

# Winter Raptor Survey Report

## South Ripley Solar Project

Town of Ripley

Chautauqua County, New York

Prepared for:



**ConnectGen LLC**

1001 McKinney Street

Suite 700

Houston, Texas 77002

Prepared by:



**Environmental Design & Research,**

**Landscape Architecture, Engineering & Environmental Services, D.P.C.**

217 Montgomery Street, Suite 1000

Syracuse, NY 13202

**May 2020**

## MANAGEMENT SUMMARY

|                                  |  |
|----------------------------------|--|
| Primary Involved Agencies:       | New York State Department of Public Service (NYSDPS)<br>New York State Department of Environmental Conservation (NYSDEC) |
| NYSDPS Article 10 Case Number:   | 19-F-0560  |
| Type of Study:                   | Winter Raptor Survey   |
| Location Information:            | Town of Ripley, Chautauqua County, New York  |
| Facility Description:            | Proposed Solar Photovoltaic Electric Generating Facility (up to 270 MW)  |
| Facility Area:                   | Approximately 4,500 acres  |
| USGS 7.5-Minute Quadrangle Maps: | South Ripley, NY and North East, PA  |
| Report Authors:                  | Ravyn Neville, Tiffany Clay, and Samouel Beguin  |
| Date of Report:                  | May 2020   |

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## 1.0 INTRODUCTION

### 1.1 Purpose of the Investigation

On behalf of ConnectGen Chautauqua County LLC (ConnectGen or the Applicant), Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) has prepared this Winter Raptor Survey Report (Report) for the proposed South Ripley Solar Project (the Facility), located in the Town of Ripley in Chautauqua County, New York. This Report supports an Application for a Certificate of Environmental Compatibility and Public Need pursuant to Article 10 of the New York State Public Service Law for construction of a solar electric generating facility. The results are intended to inform the Applicant in the development of the Facility, and also assist the New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Public Service (NYSDPS), and other New York State agencies in their review of the proposed Facility in accordance with the requirements of the Article 10 and 6 NYCRR Part 182 regulations.

The purpose of the winter raptor surveys conducted during the 2019-2020 season was to identify and document raptor species that utilize grassland habitat within the Facility Area during the winter season. The winter raptor study specifically targeted two grassland raptor species known to occur in portions of western New York State: the state-listed endangered short-eared owl (*Asio flammeus*) and the state-listed threatened northern harrier (*Circus hudsonius*; formerly *Circus cyaneus*) (NYSDEC, 2015a). The winter raptors surveys were conducted by qualified biologists following recommendations provided by NYSDEC staff and the methodology established in the 2015 NYSDEC *Survey Protocol for State-listed Wintering Grassland Raptor Species* (NYSDEC Survey Protocol; see Appendix A). The scope of these surveys was defined in a Winter Raptor Survey Work Plan that was submitted for NYSDEC staff review in November 2019 (see Appendix B).

### 1.2 Facility Location and Description

The Applicant is proposing to construct an up to 270-megawatt (MW) solar powered electric generating facility with up to 20 MW of battery energy storage capacity within the Town of Ripley, Chautauqua County, New York (see Figure 1). The Facility is anticipated to produce enough clean, renewable electricity to power approximately 67,000 New York households. The proposed Facility will include installation of solar photovoltaic (PV) panels, a collection substation, a switching station, an operations and maintenance building, temporary laydown areas, collection lines, and associated access roads and fencing. Approximately 4,500 acres of rural land are currently being evaluated to host the Facility (the Facility Area; see Figure 2). The Facility Area represents the broader area being studied, within which specific parcels will be selected for the siting, design, construction, and operation of the Facility. The Facility will ultimately be sited on approximately 2,000 acres of private land acquired and/or leased within the Facility Area. Much of the Facility



will be constructed in areas where disturbance has already occurred (e.g., agricultural fields that are used for hay and/or row crop production) in order to minimize the need for vegetation removal within forested and wetland areas.

## **2.0 BACKGROUND INFORMATION**

### **2.1 Existing Conditions**

The Applicant has gathered information on the existing ecological conditions within the Facility Area to support the siting process. This has included multiple reconnaissance-level field investigations of existing on-site conditions, as well as a desktop review of the Facility Area to inform the design of the winter raptor study. Based on these initial assessments, the Facility Area is dominated by fallow agricultural land and agricultural land that is actively managed to produce row and field crops (primarily corn, soybeans, grapes, and hay). In addition, the Facility Area includes some successional old fields and shrubland, deciduous forest, forested wetlands, emergent wetlands, scrub-shrub wetlands, and disturbed/developed land (primarily rural single-family housing units and farm buildings).

### **2.2 Agency Database Review and Consultation**

In addition to data collected on existing land use and ecological communities, the Applicant has initiated consultation with federal and state agencies regarding the potential presence of threatened and endangered species within the Facility Area. This includes database review via the U.S. Fish and Wildlife Service (USFWS) online Information for Planning and Consultation (IPaC) system, as well as correspondence with the New York Natural Heritage Program (NYNHP). According to the IPaC system, the northern long-eared bat (*Myotis septentrionalis*; NLEB) is the only federally-listed species that potentially occurs within the Facility Area (Appendix C). The NLEB is federally-listed as threatened. Correspondence with the NYNHP began with the submittal of a formal request for information regarding state and federally-listed endangered and threatened species within the Facility Area on August 21, 2019. A response letter received from the NYNHP on September 15, 2019 stated that two significant natural communities noted as high quality occurrences are present within the Facility Area. These include a confined river wetland/aquatic community and a hemlock-northern hardwood forest upland/terrestrial community. Additionally, one state-listed endangered plant species, tall ironweed (*Vernonia gigantea*), has been documented within 0.35 mile of the Facility Area (see Appendix C). The NYNHP letter did not reveal known occurrences of state-listed raptor species within the Facility Area.

Following receipt of this NYNHP response letter, EDR initiated further consultation with NYSDEC Central Office staff and NYSDEC Region 9 staff to obtain occurrence records for any additional state-listed species that may have been documented by the NYSDEC or the NYNHP in the vicinity of the Facility Area. Specifically, the Applicant and EDR spoke with NYSDEC Central Office staff on September 18, 2019 about the NYNHP response letter and the potential for additional state-listed species data. On November 6, 2019, the NYSDEC Central Office provided additional

occurrence data for the Facility Area and its vicinity under a non-disclosure agreement. In this response, NYSDEC stated that “[t]here are no records of State-listed threatened or endangered grassland bird species within the project area, however some suitable habitat exists on site that may support wintering or breeding grassland birds.”

In addition, EDR corresponded with NYSDEC Region 9 staff in mid-October 2019 regarding additional state-listed species data that may not currently be integrated with the NYNHP database. On October 21, 2019, NYSDEC Region 9 staff provided a response indicating that NYSDEC Region 9 was not aware of any additional records. Finally, a conference call was held with NYSDEC staff on April 3, 2020 during which the NYSDEC recommended submitting another request to the NYNHP for any updated state-listed species data. The Applicant will continue to consult with the NYNHP and the NYSDEC to ensure that the most current state-listed species information is being considered during the development process.

### **2.3 Target Species and Habitat**

Based on consultation with the NYSDEC and EDR’s review of land cover and ecological communities present within the Facility Area, it was determined that portions of the Facility Area may represent suitable wintering habitat for short-eared owl and/or northern harrier. Throughout much of New York, suitable habitat typically occurs in the form of certain types of agricultural land that retain adequate remnant grass and forb vegetation during the winter season. Wintering short-eared owls require large areas of open land for foraging and roosting, which may consist of hayfields, fallow farmland, pastureland, and emergent wetlands/wet meadows (NYNHP, 2019a). Wintering northern harriers require similar open habitat, which may include emergent marshes, hayfields, pastureland, and successional old fields (NYNHP, 2019b). Based on past EDR correspondence with the NYSDEC Central Office regarding the habitat requirements of state-listed grassland raptor species, wintering short-eared owls in New York typically prefer remnant grass and forb vegetation with a mean height in the range of 10 to 16 inches in fields used for foraging, and 20 to 23 inches in fields used for roosting. In general, fields with mean vegetation height in the range of 10 to 24 inches may be suitable for both short-eared owl and northern harrier.

Though neither the NYNHP nor the NYSDEC have identified known occurrences of short-eared owl or northern harrier within the Facility Area, the NYSDEC and EDR have both identified the potential for suitable habitat on-site. Therefore, winter raptor surveys have been conducted to assess use of the Facility Area by these two state-listed species and support Exhibit 22 of the Article 10 Application for the Facility. The results of this and other pre-construction ecological surveys will also be used to inform the development and siting of the Facility in order to improve impact avoidance and minimization efforts.

## **3.0 WINTER RAPTOR SURVEYS**

### **3.1 Survey Period**

Winter raptor surveys for the Facility were conducted during the winter season defined in the NYSDEC Survey Protocol (Appendix A), which represents the primary period during which short-eared owls and northern harriers may occupy wintering habitat. Surveys began on November 25, 2019 and continued through the winter season until April 1, 2020.

### **3.2 Survey Methodology**

As described in the Winter Raptor Survey Work Plan (Appendix B), the primary method for surveying wintering raptors consisted of regimented visual scans and observations from stationary points (i.e., stations) within the Facility Area. Survey stations were situated overlooking potentially suitable open fields in several directions, and were positioned throughout the Facility Area to provide optimal spatial coverage. Based on the NYSDEC Survey Protocol, survey stations were spaced approximately 1,000 meters or less from one another to provide full coverage of grassland habitat within the Facility Area. Survey stations were located adjacent to parcels under consideration for proposed Facility components, as well as in locations with potentially suitable habitat for the target grassland raptor species that are not currently proposed to include Facility components.

A total of six stationary survey locations were established through consultation with NYSDEC staff and used for the winter raptor surveys (Figure 3). Station 1 was located along Miller Road overlooking approximately 120 acres of open fallow agricultural land to the northwest, west, southwest, and east in the northwestern portion of the Facility Area. Station 2 was located along Northeast (NE) Sherman Road (County Route 6) overlooking approximately 130 acres of open successional old field to the southwest, south, and southeast in the west central portion of the Facility Area. Station 3 was also located along NE Sherman Road, with views of approximately 50 acres of successional old field to the south and additional fallow land to the north. Station 4 was located near the junction of NE Sherman Road and Sinden Road, overlooking approximately 90 acres of hayfield to the west, southwest, southeast, and east. Station 5 was located along the eastern portion of NE Sherman Road, with views of approximately 120 acres of mowed hayfields. Station 6 was located along State Route 76 north of Meeder Road with views in all directions of approximately 140 acres of mowed hayfields.

Due to the crepuscular nature of both the short-eared owl and northern harrier, stationary surveys were conducted in the evening beginning at least one hour before sunset and continuing until it became too dark to observe flying birds (i.e., at least thirty minutes after sunset). Therefore, the typical stationary survey duration was 1.5 hours (90 minutes).

In addition, biologists also performed daytime driving route surveys (i.e., in the morning or afternoon, and at least one hour before sunset) by traveling along roads within the Facility Area and observing habitat from the roadways at stops along each driving route. These daytime surveys were primarily used as an additional method of detecting northern harriers. As recommended by the NYSDEC Survey Protocol, stops were located approximately 0.5 mile apart along each route. Six daytime driving routes were established for the winter raptor study: (1) a 1.4-mile length of Miller Road in the westernmost portion of the Facility Area; (2) a 2.7-mile length of NE Sherman Road bisecting the western half of the Facility Area; (3) a 1.5-mile length of Sinden Road and NE Sherman Road in the central portion of the Facility Area; (4) a 1.6-mile length of NE Sherman Road within the eastern portion of the Facility Area; (5) a 2.4-mile stretch of Post Road in the southeastern portion of the Facility Area; and (6) a 1.34-mile long driving route on portions of Meeder Road/State Route 76 and County Road 622.

To complete daytime driving route surveys, biologists drove along each of these routes and conducted visual surveys for at least 5 minutes at each stop along each route (e.g., when conducting the Miller Road survey, biologists would drive along Miller Road and stop three times to conduct 5-minute visual scans of surrounding habitat at stops MR-1, MR-2, and MR-3. Biologists would then proceed to the next route). In total, the daytime driving route surveys included a total of 15 stop locations.

No winter raptor surveys were conducted during inclement weather that would prevent: (1) use of the area by the two target species; (2) full visibility of the surveys area; and/or (3) the accurate identification of raptor species. Inclement weather conditions included sustained precipitation, fog, and moderate to strong winds (i.e., greater than 12 mph). Weather forecasts were reviewed prior to the start of each survey week to identify the most suitable days to conduct surveys. If inclement weather prevented a survey from being conducted as planned, the survey was re-scheduled for another day and completed as soon as possible (preferably within the same week or the following week). If weather permitted it, surveys were conducted on consecutive days during each survey week so that all stations could be surveyed at least once every other week throughout the winter season.

For all surveys, qualified biologists visually scanned the surrounding habitat throughout the entirety of each survey period. Binoculars with 8x or 10x magnification were used during visual scans to aid in the observation and identification of birds. Particular attention was given to birds that were observed exhibiting behavior that could be indicative of a raptor species: (1) perching on fence posts, utility poles, transmission line towers, trees, or similar objects; (2) flying low over the ground or tree canopy; (3) perching and/or landing on the ground; and (4) flying alone. Biologists also listened for the calls of short-eared owls, northern harriers, and other raptor species. All raptor species (defined as accipiters, buteos, eagles, falcons, harriers, osprey, owls, and vultures) observed during timed survey periods were documented on survey data sheets as discrete observations. All state-listed raptor observations were documented

using a mobile geographic information system (GIS) application. It is important to note that there was a possibility of the same individual raptors being observed on multiple occasions, particularly when multiple observations of a species were recorded in close proximity to one another on the same survey day. Other sensitive bird species that were observed during timed survey periods, or incidentally, were also recorded, including any other state-listed endangered or threatened species, species of special concern (SSC), or species of greatest conservation need (SGCN) (NYSDEC, 2015a; NYSDEC, 2015b).

The following data were recorded for each survey using electronic data sheets (see Appendices D and E) and a mobile geographic information system (GIS) application:

- Survey date;
- Observer name(s);
- Survey type (stationary or daytime driving route) and station number;
- Start time, sunset time, end time, and survey duration;
- Pertinent weather conditions including temperature, wind speed and direction, snow depth, and cloud cover;
- The species, number, sex, and age for each raptor observed;
- The time each individual raptor was first and last observed;
- Behavior(s), flight direction, flight height, flight description, and perch/roost locations for each raptor observed (if any);
- Digitized GIS features showing the location and flight path of each target species relative to the observer; and
- Location coordinates for all state-listed species observations (based on GIS features digitized in the field using a mobile GIS application).

### 3.3 Survey Results

To the greatest extent practicable, at least one stationary survey was conducted during each survey week of the season so that all stations could be surveyed at least once every other week from November 25, 2019 to April 1, 2020. As discussed previously, surveys were conducted at a total of six stations (see Figure 3). Stationary surveys primarily alternated between Stations 1, 3, and 5 and Stations 2, 4, and 6 to provide optimal spatial coverage of the Facility Area from week to week.

In total, 56 evening stationary surveys were conducted, with nine surveys completed for Stations 1, 2, 5, and 6, and ten surveys completed for Stations 3 and 4. Daytime driving route surveys for all six routes were also completed on five different days from December to April, totaling 75 five-minute point count surveys. The total effort for the winter

raptor study included more than 5,600 survey minutes (more than 93 survey hours). Field data sheets for all stationary surveys and daytime driving route surveys are provided as Appendix D and Appendix E, respectively. Table 1 below indicates when surveys were completed throughout the survey period for each evening survey station and for the daytime driving routes.

**Table 1: Completed Survey Dates**

| Date of Survey(s)              | Evening Survey Stations |   |    |    |   |   | Daytime Driving Routes <sup>1</sup> |
|--------------------------------|-------------------------|---|----|----|---|---|-------------------------------------|
|                                | 1                       | 2 | 3  | 4  | 5 | 6 |                                     |
| 11/25/2019                     | X                       |   |    |    |   |   |                                     |
| 11/26/2019                     |                         |   |    |    |   | X |                                     |
| 12/3/2019                      |                         | X |    | X  |   |   |                                     |
| 12/5/2019                      |                         |   | X  |    | X |   |                                     |
| 12/12/2019                     |                         |   | X  |    | X |   | X                                   |
| 12/13/2019                     | X                       |   |    |    |   |   |                                     |
| 12/17/2019                     |                         | X |    | X  |   | X |                                     |
| 12/23/2019                     | X                       |   | X  |    | X |   |                                     |
| 12/30/2019                     |                         | X |    | X  |   | X |                                     |
| 1/7/2020                       | X                       |   | X  |    | X |   | X                                   |
| 1/13/2020                      |                         | X |    | X  |   | X |                                     |
| 1/21/2020                      | X                       |   | X  |    | X |   |                                     |
| 1/29/2020                      |                         | X |    |    |   | X |                                     |
| 2/3/2020                       | X                       |   | X  | X  | X |   | X                                   |
| 2/10/2020                      |                         | X |    | X  |   |   |                                     |
| 2/11/2020                      |                         |   |    |    |   | X |                                     |
| 2/19/2020                      | X                       |   | X  |    |   |   |                                     |
| 2/20/2020                      |                         |   |    |    | X |   |                                     |
| 2/24/2020                      |                         | X |    | X  |   | X |                                     |
| 3/4/2020                       | X                       |   | X  |    | X |   | X                                   |
| 3/9/2020                       |                         | X |    | X  |   | X |                                     |
| 3/16/2020                      | X                       |   | X  |    | X |   |                                     |
| 3/24/2020                      |                         | X |    | X  |   | X |                                     |
| 4/1/2020                       |                         |   | X  | X  |   |   | X                                   |
| <b>Total Number of Surveys</b> | 9                       | 9 | 10 | 10 | 9 | 9 | 5                                   |

**Note:** "X" indicates that surveys were completed on the dates listed.

<sup>1</sup> Daytime driving route survey included all six routes (comprised of .five-minute point count surveys conducted at 15 different stop locations).

Throughout the winter season, a total of 62 raptors were observed, including 12 state-listed raptors (five bald eagles and seven northern harriers). Specifically, three bald eagles were observed flying together in the same area **BEGIN CONFIDENTIAL INFORMATION < [REDACTED] > END CONFIDENTIAL INFORMATION**, and two additional individual bald eagle observations were recorded near **BEGIN CONFIDENTIAL INFORMATION < [REDACTED] > END CONFIDENTIAL INFORMATION**. Bald eagles were observed for a total of 16 minutes (including 3 minutes when three individuals were observed simultaneously). Three northern harriers were observed

during daytime driving route surveys. In addition, three northern harriers were observed during evening stationary surveys (BEGIN CONFIDENTIAL INFORMATION < [REDACTED] > END CONFIDENTIAL INFORMATION), and one northern harrier was observed incidentally near BEGIN CONFIDENTIAL INFORMATION < [REDACTED] > END CONFIDENTIAL INFORMATION on March 9, 2020 prior to the start of an evening stationary survey at that location. Northern harriers were observed for a total of 16 minutes, and behaviors included flying through the site (five of seven observations) and flying/foraging in open fields (two of seven observations). No short-eared owls (or other threatened or endangered species) were observed during any of the surveys.

Mapped locations and coordinates for bald eagle and northern harrier observations are provided in Figure 4, and all survey data sheets are provided in Appendices D and E. State-listed raptor observation results are summarized below in Table 2.

**Table 2: State-listed Raptor Observations**

BEGIN CONFIDENTIAL INFORMATION <

| Species                       | Sex     | Date       | Time  | Minutes Observed | Station or Driving Route | Flight Height (feet) | Behavior(s)         |
|-------------------------------|---------|------------|-------|------------------|--------------------------|----------------------|---------------------|
| Bald eagle <sup>1,2</sup>     | Unknown | 2/3/2020   | 14:11 | 3                | [REDACTED]               | 100+                 | Flying              |
| Bald eagle <sup>1,2</sup>     | Unknown | 2/3/2020   | 14:11 | 3                | [REDACTED]               | 100+                 | Flying              |
| Bald eagle <sup>1,2</sup>     | Unknown | 2/3/2020   | 14:11 | 3                | [REDACTED]               | 100+                 | Flying              |
| Bald eagle                    | Unknown | 2/19/2020  | 17:55 | 3                | [REDACTED]               | 30                   | Fly-through         |
| Bald eagle                    | Unknown | 3/9/2020   | 18:08 | 4                | [REDACTED]               | 100-200              | Flying              |
| Northern harrier <sup>1</sup> | Male    | 12/12/2019 | 12:47 | 1                | [REDACTED]               | 20                   | Fly-through         |
| Northern harrier              | Unknown | 12/23/2019 | 17:09 | 1                | [REDACTED]               | 100+                 | Fly-through         |
| Northern harrier <sup>1</sup> | Unknown | 1/7/2020   | 13:34 | 1                | [REDACTED]               | 100+                 | Fly-through         |
| Northern harrier <sup>1</sup> | Male    | 1/7/2020   | 13:34 | 1                | [REDACTED]               | 100                  | Fly-through         |
| Northern harrier <sup>3</sup> | Male    | 3/9/2020   | 17:36 | 8                | [REDACTED]               | 2-20                 | Foraging            |
| Northern harrier              | Unknown | 3/9/2020   | 18:52 | 1                | [REDACTED]               | 3-40                 | Flying and Foraging |
| Northern harrier              | Female  | 3/16/2020  | 18:15 | 3                | [REDACTED]               | 100                  | Fly-through         |

<sup>1</sup> Observation was made during a daytime driving route survey, either at the stop indicated or incidentally between stops along the route listed.

<sup>2</sup> Observation included three individual bald eagles flying together.

<sup>3</sup> Observation was made incidentally near the survey station indicated prior to the start of an evening stationary survey.

> END CONFIDENTIAL INFORMATION

The remaining raptors included red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), American kestrel (*Falco sparverius*; a species of greatest conservation need [SGCN]), sharp-shinned hawk (*Accipiter striatus*; a species of special concern [SSC]), and one unknown raptor species. Red-tailed hawks were observed from all stations except Station 5, with a total of 15 observations made during evening stationary surveys, and a total of five observations made during daytime driving route surveys. Red-tailed hawks were often observed perched on utility poles and circling above field and forest habitats. A total of 20 turkey vulture observations (many of which constituted groups of migrating individuals) were recorded during daytime driving route surveys. Individual American kestrels were observed at Stations 2 and 6, and seven additional American kestrel observations were recorded during daytime driving route surveys. One sharp-shinned hawk was observed from Station 6 on March 24, 2020, and one unknown raptor (likely a red-tailed hawk based on behavior) was observed from Station 2 on February 24, 2020. Survey data sheets documenting raptor observations are provided in Appendices D and E.

A total of 29 other avian species, three mammal species, and one amphibian species were also observed incidentally or during timed surveys. Other non-raptor birds observed included primarily passerines, woodpeckers, and waterfowl. A complete list of all avian species observed during winter raptor surveys is provided as Appendix F. Mammal species seen or heard near survey stations included red fox (*Vulpes vulpes*), red squirrel (*Tamiasciurus hudsonicus*), and white-tailed deer (*Odocoileus virginianus*). Amphibian species heard in the vicinity of survey stations included spring peeper (*Pseudacris crucifer*).

### 3.4 Discussion

This report presents the results of the surveys for winter raptor species within the Facility Area conducted during the 2019-2020 winter season. Based on the surveys conducted during this period, several conclusions are provided in the list below:

- Short-eared owls were not documented and do not appear to utilize habitat found within the Facility Area.
- Northern harrier and bald eagle were the only state-listed threatened or endangered species observed and documented.
- No suspected roost locations or areas of concentrated activity were identified for northern harrier or bald eagle.
- Only two of the northern harrier observations included foraging behavior, suggesting minimal use of the site by wintering northern harriers.
- Northern harrier observations totaled 16 minutes (less than 0.3 percent of the total survey effort).
- Bald eagle observations also totaled 16 minutes (less than 0.3 percent of the total survey effort).



- Other special status species observed included sharp-shinned hawk (SSC), American kestrel (SGCN), and American woodcock (*Scolopax minor*; SGCN).

#### 4.0 SUMMARY AND CONCLUSION

Evening and daytime surveys targeting two state-listed grassland raptor species (short-eared owl and northern harrier) were conducted by qualified biologists for six survey stations within the Facility Area between November 25, 2019 and April 1, 2020. A total of 56 evening stationary surveys and five sets of daytime driving route surveys were conducted, and the total effort for the winter raptor study included more than 5,600 survey minutes (more than 93 survey hours). Each evening survey station was surveyed nine or 10 times during the winter season.

Throughout the course of the winter season, a total of 62 raptors were observed. These observations included seven observations of northern harriers (a state-listed threatened species), five observations of bald eagles (a state-listed threatened species), and one observation of sharp-shinned hawk (a species of special concern). The remaining raptor observations were of red-tailed hawk, turkey vulture, American kestrel, and one unknown raptor. No short-eared owls were observed during any of the surveys. In addition, a total of 29 other non-raptor avian species were observed, including two species of greatest conservation need (American kestrel and American woodcock).

Of the more than 5,600 survey minutes, a total of only 26 survey minutes included observations of state-listed threatened species (limited to 16 minutes for northern harrier and 16 minutes for bald eagle), equating to less than 0.5 percent of the total survey effort. Furthermore, observations of these species did not occur regularly in any one area, suggesting a lack of consistent or repeated use of specific portions of the Facility Area associated with occupied wintering habitat. Therefore, it can be reasonably concluded that the Facility Area does not contain any occupied habitat for wintering state-listed threatened or endangered avian species and Facility-related activities will not result in “take” of such species pursuant to 6 NYCRR Section 182.11 (Part 182).

## 5.0 REFERENCES

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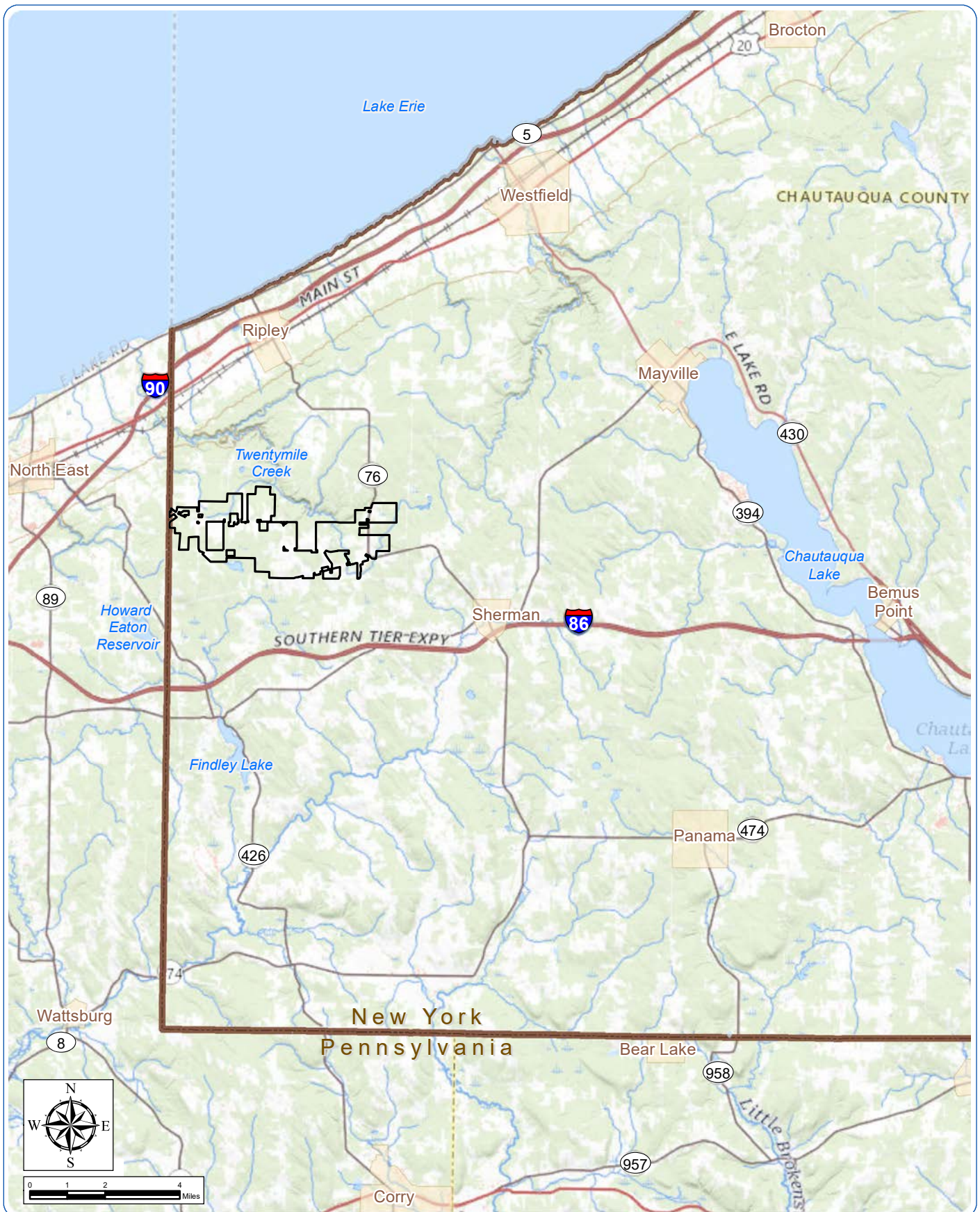
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## FIGURES





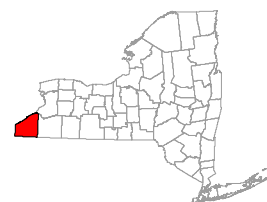
## South Ripley Solar Project

Town of Ripley, Chautauqua County, New York  
Winter Raptor Survey Report

**Figure 1: Regional Facility Location**

**Notes:** 1. Basemap: ESRI ArcGIS Online "World Topographic Map" map service.  
2. This map was generated in ArcMap on May 20, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

-  Facility Area
-  State Boundary



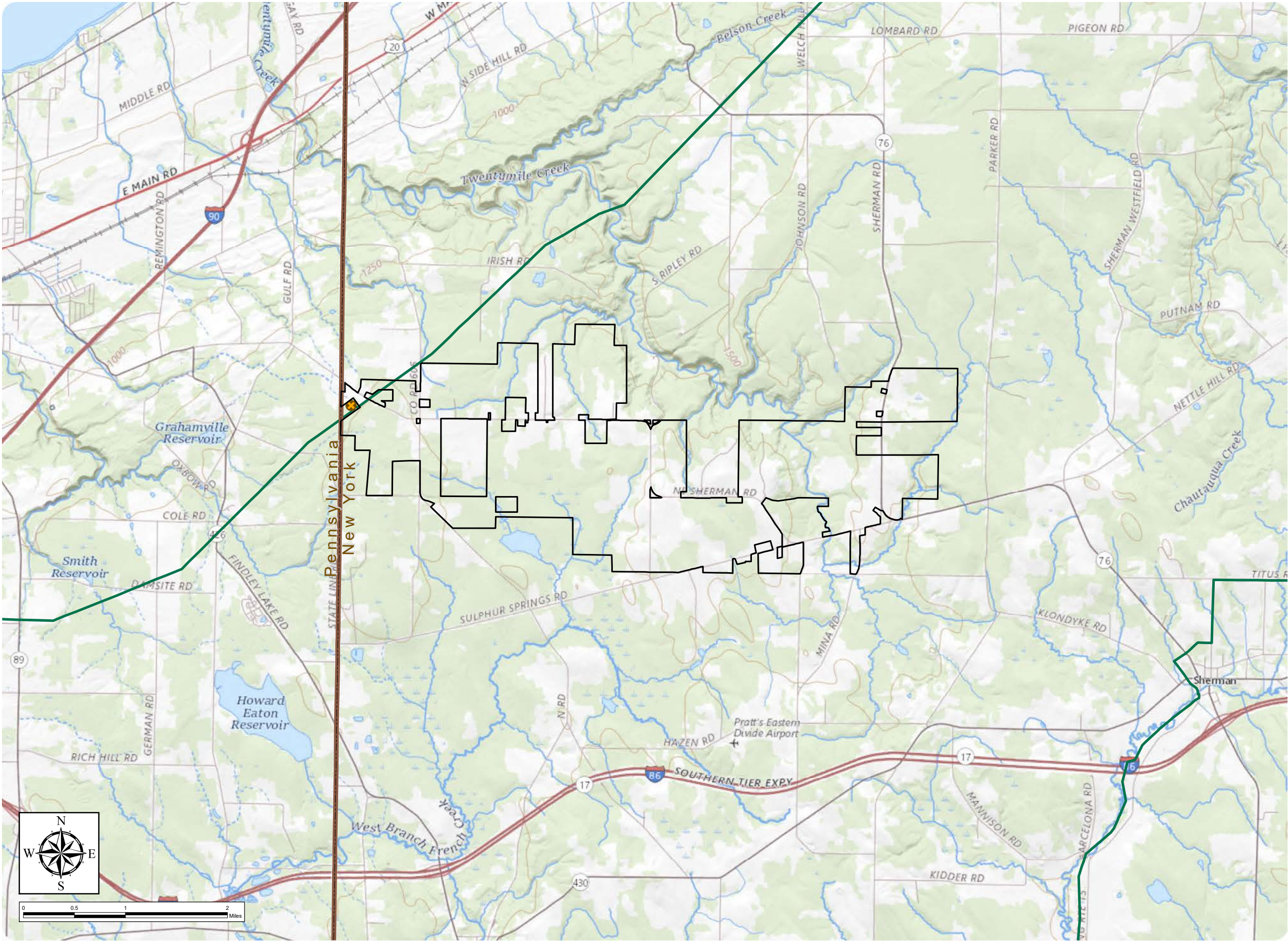


South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Winter Raptor Survey Report

Figure 2: Facility Area



- Existing Substation
- Existing Transmission Line
- Facility Area
- Town Boundary
- State Boundary

Notes: 1. Basemap: ESRI ArcGIS Online "USA Topo Maps" map service. 2. This map was generated in ArcMap on May 20, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.







**South Ripley Solar Project**

Town of Ripley, Chautauqua County, New York

[Winter Raptor Survey Report](#)

**Figure 3: Survey Locations**

- Stationary Survey Station
- Daytime Survey Stop
- Daytime Driving Route
- 1,000-meter Buffer
- Existing Substation
- Existing Transmission Line
- Facility Area
- State Boundary

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service. 2. This map was generated in ArcMap on May 20, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.





**South Ripley Solar Project**

Town of Ripley, Chautauqua County, New York

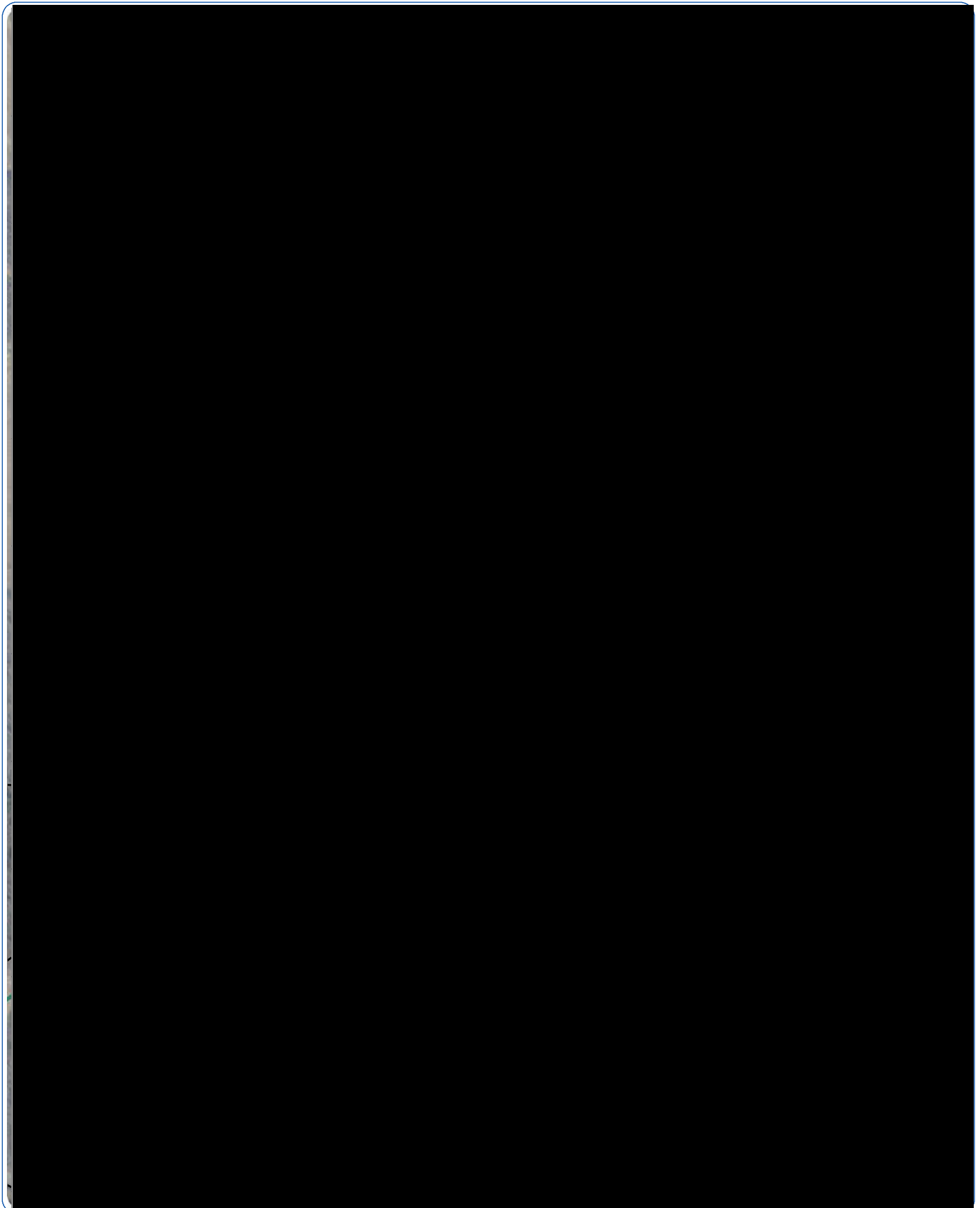
[Winter Raptor Survey Report](#)

**Figure 4: State-Listed Raptor Observations - Index**

- Bald Eagle Observation
- Northern Harrier Observation
- Stationary Survey Location
- Daytime Survey Stop
- Daytime Driving Route
- Existing Substation
- Existing Transmission Line
- Facility Area
- Town Boundary
- State Boundary

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service. 2. This map was generated in ArcMap on May 20, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.












## South Ripley Solar Project

Town of Ripley, Chautauqua County, New York  
 Winter Raptor Survey Report

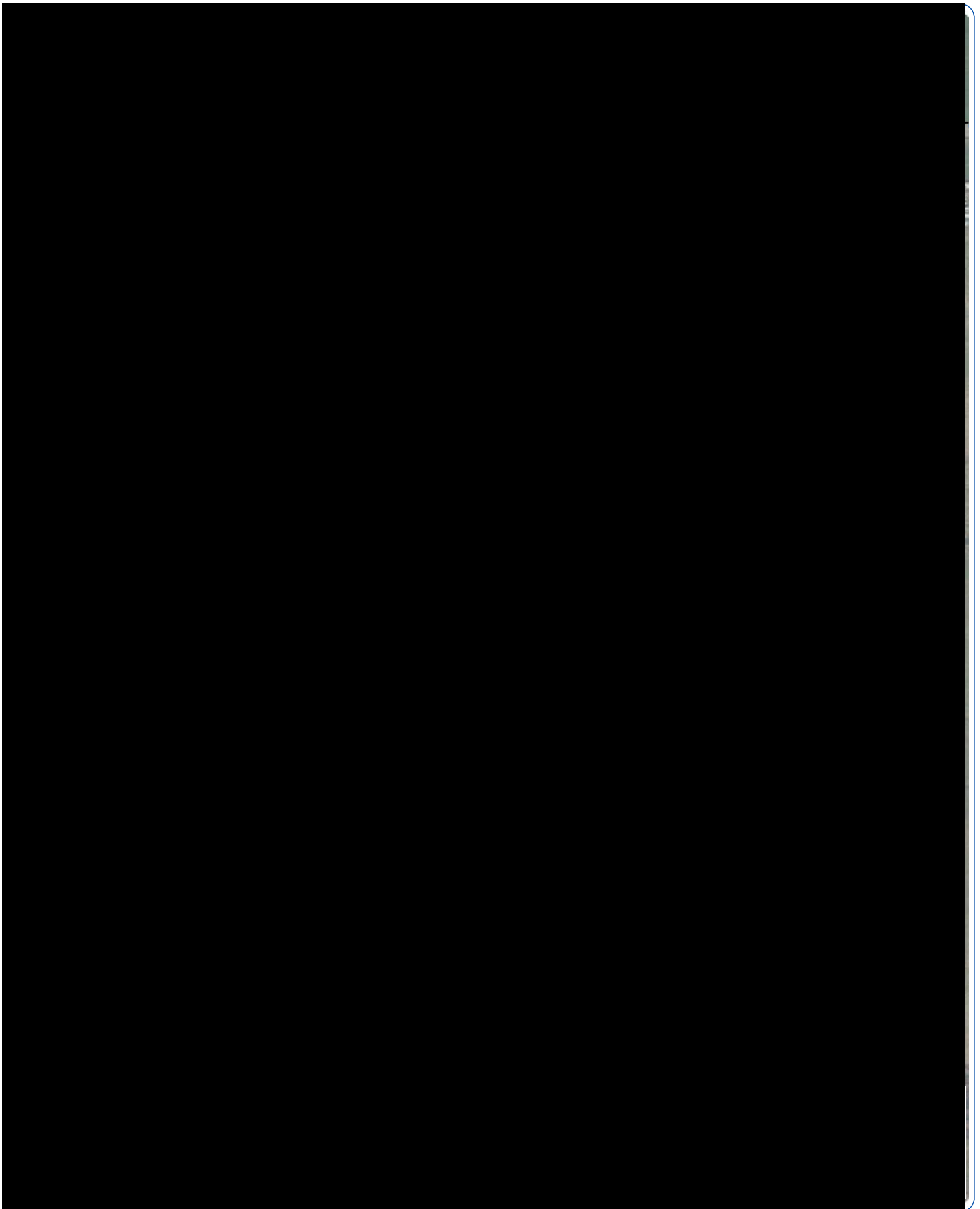
**Figure 4: State-listed Raptor Observations - Sheet 1 of 5**

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service.  
 2. This map was generated in ArcMap on May 22, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- |   |                              |   |                            |
|---|------------------------------|---|----------------------------|
|  | Northern Harrier Observation |  | Daytime Driving Route      |
|  | Northern Harrier Flight Path |  | Existing Transmission Line |
|  | Stationary Survey Location   |  | Facility Area              |
|  | Daytime Survey Stop          |   |                            |












## South Ripley Solar Project

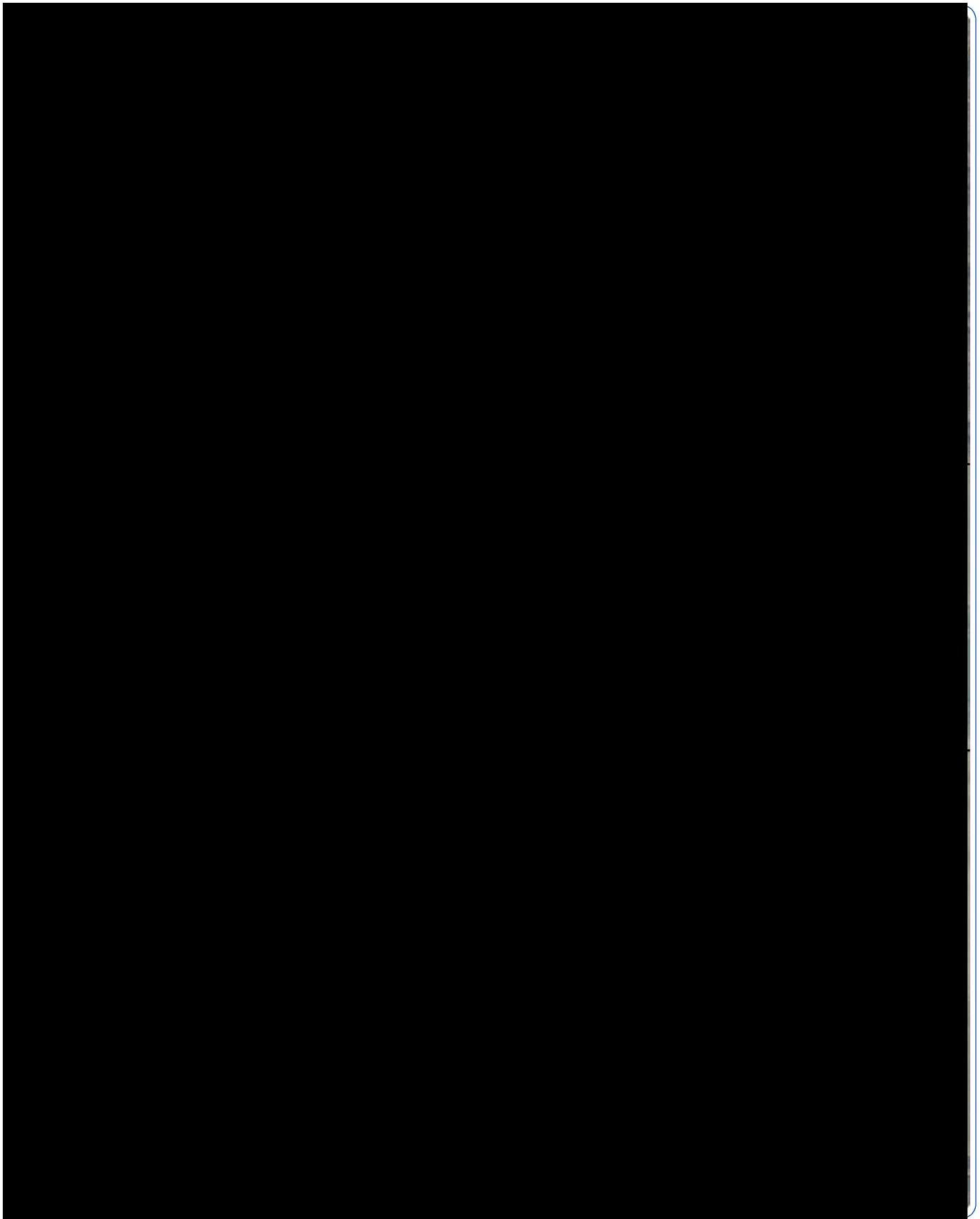
Town of Ripley, Chautauqua County, New York  
 Winter Raptor Survey Report

**Figure 4: State-listed Raptor Observations - Sheet 2 of 5**

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service.  
 2. This map was generated in ArcMap on May 22, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

-  Bald Eagle Observation
-  Bald Eagle Flight Path
-  Daytime Survey Stop
-  Daytime Driving Route
-  Facility Area












## South Ripley Solar Project

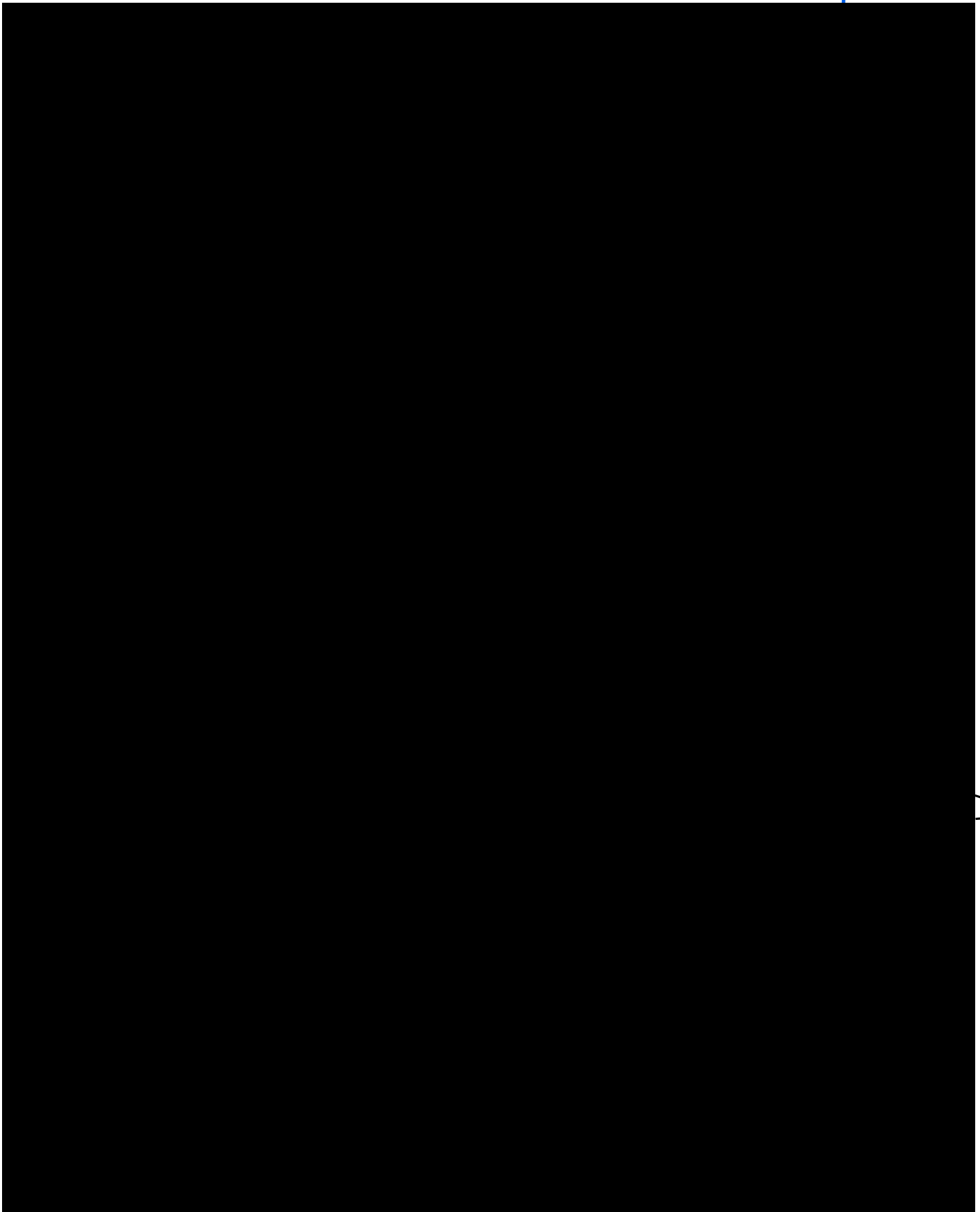
Town of Ripley, Chautauqua County, New York  
[Winter Raptor Survey Report](#)

**Figure 4: State-listed Raptor Observations - Sheet 3 of 5**

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service.  
 2. This map was generated in ArcMap on May 22, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

-  Northern Harrier Observation
-  Northern Harrier Flight Path
-  Northern Harrier Flight Area
-  Stationary Survey Location
-  Daytime Survey Stop
-  Daytime Driving Route
-  Facility Area












## South Ripley Solar Project

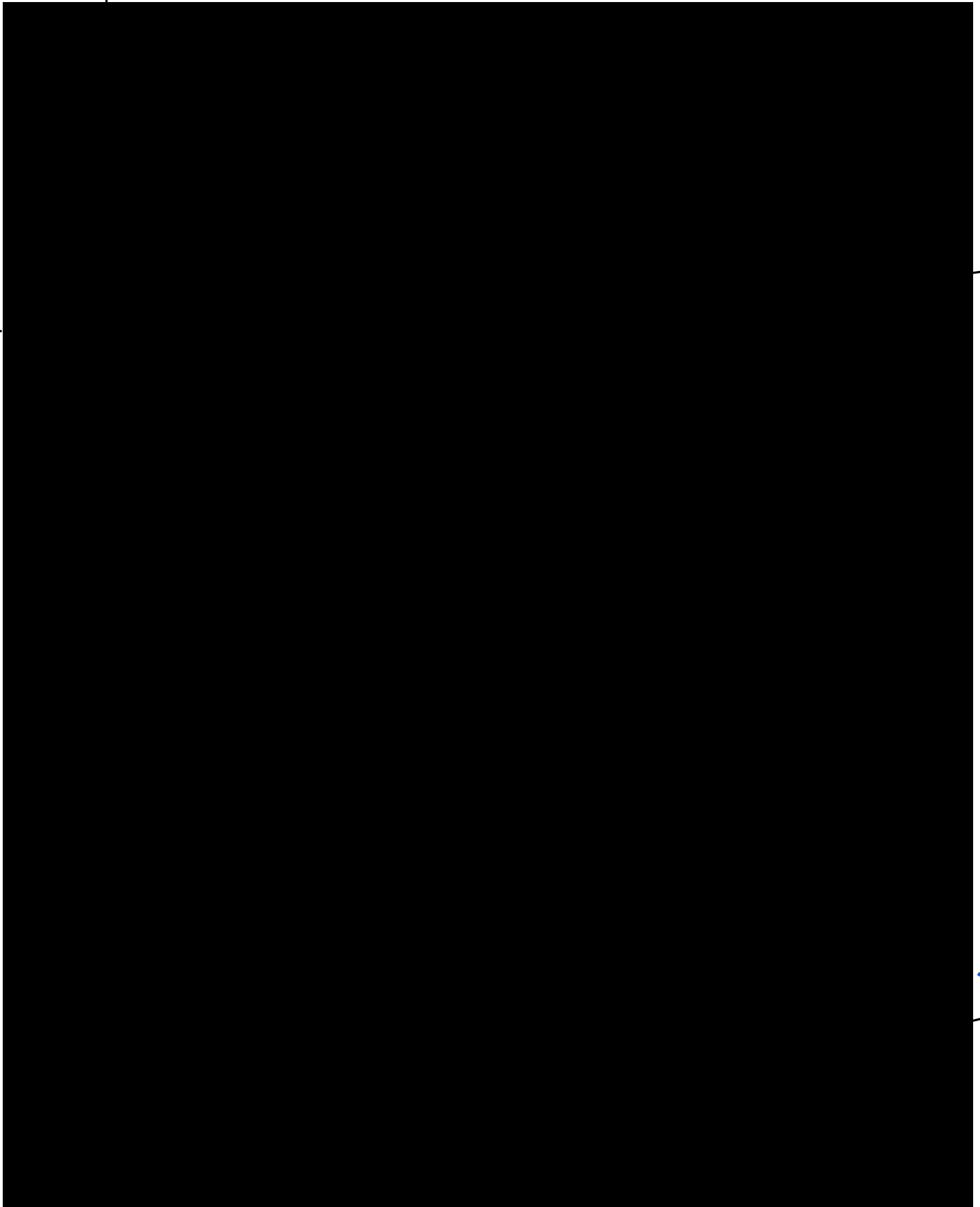
Town of Ripley, Chautauqua County, New York  
[Winter Raptor Survey Report](#)

**Figure 4: State-listed Raptor Observations - Sheet 4 of 5**

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service.  
 2. This map was generated in ArcMap on May 22, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

-  Bald Eagle Observation
-  Northern Harrier Observation
-  Northern Harrier Flight Path
-  Bald Eagle Flight Area
-  Stationary Survey Location
-  Daytime Driving Route
-  Facility Area











## South Ripley Solar Project

Town of Ripley, Chautauqua County, New York  
Winter Raptor Survey Report

**Figure 4: State-listed Raptor Observations - Sheet 5 of 5**

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service.  
2. This map was generated in ArcMap on May 22, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- |   |                            |   |                       |
|---|----------------------------|---|-----------------------|
|  | Bald Eagle Observation     |  | Daytime Driving Route |
|  | Bald Eagle Flight Path     |  | Facility Area         |
|  | Stationary Survey Location |   |                       |
|  | Daytime Survey Stop        |   |                       |



## **APPENDIX A**

NYSDEC Survey Protocol for State-listed Wintering Grassland Raptor Species

**New York State Department of Environmental Conservation**  
**Survey Protocol for State-listed Wintering Grassland Raptor Species**  
**DRAFT- 2015**

These protocols describe requirements for determining presence and site use by state-listed threatened/endangered grassland raptor species during the winter season as part of the NYSDEC permit review process for a project application. These protocols specifically target the New York state listed Short-eared Owl (Endangered) and Northern Harrier (Threatened). Information obtained from surveys will be considered in determining the possible need for additional comprehensive studies (e.g., using radio-telemetry and/or night-vision optics), regulatory review and, if necessary, avoidance, minimization, and/or mitigation strategies pursuant to 6 NYCRR Part 182.9.

### **Survey Periods**

Surveys should be conducted during the winter season, here defined as November 15-March 31, the primary time period during which Short-eared Owl and Northern Harrier often occur at winter concentration areas. At a minimum, surveys will be conducted every other week between November 15 and March 31, for a total of nine survey periods during the course of the winter season. Additional surveys may be required in April should Short-eared Owls and/or Northern Harrier be present at the project site during the second March survey period. When that occurs, applicants should discuss the possible need for April and/or breeding season surveys with NYSDEC.

### **Establishing Survey Points and Driving Routes**

The primary survey method for wintering Short-eared Owl and Northern Harrier should consist of a regimented series of visual scans and observations with binoculars from one or more stationary points or “stations” within a given project area. A spotting scope may also be necessary to aid in making positive species identifications for birds perched far from a survey station. The total number of stations will depend on the size of the project area, the amount of grassland habitat within the project area, and the visibility of that grassland habitat from selected survey station(s). Survey stations should be situated in or near grassland habitat at vantage points with clear visibility in all directions, or most directions if stations are from roadside locations or edges of grasslands. Actual observations should be made from within or next to a vehicle or blind if the station is within an open grassland habitat. When the station is at the edge of grassland habitat, the observer(s) should be backed up to a hedgerow or other background feature at the edge of a grassland habitat, or within or next to a vehicle. Stations should not be located further than 1,000 meters from one another (observations have shown that birds seen at distances greater than 1,000 meters are less likely to be correctly identified to species), and the total number of stations need to provide full coverage of the grassland habitat within the entire project site.

Driving routes, where an observer drives between a series of roadside stops and conducts observations of a short duration from multiple stationary, roadside locations may serve as

an additional survey method for Northern Harrier. However, due to the short time period during which Short-eared Owls are active and visible before dark, driving surveys **cannot** be the sole survey method at a project site. Driving route(s) for a site should include all roads within the project site from which grassland habitat can be easily viewed. The number and distribution of roadside stops will be dictated by the length and distribution of roads in the project area, and what areas may be viewed from various roadside stops. Stops located approximately a half mile apart will typically allow for sufficient coverage.

### Timing of Surveys

Because of the late afternoon/evening activity period of Short-Eared Owls, surveys for State-listed wintering grassland raptor species **must** be conducted during the 1 hour before sunset to ½ hour (or up to 1 hour) after sunset period described below. Daytime surveys and/or driving route surveys can be added as an additional survey method, but cannot replace the evening surveys.

Short-eared owls are crepuscular and nocturnal hunters and while they may occasionally, and at some sites, be active in the late afternoon, winter surveys conducted throughout New York State from 2008-2013 indicate that at many sites, they often do not leave their daytime roost to begin hunting until sunset or later, and sometimes just 5 or 10 minutes before full dark. Northern Harriers are diurnal and crepuscular raptors and may be seen hunting throughout the day, but are most active in the morning and late afternoon right up until sunset, when they can be observed landing at their nighttime roost site. In order to observe both species, surveys **must** be conducted from one hour before sunset until it is too dark to observe flying birds (up to one hour after sunset). On many nights, especially those with clear, moonlit skies, and on days with complete snow cover, birds can frequently be seen well after the official time of sunset. Therefore, the entire length of the survey will typically be 1.5 hours, but on some nights could be as long as 2.5 hours, depending on conditions and bird activity.

### Conducting Surveys

These required surveys have two primary purposes: (1) documenting the presence (occupied habitat) or apparent absence of the target species, and (2) recording particular areas used by the target species, such as roost sites or foraging areas, within a project site. Both Short-eared Owls and Northern Harriers typically roost on the ground, though Short-eared owls may roost in conifers or thick hedgerows when snow becomes deeper than roughly 6 inches. At times, these two species may roost in close proximity to one another and Northern Harriers may be observed dropping to the ground at their nighttime roost just before dark at the same time that Short-eared Owls are leaving their daytime roost to begin foraging for the evening. The period surrounding sunset is particularly critical for the identification of likely roost locations and determining the number of individuals using them.

Surveys should not be conducted during inclement weather, including precipitation, fog, or moderate to strong winds (i.e. wind greater than 12 mph, or Beaufort Scale 3). Multiple

observers at different stations and/or multiple evenings will be needed to sufficiently cover most project sites for a given stationary survey period because the survey time constraints dictate that an observer can only cover one station per evening. Repeated trips on additional evenings may be necessary to adequately confirm species presence or suspected absence and to adequately document foraging and roost areas. For example, Short-eared Owls may fly considerable distances from roost sites to foraging areas. Appropriately stationing observers on subsequent nights farther out along these flight paths may be necessary to identify important foraging areas.

Observers conducting stationary surveys should scan the available grassland habitat throughout the course of the survey period. Particular attention should be paid to birds perching on fence posts, on utility poles, on hay bales, coursing low over the ground, or perched on the ground. Observers should also listen for the bark-like call of the Short-eared Owl and rapid series of *kek* calls of the Northern Harrier.

While one observer is sufficient for conducting stationary surveys at a given station, two observers are recommended if driving routes are conducted. As noted above, survey stops will typically be spaced approximately a half mile apart. Roadside surveys for other established bird monitoring programs vary from 3-5 minutes per survey stop and this should be considered a minimum time for the purposes of these winter grassland raptor surveys, though there would be no restriction regarding a longer observation time period. The length of the driving route and the number of points to be included would dictate whether stops last longer than 3-5 minutes. At each stop, the observer(s) should get out of the vehicle and scan the surrounding suitable open-country habitat in all directions for the 3-minute (or longer) observation period. For each raptor seen, record the time that each raptor is first observed and mark its location on a map. Behavior or activity notes must also be recorded. If a raptor is observed while driving between stops, the observation location and data should be recorded upon reaching the next stationary point.

Observations of other species during the stationary and driving surveys, as well as incidentally while on the project area (not necessarily during the survey period), should also be recorded on data sheets. Other species of interest include all state-listed endangered, threatened, and special concern species, all raptors (owls, hawks, falcons, eagles, osprey), shrikes, and arctic-breeding songbirds such as snow buntings, larkspurs, and pipits.

## **Recording Data**

Data recorded for each survey must include: date; observer name(s); survey location (i.e. stationary survey locations and driving route stops, if any); start and end time of observation period; weather information (including temperature, wind speed, wind direction, snow depth, and cloud cover); number and identification of each species observed; individual behavior; and the location of target species relative to observer. Record Northern Harriers as male or female/juvenile. Observations of all raptors should also be documented, and birds identified to species, where possible. When species identification is uncertain, record “unidentified raptor”, although “unidentified buteo” or



“unidentified accipiter” would be preferable where possible. Location coordinates for all Short-eared Owls and Northern Harriers must be provided or locations indicated on an aerial photograph or map of the survey area. Where raptors fly into or out of an area of visibility, indicate direction of flight on the maps. Foraging and roost areas should be clearly shown on the maps.

Specific behaviors to be noted for Short-Eared Owl and Northern Harrier include foraging (defined as flying low over vegetation, over in a back and forth pattern, and dropping to or toward the ground in an attempt to capture prey, at least once during the observation period), perching (as on elevated perches such as fence posts, utility poles, hay bales, on the ground, etc.), fly-through (i.e., straight-line flight such as when relocating between roosting and foraging areas), and roosting. Flight height and direction should be recorded for all raptors observed at proposed wind energy projects.

Any likely roost areas should also be noted on aerial photographs, maps, and data sheets. Roost areas would be suspected in cases where one or more Short-eared owls are observed arising from the ground or conifers in the evening and then begin flying and foraging activities, or where one or more Northern Harriers are active in an area near dusk and are then observed dropping to the ground, but not coming back up as it gets dark. Late winter surveys (late March and April) should specifically document any breeding behavior observed.

### **Reporting Requirements**

A detailed, site specific work plan, including stationary survey locations and driving route stops, if they are to be used, should be developed and submitted to NYSDEC for review and written approval prior to the start of field work. A final report should be submitted to NYSDEC at the conclusion of each year of surveys. Final reports should include data sheets; maps (ideally recent aerial photographs); summaries of all observations of Short-eared Owls, Northern Harriers, and any other state-listed species; and a conclusion whether more comprehensive studies may be necessary to assess the potential for the project to negatively affect endangered or threatened winter raptor species.

## **APPENDIX B**

### Winter Raptor Survey Work Plan

# Winter Raptor Survey Work Plan

## Case No. 19-F-0560: South Ripley Solar Project

Town of Ripley

Chautauqua County, New York

Prepared For:



**ConnectGen LLC**

1001 McKinney Street

Suite 700

Houston, Texas 77002

Prepared By:



**Environmental Design & Research,**

**Landscape Architecture, Engineering, & Environmental Services, D.P.C.**

217 Montgomery Street, Suite 1000

Syracuse, New York 13202

**November 2019 (Updated January 2020)**

## MANAGEMENT SUMMARY

|                                  |  |
|----------------------------------|--|
| Involved State Agencies:         | New York State Department of Public Service (NYSDPS)<br>New York State Department of Environmental Conservation (NYSDEC)<br>(Article 10 Application, Case Number: 19-F-0560) |
| Type of Survey:                  | Winter Raptor Survey   |
| Location Information:            | Town of Ripley, Chautauqua County, New York  |
| Project Description:             | Proposed Solar Photovoltaic Electric Generating Facility (up to 270 MW)  |
| Project Area:                    | Approximately 6,000 acres (Facility Area)  |
| USGS 7.5-Minute Quadrangle Maps: | South Ripley, NY and North East, PA  |
| Report Authors:                  | Tiffany Clay                      Samouel Beguin   |
| Date of Report:                  | November 2019 (Updated January 2020)   |

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## 1.0 INTRODUCTION

### 1.1 Purpose of the Investigation

On behalf of ConnectGen LLC (“South Ripley Solar” or the “Applicant”), Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) has prepared this Winter Raptor Survey Work Plan (Work Plan) for the proposed South Ripley Solar Project (the Facility), located in the Town of Ripley, Chautauqua County, New York. This Work Plan supports an Application for a Certificate of Environmental Compatibility and Public Need pursuant to Article 10 of the New York State Public Service Law for construction of a solar electric generating facility. The information included in this Work Plan is intended to inform the Applicant in the development of the Facility, and also assist the New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Public Service (NYSDPS), and other New York State agencies in their review of the proposed Facility in accordance with the requirements of the Article 10 and 6 NYCRR Part 182 regulations. Information concerning the Facility’s potential effects on other ecological resources will be addressed in separate studies conducted on behalf of the Applicant.

As described in 16 NYCRR § 1001.22 (Exhibit 22: Terrestrial Ecology and Wetlands), an Article 10 application must include:

*(f) An analysis of the impact of the construction and operation, including air emissions if any, of the facility and interconnections on vegetation, wildlife, wildlife habitats, and wildlife travel corridors, including a detailed assessment of direct and indirect impacts and identification and evaluation of the expected environmental impacts of the facility on declining species, Species of Greatest Conservation Need (SGCN), and species protected by State and Federal law and the habitats of such species. Given the provisions of §3-0301(2)(r) of the Environmental Conservation Law and §15 of the Public Service Law, information that identifies the locations of habitats of such species or any other species or unique combination of species of flora or fauna where the destruction of such habitat or the removal of such species there from would impair their ability to survive, shall not be disclosed to the public, and shall only be disclosed to the parties to a proceeding pursuant to an appropriate protective order.*

Therefore, the purpose of the proposed winter raptor surveys is to document the presence and use patterns of raptor species within the Facility Area during the winter season and to identify specific habitat areas (including roost sites and foraging areas) used by target raptor species. The winter raptor study will specifically target two grassland raptor species: the state-listed endangered short-eared owl (*Asio flammeus*) and the state-listed threatened northern harrier (*Circus hudsonius* [formerly *Circus cyaneus*]). The winter raptor surveys will be conducted by qualified biologists following the methodology established in the 2015 NYSDEC Survey Protocol for State-listed Wintering Grassland

Raptor Species (included as Appendix A) and recommendations provided by NYSDEC staff following submittal of this Work Plan.

## 1.2 Facility Location and Description

The Applicant is proposing to construct an up to 270-megawatt (MW) solar powered electric generating facility with up to 20 MW of battery energy storage capacity within the Town of Ripley in Chautauqua County, New York. The Facility is anticipated to produce enough clean, renewable electricity to power approximately 67,000 New York households. Approximately 6,000 acres of rural land (primarily early successional and active agricultural fields) are currently being evaluated to host the Facility (the Facility Area). The Facility Area represents the broader area being studied, within which certain parcels will be selected for the siting, design, construction and operation of the Facility. The larger Facility Area offers greater flexibility during the development phase to modify the Facility based on landowner participation and input and to avoid and minimize impacts to environmental and siting sensitivities. Based on preliminary engineering and design, the Facility may ultimately be sited on approximately 2,000 acres of private land within the Facility Area. The Applicant will be leasing or purchasing the land required to accommodate the Project from private landowners. The regional Facility location and the Facility Area are depicted in Figures 1 and 2, respectively.

The proposed project involves the construction and operation of a commercial-scale solar energy generation system that will include the following components:

- Rows of PV panels (solar arrays) that will produce direct current (DC) electricity and will be mounted on either fixed-tilt racking structures or single-axis tracking systems that follow the sun (no more than 12 feet in height above the ground);
- Collocated inverters and medium-voltage transformers placed throughout the Facility (internal to the panel arrays) that will convert the DC electricity generated by the solar arrays to alternating current (AC) electricity (inverters) and increase the voltage to 34.5 kilovolts (kV) for the collection system (transformers);
- A medium-voltage electrical collection system, which will aggregate the 34.5 kV AC output from the collocated inverters and transformers, and deliver electricity to the Facility substation;
- A secure, fenced-in substation where the Facility's electrical output voltage will be combined, and its voltage increased to that of the existing Ripley to Dunkirk transmission line (owned and operated by National Grid) via a step-up transformer. A transmission line of approximately several hundred feet in length will connect the collection substation to a point of interconnection at a new bay associated with existing National Grid equipment;
- A single operations and maintenance building to be used for storage of maintenance equipment and to provide an indoor working environment to facilitate operations and maintenance activities;

- Accessory infrastructure including new or improved access roads, gates, and fencing;
- Temporary laydown areas for equipment staging during construction of the Facility; and A potential battery energy storage system, which would include multiple container-type batteries collocated with inverters and HVAC systems. These enclosures would house racks of batteries with a yet-to-be determined chemistry or type. The Applicant does not expect the total footprint of the energy storage system to exceed 0.5 acre.

## 2.0 BACKGROUND INFORMATION

### 2.1 Existing Conditions

The Applicant has started gathering information on the existing ecological conditions within the Facility Area. This has included investigations of existing habitat conditions (which has included multiple reconnaissance-level field visits to assess on-site conditions), as well as a preliminary desktop review of the Facility Area to inform the design of the winter raptor study. Based on these initial assessments, the Facility Area is dominated by fallow agricultural land and agricultural land that is actively managed to produce row and field crops (primarily corn, soybeans, grapes, and hay). In addition, the Facility Area includes some successional fields and shrubland, deciduous forest, forested wetlands, emergent wetlands, scrub-shrub wetlands, and disturbed/developed land (primarily rural single-family housing units and farm buildings).

In addition to data collected on existing land use and ecological communities, the Applicant has also initiated consultation with federal and state agencies regarding the potential presence of threatened and endangered species within the Facility Area. This includes database review via the U.S. Fish and Wildlife Service (USFWS) online Information for Planning and Consultation (IPaC) system, as well as correspondence with the New York Natural Heritage Program (NYNHP). According to the IPaC system, the northern long-eared bat (*Myotis septentrionalis*; NLEB) is the only federally-listed species that potentially occurs within the Facility Area (Appendix B). The NLEB is federally-listed as threatened. Correspondence with the NYNHP began with the submittal of a formal request for information regarding state and federally-listed endangered and threatened species within the Facility Area on August 21, 2019. A response letter received from the NYNHP on September 15, 2019 stated that two natural communities noted as high quality occurrences are present within the Facility Area. These include a confined river wetland/aquatic community and a hemlock-northern hardwood forest upland/terrestrial community. Additionally, one state-listed endangered plant species, tall ironweed (*Vernonia gigantea*), has been documented within 0.35 mile of the Facility Area.

Following receipt of this NYNHP response letter, EDR initiated further consultation with NYSDEC Central Office staff and NYSDEC Region 9 staff to obtain occurrence records for any additional state-listed species that may have been documented by the NYSDEC or the NYNHP in the vicinity of the Facility Area. Specifically, the Applicant and EDR



spoke with Brianna Denoncour on September 18, 2019 NYNHP regarding the NYNHP response letter and the potential for additional state-listed species data. On November 6, 2019, the NYSDEC Central Office provided additional occurrence data for the Facility Area and its vicinity under a non-disclosure agreement. In this response, NYSDEC stated that “[t]here are no records of State-listed threatened or endangered grassland bird species within the project area, however some suitable habitat exists on site that may support wintering or breeding grassland birds.”

In addition, EDR corresponded with NYSDEC Region 9 staff in mid-October 2019 regarding additional state-listed species data that may not currently be in the NYNHP database. On October 21, 2019, NYSDEC Region 9 staff (Kenneth Baginski) provided a response indicating that NYSDEC Region 9 was not aware of any additional records, but that the Applicant remains responsible for completing comprehensive studies to assess potential Facility-related impacts to wildlife species in consultation with the NYSDEC and the USFWS.

## **2.2 Target Species and Habitat**

Based on consultation with the NYSDEC and EDR’s initial review of land cover and ecological communities present within the Facility Area, it is probable that some portions of the Facility Area may represent suitable wintering habitat for short-eared owls and/or northern harriers. Such suitable habitat typically occurs in the form of certain types of agricultural land that retain adequate remnant grass and forb vegetation during the winter season. Wintering habitat for these two species often includes pastureland, hayfields, fallow farm fields, successional old fields, and/or emergent wetlands. Based on past EDR correspondence with the NYSDEC Central Office regarding the habitat requirements of state-listed grassland raptor species, wintering short-eared owls in New York typically prefer remnant grass and forb vegetation with a mean height in the range of 10 to 16 inches in fields used for foraging, and 20 to 23 inches in fields used for roosting. In general, fields with mean vegetation height in the range of 10 to 24 inches may be suitable for both short-eared owl and northern harrier.

Though neither the NYNHP nor the NYSDEC have identified known occurrences of short-eared owl or northern harrier within the Facility Area, EDR’s review suggests that potentially suitable habitat may be present. Therefore, it is anticipated that winter raptor surveys will need to be conducted to assess the presence/absence of these two state-listed species within the Facility Area and to support Exhibit 22 of the Article 10 Application for the Facility. The results of this and other pre-construction ecological surveys will also be used to inform the development and siting of the Facility in order to improve impact avoidance and minimization efforts.

### **3.0 WINTER RAPTOR SURVEY WORK PLAN**

As indicated previously, winter raptor surveys for the South Ripley Solar Project will be conducted in accordance with the 2014 NYSDEC Draft Project Applicant Survey Protocol for State Listed Wintering Grassland Raptor Species and following site-specific recommendations that may be provided by NYSDEC staff following submittal of this Work Plan.

#### **3.1 Survey Period**

Surveys will be conducted during the winter season, which is defined by the NYSDEC as November 15 to March 31 for the purposes of state-listed raptor monitoring (see Appendix A). This period represents the primary time when short-eared owls and northern harriers typically occupy wintering habitat in New York. Therefore, winter raptor surveys will occur at the Facility Area beginning in late November or early December 2019, and each survey station will be surveyed every other week throughout the winter season until the end of March 2020. If short-eared owls and/or northern harriers are observed at the Facility Area in late March 2020, the need for additional April surveys will be discussed with NYSDEC staff. Similarly, if weather conditions prohibit some surveys, the survey period may need to be extended further into April to ensure an adequate number of surveys at each location.

#### **3.2 Survey Methodology**

The primary survey method will consist of regimented visual scans and observations from several stationary points (“stations”) within the Facility Area. Stations will be situated within or adjacent to habitat that is potentially suitable for wintering grassland raptors, and at vantage points with clear visibility in all directions (or most directions if stations are located at the edge of the target habitat). Stations will be located on parcels within the Facility Area that may host Facility components as well as in locations with suitable habitat for the target grassland raptor species that are not anticipated to include Facility components. In other words, biologists will document target winter raptor species use of fields that are not under consideration for development (but within the Facility Area) in order to inform appropriate siting changes that may be required to avoid impacts to listed species, or to identify potential mitigation options.

A total of six evening stationary survey locations are proposed for this winter raptor study (see Figure 3). These stations are intended to provide coverage of suitable habitat within the entire Facility Area and provide views of both participating and non-participating parcels (i.e., parcels where Facility component construction is planned and parcels where no development is anticipated to occur). As shown in Figure 3, the proposed stations are spaced approximately 1,000 meters or less from one another to provide full coverage of grassland habitat within the entire Facility Area. Station 1 is located along Miller Road overlooking approximately 120 acres of open fallow agricultural land to the northwest, west, southwest, and east in the northwestern portion of the Facility Area. Station 2 is located along NE Sherman

Road (County Route 6) overlooking approximately 130 acres of open successional old field to the southwest, south, and southeast in the west central portion of the Facility Area. Station 3 is also located along NE Sherman Road, with views of approximately 50 acres of successional old field to the south and additional fallow land to the north. Station 4 is located near the junction of NE Sherman Road and Sinden Road, overlooking approximately 90 acres of hayfield to the west, southwest, southeast, and east. Station 5 is located along the eastern portion of NE Sherman Rd, with views of approximately 120 acres of mowed hayfields. Station 6 is located along State Route 76 north Meeder Rd with views in all directions of approximately 140 acres of mowed hayfields.

Due to the crepuscular nature of both the short-eared owl and the northern harrier, evening stationary surveys will be conducted beginning one hour before sunset and continuing until it becomes too dark to observe flying birds (at least thirty minutes after sunset). Therefore, the typical evening stationary survey duration will be 1.5 hours (90 minutes). Sunset times for the 2019-2020 season will be obtained for the Facility Area, and used to guide the start and end times for each stationary survey.

In addition, biologists will also perform daytime driving route surveys (i.e., in the morning or afternoon, and at least one hour before sunset) by driving along roads within the Facility Area and observing habitat from the roadways at designated stops along each driving route. These daytime surveys will be used as an additional method of detecting northern harriers. As recommended by the NYSDEC survey protocol, stops will be located approximately 0.5 mile apart along each route (see Figure 3). Six daytime driving routes are proposed for the winter raptor study, which follow lengths of Miller Road, NE Sherman Road (County Route 6), Sinden Road, and Meeder Road (Route 76). Specifically, these routes include: (1) a 1.4-mile length of Miller Road in the westernmost portion of the Facility Area; (2) a 2.7-mile length of NE Sherman Rd bisecting the western half of the Facility Area; (3) a 1.5-mile length of Sinden Road and NE Sherman Road in the central portion of the Facility Area; (4) a 1.6-mile length of NE Sherman Road within the eastern portion of the Facility Area; (5) a 2.4-mile stretch of Post Road in the southeastern portion of the Facility Area; and (6) a 1.34-mile long driving route on portions of Meeder Road/State Route 76 and County Road 622.

To complete daytime driving route surveys, biologists will drive along each of these routes and conduct visual surveys for a minimum of 5 minutes at each stop along each route (e.g., when conducting the Miller Road survey, biologists would drive along Miller Road and stop two times to conduct 5-minute visual scans of surrounding habitat at stops MR1 and MR2. Biologists would then proceed to the next route). In total, the daytime driving route surveys will include a total of 15 stop locations. Any raptor species or non-raptor listed species observed during travel among stations will also be recorded.

No winter raptor surveys will be conducted during inclement weather that would prevent: (1) use of the area by the two target species; (2) full visibility of the survey areas; and/or (3) the accurate identification of raptor species. Inclement weather conditions will include sustained precipitation, fog, and/or moderate to strong winds (i.e., greater than 12 mph, or Beaufort Scale 3). Weather forecasts will be reviewed prior to the start of each survey week to identify the most suitable days to conduct surveys. However, if inclement weather prevents surveys from being conducted as planned, surveys will be re-scheduled for another day and completed as soon as possible (preferably within the same week or the following week). Weather permitting, surveys will be conducted on consecutive days during each survey week so that all stations can be surveyed at least once every other week throughout the winter season.

For all surveys, qualified, trained biologists will visually scan the surrounding habitat throughout the entirety of each survey period. Binoculars with 8x or 10x magnification will be used during visual scans to aid in the observation and identification of birds. Particular attention will be given to birds that are observed: (1) perching on fence posts, utility poles, transmission line towers, trees, or similar objects; (2) flying low over the ground or tree canopy; (3) perching and/or landing on the ground; and (4) flying alone. Biologists will also listen for the calls of short-eared owls, northern harriers, and other raptor species. All raptor species (defined as accipiters, buteos, eagles, falcons, harriers, osprey, owls, and vultures) observed during survey periods will be documented on survey data sheets. Other incidental species that are heard and/or seen during survey periods will also be recorded, including any other state-listed endangered or threatened species, species of special concern (SSC), or species of greatest conservation need (SGCN) (NYSDEC, 2015a; NYSDEC, 2015b).

The following data will be recorded for each survey using printed data sheets and/or an electronic data entry platform, as well as a mobile geographic information system (GIS) for state-listed species observation points, flight path lines, foraging area polygons, and roost location points. Example data sheets are provided in Appendix D to show the full set of data fields that will be filled during each survey. Among others, these data fields will include:

- Survey date;
- Observer name(s);
- Survey type (evening stationary or daytime driving route) and station identification number and/or code;
- Start time, sunset time, end time, and survey duration (once completed);
- Pertinent weather conditions including air temperature, wind speed and direction, snow depth (if any), and cloud cover;
- The species four-letter alpha code (Pyle and DeSante, 2017), number, sex, and age for each raptor observed;
- The time each individual raptor was first and last observed;
- Observed behavior(s), flight direction, flight height, flight description, and any potential perch/roost locations for each raptor observed;

- The location and flight path for any state-listed species relative to the observer; and
- Location coordinates for any state-listed species observations (as well as identification of foraging areas and roosting locations).

### 3.3 Survey Schedule

Qualified biologists will visit the Facility Area multiple days per survey week to conduct the surveys. For the evening stationary surveys, one station will be surveyed by one biologist on a given evening, and surveys will typically be conducted on consecutive nights during each survey week. It is anticipated that an average of three stationary surveys will be conducted each week during the survey period so that each station is surveyed every other week (alternating). This survey frequency allows for adequate detection of arrival, departure, and presence of the target species, which can be heavily influenced by changes in regional weather conditions over the course of the season. Consequently, by the end of March 2020, at least nine evening surveys will have been completed for each station (in accordance with the 2015 NYSDEC survey protocol). Though weekly surveys are not feasible due to financial and staffing constraints, this pattern of alternating surveys is anticipated to provide adequate temporal and spatial coverage throughout the survey period (i.e., biologists will be on-site every week as weather conditions permit). Table 1 below provides a summary of the proposed evening stationary survey schedule.

**Table 1. Proposed Evening Stationary Survey Schedule<sup>1</sup>**

| Survey Period <sup>2</sup> | Station 1 | Station 2 | Station 3 | Station 4 | Station 5 | Station 6 |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| November 25 - November 29  | X         |           | X         |           | X         |           |
| December 2 - December 6    |           | X         |           | X         |           | X         |
| December 9 - December 13   | X         |           | X         |           | X         |           |
| December 16 - December 20  |           | X         |           | X         |           | X         |
| December 23 - December 27  | X         |           | X         |           | X         |           |
| December 30 - January 3    |           | X         |           | X         |           | X         |
| January 6 - January 10     | X         |           | X         |           | X         |           |
| January 13 - January 17    |           | X         |           | X         |           | X         |
| January 20 - January 24    | X         |           | X         |           | X         |           |
| January 27 - January 31    |           | X         |           | X         |           | X         |
| February 3 - February 7    | X         |           | X         |           | X         |           |
| February 10 - February 14  |           | X         |           | X         |           | X         |
| February 17 - February 21  | X         |           | X         |           | X         |           |
| February 24 - February 28  |           | X         |           | X         |           | X         |
| March 2 - March 6          | X         |           | X         |           | X         |           |
| March 9 - March 13         |           | X         |           | X         |           | X         |

| Survey Period <sup>2</sup>      | Station 1 | Station 2 | Station 3 | Station 4 | Station 5 | Station 6 |
|---------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| March 16 - March 20             | X         |           | X         |           | X         |           |
| March 23 - March 27             |           | X         |           | X         |           | X         |
| <b>Target Number of Surveys</b> | 9         | 9         | 9         | 9         | 9         | 9         |

<sup>1</sup> Dates are provided to indicate the weeks when surveys will be conducted. For each week, specific survey date(s) will be chosen based on weather conditions.

<sup>2</sup>The exact order in which stations are surveyed may be subject to change based on weather conditions and field biologist availability.

In addition, biologists will conduct daytime driving route surveys throughout the winter season as an additional means of detecting northern harriers, with a goal of completing daytime driving route surveys one or two times each month from December to March (total of at least four daytime driving route surveys). Driving route surveys will typically be conducted during morning and/or afternoon hours on days when evening stationary surveys will also be conducted.

### 3.4 Qualifications

The South Ripley Solar winter raptor study will be managed and conducted on behalf of the Applicant by experienced consulting biologists, including EDR Senior Environmental Analyst Samouel Beguin and Environmental Analyst Tiffany Clay.

Samouel Beguin is a Senior Environmental Analyst at EDR with more than 5 years of experience in environmental consulting, wildlife biology, and scientific research. He received a Master of Science degree in Environmental and Forest Biology from the State University of New York College of Environmental Science and Forestry and a Bachelor of Arts degree in Biology and Environmental Studies from Middlebury College. Samouel's experience includes wildlife and other ecological resource surveys, environmental permitting, impact assessment, technical report preparation, and GIS mapping and data analysis. At EDR, Samouel has conducted winter raptor and breeding bird surveys for several renewable energy generation and institutional development projects.

Tiffany Clay is an Environmental Analyst at EDR with more than five years of experience in the natural resources field. She received a Bachelor of Science in Environmental Science and Biology from The College at Brockport State University of New York (SUNY Brockport) and a master's degree in Environmental Science and Ecology from SUNY Brockport. Tiffany's experience includes ecological resource surveys, GIS mapping and data analysis, environmental impact analysis, and technical report preparation. At EDR, Tiffany has conducted avian surveys for several renewable energy projects in central and western New York.

### 3.5 Reporting

As specified by the NYSDEC survey protocol, a final report will be prepared and submitted to the NYSDEC on behalf of ConnectGen following the conclusion of the winter season. The final report will include a summary of all observations of short-eared owls, northern harriers, other raptor species, and other state-listed species (if any) that were observed during the surveys. The report will also include a summary of survey effort, a table showing all dates when surveys were conducted, copies of data sheets, cartographic maps showing survey locations and raptor observations (with recent aerial imagery basemaps), and GIS shapefiles (for state-listed species observation points and flight path lines as well as survey point locations and driving routes). For observations of state-listed species, the report will provide the date, time observed, type of survey (stationary or driving route), number of individuals, behavior(s), flight height, flight direction and description of area covered, and other relevant information, as applicable. Location coordinates will also be reported for all short-eared owl, northern harrier, and other state-listed species observations (including point locations of any roosting sites and/or polygons representing foraging areas if individuals are very active in certain fields). A summary of incidental species observed during surveys will also be included as an appendix to the report. Finally, the report will provide conclusions regarding the need for additional studies and the potential for Facility-related impacts to state-listed winter raptor species based on the survey results.

## **4.0 SUMMARY**

### **4.1 Winter Raptor Survey Work Plan Summary**

On behalf of ConnectGen LLC, EDR has prepared this Winter Raptor Survey Work Plan for the proposed South Ripley Solar Project, located in the Town of Ripley, Chautauqua County, New York.

Surveys targeting the short-eared owl and the northern harrier will be conducted by qualified consulting biologists within the Facility Area from mid November 2019 through March 2020. Both evening stationary and daytime driving route surveys will be conducted during this period. Evening stationary surveys will be conducted from six pre-selected locations within the Facility Area during the crepuscular period. Each survey station will be surveyed at least nine times during the winter season (one survey at each station every two weeks). In addition, biologists will conduct daytime driving route surveys one or two times per month. These daytime surveys will provide an additional means of detecting northern harriers, and will consist of driving pre-established routes and conducting 5-minute surveys (minimum) at each of several designated stops along each route.

The results of the winter raptor study will be compiled into a final report that will be submitted to the NYSDEC. The final report will include a summary of raptor observations, detailed information for any state-listed species observations, copies of data sheets, maps, GIS shapefiles, and conclusions regarding the need for additional surveys and the proposed Facility's potential impact on state-listed raptor species.



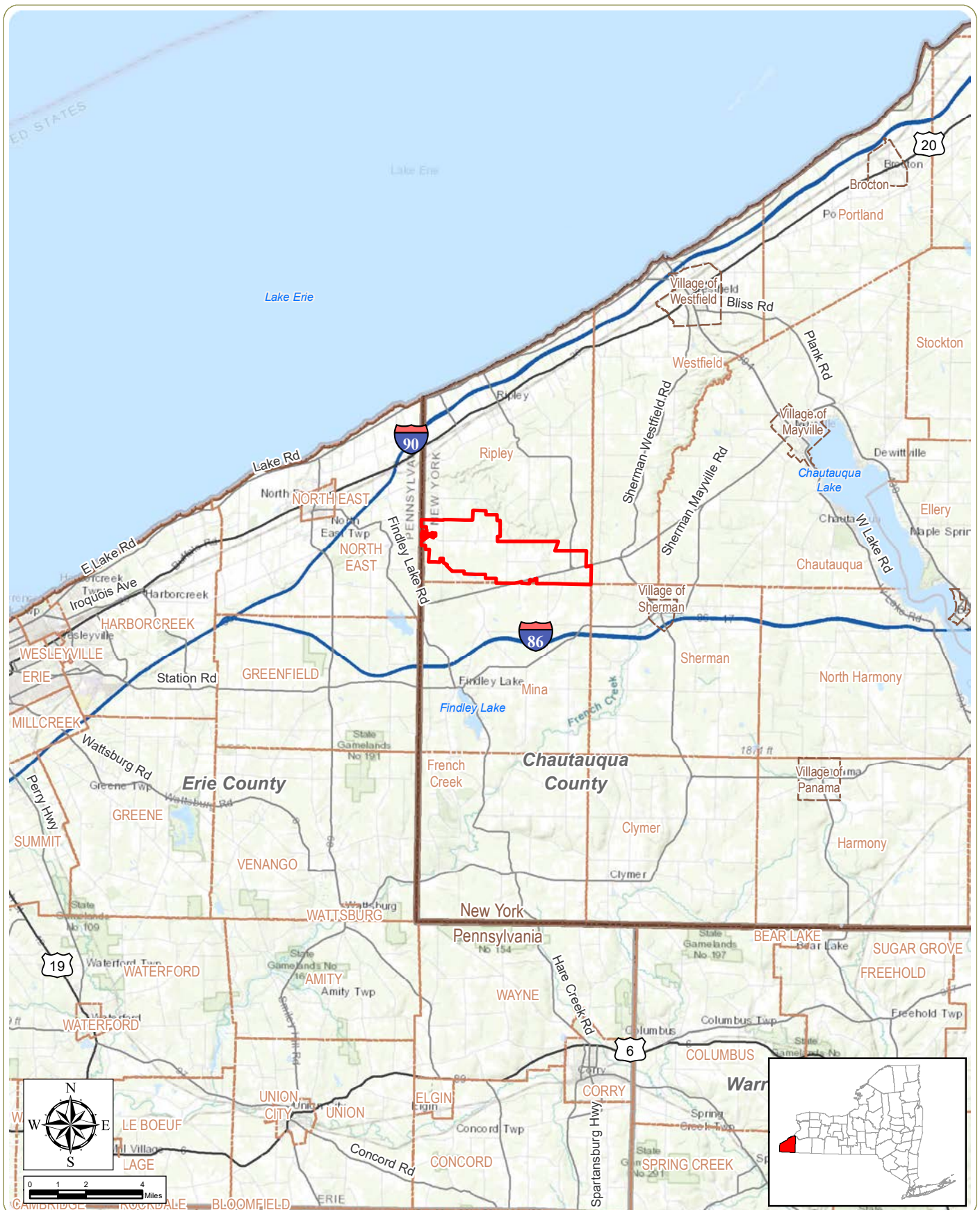
## 5.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC). 2015a. List of Endangered, Threatened and Special Concern Fish & Wildlife Species of New York State. Available at: <http://www.dec.ny.gov/animals/7494.html>. Accessed October 2019.

New York State Department of Environmental Conservation (NYSDEC). 2015b. Species of Greatest Conservation Need (SGCN). Available at: <https://www.dec.ny.gov/animals/9406.html>. Accessed October 2019.

Pyle, P., and D.F. DeSante. 2017. Four-letter (English Name) Alpha Codes for 2143 Bird Species. The Institute for Bird Populations. Available at: [https://www.birdpop.org/docs/misc/Alpha\\_codes\\_eng.pdf](https://www.birdpop.org/docs/misc/Alpha_codes_eng.pdf). Accessed October 2019.

## FIGURES



## South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

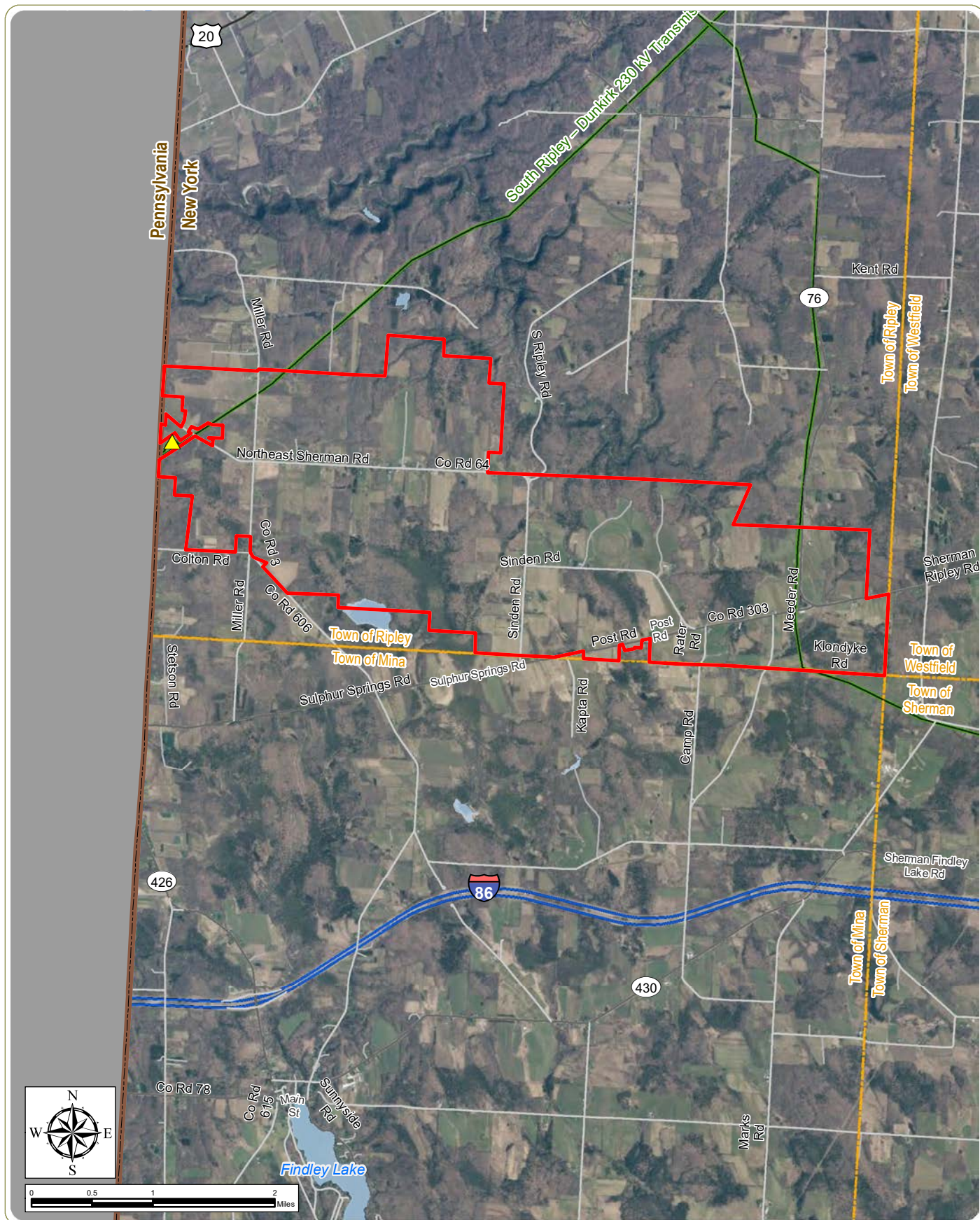
**Figure 1: Regional Facility Location**

**Notes:** 1. Basemap: ESRI ArcGIS Online "World Topographic Map" map service.  
2. This map was generated in ArcMap on November 18, 2019. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.

- Facility Area
- Town Boundary
- County Boundary
- State Boundary







## South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

### Figure 2: Facility Area

**Notes:** 1. Basemap: NYSDOP "2016" orthoimagery map service. 2. This map was generated in ArcMap on November 18, 2019. 3. This is a color graphic. Reproduction in grayscale may

- ▲ South Ripley 230 kV Substation
- Transmission Line
- Facility Area
- Village Boundary
- Town Boundary
- State Boundary

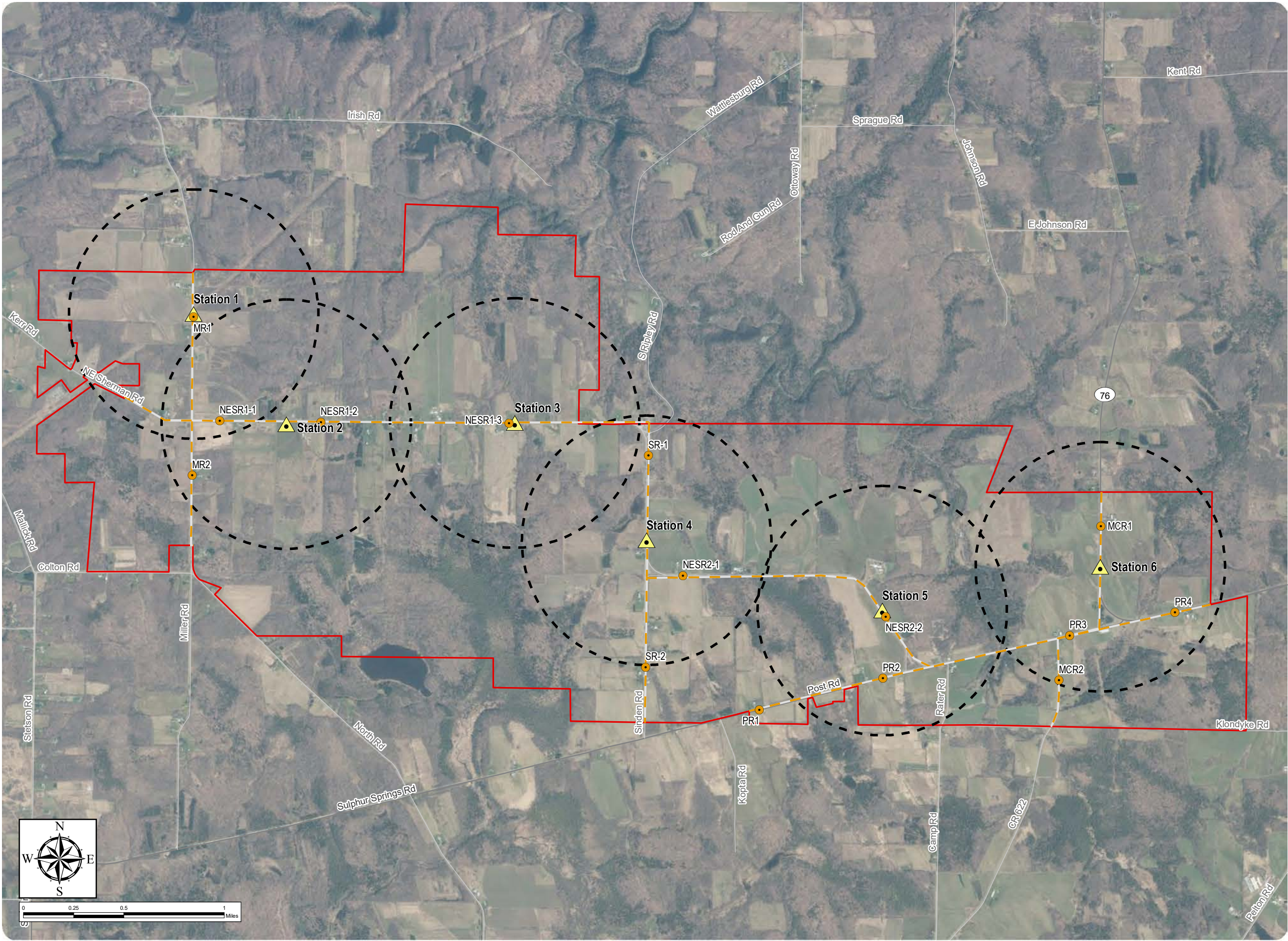




South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Figure 3: Winter Raptor Survey Locations



- Stationary Survey Location
- Daytime Survey Stop
- Daytime Driving Route
- 1,000-meter Buffer
- Facility Area

Notes: 1. Basemap: NYSDOP "2016" orthoimagery map service. 2. This map was generated in ArcMap on January 29, 2020. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.



## **APPENDIX A**

NYSDEC Survey Protocol for State-listed Wintering Grassland Raptor Species (Draft 2015)

**New York State Department of Environmental Conservation**  
**Survey Protocol for State-listed Wintering Grassland Raptor Species**  
**DRAFT- 2015**

These protocols describe requirements for determining presence and site use by state-listed threatened/endangered grassland raptor species during the winter season as part of the NYSDEC permit review process for a project application. These protocols specifically target the New York state listed Short-eared Owl (Endangered) and Northern Harrier (Threatened). Information obtained from surveys will be considered in determining the possible need for additional comprehensive studies (e.g., using radio-telemetry and/or night-vision optics), regulatory review and, if necessary, avoidance, minimization, and/or mitigation strategies pursuant to 6 NYCRR Part 182.9.

### **Survey Periods**

Surveys should be conducted during the winter season, here defined as November 15-March 31, the primary time period during which Short-eared Owl and Northern Harrier often occur at winter concentration areas. At a minimum, surveys will be conducted every other week between November 15 and March 31, for a total of nine survey periods during the course of the winter season. Additional surveys may be required in April should Short-eared Owls and/or Northern Harrier be present at the project site during the second March survey period. When that occurs, applicants should discuss the possible need for April and/or breeding season surveys with NYSDEC.

### **Establishing Survey Points and Driving Routes**

The primary survey method for wintering Short-eared Owl and Northern Harrier should consist of a regimented series of visual scans and observations with binoculars from one or more stationary points or “stations” within a given project area. A spotting scope may also be necessary to aid in making positive species identifications for birds perched far from a survey station. The total number of stations will depend on the size of the project area, the amount of grassland habitat within the project area, and the visibility of that grassland habitat from selected survey station(s). Survey stations should be situated in or near grassland habitat at vantage points with clear visibility in all directions, or most directions if stations are from roadside locations or edges of grasslands. Actual observations should be made from within or next to a vehicle or blind if the station is within an open grassland habitat. When the station is at the edge of grassland habitat, the observer(s) should be backed up to a hedgerow or other background feature at the edge of a grassland habitat, or within or next to a vehicle. Stations should not be located further than 1,000 meters from one another (observations have shown that birds seen at distances greater than 1,000 meters are less likely to be correctly identified to species), and the total number of stations need to provide full coverage of the grassland habitat within the entire project site.

Driving routes, where an observer drives between a series of roadside stops and conducts observations of a short duration from multiple stationary, roadside locations may serve as

an additional survey method for Northern Harrier. However, due to the short time period during which Short-eared Owls are active and visible before dark, driving surveys **cannot** be the sole survey method at a project site. Driving route(s) for a site should include all roads within the project site from which grassland habitat can be easily viewed. The number and distribution of roadside stops will be dictated by the length and distribution of roads in the project area, and what areas may be viewed from various roadside stops. Stops located approximately a half mile apart will typically allow for sufficient coverage.

### Timing of Surveys

Because of the late afternoon/evening activity period of Short-Eared Owls, surveys for State-listed wintering grassland raptor species **must** be conducted during the 1 hour before sunset to ½ hour (or up to 1 hour) after sunset period described below. Daytime surveys and/or driving route surveys can be added as an additional survey method, but cannot replace the evening surveys.

Short-eared owls are crepuscular and nocturnal hunters and while they may occasionally, and at some sites, be active in the late afternoon, winter surveys conducted throughout New York State from 2008-2013 indicate that at many sites, they often do not leave their daytime roost to begin hunting until sunset or later, and sometimes just 5 or 10 minutes before full dark. Northern Harriers are diurnal and crepuscular raptors and may be seen hunting throughout the day, but are most active in the morning and late afternoon right up until sunset, when they can be observed landing at their nighttime roost site. In order to observe both species, surveys **must** be conducted from one hour before sunset until it is too dark to observe flying birds (up to one hour after sunset). On many nights, especially those with clear, moonlit skies, and on days with complete snow cover, birds can frequently be seen well after the official time of sunset. Therefore, the entire length of the survey will typically be 1.5 hours, but on some nights could be as long as 2.5 hours, depending on conditions and bird activity.

### Conducting Surveys

These required surveys have two primary purposes: (1) documenting the presence (occupied habitat) or apparent absence of the target species, and (2) recording particular areas used by the target species, such as roost sites or foraging areas, within a project site. Both Short-eared Owls and Northern Harriers typically roost on the ground, though Short-eared owls may roost in conifers or thick hedgerows when snow becomes deeper than roughly 6 inches. At times, these two species may roost in close proximity to one another and Northern Harriers may be observed dropping to the ground at their nighttime roost just before dark at the same time that Short-eared Owls are leaving their daytime roost to begin foraging for the evening. The period surrounding sunset is particularly critical for the identification of likely roost locations and determining the number of individuals using them.

Surveys should not be conducted during inclement weather, including precipitation, fog, or moderate to strong winds (i.e. wind greater than 12 mph, or Beaufort Scale 3). Multiple



observers at different stations and/or multiple evenings will be needed to sufficiently cover most project sites for a given stationary survey period because the survey time constraints dictate that an observer can only cover one station per evening. Repeated trips on additional evenings may be necessary to adequately confirm species presence or suspected absence and to adequately document foraging and roost areas. For example, Short-eared Owls may fly considerable distances from roost sites to foraging areas. Appropriately stationing observers on subsequent nights farther out along these flight paths may be necessary to identify important foraging areas.

Observers conducting stationary surveys should scan the available grassland habitat throughout the course of the survey period. Particular attention should be paid to birds perching on fence posts, on utility poles, on hay bales, coursing low over the ground, or perched on the ground. Observers should also listen for the bark-like call of the Short-eared Owl and rapid series of *kek* calls of the Northern Harrier.

While one observer is sufficient for conducting stationary surveys at a given station, two observers are recommended if driving routes are conducted. As noted above, survey stops will typically be spaced approximately a half mile apart. Roadside surveys for other established bird monitoring programs vary from 3-5 minutes per survey stop and this should be considered a minimum time for the purposes of these winter grassland raptor surveys, though there would be no restriction regarding a longer observation time period. The length of the driving route and the number of points to be included would dictate whether stops last longer than 3-5 minutes. At each stop, the observer(s) should get out of the vehicle and scan the surrounding suitable open-country habitat in all directions for the 3-minute (or longer) observation period. For each raptor seen, record the time that each raptor is first observed and mark its location on a map. Behavior or activity notes must also be recorded. If a raptor is observed while driving between stops, the observation location and data should be recorded upon reaching the next stationary point.

Observations of other species during the stationary and driving surveys, as well as incidentally while on the project area (not necessarily during the survey period), should also be recorded on data sheets. Other species of interest include all state-listed endangered, threatened, and special concern species, all raptors (owls, hawks, falcons, eagles, osprey), shrikes, and arctic-breeding songbirds such as snow buntings, larkspurs, and pipits.

## **Recording Data**

Data recorded for each survey must include: date; observer name(s); survey location (i.e. stationary survey locations and driving route stops, if any); start and end time of observation period; weather information (including temperature, wind speed, wind direction, snow depth, and cloud cover); number and identification of each species observed; individual behavior; and the location of target species relative to observer. Record Northern Harriers as male or female/juvenile. Observations of all raptors should also be documented, and birds identified to species, where possible. When species identification is uncertain, record “unidentified raptor”, although “unidentified buteo” or

“unidentified accipiter” would be preferable where possible. Location coordinates for all Short-eared Owls and Northern Harriers must be provided or locations indicated on an aerial photograph or map of the survey area. Where raptors fly into or out of an area of visibility, indicate direction of flight on the maps. Foraging and roost areas should be clearly shown on the maps.

Specific behaviors to be noted for Short-Eared Owl and Northern Harrier include foraging (defined as flying low over vegetation, over in a back and forth pattern, and dropping to or toward the ground in an attempt to capture prey, at least once during the observation period), perching (as on elevated perches such as fence posts, utility poles, hay bales, on the ground, etc.), fly-through (i.e., straight-line flight such as when relocating between roosting and foraging areas), and roosting. Flight height and direction should be recorded for all raptors observed at proposed wind energy projects.

Any likely roost areas should also be noted on aerial photographs, maps, and data sheets. Roost areas would be suspected in cases where one or more Short-eared owls are observed arising from the ground or conifers in the evening and then begin flying and foraging activities, or where one or more Northern Harriers are active in an area near dusk and are then observed dropping to the ground, but not coming back up as it gets dark. Late winter surveys (late March and April) should specifically document any breeding behavior observed.

### **Reporting Requirements**

A detailed, site specific work plan, including stationary survey locations and driving route stops, if they are to be used, should be developed and submitted to NYSDEC for review and written approval prior to the start of field work. A final report should be submitted to NYSDEC at the conclusion of each year of surveys. Final reports should include data sheets; maps (ideally recent aerial photographs); summaries of all observations of Short-eared Owls, Northern Harriers, and any other state-listed species; and a conclusion whether more comprehensive studies may be necessary to assess the potential for the project to negatively affect endangered or threatened winter raptor species.

## **APPENDIX B**

Results of Agency Database Review and Consultation



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New York Ecological Services Field Office  
3817 Luker Road

Cortland, NY 13045-9385

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

In Reply Refer To:

October 28, 2019

Consultation Code: 05E1NY00-2020-SLI-0302

Event Code: 05E1NY00-2020-E-00842

Project Name: South Ripley Solar

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (<http://www.fws.gov/windenergy/>

[eagle\\_guidance.html](#)). Additionally, wind energy projects should follow the Services wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New York Ecological Services Field Office**

3817 Luker Road

Cortland, NY 13045-9385

(607) 753-9334

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## Project Summary

Consultation Code: 05E1NY00-2020-SLI-0302

Event Code: 05E1NY00-2020-E-00842

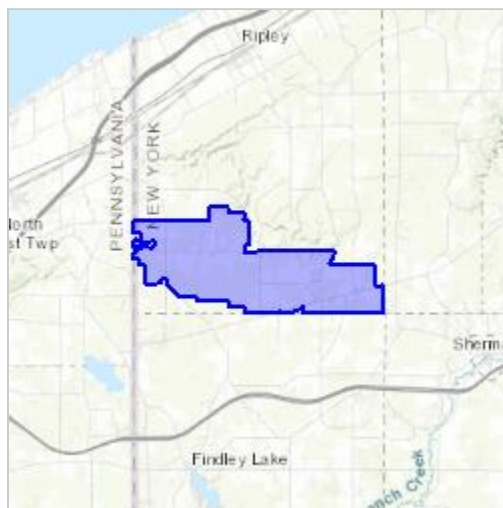
Project Name: South Ripley Solar

Project Type: POWER GENERATION

Project Description: South Ripley Solar Project is proposing to construct an up to 270 MW solar powered electric generating facility within the Town of Ripley, Chautauqua County, New York.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/42.19202586523372N79.71394837277441W>



Counties: Chautauqua, NY

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## Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

| NAME   | STATUS     |
|--|------------|
| Northern Long-eared Bat <i>Myotis septentrionalis</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a> | Threatened |

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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**The following rare plants and significant natural communities  
have been documented at the project site, or in its vicinity.**

We recommend that potential impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

**The following natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. Each community is either an example of a community type that is rare in the state, or a high-quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.**

| COMMON NAME   | SCIENTIFIC NAME | NY STATE LISTING | HERITAGE CONSERVATION STATUS                          |
|---|-----------------|------------------|---|
| <b>Wetland/Aquatic Communities</b>  |                 |                  |   |
| <b>Confined River</b>   |                 |                  | High Quality Occurrence of<br>Uncommon Community Type |
| <p><b>Documented in the eastern third of the project site at Twentymile Creek.</b> This is a moderately large occurrence in very good condition and with very good species diversity. The stream is in a moderate-sized landscape of working forests.</p> |                 |                  |   |

10196

**Upland/Terrestrial Communities**

|   |  |  |                         |
|---|--|--|-------------------------|
| <b>Hemlock-Northern Hardwood Forest</b>   |  |  | High Quality Occurrence |
| <p><b>Documented in multiple patches within the project site.</b> This is a moderate-sized occurrence in a mature state with small patches of putative old growth and excellent plant species diversity. The community is in an excellent moderate-sized and intact forested landscape.</p> |  |  |                         |

6512

**The following plant is listed as Endangered by New York State, and so is a vulnerable natural resource of conservation concern.**

| COMMON NAME  | SCIENTIFIC NAME          | NY STATE LISTING | HERITAGE CONSERVATION STATUS |
|--|--------------------------|------------------|------------------------------|
| <b>Tall Ironweed</b>   | <i>Vernonia gigantea</i> | Endangered       | Critically Imperiled in NYS  |
| <p>Documented within 0.35 mile south of the project site. 1991-08-05: Moist pastureland and successional old field. The area was probably a rich hemlock-hardwood forest before human and beaver activities.</p> |                          |                  |                              |

1882

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at [www.guides.nynhp.org](http://www.guides.nynhp.org), from NatureServe Explorer at [www.natureserve.org/explorer](http://www.natureserve.org/explorer), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at [www.guides.nynhp.org](http://www.guides.nynhp.org). For descriptions of all community types, go to [www.dec.ny.gov/animals/97703.html](http://www.dec.ny.gov/animals/97703.html) for Ecological Communities of New York State.

## **APPENDIX C**

Sample Winter Raptor Survey Data Sheets

# 19020 South Ripley Solar – Winter Raptor Survey Data Sheet

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Observer Name(s): \_\_\_\_\_

Survey Type (circle one): Stationary or Driving Route Station or Driving Route ID: \_\_\_\_\_

Start Time: \_\_\_\_\_ Sunset Time: \_\_\_\_\_ End Time: \_\_\_\_\_ Survey Duration: \_\_\_\_\_

Temperature (°F): \_\_\_\_\_ Wind Speed (mph) and Direction: \_\_\_\_\_ Snow Depth (in): \_\_\_\_ Cloud Cover (%): \_\_\_\_\_

| No. | Time Observed | Location Description <sup>1</sup> | Raptor Species | Count | Sex <sup>2</sup> | Age <sup>3</sup> | Behavior(s) <sup>4</sup><br>(F, P, F-T, or R) | Flight Description <sup>5</sup> |
|-----|---------------|-----------------------------------|----------------|-------|------------------|------------------|---|---------------------------------|
| 1   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 2   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 3   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 4   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 5   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 6   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 7   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 8   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 9   | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |
| 10  | First:        |                                   |                |       |                  |                  |   |                                 |
|     | Last:         |                                   |                |       |                  |                  |   |                                 |

<sup>1</sup> Provide nearest stop ID for driving route surveys; indicate location, flight paths, and perch/roost locations on map; provide coordinates for SEOW and NOHA

<sup>2</sup> M = male, F = female, U = unknown; <sup>3</sup> A = adult, J = juvenile, U = unknown

<sup>4</sup> F = foraging, P = perching, F-T = fly-through, R = roosting; include likely roost areas on maps and in notes below; for surveys in late March and April, document any breeding behavior observed

<sup>5</sup> Indicate direction(s) of flight, approximate height of flight, and description of area covered during foraging/flights if birds are very active

## Notes and Incidental Species:

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\*Use the following categories for the "Habitat Type" column: RH = row crops, harvested in previous growing season; RF = row crops, fallow in previous growing season; H = hayfield; P = pastureland; S = successional old field; O = other (describe in "Notes" column)

## **APPENDIX C**

### Results of Agency Database Review and Consultation



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9385

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo/es/section7.htm>



In Reply Refer To:

October 28, 2019

Consultation Code: 05E1NY00-2020-SLI-0302

Event Code: 05E1NY00-2020-E-00842

Project Name: South Ripley Solar

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (<http://www.fws.gov/windenergy/>

[eagle\\_guidance.html](#)). Additionally, wind energy projects should follow the Services wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List



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Cortland, NY 13045-9385

(607) 753-9334

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## Project Summary

Consultation Code: 05E1NY00-2020-SLI-0302

Event Code: 05E1NY00-2020-E-00842

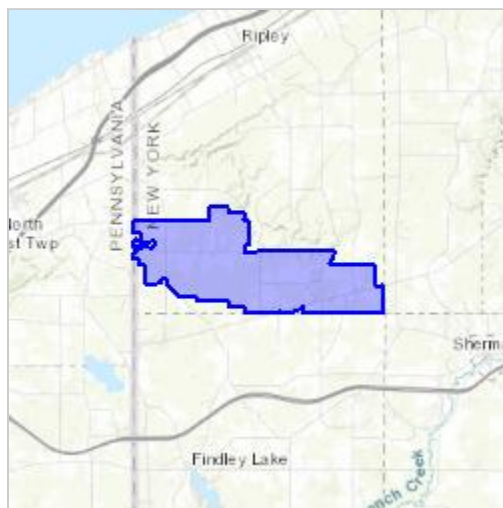
Project Name: South Ripley Solar

Project Type: POWER GENERATION

Project Description: South Ripley Solar Project is proposing to construct an up to 270 MW solar powered electric generating facility within the Town of Ripley, Chautauqua County, New York.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/42.19202586523372N79.71394837277441W>



Counties: Chautauqua, NY

---

## Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

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See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

| NAME   | STATUS     |
|--|------------|
| Northern Long-eared Bat <i>Myotis septentrionalis</i><br>No critical habitat has been designated for this species.<br>Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a> | Threatened |

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

---



**The following rare plants and significant natural communities  
have been documented at the project site, or in its vicinity.**

We recommend that potential impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

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| COMMON NAME   | SCIENTIFIC NAME | NY STATE LISTING | HERITAGE CONSERVATION STATUS                          |
|---|-----------------|------------------|---|
| <b>Wetland/Aquatic Communities</b>  |                 |                  |   |
| <b>Confined River</b>   |                 |                  | High Quality Occurrence of<br>Uncommon Community Type |
| <p><b>Documented in the eastern third of the project site at Twentymile Creek.</b> This is a moderately large occurrence in very good condition and with very good species diversity. The stream is in a moderate-sized landscape of working forests.</p> |                 |                  |   |

10196

**Upland/Terrestrial Communities**

|   |  |  |                         |
|---|--|--|-------------------------|
| <b>Hemlock-Northern Hardwood Forest</b>   |  |  | High Quality Occurrence |
| <p><b>Documented in multiple patches within the project site.</b> This is a moderate-sized occurrence in a mature state with small patches of putative old growth and excellent plant species diversity. The community is in an excellent moderate-sized and intact forested landscape.</p> |  |  |                         |

6512

**The following plant is listed as Endangered by New York State, and so is a vulnerable natural resource of conservation concern.**

| COMMON NAME  | SCIENTIFIC NAME          | NY STATE LISTING | HERITAGE CONSERVATION STATUS |
|--|--------------------------|------------------|------------------------------|
| <b>Tall Ironweed</b>   | <i>Vernonia gigantea</i> | Endangered       | Critically Imperiled in NYS  |
| <p>Documented within 0.35 mile south of the project site. 1991-08-05: Moist pastureland and successional old field. The area was probably a rich hemlock-hardwood forest before human and beaver activities.</p> |                          |                  |                              |

1882

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

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Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at [www.guides.nynhp.org](http://www.guides.nynhp.org). For descriptions of all community types, go to [www.dec.ny.gov/animals/97703.html](http://www.dec.ny.gov/animals/97703.html) for Ecological Communities of New York State.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

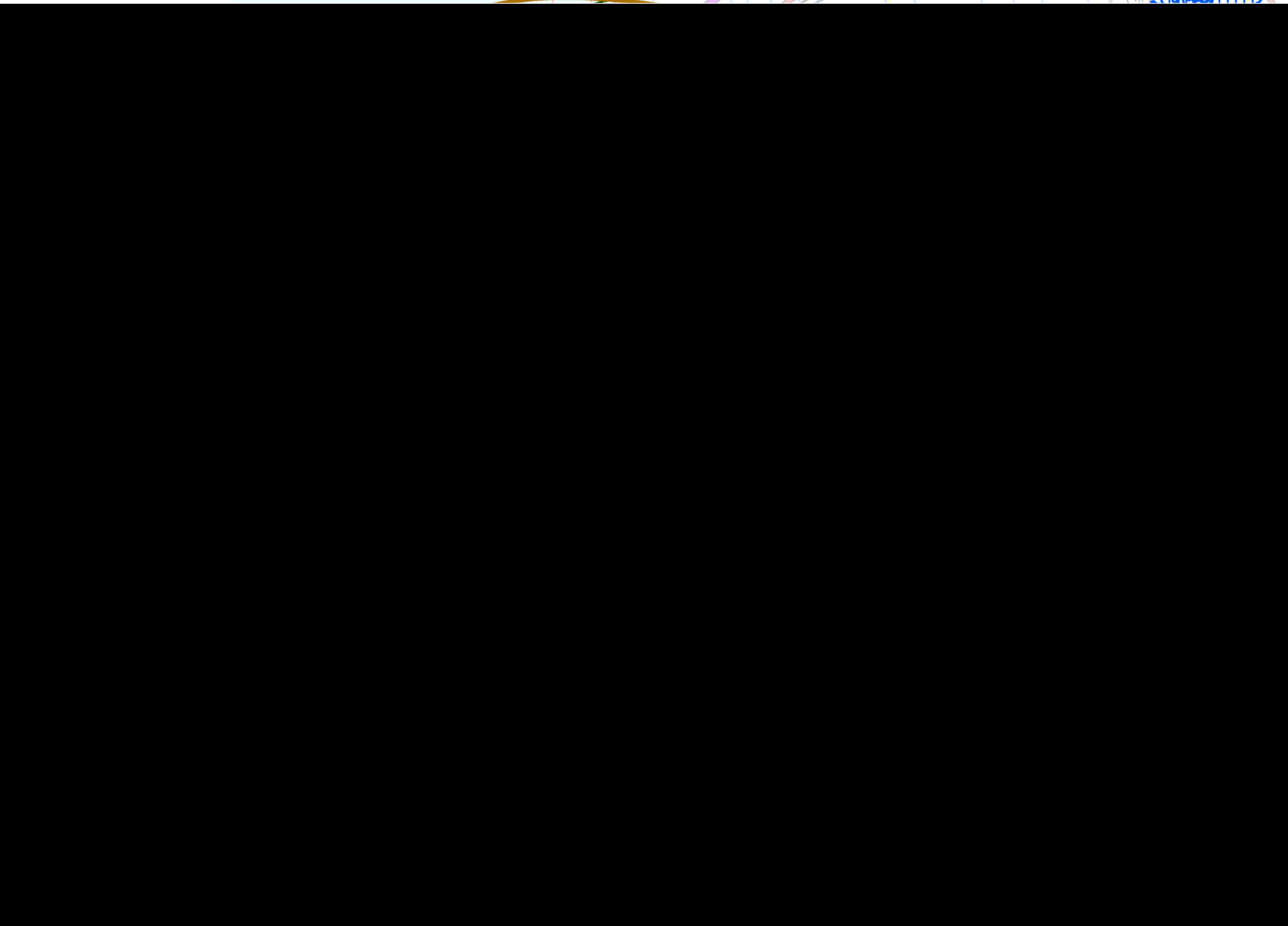
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# South Ripley Solar--NHP Tracked Species

REDACTED -- Matter No. 21-00750



## **APPENDIX D**

Stationary Survey Data Sheets



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 64367                    |
| Survey Date | 11/25/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 1   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:21 PM   |
| Sunset Time | 04:51 PM   |
| End Time    | 05:21 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 90   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 0  |
| Mean veg height (inches) | 1.5  |
| Dominant plant species   | unknown grasses  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 60   |
| Forb cover (%)           | 40   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 18   |
| Dominant plant species   | unknown grasses, solidago sp.  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | under transmission line  |

### Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1C   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 60   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 30   |
| Dominant plant species   | unknown grasses, timothy, solidago sp.                                 |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |                                |
|---------------------|--|--------------------------------|
| Wind Direction      | SSW  | REDACTED – Matter No. 21-00750 |
| Temperature Range   | 49-46  |                                |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input checked="" type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |                                |
| Snow Depth (inches) | 0  |                                |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |                                |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |                                |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input checked="" type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |                                |
| If other, explain:  | N/A  |                                |

Raptor Observations

Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | RTHA   |
| Bird ID #                   | 1  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown    |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown |
| Time of Initial Observation | 2:30   |
| Time of Final Observation   | 2:35   |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through      |

- REDACTED – Matter No. 21-00750
- ☒ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Riding thermals approximately 100 ft up

Notes

Incidental Species

AMGO, AMCR, RBWP, EUST, ROPI

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 64458                    |
| Survey Date | 11/26/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC and HK  |
| Location ID | Stationary 6   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:38 PM   |
| Sunset Time | 04:51 PM   |
| End Time    | 05:21 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 6A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 3  |
| Dominant plant species   | unknown grasses, most likely timothy                                   |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

Habitat



Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                 |     |
|-----------------|-----|
| Crop cover (%)  | 0   |
| Grass cover (%) | 100 |
| Forb cover (%)  | 5   |
| Shrub cover (%) | 0   |

|                          |  |                                |
|--------------------------|--|--------------------------------|
| Remnant veg (%)          | 10                                     | REDACTED – Matter No. 21-00750 |
| Mean veg height (inches) | 6                                      |                                |
| Dominant plant species   | unknown grasses, most likely timothy   |                                |
| Snow depth (inches)      | 0                                      |                                |
| Snow crust?              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes   |
| Notes                    |  |                                |

## Weather

|                     |   |  |
|---------------------|---|--|
| Beaufort Wind Code  | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input checked="" type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |  |
| Wind Direction      | SW  |  |
| Temperature Range   | 51-44   |  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input checked="" type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100%  |  |
| Snow Depth (inches) | 0   |  |
| Snow Crust?         | <input checked="" type="checkbox"/> No  | <input type="checkbox"/> Yes             |
| Visibility          | <input type="checkbox"/> Fair   | <input checked="" type="checkbox"/> Good |
|                     | <input type="checkbox"/> Poor   |  |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear   | <input type="checkbox"/> Fog             |

REDACTED – Matter No. 21-00750

☐ No Moon

☐ Other

☐ Rain

☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

Raptor Species

Bird ID #

Sex

☐ Female

☐ Male

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

NO RAPTORS

Incidental Species

CANG x 13 flyover, 8 white-tailed deer

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 64681                    |
| Survey Date | 12/03/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC and SPF   |
| Location ID | Stationary 2   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:48 PM   |
| Sunset Time | 04:48 PM   |
| End Time    | 05:18 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 2A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 75   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 75   |
| Mean veg height (inches) | 20   |
| Dominant plant species   | Juncus effusus, solidago sp.,<br>unknown grasses                       |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

☐ 0 - Smoke rises vertically  
( $<1$  mph)☐ 1 - Wind direction shown  
by smoke drift (1-3 mph)☒ 2 - Wind felt on face;  
leaves rustle (4-7 mph)☐ 3 - Leaves, small twigs in  
constant motion; light flag  
extended (8-12 mph)☐ 4 - Raises dust and loose  
paper; small branches are  
moved (13-18 mph)☐ 5 - Small trees in leaf  
sway; crested wavelets on  
inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | SSW  |
| Temperature Range   | 31-31  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 2  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #



Sex

- REDACTED – Matter No. 21-00750
- ☐ Female
- ☐ Male
- ☐ Unknown

Age

- ☐ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

Deer, MODO



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 64677                    |
| Survey Date | 12/03/2019               |
| User        | Joshua Marchner          |

## General

|             |  |
|-------------|--|
| Observer(s) | JM,JK  |
| Location ID | 4  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:44 PM   |
| Sunset Time | 04:48 PM   |
| End Time    | 05:21 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 0  |
| Forb cover (%)           | 100  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 36   |
| Dominant plant species   | GOLDEN ROD   |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input checked="" type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 20   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 20   |
| Remnant veg (%)          | 60   |
| Mean veg height (inches) | 48   |
| Dominant plant species   | Dogwood spp  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4C   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input checked="" type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 25   |
| Forb cover (%)           | 75   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 12   |
| Dominant plant species   | Unk  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4D   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | Unk  |
| Forb cover (%)           | Unk  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unk  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☒ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

SW

Temperature Range

32-32 REDACTED – Matter No. 21-00750

Cloud Cover (%)

- ☐ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☐ Mostly Cloudy - 50-90%  
☒ Overcast - 90-100%

Snow Depth (inches)

2

Snow Crust?

- ☒ No  
☐ Yes

Visibility

- ☐ Fair  
☒ Good  
☐ Poor

Visibility Reason

- ☒ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain  
☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female  
☐ Male  
☐ Unknown

Age

- ☐ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched  
☐ Foraging  
☐ Fly-through  
☐ Flying



- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

Black-Capped Chickadee

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 64772                    |
| Survey Date | 12/05/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 3   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:46 PM   |
| Sunset Time | 04:46 PM   |
| End Time    | 05:16 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 24   |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 30   |
| Mean veg height (inches) | 8  |
| Dominant plant species   | Solidago, Queen Anne, unknown grasses, unknown shrubs                  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 0  |
| Forb cover (%)           | 85   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 85   |
| Mean veg height (inches) | 36   |
| Dominant plant species   | Solidago   |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

WNW

Temperature Range

31-30 REDACTED – Matter No. 21-00750

Cloud Cover (%)

☐

Clear - 0-10%

☐

Mostly Clear - 10-25%

☐

Partly Cloudy - 25-50%

☐

Mostly Cloudy - 50-90%

☒

Overcast - 90-100%

Snow Depth (inches)

4

Snow Crust?

☒

No

☐

Yes

Visibility

☐

Fair

☒

Good

☐

Poor

Visibility Reason

☒

Clear

☐

Fog

☐

No Moon

☐

Other

☐

Rain

☐

Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying

- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

CANG, NOCA, AMCR

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 64809                    |
| Survey Date | 12/05/2019               |
| User        | Joshua Marchner          |

## General

|             |  |
|-------------|--|
| Observer(s) | JK,SB  |
| Location ID | 5  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:50 PM   |
| Sunset Time | 04:46 PM   |
| End Time    | 05:16 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input checked="" type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 8  |
| Dominant plant species   | Juncus sp.   |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5B   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 20   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 5  |
| Dominant plant species   | Unk  |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code ☐ 0 - Smoke rises vertically

- (☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | W  |
| Temperature Range   | 32   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 6  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

CANG, MODO



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65711                    |
| Survey Date | 12/12/2019               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 3  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:43 PM   |
| Sunset Time | 04:46 PM   |
| End Time    | 05:16 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 20   |
| Grass cover (%)          |  |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 40   |
| Mean veg height (inches) | 10   |
| Dominant plant species   | golden rod   |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           |  |
| Grass cover (%)          |  |
| Forb cover (%)           | 60   |
| Shrub cover (%)          | 20   |
| Remnant veg (%)          | 60   |
| Mean veg height (inches) | 24   |
| Dominant plant species   | golden rod   |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input checked="" type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction     | S   |

Temperature Range

31-30 REDACTED – Matter No. 21-00750

Cloud Cover (%)

- ☐ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☒ Mostly Cloudy - 50-90%  
☐ Overcast - 90-100%

Snow Depth (inches)

5

Snow Crust?

- ☒ No  
☐ Yes

Visibility

- ☐ Fair  
☒ Good  
☐ Poor

Visibility Reason

- ☒ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain  
☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female  
☐ Male  
☐ Unknown

Age

- ☐ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched  
☐ Foraging  
☐ Fly-through  
☐ Flying

- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

BCCH, EUST

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65481                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 5   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:46 PM   |
| Sunset Time | 04:46 PM   |
| End Time    | 05:16 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 0  |
| Forb cover (%)           | 35   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 25   |
| Mean veg height (inches) | 12   |
| Dominant plant species   | Juncus effusus   |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5B   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 15   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 6  |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

S



Temperature Range

30

REDACTED – Matter No. 21-00750

Cloud Cover (%)

☐

Clear - 0-10%

☐

Mostly Clear - 10-25%

☐

Partly Cloudy - 25-50%

☐

Mostly Cloudy - 50-90%

☒

Overcast - 90-100%

Snow Depth (inches)

4

Snow Crust?

☒

No

☐

Yes

Visibility

☐

Fair

☒

Good

☐

Poor

Visibility Reason

☒

Clear

☐

Fog

☐

No Moon

☐

Other

☐

Rain

☐

Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying

- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65283                    |
| Survey Date | 12/12/2019               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 1  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:39 PM   |
| Sunset Time | 04:46 PM   |
| End Time    | 05:17 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input checked="" type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | Unk  |
| Forb cover (%)           | 15   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 2  |
| Dominant plant species   | Unk  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               |  |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | Unk  |
| Forb cover (%)           | 60   |
| Shrub cover (%)          | 15   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 24   |
| Dominant plant species   | Goldenrod  |
| Snow depth (inches)      | Unk  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               |  |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input checked="" type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 26   |
| Forb cover (%)           | 50   |
| Shrub cover (%)          | 25   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 36   |
| Dominant plant species   | Goldenrod  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

SSE

|                     |  |                                |
|---------------------|--|--------------------------------|
| Temperature Range   | 31-30  | REDACTED – Matter No. 21-00750 |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input checked="" type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |                                |
| Snow Depth (inches) | 4  |                                |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |                                |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |                                |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |                                |
| If other, explain:  |  |                                |

## Raptor Observations

### Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | RTHA   |
| Bird ID #                   | 1  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input type="checkbox"/> Adult<br><input checked="" type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown   |
| Time of Initial Observation | 3:56   |
| Time of Final Observation   | 4:07   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying |

- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

SE 45ft

Notes

Incidental Species

EUST



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65709                    |
| Survey Date | 12/17/2019               |
| User        | Joshua Marchner          |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 2  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:52 PM   |
| Sunset Time | 04:48 PM   |
| End Time    | 05:19 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 2A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 12 in  |
| Dominant plant species   | Grass, Juncus  |
| Snow depth (inches)      | 6  |
| Snow crust?              | <div> <input checked="" type="checkbox"/> No                 <input type="checkbox"/> Yes             </div> |
| Notes                    |  |

Weather

|                    |  |
|--------------------|--|
| Beaufort Wind Code | <div> <input type="checkbox"/> 0 - Smoke rises vertically                 </div> |
|--------------------|--|

- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | WNW  |
| Temperature Range   | 29-29  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 6  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

Raptor Observations

Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

CANG, MODO

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65621                    |
| Survey Date | 12/17/2019               |
| User        | Joshua Marchner          |

## General

|             |  |
|-------------|--|
| Observer(s) | JM   |
| Location ID | 4  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:48 PM   |
| Sunset Time | 04:48 PM   |
| End Time    | 05:20 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          |  |
| Forb cover (%)           | 95   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 24   |
| Dominant plant species   | Goldenrod  |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           |  |
| Grass cover (%)          |  |
| Forb cover (%)           |  |
| Shrub cover (%)          |  |
| Remnant veg (%)          |  |
| Mean veg height (inches) |  |
| Dominant plant species   |  |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | Previously named 4D. Unk veg due to snow cover                         |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4C   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input checked="" type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          |  |
| Forb cover (%)           |  |
| Shrub cover (%)          |  |
| Remnant veg (%)          |  |
| Mean veg height (inches) |  |
| Dominant plant species   |  |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | Unk veg due to snow  |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input checked="" type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction     | NNW   |



Temperature Range

31-31

REDACTED – Matter No. 21-00750

Cloud Cover (%)

☐

Clear - 0-10%

☐

Mostly Clear - 10-25%

☐

Partly Cloudy - 25-50%

☐

Mostly Cloudy - 50-90%

☒

Overcast - 90-100%

Snow Depth (inches)

5

Snow Crust?

☒

No

☐

Yes

Visibility

☐

Fair

☒

Good

☐

Poor

Visibility Reason

☐

Clear

☐

Fog

☐

No Moon

☐

Other

☐

Rain

☐

Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying



- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65712                    |
| Survey Date | 12/17/2019               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | spf  |
| Location ID | 6  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:48 PM   |
| Sunset Time | 04:48 PM   |
| End Time    | 05:18 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 6B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 3   |
| Forb cover (%)           | 3   |
| Shrub cover (%)          | 1   |
| Remnant veg (%)          | 7   |
| Mean veg height (inches) | 12  |
| Dominant plant species   | juncus sp.  |
| Snow depth (inches)      | 8   |
| Snow crust?              | <div><div><input checked="" type="checkbox"/></div>No</div> <div><div><input type="checkbox"/></div>Yes</div> |
| Notes                    |   |

Habitat

|          |    |
|----------|----|
| Field ID | 6A |
|----------|----|

Habitat Type

- ☐ REDACTED – Matter No. 21-00750  
Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☒ Successional Old Field

Field Condition Photos



Crop cover (%)

Grass cover (%)

Forb cover (%)

1

Shrub cover (%)

Remnant veg (%)

1

Mean veg height (inches)

8

Dominant plant species

goldenrod sp

Snow depth (inches)

10

Snow crust?

- ☒ No
- ☐ Yes

Notes

Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☒ 2 - Wind felt on face;



- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | nw   |
| Temperature Range   | 28-27  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 10   |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input checked="" type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input checked="" type="checkbox"/> Snow  |
| If other, explain:  |  |

Raptor Observations

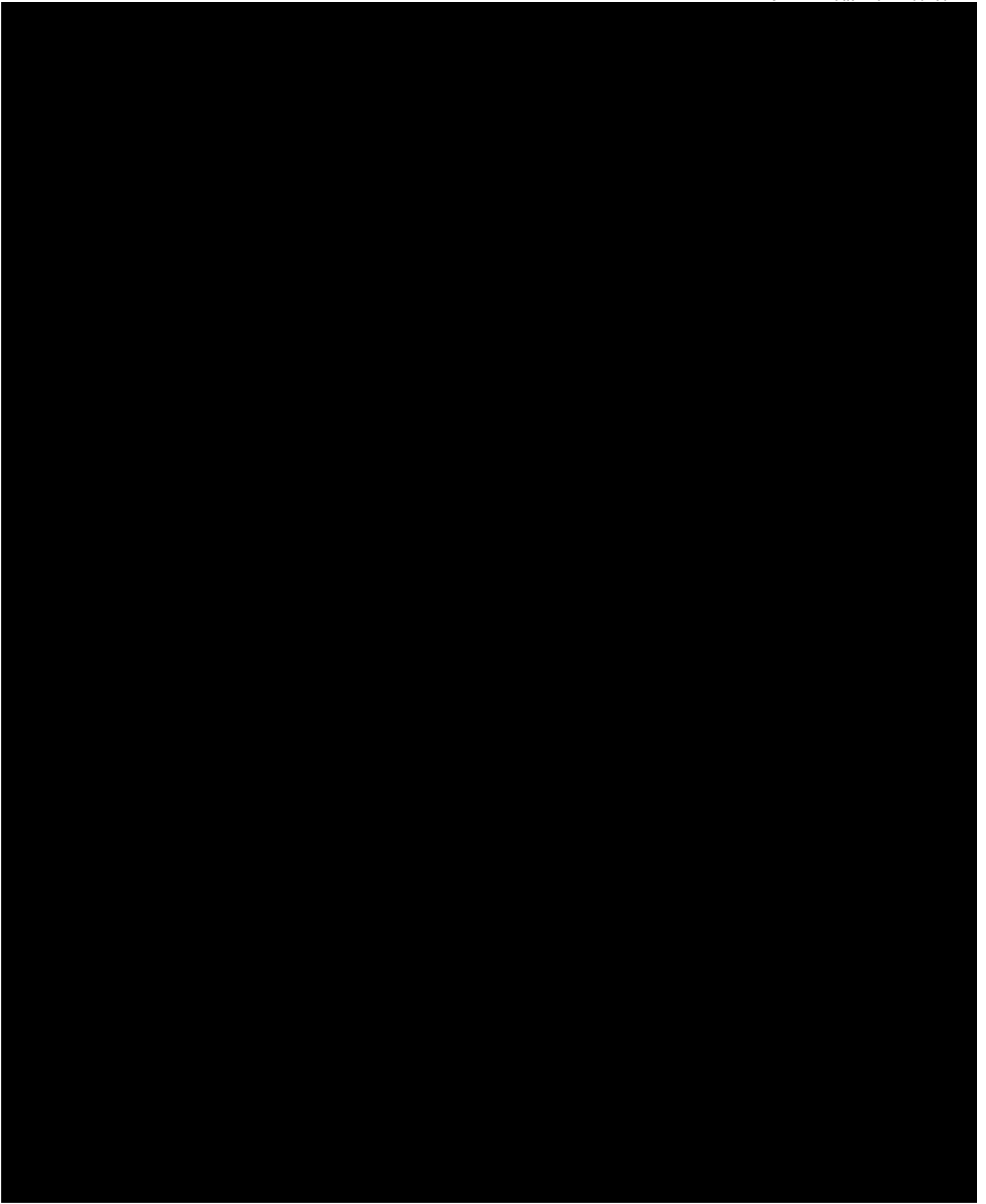
Raptor Observation

|                |   |
|----------------|---|
| Raptor Species | RTHA  |
| Bird ID #      | 6-1   |
| Sex            | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown |
| Age            | <input checked="" type="checkbox"/> Adult   |

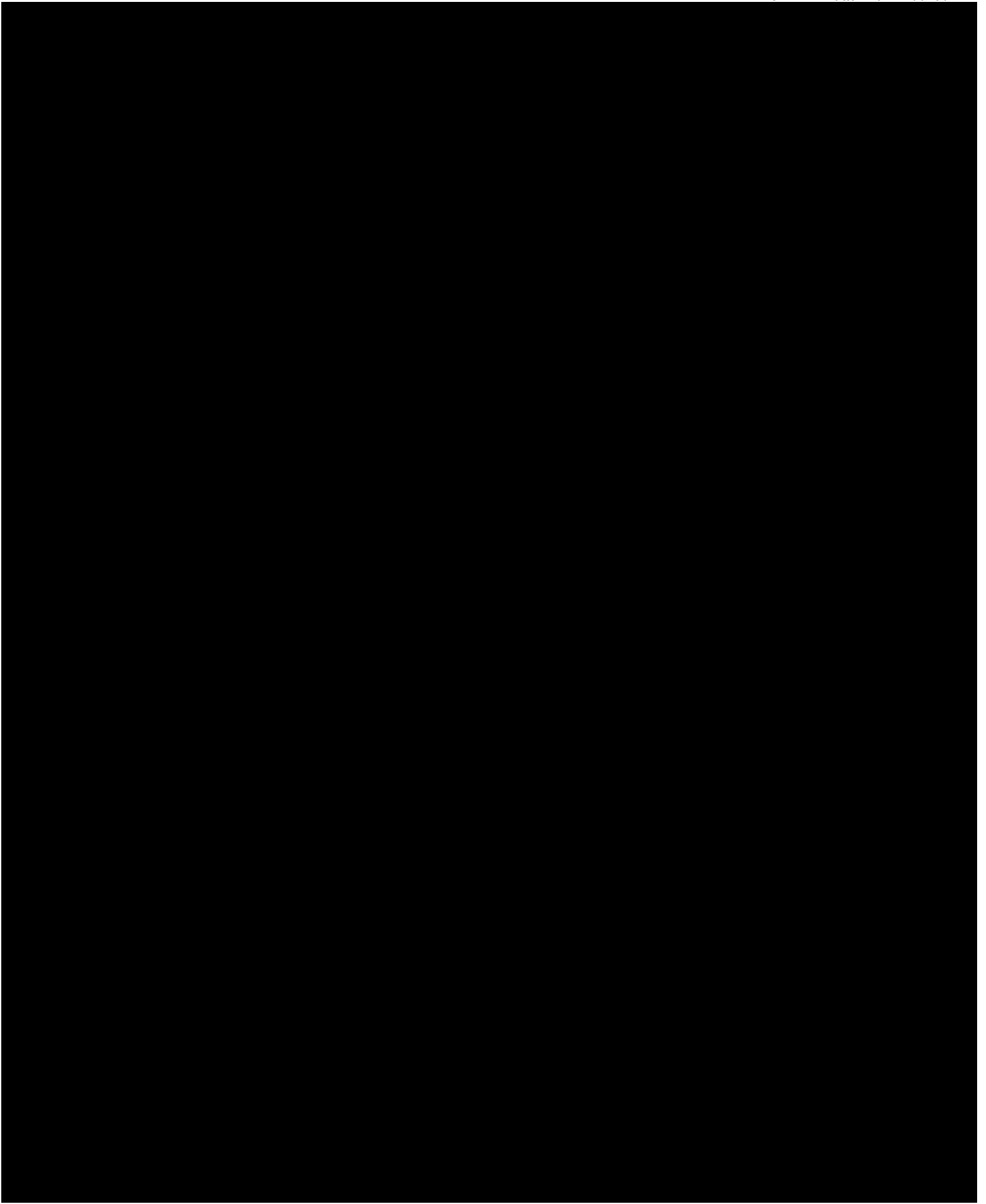
|                             |  |
|-----------------------------|--|
| Time of Initial Observation | 4:00   |
| Time of Final Observation   | 4:29   |
| Activity Observed           | <div><input checked="" type="checkbox"/> Perched</div> <div><input type="checkbox"/> Foraging</div> <div><input type="checkbox"/> Fly-through</div> <div><input type="checkbox"/> Flying</div> <div><input type="checkbox"/> Feeding</div> <div><input type="checkbox"/> Roosting</div> <div><input type="checkbox"/> Breeding</div> <div><input type="checkbox"/> Nest-Building</div> <div><input type="checkbox"/> Other</div> |
| If Other, Explain:          |  |
| Flight Description          |  |
| Notes                       | on telephone pole past field 6b  |

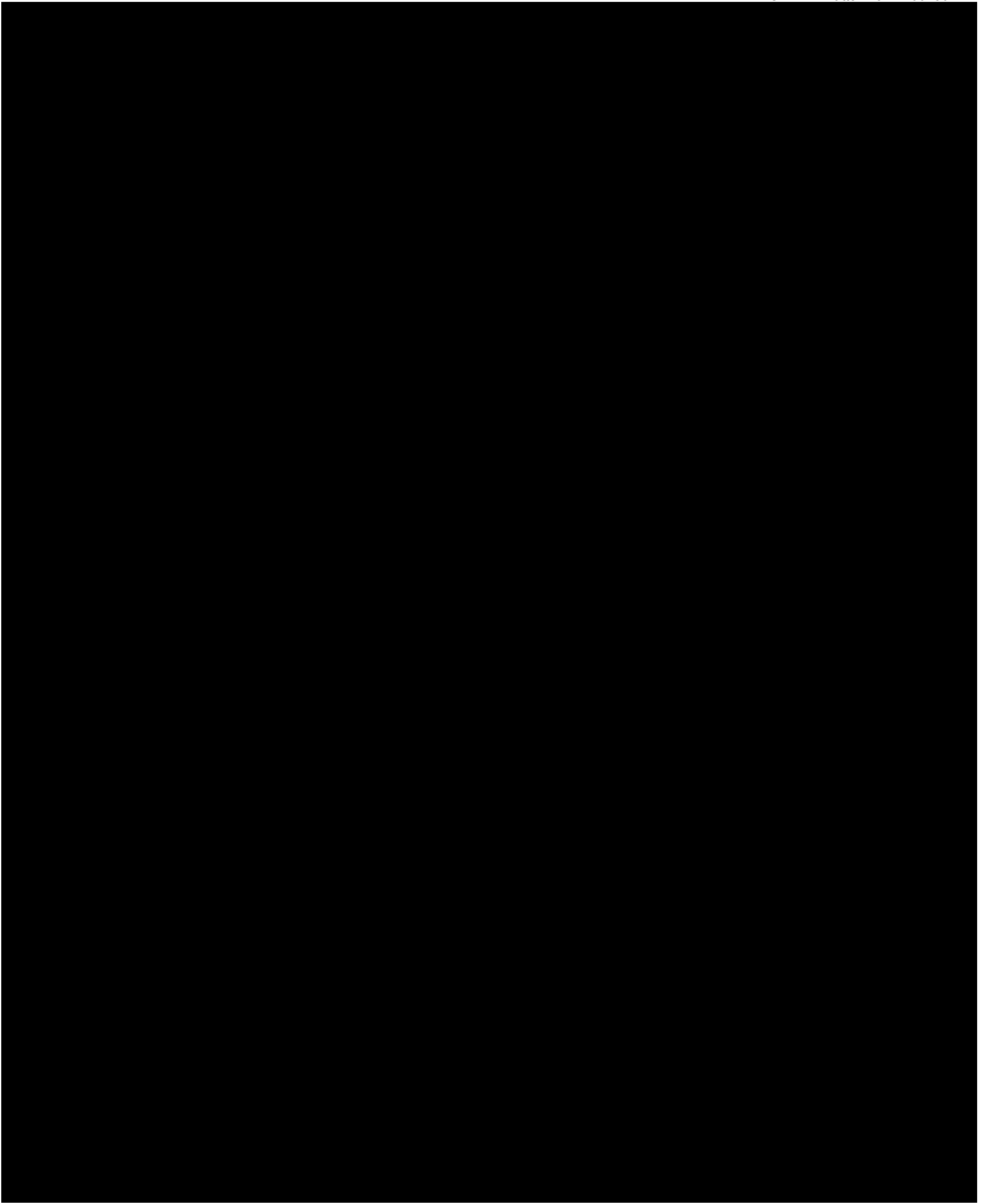
Incidental Species

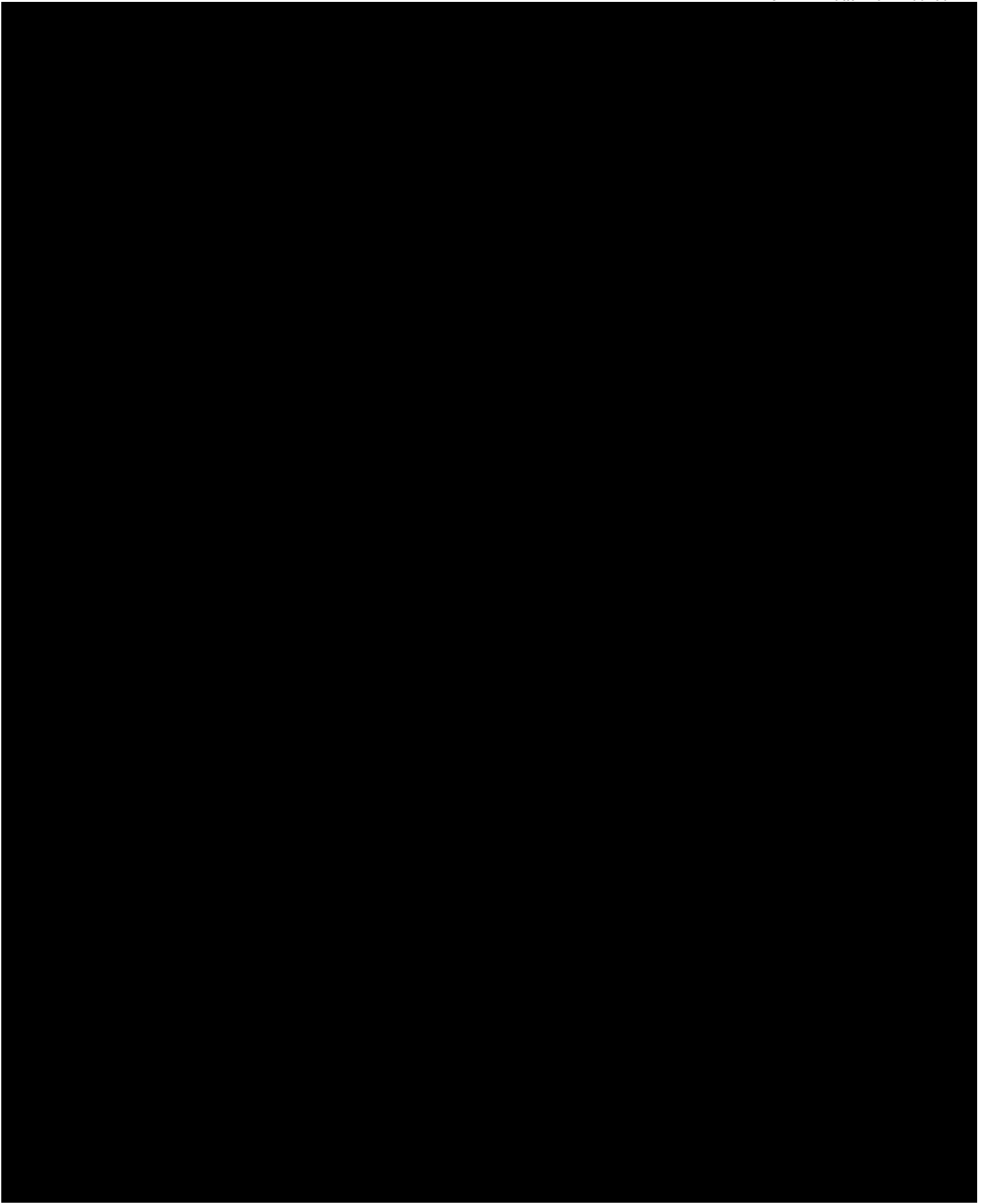
SOSP

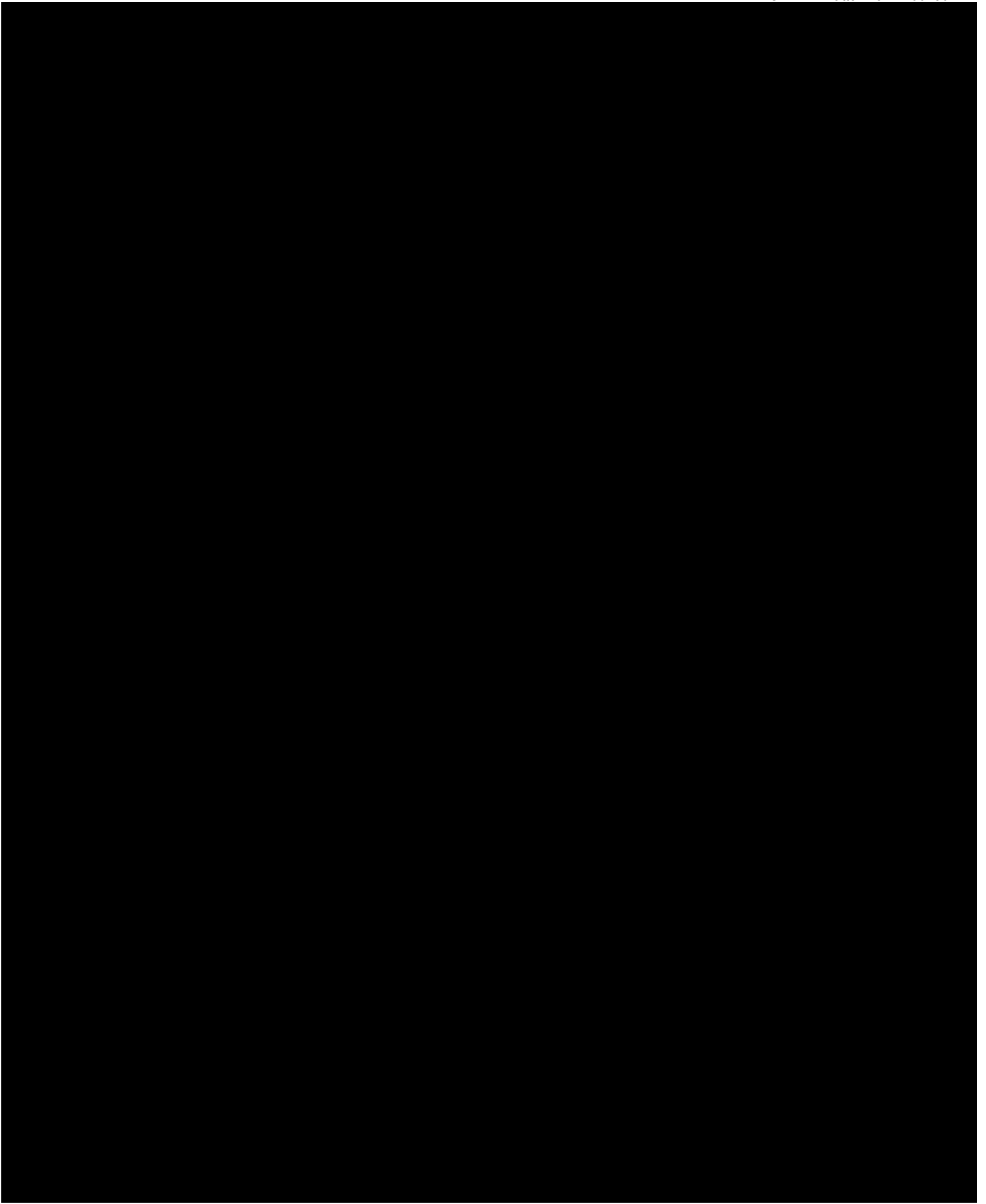


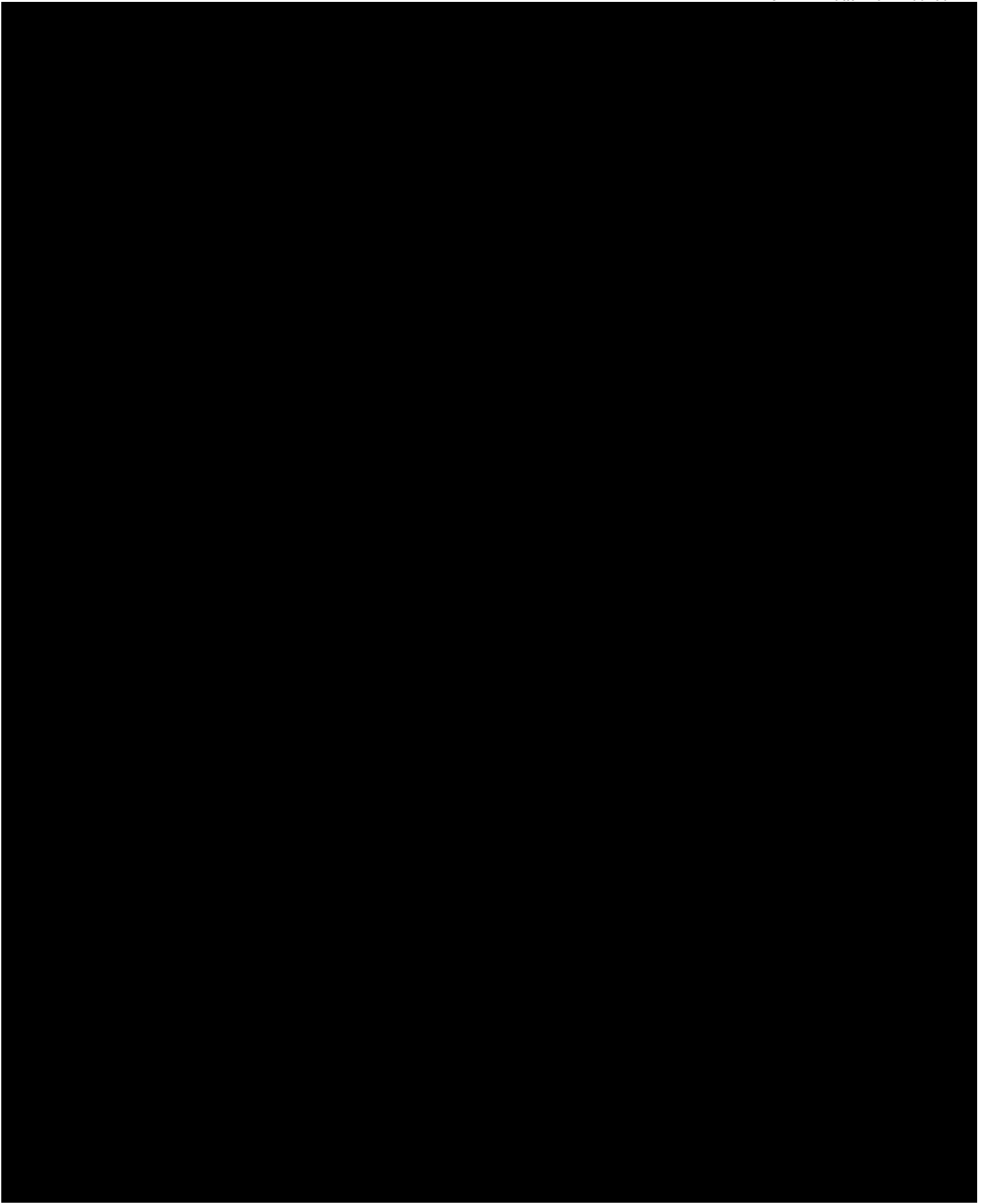












EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66079                    |
| Survey Date | 12/23/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 3   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:38 PM   |
| Sunset Time | 04:50 PM   |
| End Time    | 05:20 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 5  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 15   |
| Mean veg height (inches) | 4  |
| Dominant plant species   | Solidago, unknown grasses and Forbs                                    |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 30   |
| Forb cover (%)           | 30   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 75   |
| Mean veg height (inches) | 20   |
| Dominant plant species   | Solidago   |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | Kids playing outside for duration of survey                            |

## Weather



- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | SW   |
| Temperature Range   | 53   |
| Cloud Cover (%)     | <input checked="" type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 4  |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

REDACTED – Matter No. 21-00750

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying

☐

Feeding

☐

Roosting

☐

Breeding

☐

Nest-Building

☐

Other

If Other, Explain:

Flight Description

Notes

Incidental Species

AMCR, BLJA, EUST, BCCH, HOSP,  
MODO



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66092                    |
| Survey Date | 12/23/2019               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 5  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:45 AM   |
| Sunset Time | 04:51 PM   |
| End Time    | 05:21 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 20   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 10   |
| Dominant plant species   | Junkies  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5B   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 5  |
| Dominant plant species   | Grass  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

WSW

Temperature Range

51-47 REDACTED – Matter No. 21-00750

Cloud Cover (%)

- ☒ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☐ Mostly Cloudy - 50-90%  
☐ Overcast - 90-100%

Snow Depth (inches)

4

Snow Crust?

- ☐ No  
☒ Yes

Visibility

- ☐ Fair  
☒ Good  
☐ Poor

Visibility Reason

- ☒ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain  
☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female  
☐ Male  
☐ Unknown

Age

- ☐ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched  
☐ Foraging  
☐ Fly-through  
☐ Flying

- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EUST

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66203                    |
| Survey Date | 12/30/2019               |
| User        | Holly Kistner            |

## General

|             |  |
|-------------|--|
| Observer(s) | HK   |
| Location ID | 2  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:53 PM   |
| Sunset Time | 04:56 PM   |
| End Time    | 05:26 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 2A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 20   |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code ☐ 0 - Smoke rises vertically

- (☐ <1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | SW   |
| Temperature Range   | 33   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input checked="" type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 0  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input checked="" type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66202                    |
| Survey Date | 12/30/2019               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 4  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:55 PM   |
| Sunset Time | 04:56 PM   |
| End Time    | 05:26 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 2  |
| Forb cover (%)           | 70   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 77   |
| Mean veg height (inches) | 12   |
| Dominant plant species   | Solidago sp  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           |  |
| Grass cover (%)          | 90   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          |  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 5  |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4C   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input checked="" type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 75   |
| Forb cover (%)           | 2  |
| Shrub cover (%)          |  |
| Remnant veg (%)          | 20   |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unknown grass  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☒ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

E

Temperature Range

39-38 REDACTED – Matter No. 21-00750

Cloud Cover (%)

- ☐ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☒ Mostly Cloudy - 50-90%  
☐ Overcast - 90-100%

Snow Depth (inches)

0

Snow Crust?

- ☒ No  
☐ Yes

Visibility

- ☐ Fair  
☒ Good  
☐ Poor

Visibility Reason

- ☐ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☒ Rain  
☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female  
☐ Male  
☐ Unknown

Age

- ☐ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched  
☐ Foraging  
☐ Fly-through  
☐ Flying



- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

BCCH , DEJU, White-tailed deer,  
EUST, AMGO

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66246                    |
| Survey Date | 12/30/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 6   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:56 PM   |
| Sunset Time | 04:56 PM   |
| End Time    | 05:26 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 6A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <div> <input checked="" type="checkbox"/> No                 <input type="checkbox"/> Yes             </div> |
| Notes                    |  |

Habitat

|          |    |
|----------|----|
| Field ID | 6B |
|----------|----|

Habitat Type

- REDACTED – Matter No. 21-00750
- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 100   |
| Forb cover (%)           | 5   |
| Shrub cover (%)          | 5   |
| Remnant veg (%)          | 10  |
| Mean veg height (inches) | 4   |
| Dominant plant species   | Unknown grasses   |
| Snow depth (inches)      | 0   |
| Snow crust?              | <div><input checked="" type="checkbox"/> No</div> <div><input type="checkbox"/> Yes</div> |
| Notes                    |   |

Weather

|                    |  |
|--------------------|--|
| Beaufort Wind Code | <div><input type="checkbox"/> 0 - Smoke rises vertically (&lt;1 mph)</div> <div><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)</div> |
|--------------------|--|

☐ 2 - Wind felt on face;  
leaves rustle (4-7 mph)

☒ 3 - Leaves, small twigs in  
constant motion; light flag  
extended (8-12 mph)

☐ 4 - Raises dust and loose  
paper; small branches are  
moved (13-18 mph)

☐ 5 - Small trees in leaf  
sway; crested wavelets on  
inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | WSW  |
| Temperature Range   | 39-39  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 0  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |  |
|----------------|--|
| Raptor Species |  |
| Bird ID #      |  |
| Sex            | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input type="checkbox"/> Unknown |

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66501                    |
| Survey Date | 01/07/2020               |
| User        | Holly Kistner            |

## General

|             |  |
|-------------|--|
| Observer(s) | HK   |
| Location ID | 1  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:57 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 05:30 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input checked="" type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



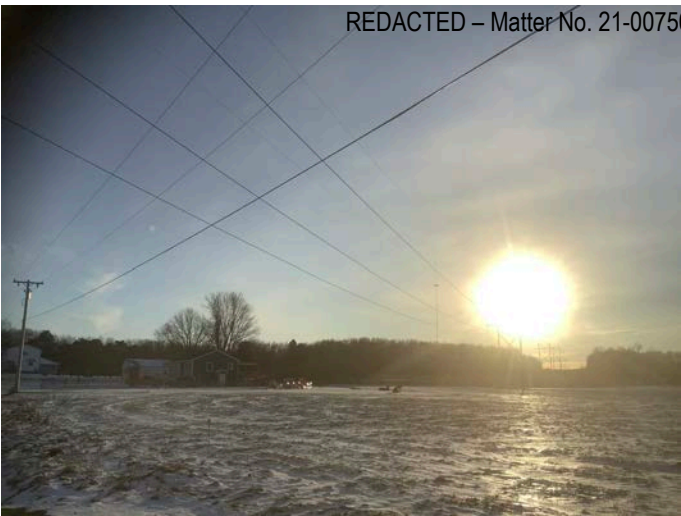


|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 20   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 5  |
| Dominant plant species   | Unknown grass  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input checked="" type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 70   |
| Forb cover (%)           | 30   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 40   |
| Dominant plant species   | Grasses and shrubs   |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | Field behind house and open space under transmission lines             |

Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1C   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input checked="" type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 80   |
| Forb cover (%)           | 15   |
| Shrub cover (%)          | 15   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 40   |
| Dominant plant species   | Unknown grasses and shrubs   |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | Open space under transmission lines                                    |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |                                |
|---------------------|--|--------------------------------|
| Wind Direction      | SW   | REDACTED – Matter No. 21-00750 |
| Temperature Range   | 30-37  |                                |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input checked="" type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |                                |
| Snow Depth (inches) | 2  |                                |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes   |                                |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |                                |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |                                |
| If other, explain:  |  |                                |

## Raptor Observations

### Raptor Observation

|                             |   |
|-----------------------------|---|
| Raptor Species              |   |
| Bird ID #                   |   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input type="checkbox"/> Unknown          |
| Age                         | <input type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown       |
| Time of Initial Observation |   |
| Time of Final Observation   |   |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through |

- REDACTED – Matter No. 21-00750
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66577                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 3  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:59 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 05:33 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           |  |
| Grass cover (%)          | 60   |
| Forb cover (%)           | 2  |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 67   |
| Mean veg height (inches) | 4  |
| Dominant plant species   | Grass unk  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|          |    |
|----------|----|
| Field ID | 3B |
|----------|----|

Habitat Type

- ☐ REDACTED – Matter No. 21-00750  
Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☒ Successional Old Field

Field Condition Photos



Crop cover (%)

Grass cover (%)

Forb cover (%)

60

Shrub cover (%)

20

Remnant veg (%)

60

Mean veg height (inches)

24

Dominant plant species

Solidago sp

Snow depth (inches)

1

Snow crust?

- ☐ No
- ☒ Yes

Notes

Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☒ 2 - Wind felt on face;





leaves rustle (4-7 mph)

- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | Sw   |
| Temperature Range   | 40-32  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input checked="" type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 2  |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |  |
|----------------|--|
| Raptor Species |  |
| Bird ID #      |  |
| Sex            | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input type="checkbox"/> Unknown |
| Age            | <input type="checkbox"/> Adult   |



Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EUST, AMCR, White-tailed Deer,  
BCCH

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66579                    |
| Survey Date | 01/07/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 5   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:59 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 05:33 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 30   |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 30   |
| Mean veg height (inches) | 10   |
| Dominant plant species   | Juncus effusus, unknown grasses  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

Habitat

Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                 |    |
|-----------------|----|
| Crop cover (%)  | 0  |
| Grass cover (%) | 25 |
| Forb cover (%)  | 5  |
| Shrub cover (%) | 0  |

|                          |  |                                |
|--------------------------|--|--------------------------------|
| Remnant veg (%)          | 25   | REDACTED – Matter No. 21-00750 |
| Mean veg height (inches) | 5  |                                |
| Dominant plant species   | Juncus effusus, unknown grasses  |                                |
| Snow depth (inches)      | 2  |                                |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |                                |
| Notes                    |  |                                |

## Weather

|                     |   |
|---------------------|---|
| Beaufort Wind Code  | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input checked="" type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction      | SW  |
| Temperature Range   | 36  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input checked="" type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100%  |
| Snow Depth (inches) | 2   |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes  |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor  |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog   |

REDACTED – Matter No. 21-00750

☐ No Moon

☐ Other

☐ Rain

☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

Raptor Species

Bird ID #

Sex

☐ Female

☐ Male

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66881                    |
| Survey Date | 01/13/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 2   |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 04:06 PM   |
| Sunset Time | 05:09 PM   |
| End Time    | 05:39 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 2A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |







|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 15   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 24   |
| Dominant plant species   | Juncus effusus, unknown<br>grasses, solidago                           |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather



☐ 0 - Smoke rises vertically  
( $<1$  mph)☐ 1 - Wind direction shown  
by smoke drift (1-3 mph)☐ 2 - Wind felt on face;  
leaves rustle (4-7 mph)☒ 3 - Leaves, small twigs in  
constant motion; light flag  
extended (8-12 mph)☐ 4 - Raises dust and loose  
paper; small branches are  
moved (13-18 mph)☐ 5 - Small trees in leaf  
sway; crested wavelets on  
inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | W  |
| Temperature Range   | 36-35  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 0  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |      |
|----------------|------|
| Raptor Species | RTHA |
| Bird ID #      | 1    |

Sex

☐

REDACTED – Matter No. 21-00750

Female

☐

Male

☒

Unknown

Age

☒

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

4:26

Time of Final Observation

4:47

Activity Observed

☒

Perched

☐

Foraging

☐

Fly-through

☒

Flying

☐

Feeding

☐

Roosting

☐

Breeding

☐

Nest-Building

☐

Other

If Other, Explain:

Flight Description

Flew ~20 feet off the ground from the telephone wire along the road south to a snag in the middle of the field where it perched again.

Notes

Incidental Species

CANG, saw RTHA at 3:26 driving by



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66886                    |
| Survey Date | 01/13/2020               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 4  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 03:45 PM   |
| Sunset Time | 05:09 PM   |
| End Time    | 05:40 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 20   |
| Forb cover (%)           | 80   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Golden rod   |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 50   |
| Mean veg height (inches) | 2  |
| Dominant plant species   | UNK grass  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 4C   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input checked="" type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 80   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 75   |
| Mean veg height (inches) | 4  |
| Dominant plant species   | UNK GRASS  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

W

Temperature Range

36-35 REDACTED – Matter No. 21-00750

Cloud Cover (%)

- ☐ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☐ Mostly Cloudy - 50-90%  
☒ Overcast - 90-100%

Snow Depth (inches)

0

Snow Crust?

- ☒ No  
☐ Yes

Visibility

- ☐ Fair  
☒ Good  
☐ Poor

Visibility Reason

- ☒ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain  
☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female  
☐ Male  
☐ Unknown

Age

- ☐ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched  
☐ Foraging  
☐ Fly-through  
☐ Flying



- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

NSHR, CANG, Red squirrel, Deer



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66828                    |
| Survey Date | 01/13/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 6  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:09 PM   |
| Sunset Time | 05:09 PM   |
| End Time    | 05:39 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 6A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 90   |
| Forb cover (%)           | 2  |
| Shrub cover (%)          | 2  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 4  |
| Dominant plant species   | Unk grass  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

Field ID 6B

- REDACTED – Matter No. 21-00750
- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                          |    |
|--------------------------|----|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 90 |
| Forb cover (%)           | 2  |
| Shrub cover (%)          | 1  |
| Remnant veg (%)          | 20 |
| Mean veg height (inches) | 4  |

Dominant plant species

Snow depth (inches)

0

Snow crust?

☒ No
☐ Yes

Notes

Weather

Beaufort Wind Code

☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

W

Temperature Range

38-35

Cloud Cover (%)

☐ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☐ Mostly Cloudy - 50-90%  
☒ Overcast - 90-100%

Snow Depth (inches)

0

Snow Crust?

☒ No
☐ Yes

Visibility

☐ Fair  
☒ Good  
☐ Poor

Visibility Reason

☒ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain



If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying

☐

Feeding

☐

Roosting

☐

Breeding

☐

Nest-Building

☐

Other

If Other, Explain:

Flight Description

Notes

Incidental Species



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 68385                    |
| Survey Date | 01/21/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 3   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:03 PM   |
| Sunset Time | 05:18 PM   |
| End Time    | 05:48 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 5  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 6  |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 30   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 30   |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Solidago, unknown grasses  |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

WSW



|                     |  |                                |
|---------------------|--|--------------------------------|
| Temperature Range   | 22   | REDACTED – Matter No. 21-00750 |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |                                |
| Snow Depth (inches) | 6  |                                |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |                                |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |                                |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |                                |
| If other, explain:  |  |                                |

## Raptor Observations

### Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | RTHA   |
| Bird ID #                   | 1  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown   |
| Time of Initial Observation | 4:12   |
| Time of Final Observation   | 4:29   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying |

- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Flying 15 ft above ground over field 3B from north to south, perched in tree on west side of field 3B

Notes

Incidental Species

EUST, cat, deer

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 67443                    |
| Survey Date | 01/21/2020               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 5  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:13 PM   |
| Sunset Time | 05:18 PM   |
| End Time    | 05:48 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 10   |
| Dominant plant species   | juncus effusus   |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5B   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 4  |
| Dominant plant species   | Unk grass  |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

WSW

Temperature Range

23-22 REDACTED – Matter No. 21-00750

Cloud Cover (%)

- ☐ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☐ Mostly Cloudy - 50-90%  
☒ Overcast - 90-100%

Snow Depth (inches)

6

Snow Crust?

- ☒ No  
☐ Yes

Visibility

- ☐ Fair  
☒ Good  
☐ Poor

Visibility Reason

- ☒ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain  
☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female  
☐ Male  
☐ Unknown

Age

- ☐ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched  
☐ Foraging  
☐ Fly-through  
☐ Flying

- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 67444                    |
| Survey Date | 01/21/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 1  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:00 PM   |
| Sunset Time | 05:19 PM   |
| End Time    | 05:49 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input checked="" type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 0  |
| Forb cover (%)           | 1  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 1  |
| Mean veg height (inches) | 2  |
| Dominant plant species   | unk  |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | only tips of plants seen above snow                                    |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1C   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input checked="" type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 25   |
| Forb cover (%)           | 25   |
| Shrub cover (%)          | 30   |
| Remnant veg (%)          | 50   |
| Mean veg height (inches) | 24   |
| Dominant plant species   | solidago sp.   |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | ROW  |

Habitat

## Habitat Type

☒

Hayfield

☐

Other (describe in notes)

☐

Pastureland

☐

Row crops, fallow in previous growing season

☐

Row crops, harvested in previous growing season

☐

Successional Old Field

## Field Condition Photos



Crop cover (%)

0

Grass cover (%)

30

Forb cover (%)

0

Shrub cover (%)

15

Remnant veg (%)

20

Mean veg height (inches)

24

Dominant plant species

unk grass

Snow depth (inches)

5

Snow crust?

☐

No

☒

Yes

Notes

## Weather

Beaufort Wind Code

☐

0 - Smoke rises vertically (&lt;1 mph)

☐

1 - Wind direction shown

- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☒ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      | W   |
| Temperature Range   | 23-20   |
| Cloud Cover (%)     | <div><input type="checkbox"/> Clear - 0-10%</div> <div><input type="checkbox"/> Mostly Clear - 10-25%</div> <div><input type="checkbox"/> Partly Cloudy - 25-50%</div> <div><input type="checkbox"/> Mostly Cloudy - 50-90%</div> <div><input checked="" type="checkbox"/> Overcast - 90-100%</div> |
| Snow Depth (inches) | 5   |
| Snow Crust?         | <div><input type="checkbox"/> No</div> <div><input checked="" type="checkbox"/> Yes</div>   |
| Visibility          | <div><input checked="" type="checkbox"/> Fair</div> <div><input type="checkbox"/> Good</div> <div><input type="checkbox"/> Poor</div>   |
| Visibility Reason   | <div><input type="checkbox"/> Clear</div> <div><input type="checkbox"/> Fog</div> <div><input type="checkbox"/> No Moon</div> <div><input type="checkbox"/> Other</div> <div><input type="checkbox"/> Rain</div> <div><input type="checkbox"/> Snow</div>   |
| If other, explain:  | low light   |

Raptor Observations

Raptor Observation

|                |   |
|----------------|---|
| Raptor Species |   |
| Bird ID #      |   |
| Sex            | <div><input type="checkbox"/> Female</div> <div><input type="checkbox"/> Male</div> |

Age

- ☐ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 68268                    |
| Survey Date | 01/29/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 2  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:20 PM   |
| Sunset Time | 05:27 PM   |
| End Time    | 05:57 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 2A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 30   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 45   |
| Mean veg height (inches) | 20   |
| Dominant plant species   | Carex sp.  |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- (☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | NE   |
| Temperature Range   | 27-2   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input checked="" type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 6  |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow   |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

AMCR

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 68534                    |
| Survey Date | 01/29/2020               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 6  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:20 PM   |
| Sunset Time | 05:28 PM   |
| End Time    | 05:58 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 6A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | P  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 5  |
| Dominant plant species   | UNK grass  |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

Habitat

|          |    |
|----------|----|
| Field ID | 6B |
|----------|----|

Habitat Type

- REDACTED – Matter No. 21-00750
- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                          |    |
|--------------------------|----|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 15 |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          |    |
| Mean veg height (inches) | 5  |

Dominant plant species

Snow depth (inches)

4

Snow crust?

- ☐ No
- ☒ Yes

Notes

Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☒ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

NE

Temperature Range

29-27

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☒ Overcast - 90-100%

Snow Depth (inches)

6

Snow Crust?

- ☐ No
- ☒ Yes

Visibility

- ☐ Fair
- ☒ Good
- ☐ Poor

Visibility Reason

- ☒ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain



If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying

☐

Feeding

☐

Roosting

☐

Breeding

☐

Nest-Building

☐

Other

If Other, Explain:

Flight Description

Notes

Incidental Species



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 69901                    |
| Survey Date | 02/03/2020               |
| User        | Holly Kistner            |

## General

|             |  |
|-------------|--|
| Observer(s) | HK   |
| Location ID | 1  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:34 PM   |
| Sunset Time | 05:34 PM   |
| End Time    | 06:04 AM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1A   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input checked="" type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 30   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 35   |
| Mean veg height (inches) | 7  |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 1B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input checked="" type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 20   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 15   |
| Remnant veg (%)          | 55   |
| Mean veg height (inches) | 12   |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | Right of way   |

## Habitat

|              |   |
|--------------|---|
| Field ID     | 1C  |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input checked="" type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season |

Field Condition Photos



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 25   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 20   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 36   |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | Right of way   |

Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input checked="" type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are |
|--------------------|---|

☐ 5 - Small trees in leaf  
sway; crested wavelets on  
inland waters (19-24 mph)

S

43

- ☐ Clear - 0-10%  
☒ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☐ Mostly Cloudy - 50-90%  
☐ Overcast - 90-100%

2

- ☒ No  
☐ Yes

- ☐ Fair  
☒ Good  
☐ Poor

- ☒ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain  
☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

Raptor Species

Bird ID #

- Sex  
☐ Female  
☐ Male  
☐ Unknown

- Age  
☐ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- REDACTED – Matter No. 21-00750
- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

Canada geese

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 68847                    |
| Survey Date | 02/03/2020               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 3  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:27 PM   |
| Sunset Time | 05:35 PM   |
| End Time    | 06:08 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3B   |
| Habitat Type           | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 20   |
| Forb cover (%)           | 60   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Goldenrod  |
| Snow depth (inches)      | 1  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 3A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 80   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unk grass  |
| Snow depth (inches)      | 1  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input checked="" type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction     | E   |

Temperature Range

43-41 REDACTED – Matter No. 21-00750

Cloud Cover (%)

☐

Clear - 0-10%

☐

Mostly Clear - 10-25%

☒

Partly Cloudy - 25-50%

☐

Mostly Cloudy - 50-90%

☐

Overcast - 90-100%

Snow Depth (inches)

1

Snow Crust?

☒

No

☐

Yes

Visibility

☐

Fair

☒

Good

☐

Poor

Visibility Reason

☒

Clear

☐

Fog

☐

No Moon

☐

Other

☐

Rain

☐

Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

RTHA

Bird ID #

1

Sex

☐

Female

☐

Male

☒

Unknown

Age

☒

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

5:37

Time of Final Observation

5:37

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☒

Flying



- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Flying low: 25 ft. flying NE.

Notes

Raptor Observation

Raptor Species

RTHA

Bird ID #

2

Sex

☐ Female

☐ Male

☒ Unknown

Age

☒ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

5:37

Time of Final Observation

5:40

Activity Observed

☒ Perched

☐ Foraging

☐ Fly-through

☒ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Perching in filed hedgerow, flew N. Height: 40 ft

Notes

Incidental Species

EUST, Deer

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 72513                    |
| Survey Date | 02/03/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 4   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:28 PM   |
| Sunset Time | 05:35 PM   |
| End Time    | 06:05 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 4A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 50   |
| Forb cover (%)           | 30   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 60   |
| Mean veg height (inches) | 24   |
| Dominant plant species   | Unknown grasses and forbs  |
| Snow depth (inches)      | 1-2  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

Habitat



Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                 |    |
|-----------------|----|
| Crop cover (%)  | 0  |
| Grass cover (%) | 25 |
| Forb cover (%)  | 5  |
| Shrub cover (%) | 0  |

|                          |  |                                |
|--------------------------|--|--------------------------------|
| Remnant veg (%)          | 25   | REDACTED – Matter No. 21-00750 |
| Mean veg height (inches) | 2  |                                |
| Dominant plant species   | Unknown grasses  |                                |
| Snow depth (inches)      | 1-2  |                                |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |                                |
| Notes                    |  |                                |

## Weather

|                     |   |
|---------------------|---|
| Beaufort Wind Code  | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input checked="" type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction      | ENE   |
| Temperature Range   | 43-41   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input checked="" type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100%  |
| Snow Depth (inches) | 1-2   |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes  |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor  |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon   |

REDACTED – Matter No. 21-00750

☐ Other

☐ Rain

☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

Raptor Species

Bird ID #

Sex

☐ Female

☐ Male

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 68921                    |
| Survey Date | 02/03/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 5  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:20 PM   |
| Sunset Time | 05:35 PM   |
| End Time    | 06:05 PM   |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5A   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 12   |
| Dominant plant species   | Juncus sp.   |
| Snow depth (inches)      | 3  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|                        |  |
|------------------------|--|
| Field ID               | 5B   |
| Habitat Type           | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos |  |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 2  |
| Remnant veg (%)          | 12   |
| Mean veg height (inches) | 6  |
| Dominant plant species   | Unk grass  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ☒ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | NE   |
| Temperature Range   | 40-  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input checked="" type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 4  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

Raptor Observations

Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

MODO, EUST, DEJU, AMCR, white-tailed deer

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 71045                    |
| Survey Date | 02/10/2020               |
| User        | Holly Kistner            |

## General

|             |  |
|-------------|--|
| Observer(s) | HK   |
| Location ID | 2  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:31 PM   |
| Sunset Time | 05:44 PM   |
| End Time    | 06:15 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 2A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 25   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 35   |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 4  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☒ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

SSW

REDACTED – Matter No. 21-00750

Temperature Range

35-39

Cloud Cover (%)

☐

Clear - 0-10%

☐

Mostly Clear - 10-25%

☐

Partly Cloudy - 25-50%

☐

Mostly Cloudy - 50-90%

☒

Overcast - 90-100%

Snow Depth (inches)

4

Snow Crust?

☒

No

☐

Yes

Visibility

☐

Fair

☐

Good

☒

Poor

Visibility Reason

☐

Clear

☒

Fog

☐

No Moon

☒

Other

☐

Rain

☐

Snow

If other, explain:

Fog progressively cleared throughout survey but still was not perfect by end

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging



- REDACTED – Matter No. 21-00750
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

Starlings on wire

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 71432                    |
| Survey Date | 02/10/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 4  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:42 PM   |
| Sunset Time | 05:44 PM   |
| End Time    | 06:14 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 4A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |





|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 10  |
| Forb cover (%)           | 20  |
| Shrub cover (%)          | 20  |
| Remnant veg (%)          | 50  |
| Mean veg height (inches) | 24  |
| Dominant plant species   | solidago sp.  |
| Snow depth (inches)      | 6   |
| Snow crust?              | <div><input type="checkbox"/> No</div> <div><input checked="" type="checkbox"/> Yes</div> |
| Notes                    | low visibility  |

Habitat

## Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

## Field Condition Photos



Crop cover (%) 0

Grass cover (%) 0

Forb cover (%) 0

Shrub cover (%) 0

Remnant veg (%) 0

Mean veg height (inches) 0

Dominant plant species unk.

Snow depth (inches) 6

Snow crust? ☐ No  
☒ Yes

Notes no visibility due to hill and fog.

## Habitat

Field ID 4C

Habitat Type ☒ Hayfield

- ☐ REDACTED – Matter No. 21-00750  
Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

#### Field Condition Photos



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 0  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 5  |
| Mean veg height (inches) | 8  |
| Dominant plant species   | juncus sp.   |
| Snow depth (inches)      | 5  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | low visibility   |

#### Weather

|                    |  |
|--------------------|--|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input checked="" type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input type="checkbox"/> 2 - Wind felt on face; |
|--------------------|--|

leaves rustle (4-7 mph)

☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)

☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)

☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | NW   |
| Temperature Range   | 32-32  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 5  |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input checked="" type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input checked="" type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

Raptor Observations

Raptor Observation

|                |  |
|----------------|--|
| Raptor Species |  |
| Bird ID #      |  |
| Sex            | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input type="checkbox"/> Unknown |
| Age            | <input type="checkbox"/> Adult   |

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 71422                    |
| Survey Date | 02/11/2020               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 6  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:42 PM   |
| Sunset Time | 05:46 PM   |
| End Time    | 06:16 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 6A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 1  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | <6   |
| Dominant plant species   | UNKNOWN GRASS  |
| Snow depth (inches)      | 6-7  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 6B   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 5  |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | <6   |
| Dominant plant species   | Unknown grass  |
| Snow depth (inches)      | 6-7  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)



Wind Direction

WSW

REDACTED – Matter No. 21-00750

Temperature Range

Cloud Cover (%)

☐

Clear - 0-10%

☐

Mostly Clear - 10-25%

☒

Partly Cloudy - 25-50%

☐

Mostly Cloudy - 50-90%

☐

Overcast - 90-100%

Snow Depth (inches)

6-7

Snow Crust?

☐

No

☒

Yes

Visibility

☐

Fair

☒

Good

☐

Poor

Visibility Reason

☒

Clear

☐

Fog

☐

No Moon

☐

Other

☐

Rain

☐

Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying



- REDACTED – Matter No. 21-00750
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

DEER

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 74528                    |
| Survey Date | 02/19/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 1   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:53 PM   |
| Sunset Time | 05:56 PM   |
| End Time    | 06:26 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 1A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 1  |
| Forb cover (%)           | 1  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 1  |
| Mean veg height (inches) | 6  |
| Dominant plant species   | Unknown grasses and forbs  |
| Snow depth (inches)      | 3  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 1B   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 30   |
| Forb cover (%)           | 30   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 40   |
| Mean veg height (inches) | 18   |
| Dominant plant species   | Unknown grasses and forbs  |
| Snow depth (inches)      | 3  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 1C   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          | 20   |
| Remnant veg (%)          | 50   |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Unknown grasses, forbs, and shrubs                                     |
| Snow depth (inches)      | 3  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☒ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on

|                     |   |
|---------------------|---|
| Wind Direction      | W   |
| Temperature Range   | 24-27   |
| Cloud Cover (%)     | <div><input type="checkbox"/> Clear - 0-10%</div> <div><input type="checkbox"/> Mostly Clear - 10-25%</div> <div><input checked="" type="checkbox"/> Partly Cloudy - 25-50%</div> <div><input type="checkbox"/> Mostly Cloudy - 50-90%</div> <div><input type="checkbox"/> Overcast - 90-100%</div> |
| Snow Depth (inches) | 3   |
| Snow Crust?         | <div><input type="checkbox"/> No</div> <div><input checked="" type="checkbox"/> Yes</div>   |
| Visibility          | <div><input type="checkbox"/> Fair</div> <div><input checked="" type="checkbox"/> Good</div> <div><input type="checkbox"/> Poor</div>   |
| Visibility Reason   | <div><input checked="" type="checkbox"/> Clear</div> <div><input type="checkbox"/> Fog</div> <div><input type="checkbox"/> No Moon</div> <div><input type="checkbox"/> Other</div> <div><input type="checkbox"/> Rain</div> <div><input type="checkbox"/> Snow</div>                                |
| If other, explain:  |   |

Raptor Observations

Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              |  |
| Bird ID #                   |  |
| Sex                         | <div><input type="checkbox"/> Female</div> <div><input type="checkbox"/> Male</div> <div><input type="checkbox"/> Unknown</div>          |
| Age                         | <div><input type="checkbox"/> Adult</div> <div><input type="checkbox"/> Juvenile</div> <div><input type="checkbox"/> Unknown</div>       |
| Time of Initial Observation |  |
| Time of Final Observation   |  |
| Activity Observed           | <div><input type="checkbox"/> Perched</div> <div><input type="checkbox"/> Foraging</div> <div><input type="checkbox"/> Fly-through</div> |

- REDACTED – Matter No. 21-00750
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

ROPI



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 73323                    |
| Survey Date | 02/19/2020               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 3  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:50 PM   |
| Sunset Time | 05:55 PM   |
| End Time    | 06:25 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 3A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 10  |
| Forb cover (%)           | 0   |
| Shrub cover (%)          | 0   |
| Remnant veg (%)          | 200   |
| Mean veg height (inches) | 6   |
| Dominant plant species   | UNK grass   |
| Snow depth (inches)      | 5   |
| Snow crust?              | <div><input type="checkbox"/> No</div> <div><input checked="" type="checkbox"/> Yes</div> |
| Notes                    |   |

Habitat

## Habitat Type

- ☐ Hayfield  
☐ Other (describe in notes)  
☐ Pastureland  
☐ Row crops, fallow in previous growing season  
☐ Row crops, harvested in previous growing season  
☒ Successional Old Field

## Field Condition Photos



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 10   |
| Forb cover (%)           | 30   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Golden rod   |
| Snow depth (inches)      | 6  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | Wind was 13-12 mph   |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)

- ☐ REDACTED – Matter No. 21-00750
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☒ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | W  |
| Temperature Range   | 27-26  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input checked="" type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 5-6  |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

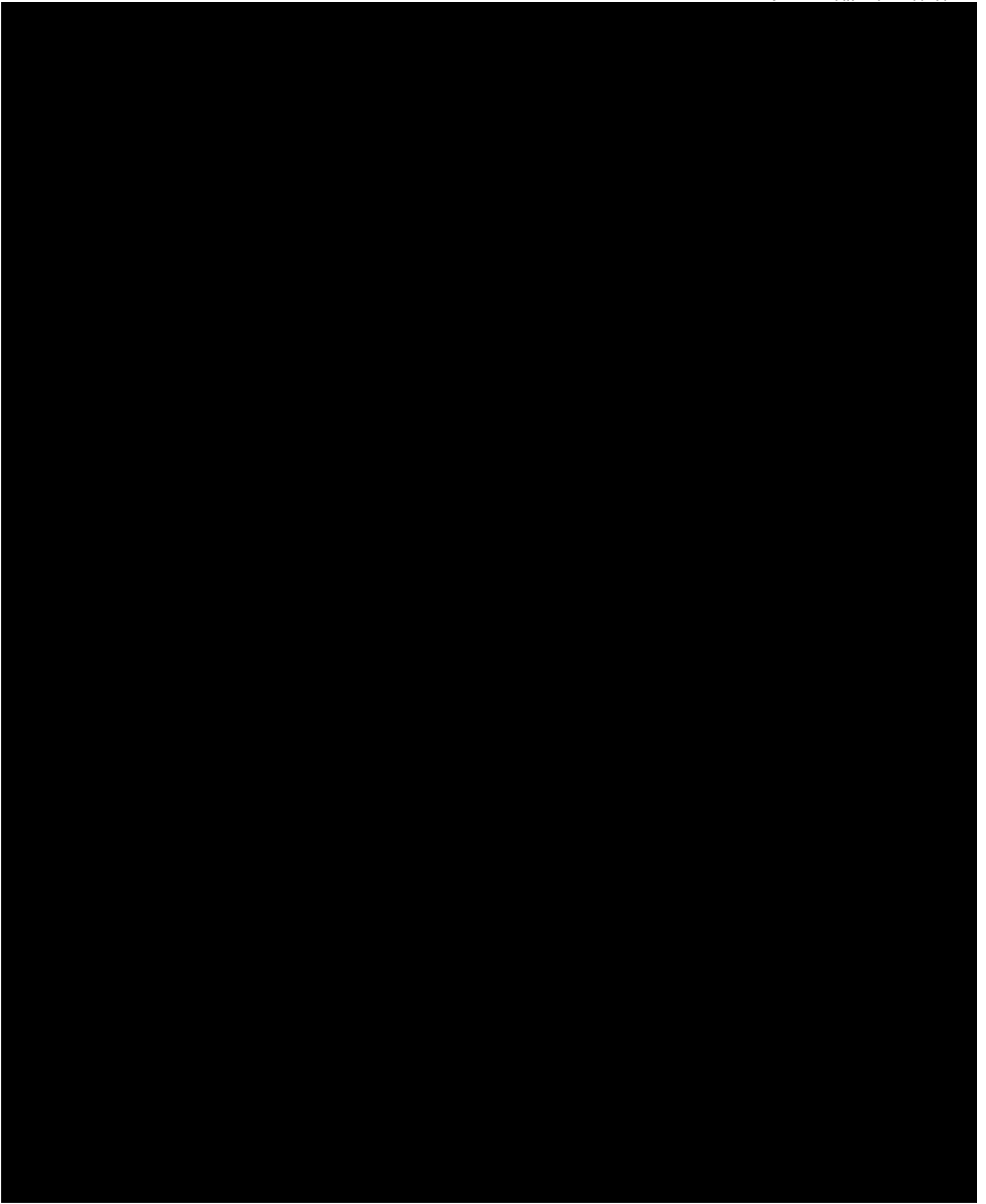
If Other, Explain:

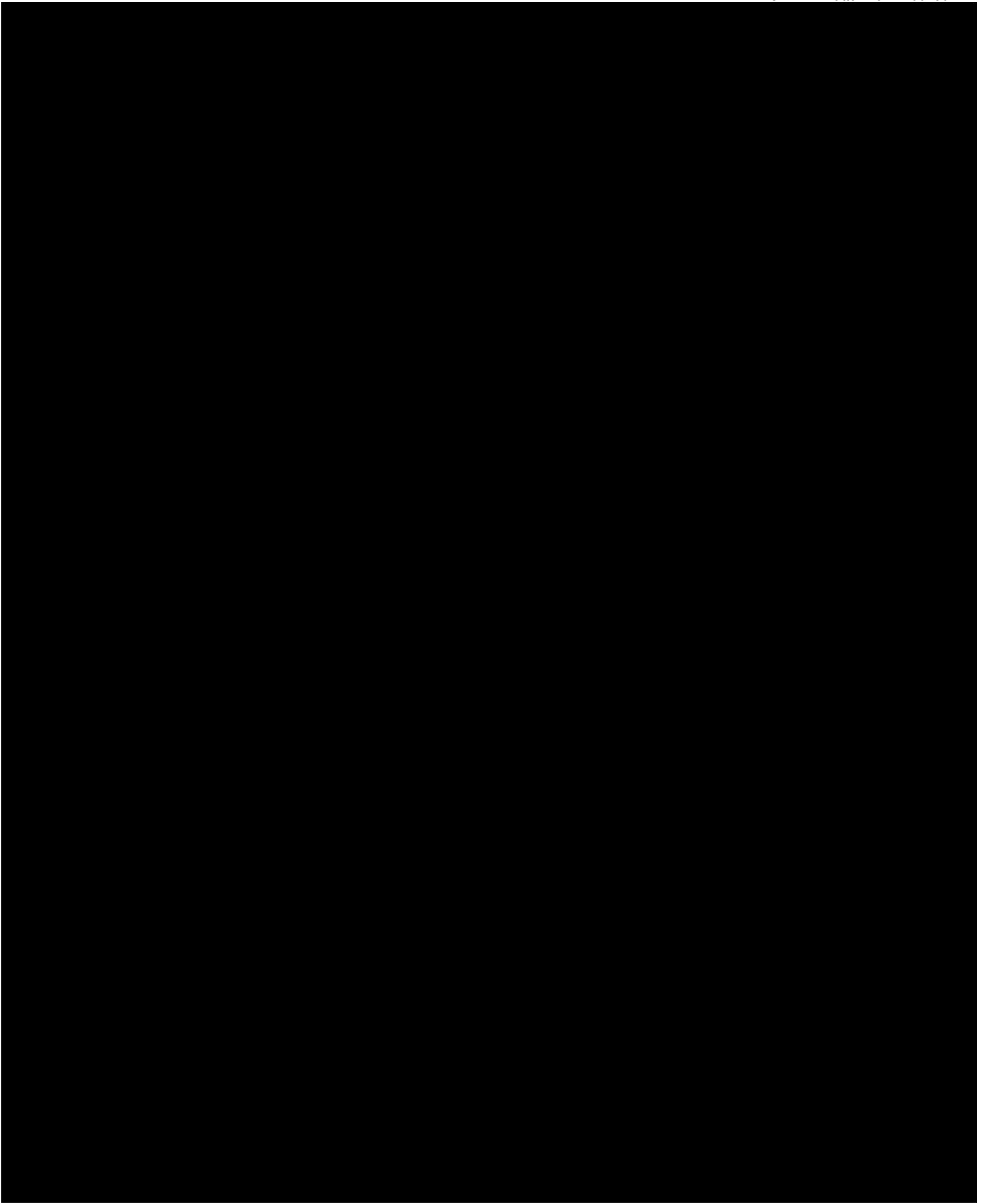
Flight Description

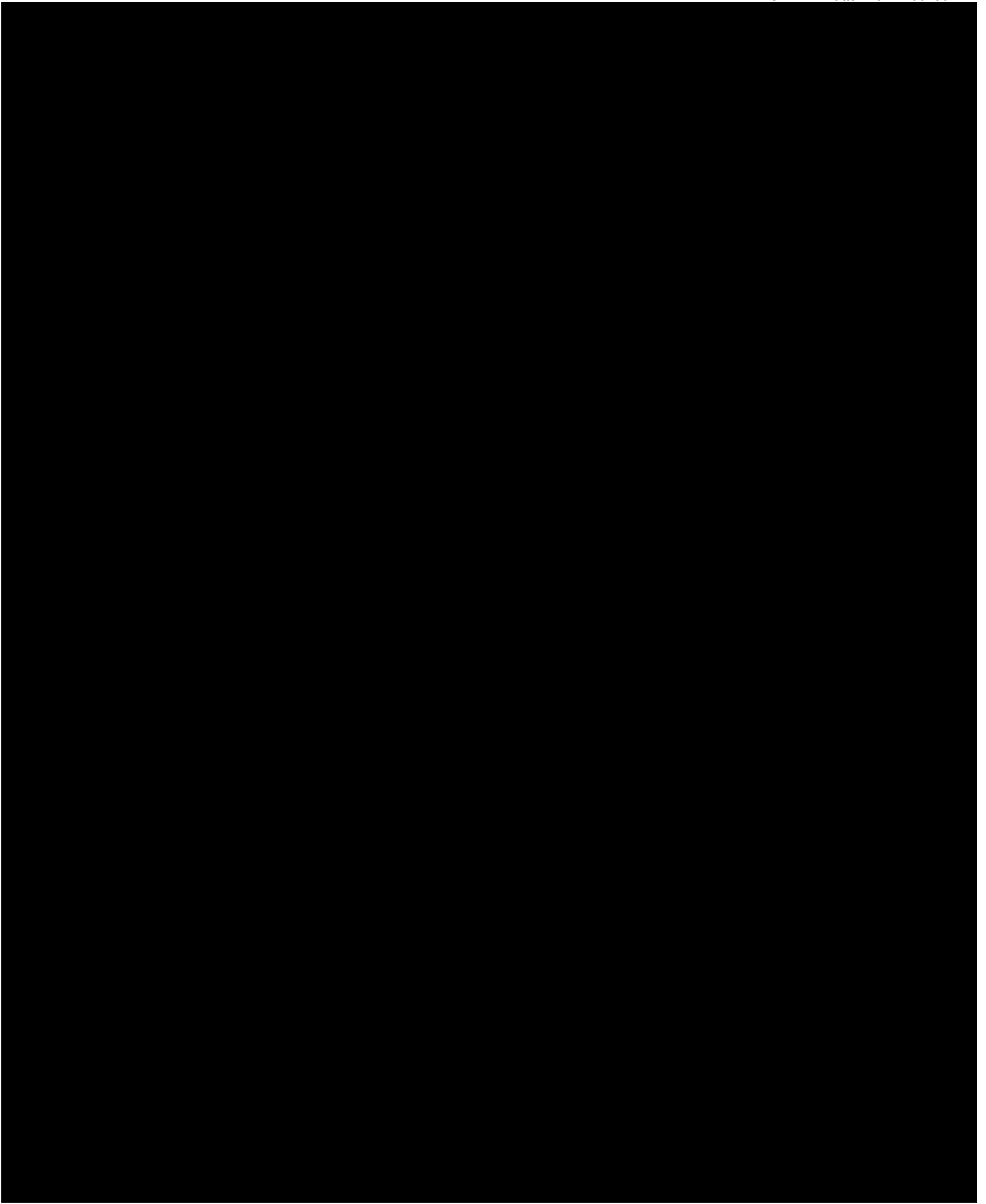
Notes

Incidental Species

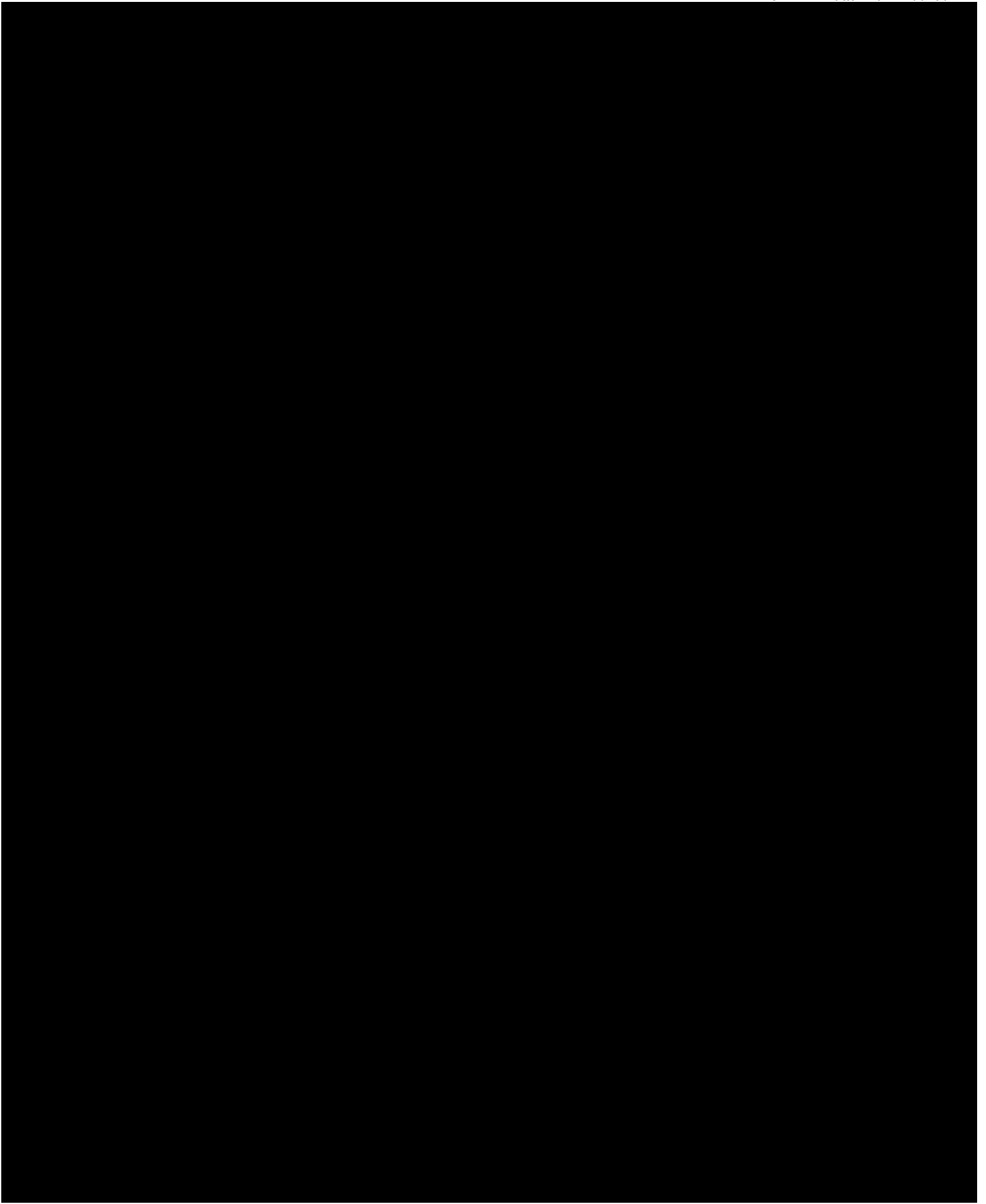
Deer

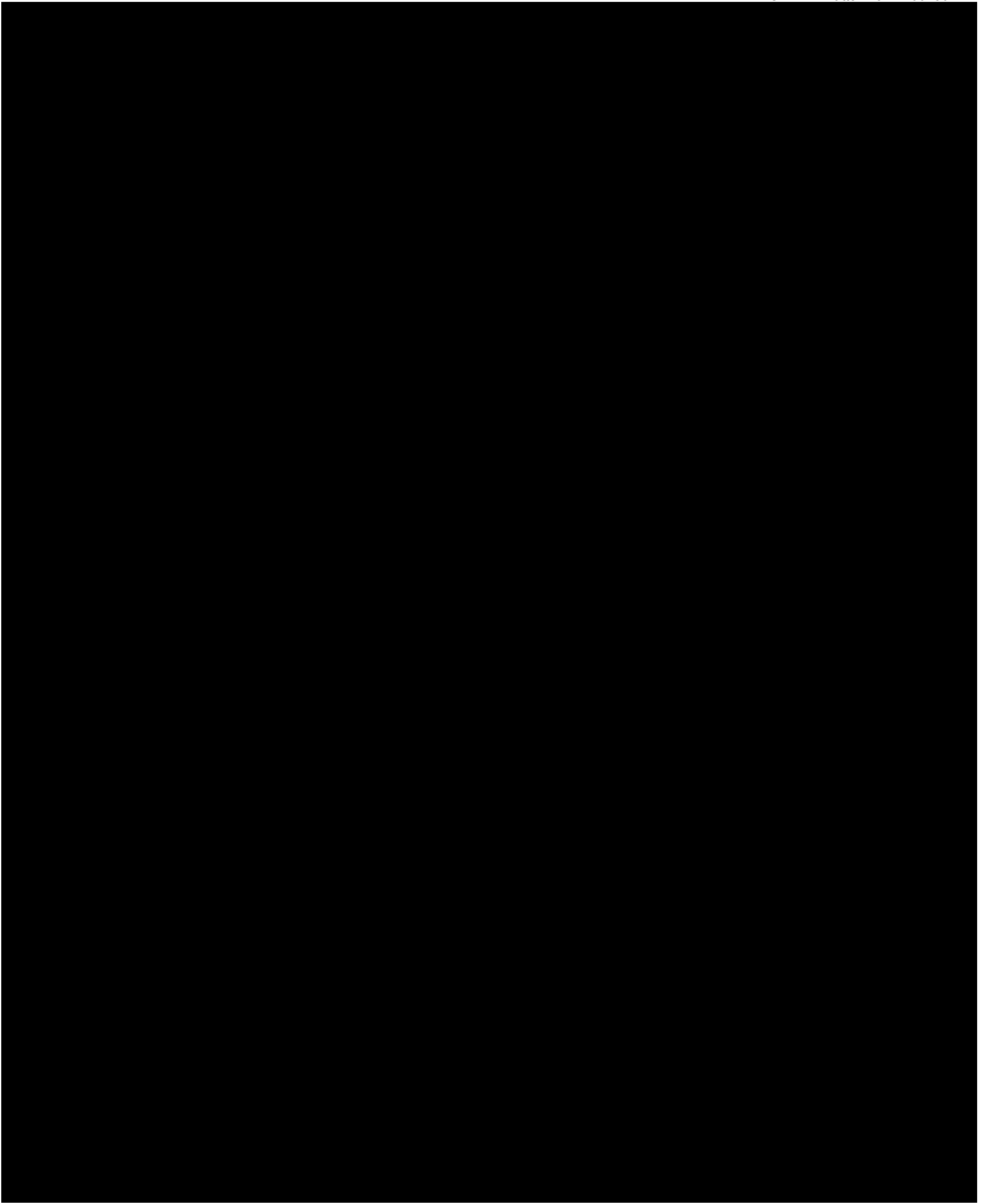












EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 74481                    |
| Survey Date | 02/24/2020               |
| User        | Holly Kistner            |

## General

|             |  |
|-------------|--|
| Observer(s) | HK   |
| Location ID | 2  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 05:00 PM   |
| Sunset Time | 06:03 PM   |
| End Time    | 06:33 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 2A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 25   |
| Forb cover (%)           | 10   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 20   |
| Mean veg height (inches) | 45   |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

☐ 0 - Smoke rises vertically  
( $<1$  mph)☐ 1 - Wind direction shown  
by smoke drift (1-3 mph)☒ 2 - Wind felt on face;  
leaves rustle (4-7 mph)☐ 3 - Leaves, small twigs in  
constant motion; light flag  
extended (8-12 mph)☐ 4 - Raises dust and loose  
paper; small branches are  
moved (13-18 mph)☐ 5 - Small trees in leaf  
sway; crested wavelets on  
inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | E  |
| Temperature Range   | 35   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 3  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |                |
|----------------|----------------|
| Raptor Species | Unknown Raptor |
| Bird ID #      | 1              |

|                             |   |
|-----------------------------|---|
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input checked="" type="checkbox"/> Unknown  |
| Time of Initial Observation | 5:04  |
| Time of Final Observation   | 5:47  |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input checked="" type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |   |
| Flight Description          | Low to ground. Flew once between 2 trees  |
| Notes                       | RTHA or NOHA but too far away to tell. Flew back and forth between and perched on small trees on very right side of field. Flew low, appeared to be hunting and then feeding. Was perched for 20 minutes at a time  |

Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | RTHA   |
| Bird ID #                   | 2  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown    |
| Age                         | <input type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input checked="" type="checkbox"/> Unknown |
| Time of Initial Observation | 5:03   |
| Time of Final Observation   | 5:15   |

Activity Observed

- REDACTED – Matter No. 21-00750
- ☒ Perched
- ☐ Foraging
- ☐ Fly-through
- ☒ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Fly low across field and then perch for a bit until flying away

Notes

Incidental Species

Canada geese, Starlings

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 74527                    |
| Survey Date | 02/24/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 4   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:52 PM   |
| Sunset Time | 06:02 PM   |
| End Time    | 06:32 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 4A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 60   |
| Forb cover (%)           | 25   |
| Shrub cover (%)          | 15   |
| Remnant veg (%)          | 75   |
| Mean veg height (inches) | 24   |
| Dominant plant species   | Unknown grasses and forbs  |
| Snow depth (inches)      | 3  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    |  |

Habitat

Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                 |    |
|-----------------|----|
| Crop cover (%)  | 0  |
| Grass cover (%) | 40 |
| Forb cover (%)  | 5  |
| Shrub cover (%) | 0  |

|                          |  |                                |
|--------------------------|--|--------------------------------|
| Remnant veg (%)          | 40   | REDACTED – Matter No. 21-00750 |
| Mean veg height (inches) | 8  |                                |
| Dominant plant species   | Unknown grasses and forbs  |                                |
| Snow depth (inches)      | 3  |                                |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |                                |
| Notes                    |  |                                |

## Weather

|                     |   |
|---------------------|---|
| Beaufort Wind Code  | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input checked="" type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction      | WSW   |
| Temperature Range   | 42-40   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100%  |
| Snow Depth (inches) | 3   |
| Snow Crust?         | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes  |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor  |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon   |

REDACTED – Matter No. 21-00750

☐ Other

☐ Rain

☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

Raptor Species

Bird ID #

Sex

☐ Female

☐ Male

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

CANG, EUST, AMCR, deer

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 74480                    |
| Survey Date | 02/24/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 6  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 04:47 PM   |
| Sunset Time | 06:02 PM   |
| End Time    | 06:32 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 6A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |





|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 30  |
| Forb cover (%)           | 0   |
| Shrub cover (%)          | 0   |
| Remnant veg (%)          | 30  |
| Mean veg height (inches) | 3   |
| Dominant plant species   | unk grass   |
| Snow depth (inches)      | .5  |
| Snow crust?              | <div><div><input checked="" type="checkbox"/></div>No</div> <div><div><input type="checkbox"/></div>Yes</div> |
| Notes                    | snow is patchy  |

Habitat

Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                 |    |
|-----------------|----|
| Crop cover (%)  | 0  |
| Grass cover (%) | 30 |
| Forb cover (%)  | 2  |
| Shrub cover (%) | 0  |

|                          |  |                                |
|--------------------------|--|--------------------------------|
| Remnant veg (%)          | 32   | REDACTED – Matter No. 21-00750 |
| Mean veg height (inches) | 3  |                                |
| Dominant plant species   | unk grass  |                                |
| Snow depth (inches)      | .5   |                                |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |                                |
| Notes                    | snow is patchy   |                                |

## Weather

|                     |   |
|---------------------|---|
| Beaufort Wind Code  | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input checked="" type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction      | W   |
| Temperature Range   | 39-   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100%  |
| Snow Depth (inches) | .5  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes  |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor  |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon   |



REDACTED – Matter No. 21-00750

☐ Other

☐ Rain

☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

Raptor Species

Bird ID #

Sex

☐ Female

☐ Male

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EUST, white tail deer

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 76520                    |
| Survey Date | 03/04/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 1  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 05:04 PM   |
| Sunset Time | 06:13 PM   |
| End Time    | 06:43 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 1A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 85   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 10   |
| Mean veg height (inches) | 2  |
| Dominant plant species   | unk grass  |
| Snow depth (inches)      | .5   |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | patchy snow  |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 1b   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 30   |
| Forb cover (%)           | 30   |
| Shrub cover (%)          | 20   |
| Remnant veg (%)          | 60   |
| Mean veg height (inches) | 12   |
| Dominant plant species   | solidago sp.   |
| Snow depth (inches)      | .5   |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | patchy snow  |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 1c   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 15   |
| Forb cover (%)           | 30   |
| Shrub cover (%)          | 40   |
| Remnant veg (%)          | 30   |
| Mean veg height (inches) | 12   |
| Dominant plant species   | solidago sp.   |
| Snow depth (inches)      | 2  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | patchy snow  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |                                |
|---------------------|--|--------------------------------|
| Wind Direction      | SW   | REDACTED – Matter No. 21-00750 |
| Temperature Range   | 33 - 33  |                                |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input checked="" type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |                                |
| Snow Depth (inches) | 1  |                                |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |                                |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |                                |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input checked="" type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow                             |                                |
| If other, explain:  |  |                                |

## Raptor Observations

### Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | RTHA   |
| Bird ID #                   | 1  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown          |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown       |
| Time of Initial Observation | 5:49   |
| Time of Final Observation   | 6:00   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through |

10

5

5

9

9

|                    |  |
|--------------------|--|
| Flight Description | flew up from woods around 1b to sit on utility poles |
|--------------------|--|

Notes

Incidental Species NOCA, CANG, EUST, AMCR, AMGO

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 76817                    |
| Survey Date | 03/04/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 3   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 05:09 PM   |
| Sunset Time | 06:13 PM   |
| End Time    | 06:43 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 3A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |







|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unknown grasses and forbs  |
| Snow depth (inches)      | 0-1  |
| Snow crust?              | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Notes                    | Small patches of snow left   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 3B   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 75   |
| Shrub cover (%)          | 5  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Solidago and unknown grasses   |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

WSW REDACTED – Matter No. 21-00750

Temperature Range

34-34

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☒ Overcast - 90-100%

Snow Depth (inches)

0-1

Snow Crust?

- ☐ No
- ☒ Yes

Visibility

- ☐ Fair
- ☒ Good
- ☐ Poor

Visibility Reason

- ☒ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female
- ☐ Male
- ☐ Unknown

Age

- ☐ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through

- REDACTED – Matter No. 21-00750
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

WBNH RWBL EUST AMCR MODO

EDR

# 19020 Ridge View Solar Checklist

## Winter Raptor Survey 1

|             |                        |
|-------------|------------------------|
| Project     | 19020 Ridge View Solar |
| ID          | 76521                  |
| Survey Date | 03/04/2020             |
| User        | Joseph Knight          |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID | 5  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 05:06 PM   |
| Sunset Time | 06:13 PM   |
| End Time    | 06:43 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 5A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 5  |
| Dominant plant species   | UNK grass, juncus effusus  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

### Habitat

|              |  |
|--------------|--|
| Field ID     | 5B   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unk grass, juncus effusus  |
| Snow depth (inches)      | <0.5   |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |                                |
|---------------------|--|--------------------------------|
| Wind Direction      | WSW  | REDACTED – Matter No. 21-00750 |
| Temperature Range   | 33-33  |                                |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input checked="" type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |                                |
| Snow Depth (inches) | <0.5   |                                |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |                                |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |                                |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |                                |
| If other, explain:  |  |                                |

## Raptor Observations

### Raptor Observation

|                             |   |
|-----------------------------|---|
| Raptor Species              |   |
| Bird ID #                   |   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input type="checkbox"/> Unknown          |
| Age                         | <input type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown       |
| Time of Initial Observation |   |
| Time of Final Observation   |   |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through |



- REDACTED – Matter No. 21-00750
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

RWBL, CANG, AMCR, AMRO

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 77552                    |
| Survey Date | 03/09/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 2  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 05:53 PM   |
| Sunset Time | 07:19 PM   |
| End Time    | 07:49 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 2A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input checked="" type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 95  |
| Forb cover (%)           | 0   |
| Shrub cover (%)          | 2   |
| Remnant veg (%)          | 97  |
| Mean veg height (inches) | 24  |
| Dominant plant species   | unk grass   |
| Snow depth (inches)      | 0   |
| Snow crust?              | <div><div><input checked="" type="checkbox"/></div>No</div> <div><div><input type="checkbox"/></div>Yes</div> |
| Notes                    |   |

Weather

☐ 0 - Smoke rises vertically (<1 mph)☐ 1 - Wind direction shown by smoke drift (1-3 mph)☐ 2 - Wind felt on face; leaves rustle (4-7 mph)☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)☒ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | SW   |
| Temperature Range   | 62-  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input checked="" type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 0  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |      |
|----------------|------|
| Raptor Species | RTHA |
| Bird ID #      | 1    |

Sex

- REDACTED – Matter No. 21-00750
- ☐ Female
- ☐ Male
- ☒ Unknown

Age

- ☒ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

5:59

Time of Final Observation

6:01

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☒ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

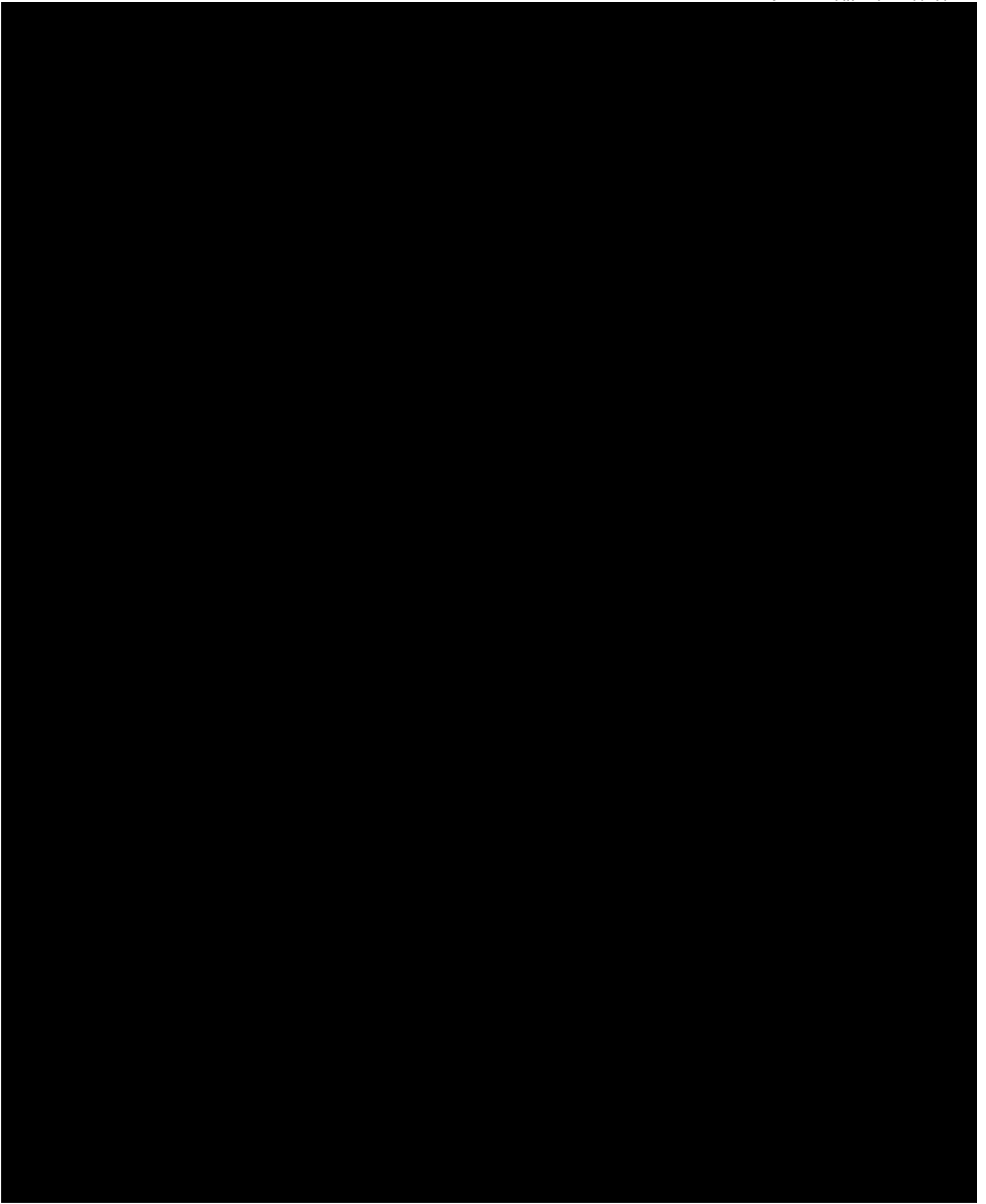
Flight Description

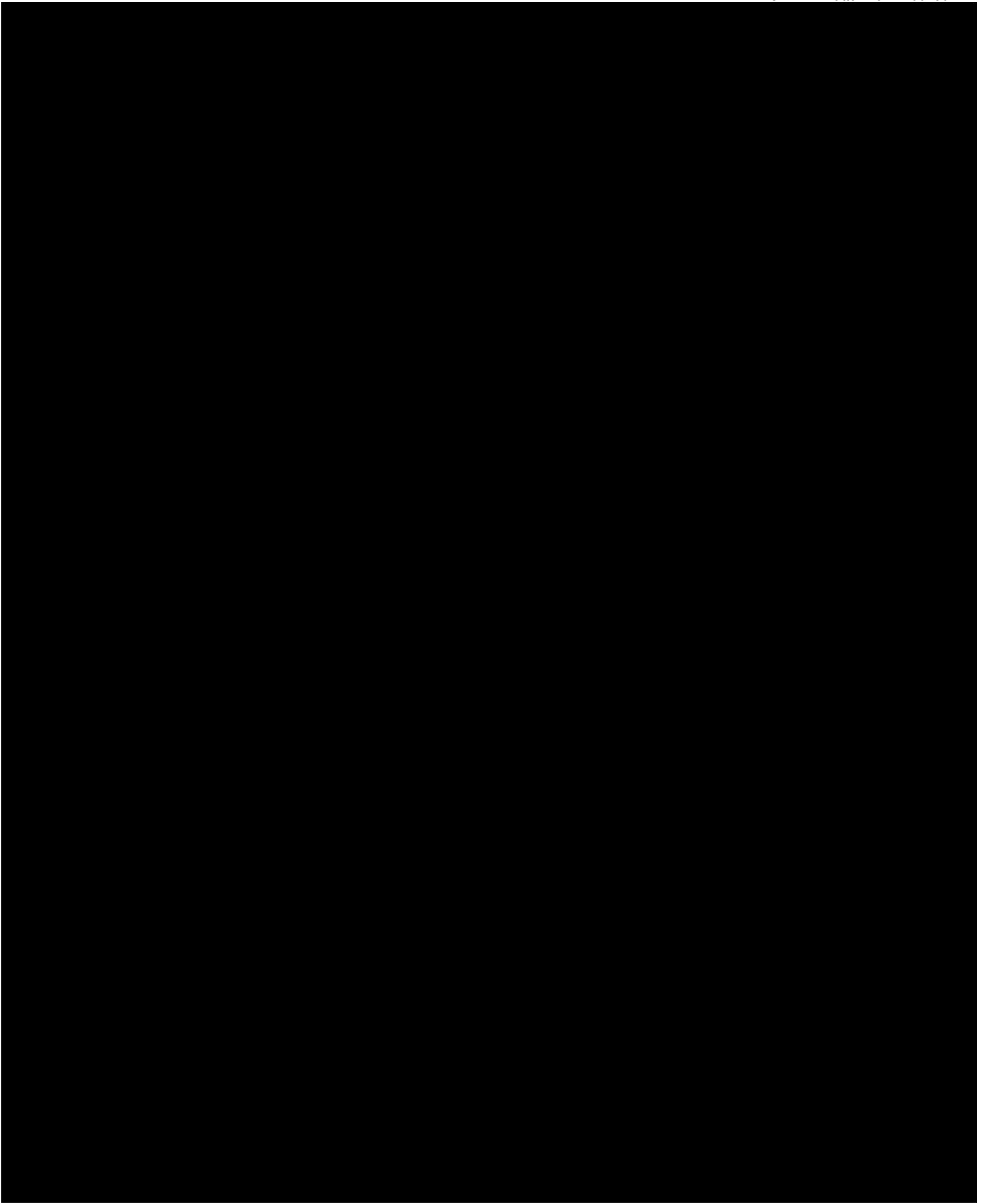
100 feet up riding thermals,  
flew over field 2A from South to  
north East

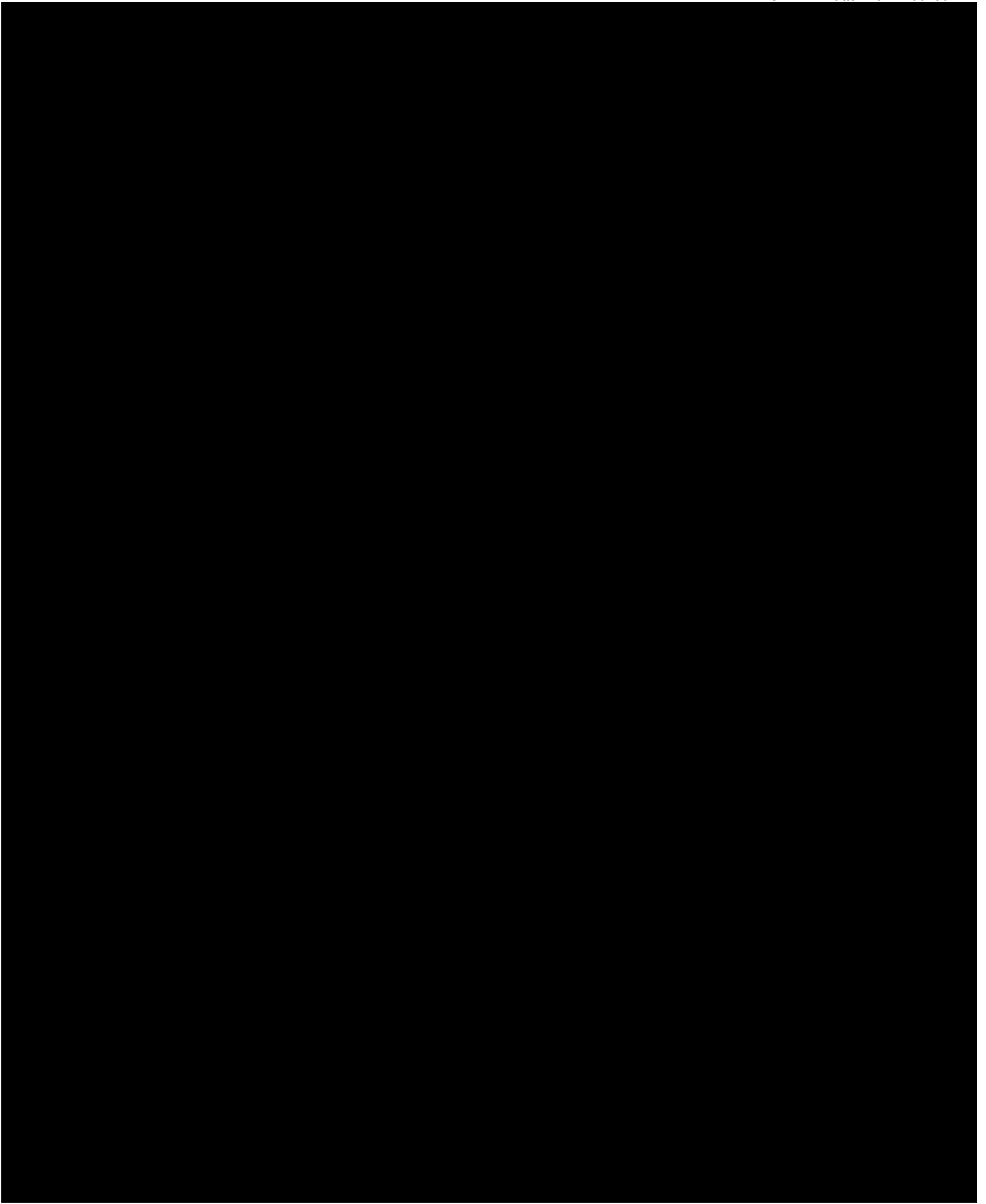
Notes

Incidental Species

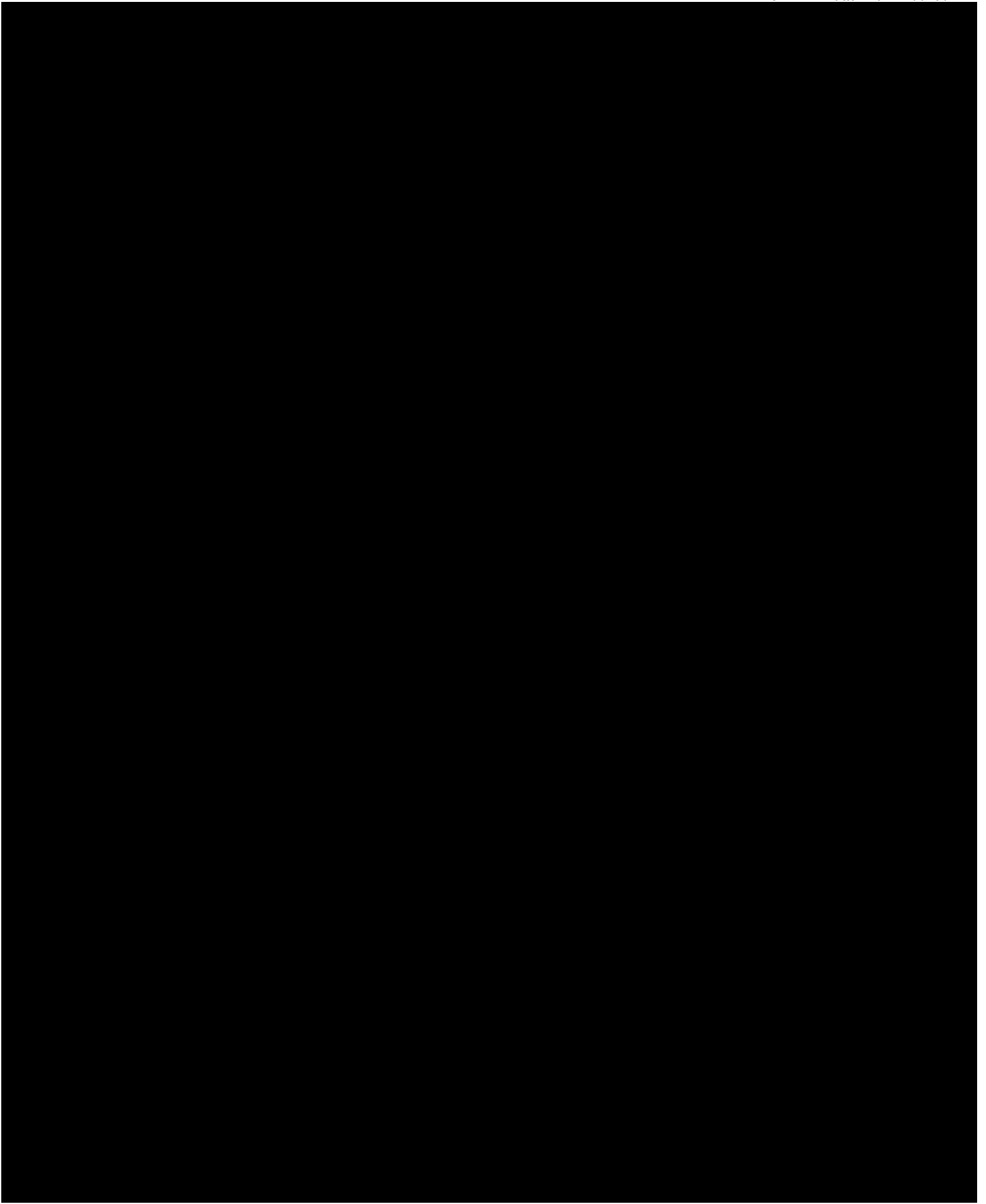
RWBL, EUST, MODO, EATO, BASW,  
AMCR, KILL, CANG, GOFI

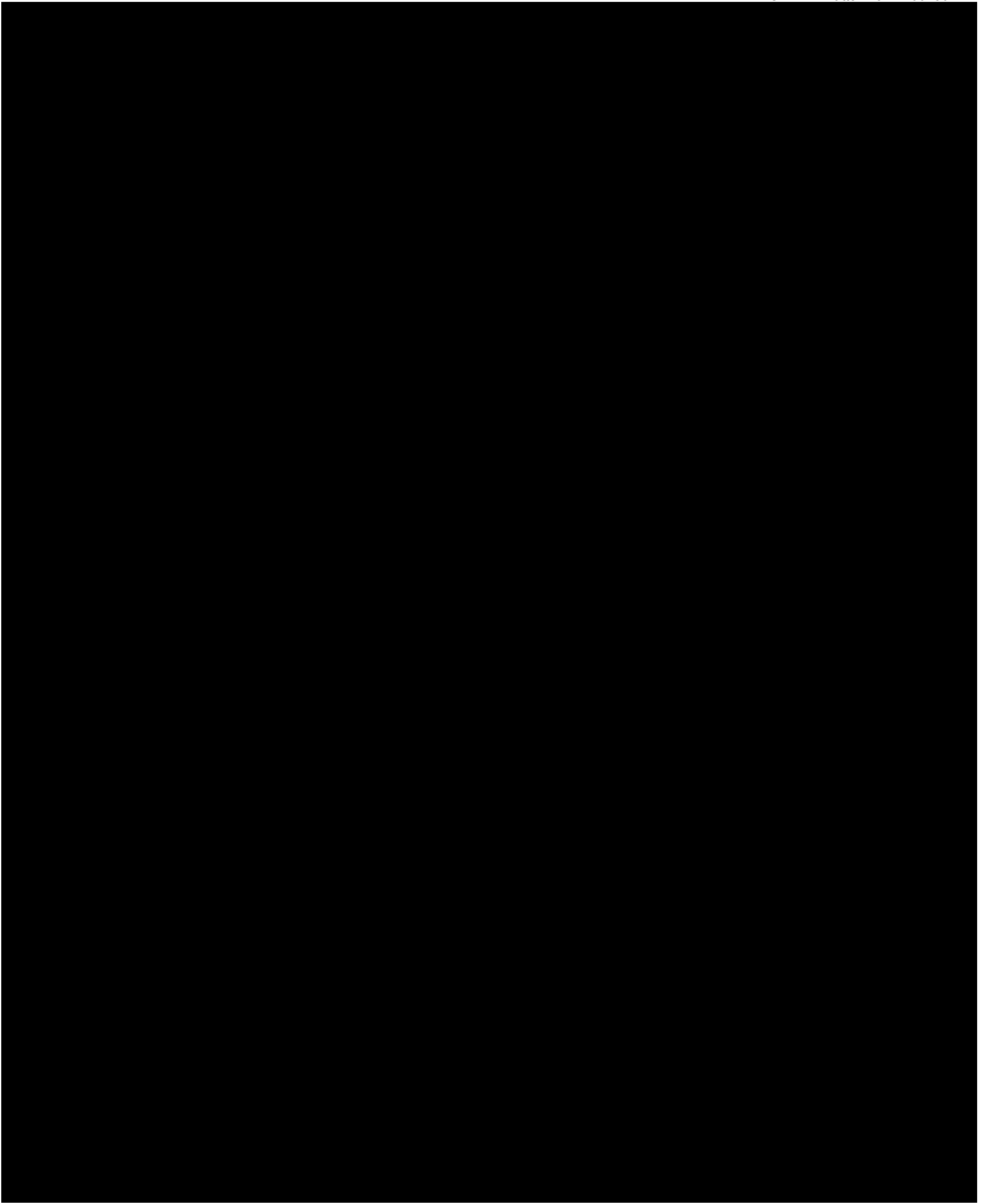


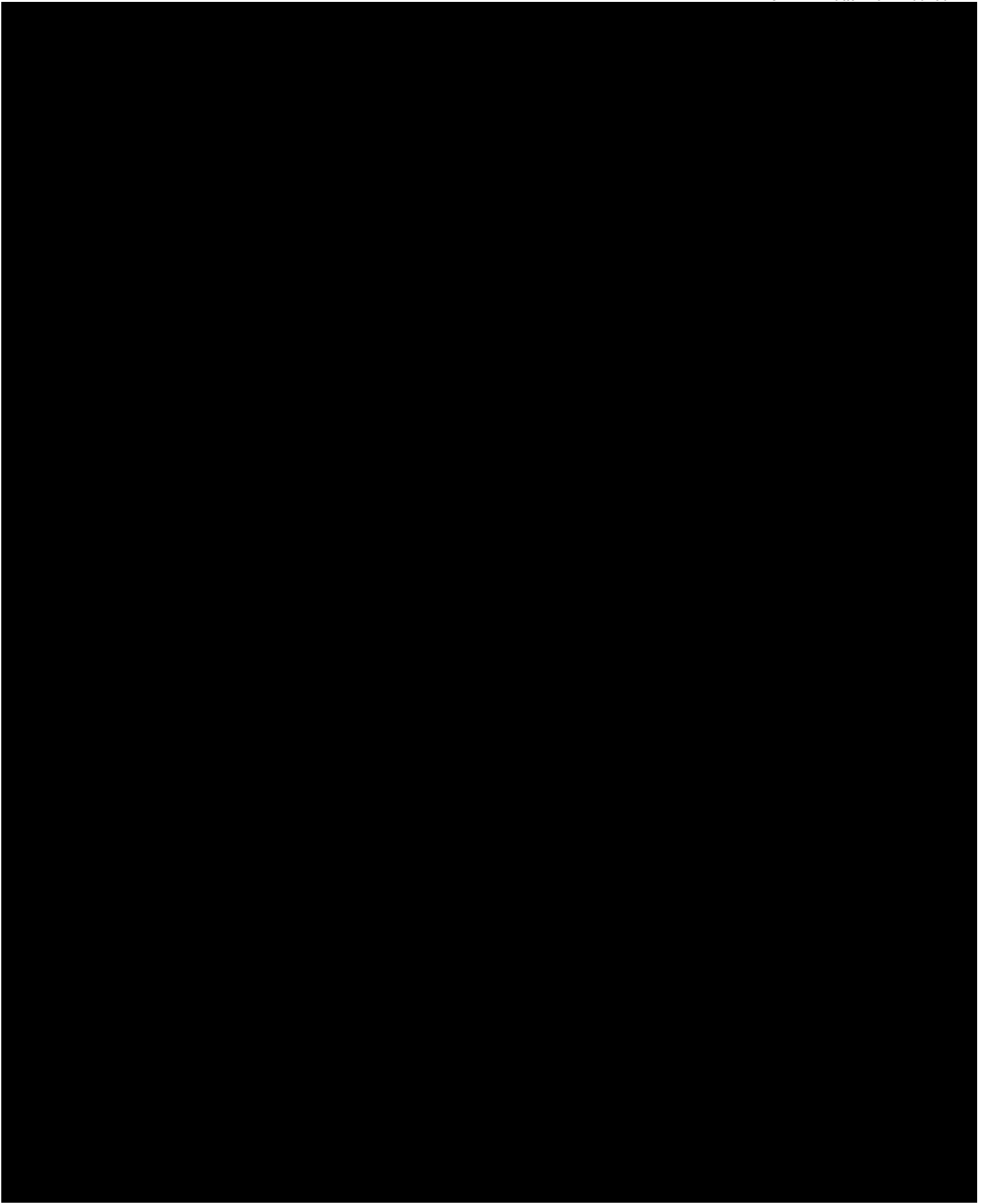


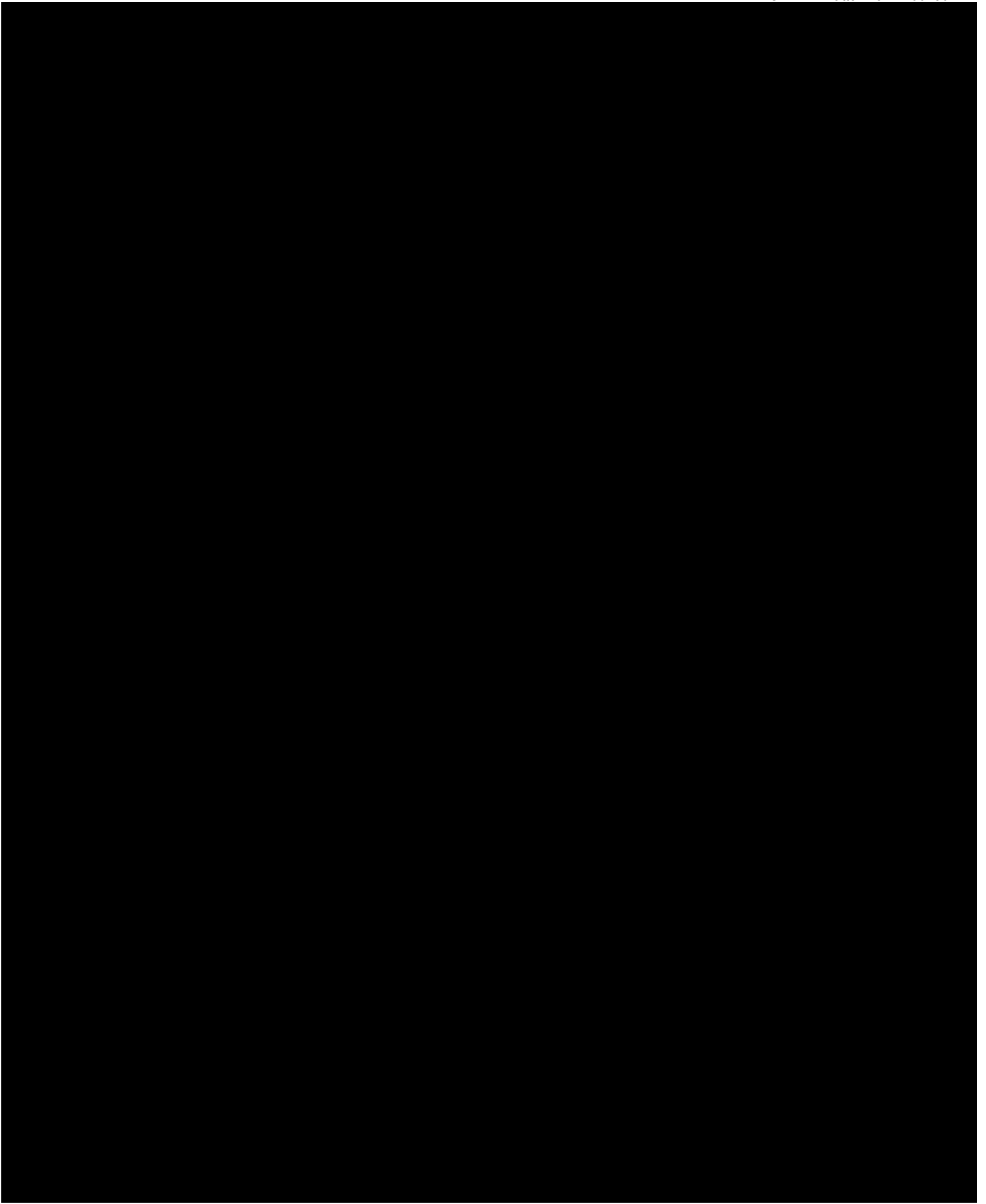












EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 79711                    |
| Survey Date | 03/09/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 6   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:00 PM   |
| Sunset Time | 07:19 PM   |
| End Time    | 07:49 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 6A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unknown grasses likely timothy   |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

Habitat

Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                 |     |
|-----------------|-----|
| Crop cover (%)  | 0   |
| Grass cover (%) | 100 |
| Forb cover (%)  | 5   |
| Shrub cover (%) | 0   |

|                          |  |                                |
|--------------------------|--|--------------------------------|
| Remnant veg (%)          | 100                                    | REDACTED – Matter No. 21-00750 |
| Mean veg height (inches) | 3                                      |                                |
| Dominant plant species   | Unknown grasses likely Timothy         |                                |
| Snow depth (inches)      | 0                                      |                                |
| Snow crust?              | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes   |
| Notes                    |  |                                |

## Weather

|                     |   |  |
|---------------------|---|--|
| Beaufort Wind Code  | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input checked="" type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |  |
| Wind Direction      | SW  |  |
| Temperature Range   | 60-54   |  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input checked="" type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100%  |  |
| Snow Depth (inches) | 0   |  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes  |  |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor  |  |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon   |  |



REDACTED – Matter No. 21-00750

☐ Other

☐ Rain

☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

|                             |   |
|-----------------------------|---|
| Raptor Species              | RTHA  |
| Bird ID #                   | 1   |
| Sex                         | <div><input type="checkbox"/> Female</div> <div><input type="checkbox"/> Male</div> <div><input checked="" type="checkbox"/> Unknown</div>  |
| Age                         | <div><input type="checkbox"/> Adult</div> <div><input checked="" type="checkbox"/> Juvenile</div> <div><input type="checkbox"/> Unknown</div>   |
| Time of Initial Observation | 6:00  |
| Time of Final Observation   | 6:00  |
| Activity Observed           | <div><input checked="" type="checkbox"/> Perched</div> <div><input type="checkbox"/> Foraging</div> <div><input type="checkbox"/> Fly-through</div> <div><input checked="" type="checkbox"/> Flying</div> <div><input type="checkbox"/> Feeding</div> <div><input type="checkbox"/> Roosting</div> <div><input type="checkbox"/> Breeding</div> <div><input type="checkbox"/> Nest-Building</div> <div><input type="checkbox"/> Other</div> |

If Other, Explain:

Flight Description

Flying low (~5 ft) off ground in straight west direction across road. Disappeared behind hill for 5 mins before popping up and perching on telephone pole in field 6A. Possible feeding while out of sight. Moved through series of lower perches moving west before flying into woods on west side of field 6A

Notes

Incidental Species

MODO, RWBL, EUST, AMCR, KILL, RBGU, AMRO, CANG, deer

EDR

## 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 80786                    |
| Survey Date | 03/16/2020               |
| User        | Joseph Knight            |

## General

|             |  |
|-------------|--|
| Observer(s) | JK   |
| Location ID |  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:20 PM   |
| Sunset Time | 07:27 PM   |
| End Time    | 07:57 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 1A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input checked="" type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 60   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 0.5  |
| Dominant plant species   | Unkngrass  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | Horseback riding in field  |

### Habitat

|              |  |
|--------------|--|
| Field ID     | 1B   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 50   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 20   |
| Dominant plant species   | Golden rod, unknggrass   |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    | Horseback riding in field  |

### Habitat

|              |  |
|--------------|--|
| Field ID     | 1C   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 40   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 32   |
| Dominant plant species   | Golden rod, dogwood, UNK grasses                                       |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on

|                     |  |
|---------------------|--|
| Wind Direction      | S  |
| Temperature Range   | 46-45  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 0  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

Raptor Observations

Raptor Observation

|                             |   |
|-----------------------------|---|
| Raptor Species              |   |
| Bird ID #                   |   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input type="checkbox"/> Unknown          |
| Age                         | <input type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown       |
| Time of Initial Observation |   |
| Time of Final Observation   |   |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through |

- REDACTED – Matter No. 21-00750
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

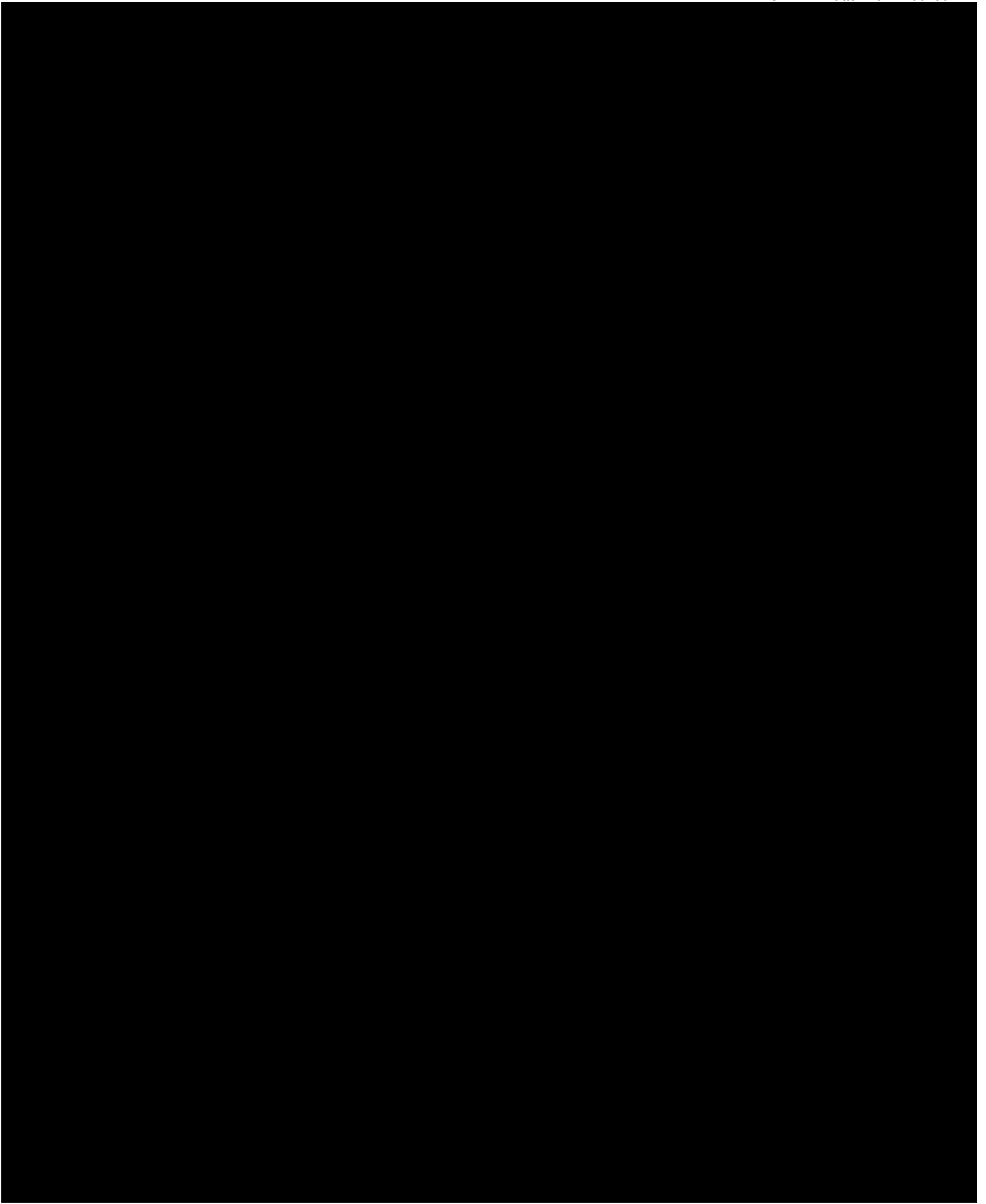
If Other, Explain:

Flight Description

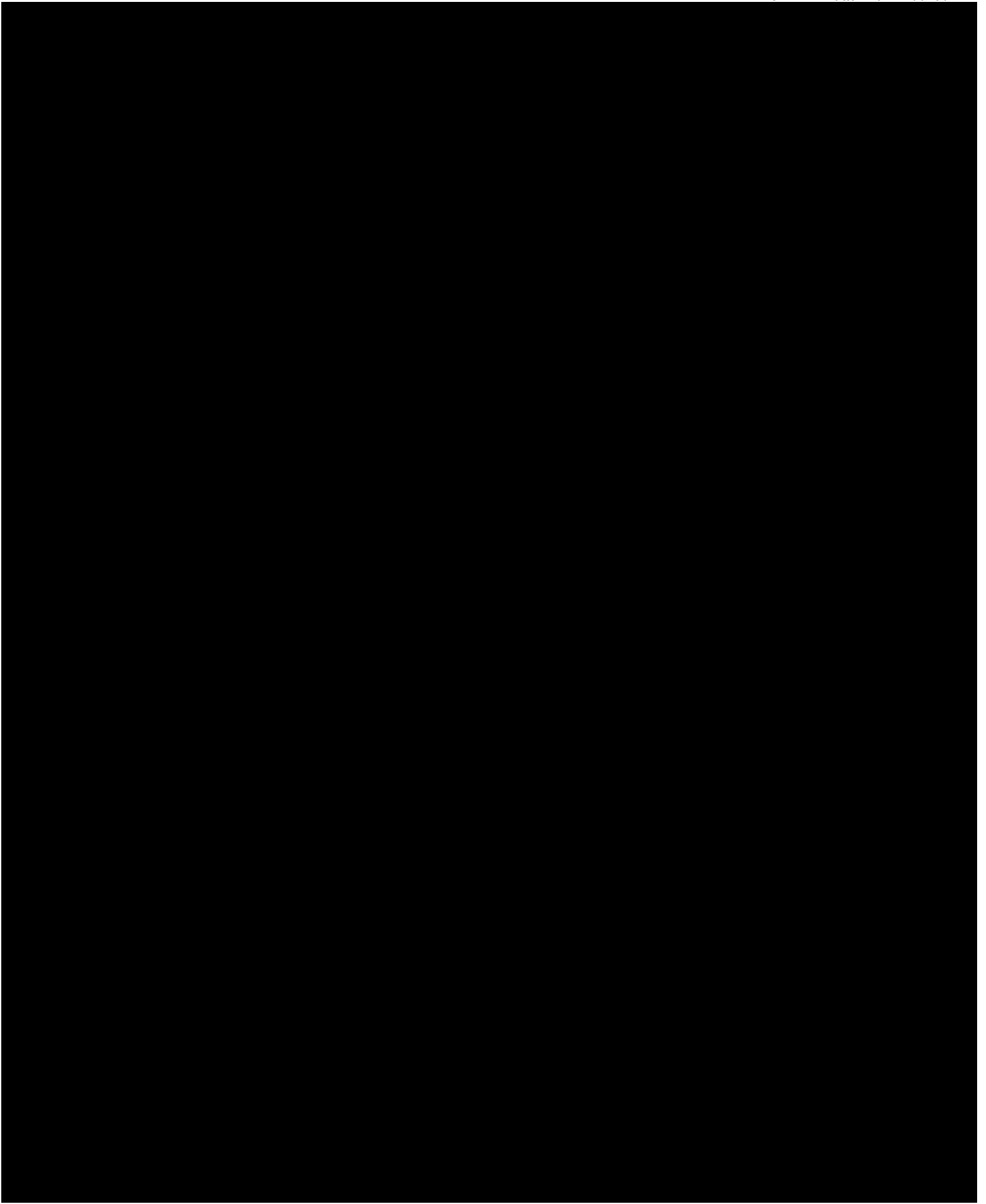
Notes

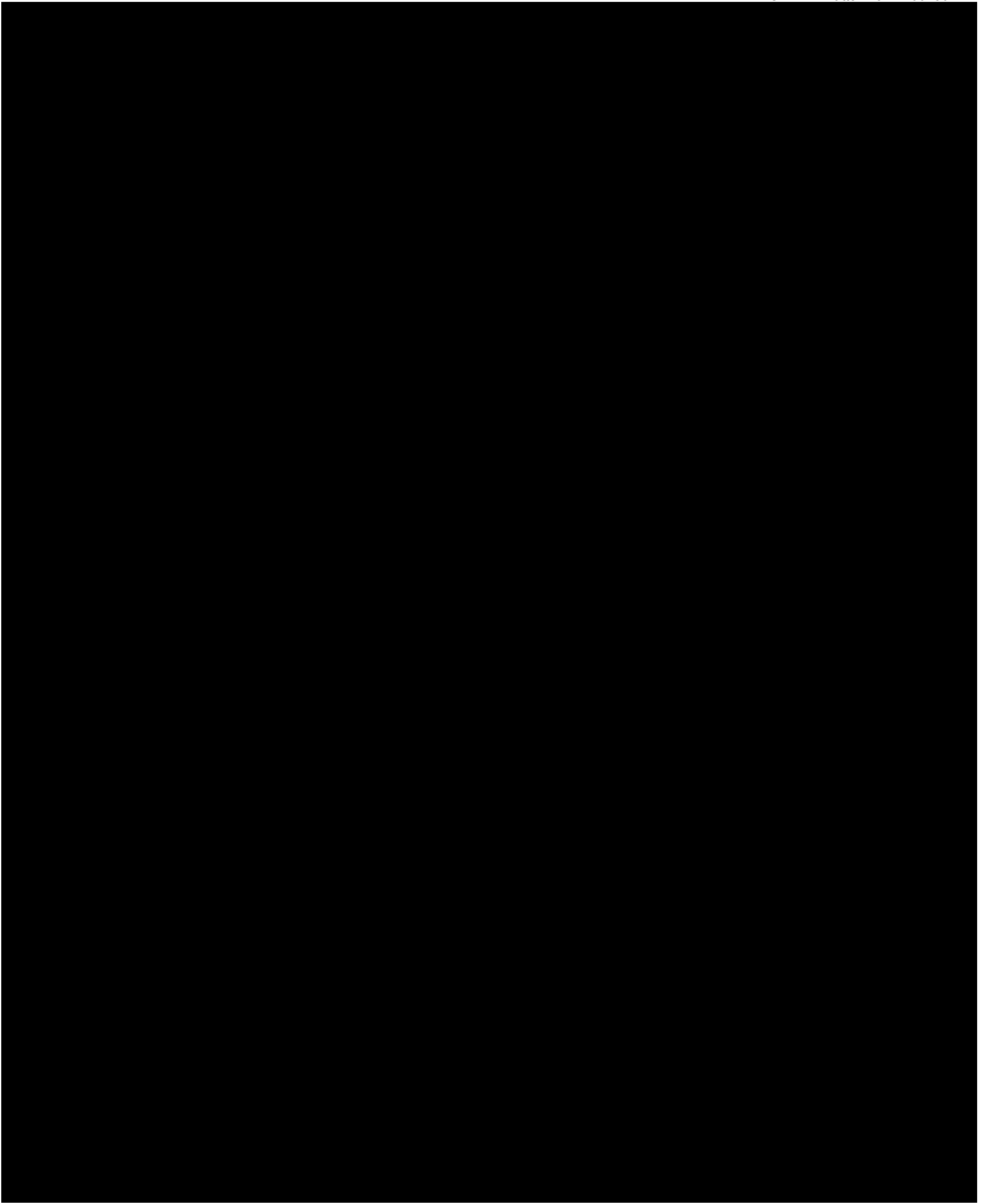
Incidental Species

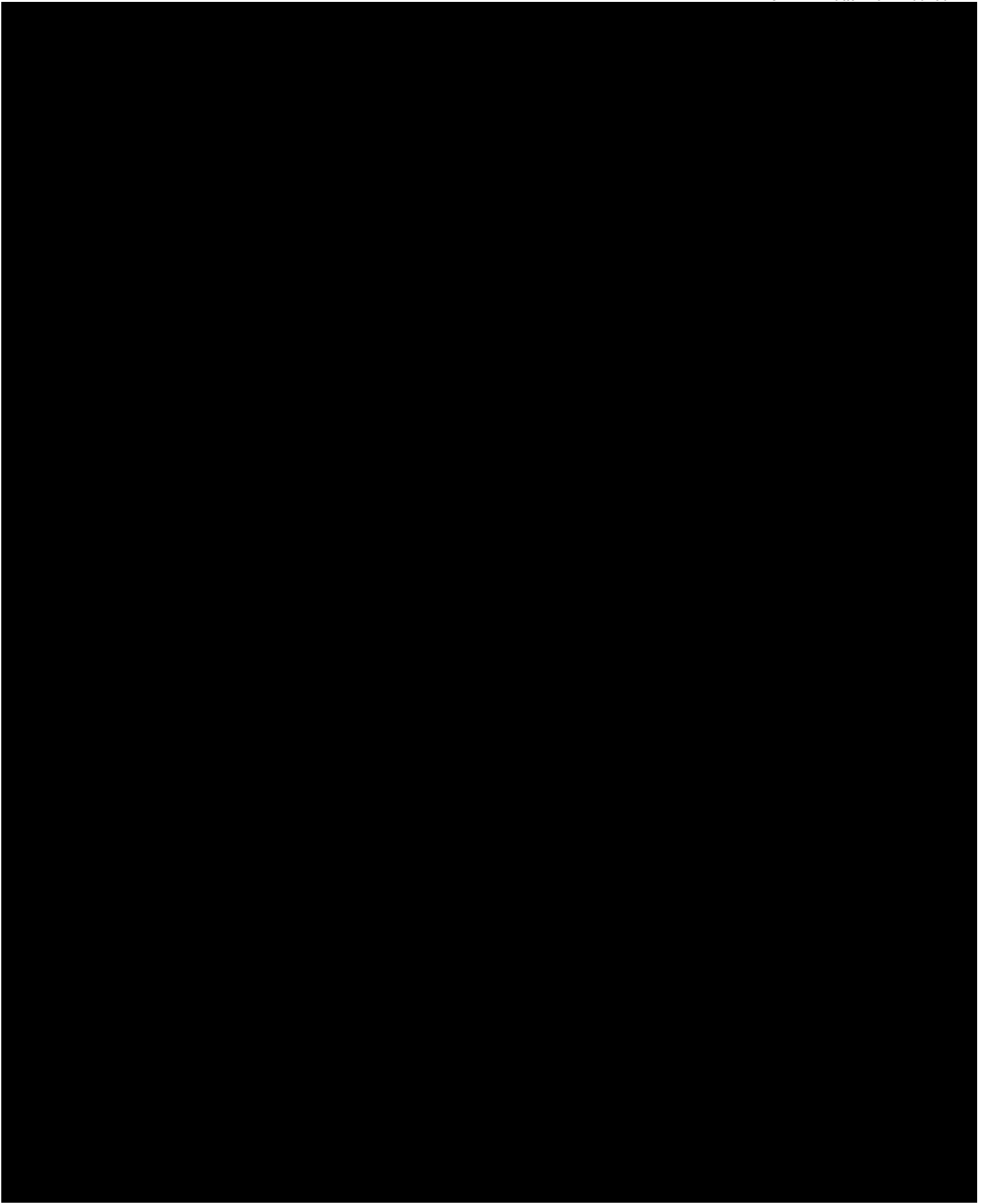
REBL, CANG, AMRO, KILL, domestic horse, DOWO

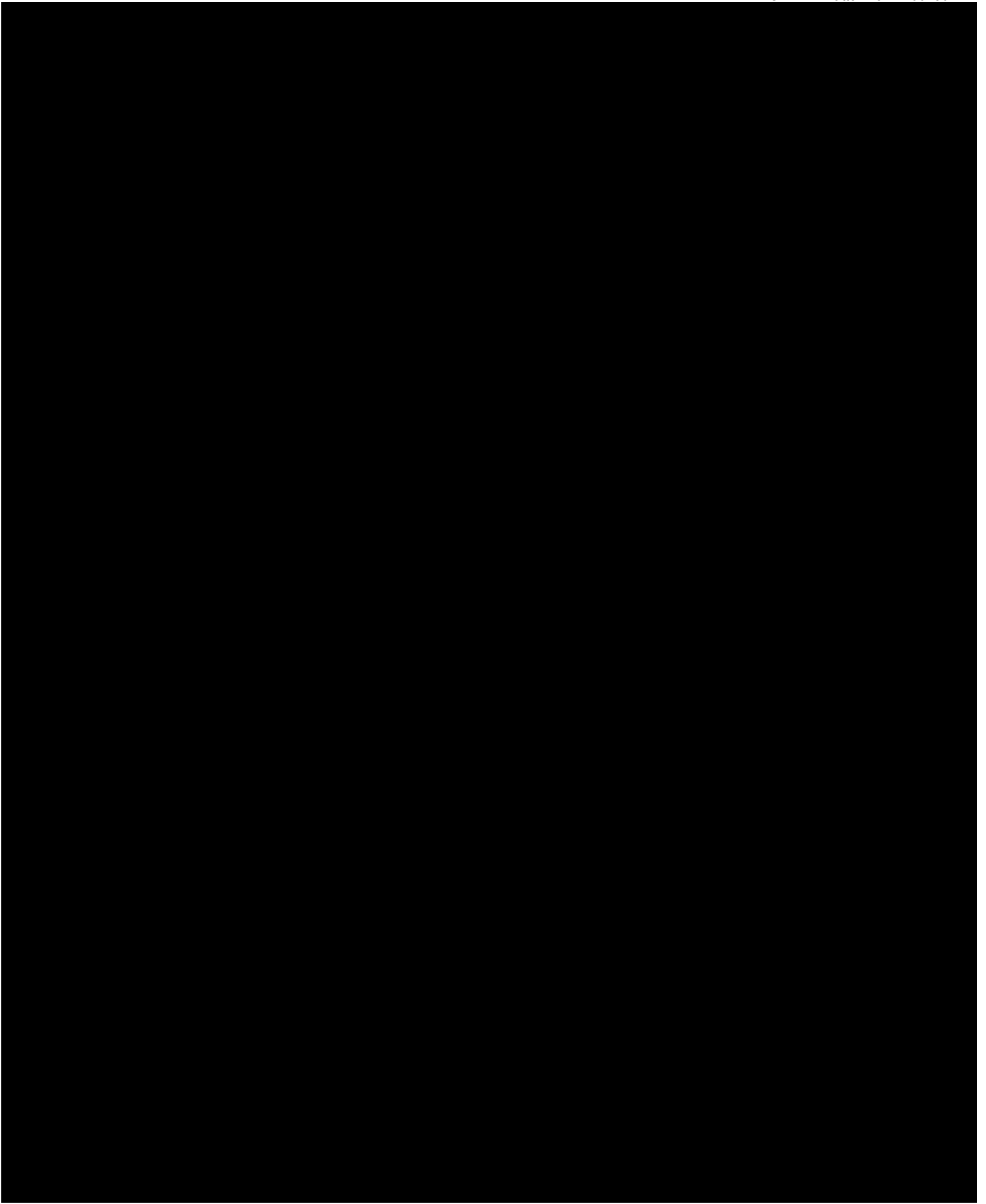












EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 79710                    |
| Survey Date | 03/16/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 5   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:27 PM   |
| Sunset Time | 07:27 PM   |
| End Time    | 07:57 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 5A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 90   |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 6  |
| Dominant plant species   | Unknown grasses, juncus effusus  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 5B   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 100   |
| Forb cover (%)           | 10  |
| Shrub cover (%)          | 0   |
| Remnant veg (%)          | 100   |
| Mean veg height (inches) | 4-6   |
| Dominant plant species   | Unknown grasses   |
| Snow depth (inches)      | 0   |
| Snow crust?              | <div><input checked="" type="checkbox"/> No</div> <div><input type="checkbox"/> Yes</div> |
| Notes                    |   |

Weather

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | A  |
| Temperature Range   | 45-43  |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #





Sex

- ☐ REDACTED – Matter No. 21-00750  
Female
- ☐ Male
- ☐ Unknown

Age

- ☐ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

RWBL

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 81831                    |
| Survey Date | 03/24/2020               |
| User        | Holly Kistner            |

## General

|             |  |
|-------------|--|
| Observer(s) | HK   |
| Location ID | 2  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:36 PM   |
| Sunset Time | 07:36 PM   |
| End Time    | 08:06 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 2A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 85   |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 36   |
| Dominant plant species   | Unknown grasses  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

☐ 0 - Smoke rises vertically  
(<1 mph)☒ 1 - Wind direction shown  
by smoke drift (1-3 mph)☐ 2 - Wind felt on face;  
leaves rustle (4-7 mph)☐ 3 - Leaves, small twigs in  
constant motion; light flag  
extended (8-12 mph)☐ 4 - Raises dust and loose  
paper; small branches are  
moved (13-18 mph)☐ 5 - Small trees in leaf  
sway; crested wavelets on  
inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      | E  |
| Temperature Range   | 37   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input checked="" type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) | 0  |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |  |

## Raptor Observations

### Raptor Observation

|                |      |
|----------------|------|
| Raptor Species | RTHA |
| Bird ID #      | 1    |

|                             |  |
|-----------------------------|--|
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input checked="" type="checkbox"/> Unknown   |
| Time of Initial Observation | 6:36   |
| Time of Final Observation   | 6:47   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |  |
| Flight Description          | flew low between perches, maybe hunting but obscured by tall grasses/very far away   |
| Notes                       | first saw when arrived on site, perched in a tree on the south end of field, around 6:46 the bird flew low across field and perched on a pole at the edge of the service road and flew away south after another minute   |

Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | AMKE   |
| Bird ID #                   | 2  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown    |
| Age                         | <input type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input checked="" type="checkbox"/> Unknown |
| Time of Initial Observation | 6:50   |

Activity Observed

- ☒ Perched  
☒ Foraging  
☐ Fly-through  
☒ Flying  
☐ Feeding  
☐ Roosting  
☐ Breeding  
☐ Nest-Building  
☐ Other

If Other, Explain:

Flight Description

windhover over field and then  
fly low and fly back up to perch

Notes

Watched bird forage,  
windhover, fly low and then  
come up to perch on telephone  
pole/service road pole/small  
trees on edge of field,  
occasionally lost sight of the  
kestral but was around for  
about an hour

Incidental Species

lots of signs of spring! Heard  
american woodcock and peepers.  
Saw redwing black bird, canada  
goose, starlings, robins, mourning  
dove, and 1 deer



EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 81829                    |
| Survey Date | 03/24/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 4   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:31 PM   |
| Sunset Time | 07:36 PM   |
| End Time    | 08:06 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 4A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |





|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 20   |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 24   |
| Dominant plant species   | Unknown grasses and forbs  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

Habitat



## Habitat Type

☒

Hayfield

☐

Other (describe in notes)

☐

Pastureland

☐

Row crops, fallow in previous growing season

☐

Row crops, harvested in previous growing season

☐

Successional Old Field

## Field Condition Photos



Crop cover (%)

0

Grass cover (%)

100

Forb cover (%)

10

Shrub cover (%)

0

Remnant veg (%)

100

Mean veg height (inches)

6

Dominant plant species

Unknown grasses

Snow depth (inches)

0

Snow crust?

☒

No

☐

Yes

Notes

## Weather

Beaufort Wind Code

☐

0 - Smoke rises vertically (&lt;1 mph)

☐

1 - Wind direction shown

- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☒ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      | NE  |
| Temperature Range   | 38-37   |
| Cloud Cover (%)     | <div><input type="checkbox"/> Clear - 0-10%</div> <div><input type="checkbox"/> Mostly Clear - 10-25%</div> <div><input type="checkbox"/> Partly Cloudy - 25-50%</div> <div><input type="checkbox"/> Mostly Cloudy - 50-90%</div> <div><input checked="" type="checkbox"/> Overcast - 90-100%</div> |
| Snow Depth (inches) | 0   |
| Snow Crust?         | <div><input checked="" type="checkbox"/> No</div> <div><input type="checkbox"/> Yes</div>   |
| Visibility          | <div><input type="checkbox"/> Fair</div> <div><input checked="" type="checkbox"/> Good</div> <div><input type="checkbox"/> Poor</div>   |
| Visibility Reason   | <div><input checked="" type="checkbox"/> Clear</div> <div><input type="checkbox"/> Fog</div> <div><input type="checkbox"/> No Moon</div> <div><input type="checkbox"/> Other</div> <div><input type="checkbox"/> Rain</div> <div><input type="checkbox"/> Snow</div>                                |
| If other, explain:  |   |

Raptor Observations

Raptor Observation

|                |   |
|----------------|---|
| Raptor Species |   |
| Bird ID #      |   |
| Sex            | <div><input type="checkbox"/> Female</div> <div><input type="checkbox"/> Male</div> |

|     |                                   |
|-----|-----------------------------------|
| Age | <input type="checkbox"/> Adult    |
|     | <input type="checkbox"/> Juvenile |
|     | <input type="checkbox"/> Unknown  |

|                             |
|-----------------------------|
| Time of Initial Observation |
|-----------------------------|

|                           |
|---------------------------|
| Time of Final Observation |
|---------------------------|

|                   |  |
|-------------------|--|
| Activity Observed | <input type="checkbox"/> Perched       |
|                   | <input type="checkbox"/> Foraging      |
|                   | <input type="checkbox"/> Fly-through   |
|                   | <input type="checkbox"/> Flying        |
|                   | <input type="checkbox"/> Feeding       |
|                   | <input type="checkbox"/> Roosting      |
|                   | <input type="checkbox"/> Breeding      |
|                   | <input type="checkbox"/> Nest-Building |
|                   | <input type="checkbox"/> Other         |

|                    |
|--------------------|
| If Other, Explain: |
|--------------------|

|                    |
|--------------------|
| Flight Description |
|--------------------|

|       |
|-------|
| Notes |
|-------|

|                    |  |
|--------------------|--|
| Incidental Species | CANG, EUST, RWBL, AMRO, WODU,<br>SOSP, TUVU, spring peepers,<br>American woodcock mating display |
|--------------------|--|

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 81832                    |
| Survey Date | 03/24/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 6  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:34 PM   |
| Sunset Time | 07:36 PM   |
| End Time    | 08:06 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 6A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |   |
|--------------------------|---|
| Crop cover (%)           | 0   |
| Grass cover (%)          | 80  |
| Forb cover (%)           | 10  |
| Shrub cover (%)          | 2   |
| Remnant veg (%)          | 50  |
| Mean veg height (inches) | 4   |
| Dominant plant species   | unk grass   |
| Snow depth (inches)      | 0   |
| Snow crust?              | <div><div><input checked="" type="checkbox"/></div>No</div> <div><div><input type="checkbox"/></div>Yes</div> |
| Notes                    |   |

Habitat



Habitat Type

- ☒ Hayfield
- ☐ Other (describe in notes)
- ☐ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

Field Condition Photos



|                 |    |
|-----------------|----|
| Crop cover (%)  | 0  |
| Grass cover (%) | 80 |
| Forb cover (%)  | 10 |
| Shrub cover (%) | 2  |

|                          |  |                                |
|--------------------------|--|--------------------------------|
| Remnant veg (%)          | 50   | REDACTED – Matter No. 21-00750 |
| Mean veg height (inches) | 4  |                                |
| Dominant plant species   | unk grass  |                                |
| Snow depth (inches)      | 0  |                                |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |                                |
| Notes                    |  |                                |

## Weather

|                     |   |
|---------------------|---|
| Beaufort Wind Code  | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph)<br><input checked="" type="checkbox"/> 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)<br><input type="checkbox"/> 4 - Raises dust and loose paper; small branches are moved (13-18 mph)<br><input type="checkbox"/> 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph) |
| Wind Direction      | NE  |
| Temperature Range   | 35-33   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input checked="" type="checkbox"/> Overcast - 90-100%  |
| Snow Depth (inches) | 0   |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes  |
| Visibility          | <input checked="" type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor  |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input checked="" type="checkbox"/> No Moon  |

REDACTED – Matter No. 21-00750

☐ Other

☐ Rain

☐ Snow

If other, explain:

Raptor Observations

Raptor Observation

Raptor Species

☐ AMKE

☐ BAEA

☐ BANO

☐ BWHH

☐ COHA

☐ EASO

☐ GHOW

☐ GOEA

☐ MERL

☐ NOGO

☐ NOHA

☐ OSPR

☐ Other (Describe)

☐ PEFA

☐ RLHA

☐ RSHA

☐ RTHA

☐ SEOW

☐ SNOW

☒ SSHA

☐ TUVU

☐ Unknown Accipiter

☐ Unknown Buteo

☐ Unknown Raptor

Bird ID #1

Sex

☐ Female

☐ Male

☒ Unknown

Age

☒ Adult



|                             |   |
|-----------------------------|---|
| Time of Initial Observation | 6:35  |
| Time of Final Observation   | 6:36  |
| Activity Observed           | <div> <input type="checkbox"/> Perched <input type="checkbox"/> Foraging <input type="checkbox"/> Fly-through <input checked="" type="checkbox"/> Flying <input type="checkbox"/> Feeding <input checked="" type="checkbox"/> Roosting <input type="checkbox"/> Breeding <input type="checkbox"/> Nest-Building <input type="checkbox"/> Other </div> |
| If Other, Explain:          |   |
| Flight Description          | approximately 50-75 feet in the air, flew up from grassy patch in front of conifers into conifers then down into hedgerow and wooded are south of point   |
| Notes                       | flew up into conifers, landed briefly then was startled out by passing car. Flew south into hedgerow and wooded are in a zig zag.   |

Raptor Observation

|                |  |
|----------------|--|
| Raptor Species | <div> <input type="checkbox"/> AMKE <input type="checkbox"/> BAEA <input type="checkbox"/> BANO <input type="checkbox"/> BWHa <input type="checkbox"/> COHA <input type="checkbox"/> EASO <input type="checkbox"/> GHOW <input type="checkbox"/> GOEA <input type="checkbox"/> MERL <input type="checkbox"/> NOGO <input type="checkbox"/> NOHA <input type="checkbox"/> OSPR <input type="checkbox"/> Other (Describe) <input type="checkbox"/> PEFA </div> |
|----------------|--|

- ☐ RLHA
- ☐ RSHA
- ☒ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☐ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

|                             |  |
|-----------------------------|--|
| Bird ID #                   | 2  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown   |
| Time of Initial Observation | 6:53   |
| Time of Final Observation   | 6:54   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |  |
| Flight Description          | moving between treeptops in back of field 6B to perch, then flying in circles above treetops approx. 50 ft   |
| Notes                       | perched in tree in back of field 6B and then flew to another tree top to perch, then flying in circles above trees with other RTHA (bird ID 4)   |

Raptor Observation

- ☒ AMKE  
☐ BAEA  
☐ BANO  
☐ BWAH  
☐ COHA  
☐ EASO  
☐ GHOW  
☐ GOEA  
☐ MERL  
☐ NOGO  
☐ NOHA  
☐ OSPR  
☐ Other (Describe)  
☐ PEFA  
☐ RLHA  
☐ RSHA  
☐ RTHA  
☐ SEOW  
☐ SNOW  
☐ SSHA  
☐ TUVU  
☐ Unknown Accipiter  
☐ Unknown Buteo  
☐ Unknown Raptor

Bird ID #

3

Sex

- ☒ Female  
☐ Male  
☐ Unknown

Age

- ☒ Adult  
☐ Juvenile  
☐ Unknown

Time of Initial Observation

6:55

Time of Final Observation

7:32

Activity Observed

- ☒ Perched  
☒ Foraging  
☐ Fly-through  
☐ Flying  
☐ Feeding



- REDACTED – Matter No. 21-00750
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

sitting on powerline in 6A, flying back and forth to tops of sign posts and hovering

Notes

Foraging in-between signposts on road to the south of 6A and powerline, hovering and diving

## Raptor Observation

Raptor Species

- ☐ AMKE
- ☐ BAEA
- ☐ BANO
- ☐ BWHA
- ☐ COHA
- ☐ EASO
- ☐ GHOW
- ☐ GOEA
- ☐ MERL
- ☐ NOGO
- ☐ NOHA
- ☐ OSPR
- ☐ Other (Describe)
- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☒ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☐ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

Bird ID #

4



Sex

- REDACTED – Matter No. 21-00750
- ☐ Female
- ☐ Male
- ☒ Unknown

Age

- ☒ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

7:39

Time of Final Observation

7:42

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☒ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

approx 50 feet flight height,  
flying in circles above treetops

Notes

flying in circles above trees with  
other RTHA (bird ID 3) moving  
East

Incidental Species

RWBL, AMRO, SOSP, AMCR, CANG,  
AMWO

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

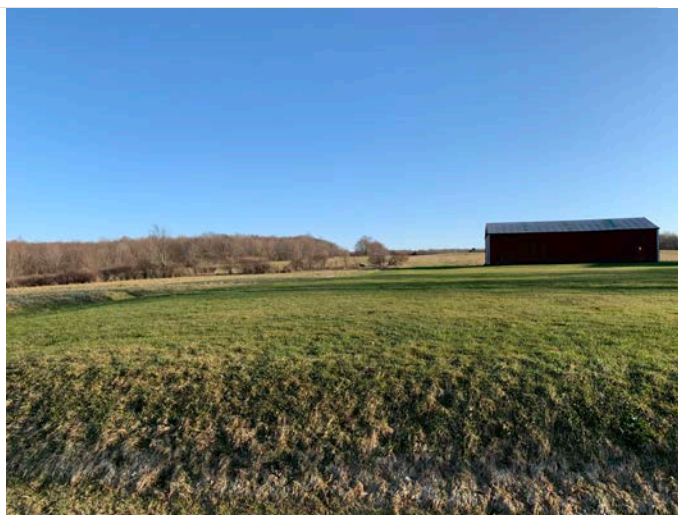
|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 84399                    |
| Survey Date | 04/01/2020               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC   |
| Location ID | Stationary 3   |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:38 PM   |
| Sunset Time | 07:45 PM   |
| End Time    | 08:15 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 3A   |
| Habitat Type | <input checked="" type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 100  |
| Forb cover (%)           | 5  |
| Shrub cover (%)          | 10   |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 3  |
| Dominant plant species   | Unknown grasses, Queen Anne  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 3B   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 50   |
| Shrub cover (%)          | 0  |
| Remnant veg (%)          | 100  |
| Mean veg height (inches) | 30   |
| Dominant plant species   | Solidago unknown grasses   |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☒ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)



|                     |  |                                |
|---------------------|--|--------------------------------|
| Wind Direction      | N  | REDACTED – Matter No. 21-00750 |
| Temperature Range   | 44-40  |                                |
| Cloud Cover (%)     | <input checked="" type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |                                |
| Snow Depth (inches) | 0  |                                |
| Snow Crust?         | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes   |                                |
| Visibility          | <input type="checkbox"/> Fair<br><input checked="" type="checkbox"/> Good<br><input type="checkbox"/> Poor   |                                |
| Visibility Reason   | <input checked="" type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |                                |
| If other, explain:  |  |                                |

Raptor Observations

Raptor Observation

|                |   |
|----------------|---|
| Raptor Species | <input type="checkbox"/> AMKE<br><input type="checkbox"/> BAEA<br><input type="checkbox"/> BANO<br><input type="checkbox"/> BWHA<br><input type="checkbox"/> COHA<br><input type="checkbox"/> EASO<br><input type="checkbox"/> GHOW<br><input type="checkbox"/> GOEA<br><input type="checkbox"/> MERL<br><input type="checkbox"/> NOGO<br><input type="checkbox"/> NOHA<br><input type="checkbox"/> OSPR<br><input type="checkbox"/> Other (Describe) |
|----------------|---|

- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☐ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

Bird ID #

Sex

- ☐ Female
- ☐ Male
- ☐ Unknown

Age

- ☐ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

AMRO, EUST SOSP WBNH MODO  
BCCH RWBL AMCR EAPH AMWO

EDR

# 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 84398                    |
| Survey Date | 04/01/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF  |
| Location ID | 4  |
| Survey Type | <input type="checkbox"/> Driving<br><input checked="" type="checkbox"/> Stationary |
| Start Time  | 06:43 PM   |
| Sunset Time | 07:45 PM   |
| End Time    | 08:15 PM   |

## Habitat

|              |  |
|--------------|--|
| Field ID     | 4A   |
| Habitat Type | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input checked="" type="checkbox"/> Successional Old Field |



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 40   |
| Forb cover (%)           | 50   |
| Shrub cover (%)          | 20   |
| Remnant veg (%)          | 70   |
| Mean veg height (inches) | 24   |
| Dominant plant species   | solidago sp  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

Habitat

## Habitat Type

☐

Hayfield

☐

Other (describe in notes)

☒

Pastureland

☐

Row crops, fallow in previous growing season

☐

Row crops, harvested in previous growing season

☐

Successional Old Field

## Field Condition Photos



Crop cover (%)

0

Grass cover (%)

90

Forb cover (%)

0

Shrub cover (%)

2

Remnant veg (%)

25

Mean veg height (inches)

4

Dominant plant species

unk grass

Snow depth (inches)

0

Snow crust?

☒

No

☐

Yes

Notes

## Habitat

Field ID

4C

Habitat Type

☐

Hayfield

- ☐ REDACTED – Matter No. 21-00750  
Other (describe in notes)
- ☒ Pastureland
- ☐ Row crops, fallow in previous growing season
- ☐ Row crops, harvested in previous growing season
- ☐ Successional Old Field

#### Field Condition Photos



|                          |  |
|--------------------------|--|
| Crop cover (%)           | 0  |
| Grass cover (%)          | 90   |
| Forb cover (%)           | 0  |
| Shrub cover (%)          | 2  |
| Remnant veg (%)          | 24   |
| Mean veg height (inches) | 4  |
| Dominant plant species   | unk grass  |
| Snow depth (inches)      | 0  |
| Snow crust?              | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Notes                    |  |

#### Weather

|                    |  |
|--------------------|--|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically (<1 mph)<br><input type="checkbox"/> 1 - Wind direction shown by smoke drift (1-3 mph)<br><input checked="" type="checkbox"/> 2 - Wind felt on face; leaves rustle (4-7 mph) |
|--------------------|--|

- ☐ REDACTED – Matter No. 21-00750
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      | NW  |
| Temperature Range   | 42-41   |
| Cloud Cover (%)     | <div><input type="checkbox"/> Clear - 0-10%</div> <div><input checked="" type="checkbox"/> Mostly Clear - 10-25%</div> <div><input type="checkbox"/> Partly Cloudy - 25-50%</div> <div><input type="checkbox"/> Mostly Cloudy - 50-90%</div> <div><input type="checkbox"/> Overcast - 90-100%</div> |
| Snow Depth (inches) | 0   |
| Snow Crust?         | <div><input checked="" type="checkbox"/> No</div> <div><input type="checkbox"/> Yes</div>   |
| Visibility          | <div><input type="checkbox"/> Fair</div> <div><input checked="" type="checkbox"/> Good</div> <div><input type="checkbox"/> Poor</div>   |
| Visibility Reason   | <div><input checked="" type="checkbox"/> Clear</div> <div><input type="checkbox"/> Fog</div> <div><input type="checkbox"/> No Moon</div> <div><input type="checkbox"/> Other</div> <div><input type="checkbox"/> Rain</div> <div><input type="checkbox"/> Snow</div>                                |
| If other, explain:  |   |

Raptor Observations

Raptor Observation

|                |   |
|----------------|---|
| Raptor Species | <div><input type="checkbox"/> AMKE</div> <div><input type="checkbox"/> BAEA</div> <div><input type="checkbox"/> BANO</div> <div><input type="checkbox"/> BWHA</div> <div><input type="checkbox"/> COHA</div> <div><input type="checkbox"/> EASO</div> |
|----------------|---|

- ☐ GHOW
- ☐ GOEA
- ☐ MERL
- ☐ NOGO
- ☐ NOHA
- ☐ OSPR
- ☐ Other (Describe)
- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☐ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

Bird ID #

Sex

- ☐ Female
- ☐ Male
- ☐ Unknown

Age

- ☐ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description



Incidental Species

Spring peepers, RWBL, MODO, SOSP,  
COGR, EUST

## **APPENDIX E**

Daytime Driving Route Survey Data Sheets

EDR

## 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65226                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | NESR1-2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:08 PM   |
| Sunset Time |  |
| End Time    | 01:12 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No   |

Notes

## Weather

Beaufort Wind Code

- ☐ 0 - Smoke rises vertically (<1 mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:



## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying

☐

Feeding

☐

Roosting

☐

Breeding

☐

Nest-Building

☐

Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65227                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC JK SP   |
| Location ID | NESR1-1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:02 PM   |
| Sunset Time |  |
| End Time    | 01:07 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species



|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65228                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |   |
|-------------|---|
| Observer(s) | TC SP JK  |
| Location ID | MR2   |
| Survey Type | <input type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 12:54 PM  |
| Sunset Time |   |
| End Time    | 12:59 PM  |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

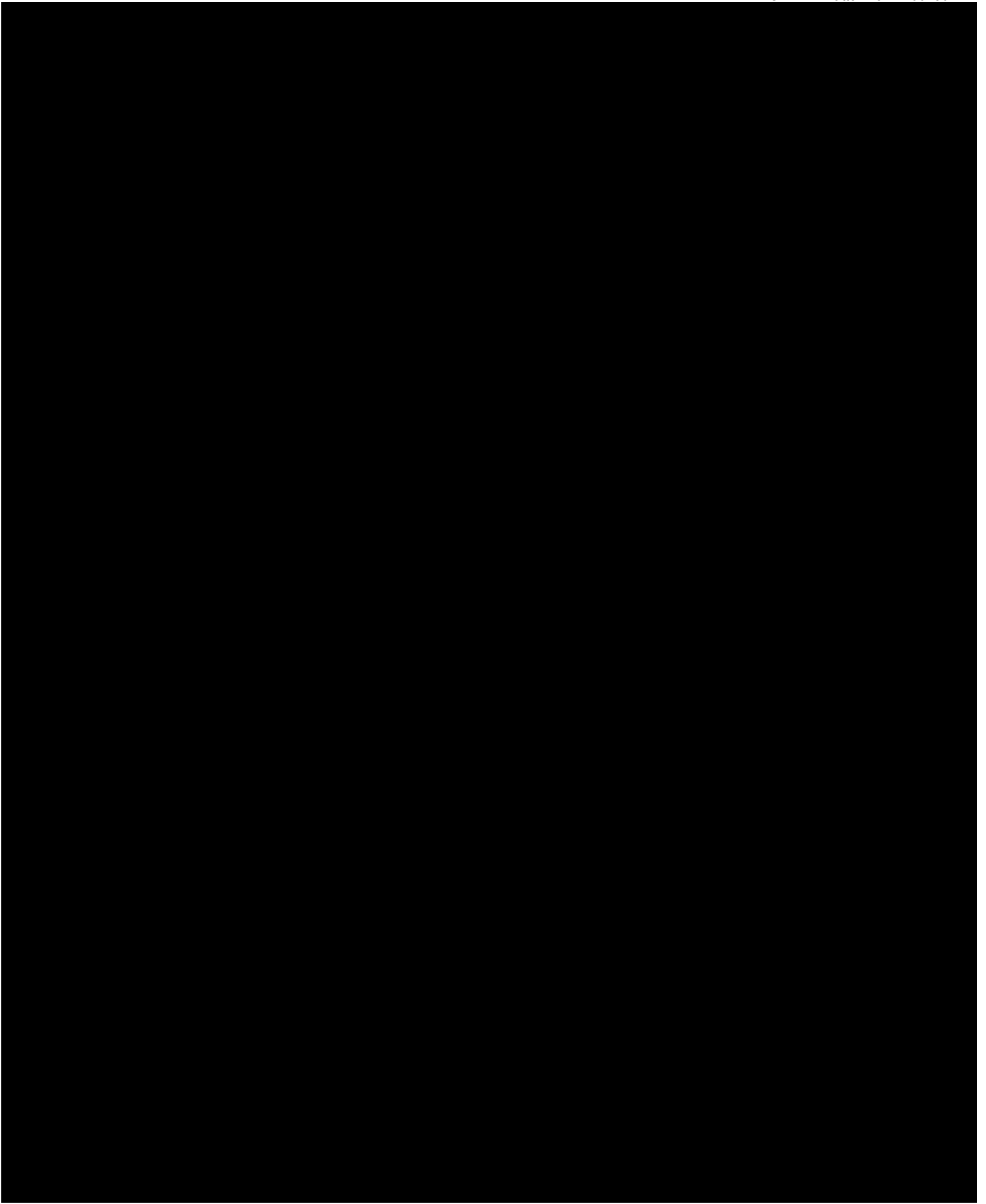
☐ Other

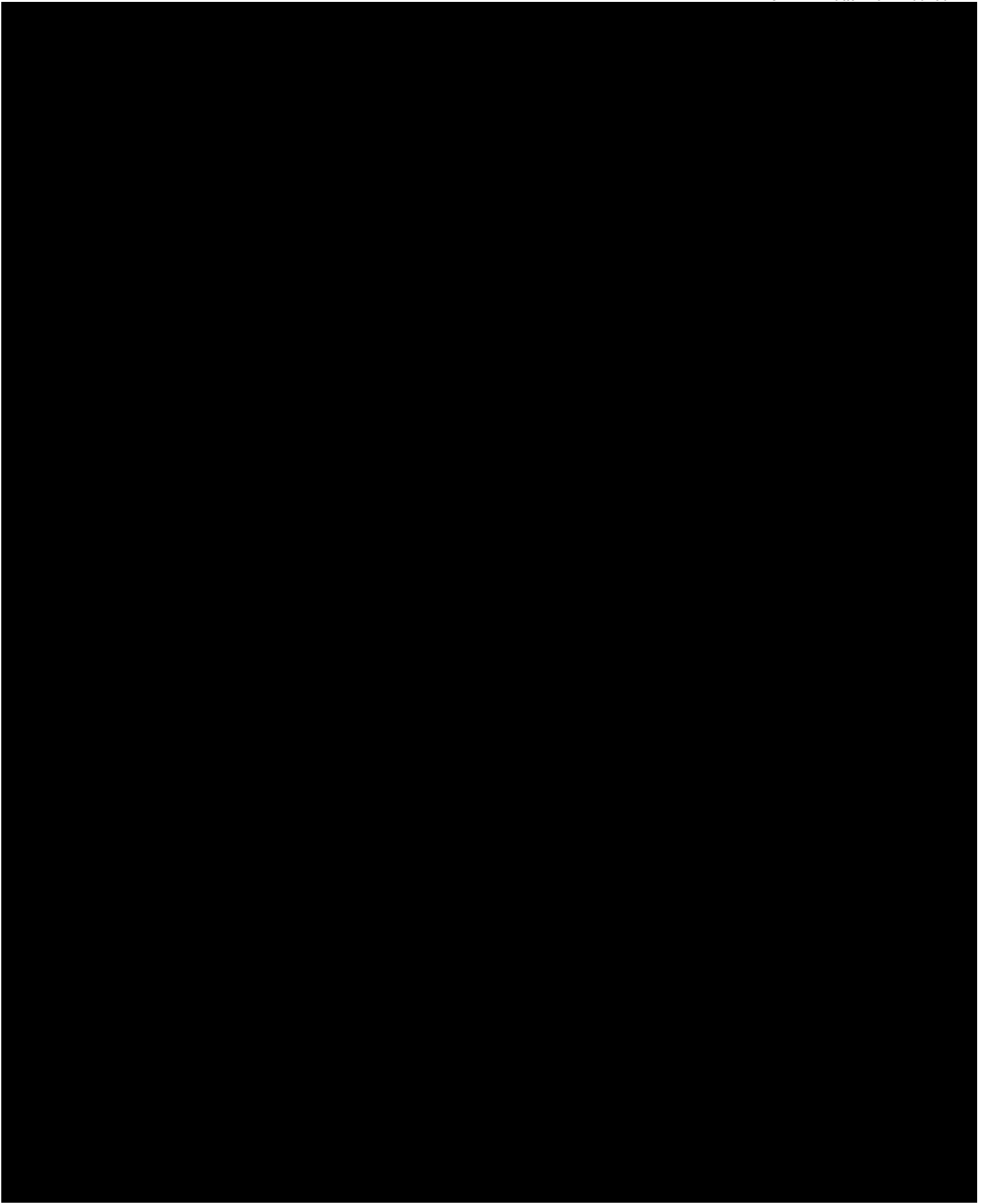
If Other, Explain:

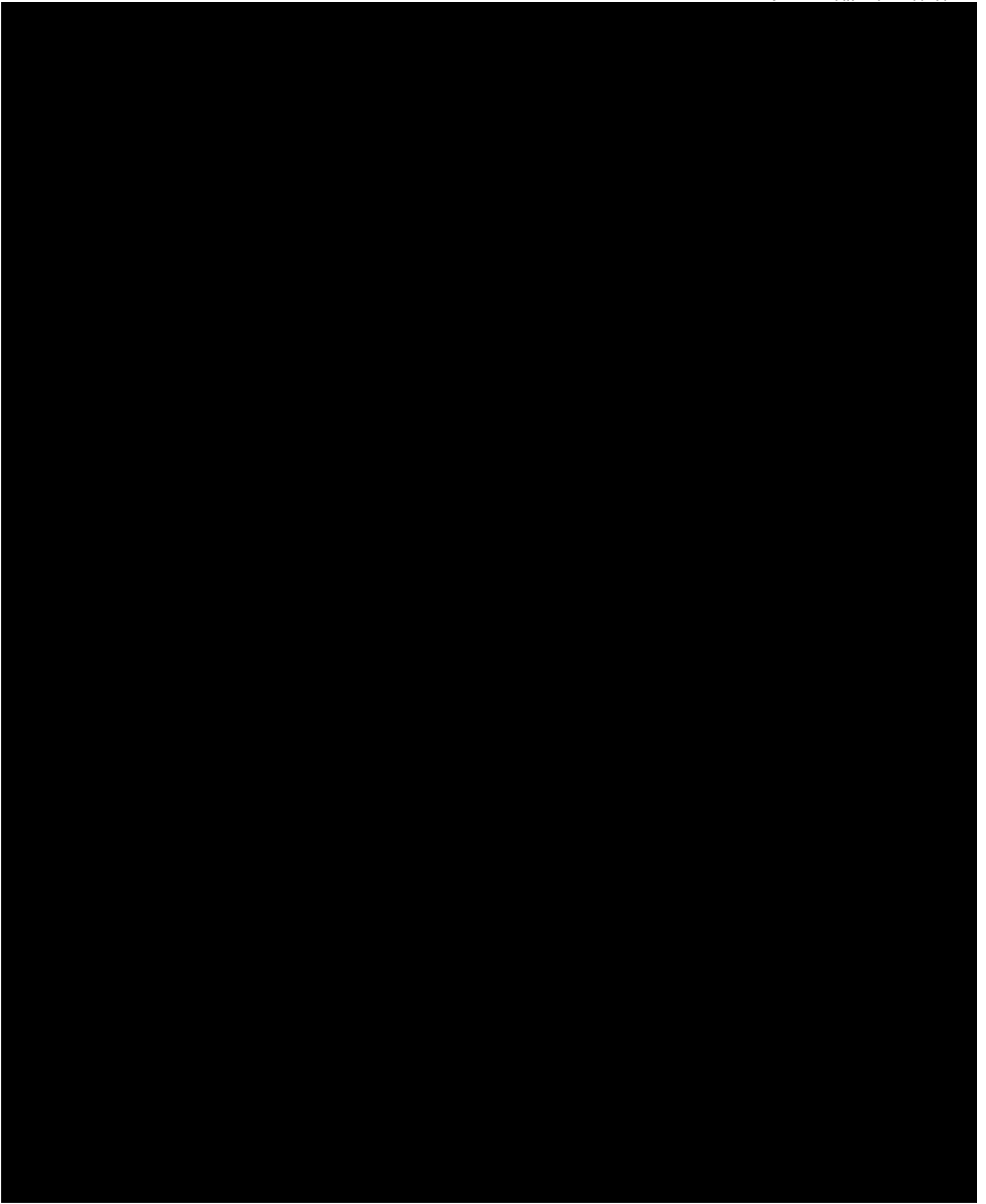
Flight Description

Notes

Incidental Species







- REDACTED – Matter No. 21-00750
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Fly over from west to East over the road, ~30-40 feet high

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65230                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | NESR1-3  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:14 PM   |
| Sunset Time |  |
| End Time    | 01:19 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65231                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | SR1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:21 PM   |
| Sunset Time |  |
| End Time    | 01:26 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65232                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | SR2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:27 PM   |
| Sunset Time |  |
| End Time    | 01:32 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species



|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65233                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | PR1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:34 PM   |
| Sunset Time |  |
| End Time    | 01:39 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |  |
|---------------------|--|
| Wind Direction      |  |
| Temperature Range   |  |
| Cloud Cover (%)     | <div><input type="checkbox"/> Clear - 0-10%</div> <div><input type="checkbox"/> Mostly Clear - 10-25%</div> <div><input type="checkbox"/> Partly Cloudy - 25-50%</div> <div><input type="checkbox"/> Mostly Cloudy - 50-90%</div> <div><input type="checkbox"/> Overcast - 90-100%</div> |
| Snow Depth (inches) |  |
| Snow Crust?         | <div><input type="checkbox"/> No</div> <div><input type="checkbox"/> Yes</div>   |
| Visibility          | <div><input type="checkbox"/> Fair</div> <div><input type="checkbox"/> Good</div> <div><input type="checkbox"/> Poor</div>   |
| Visibility Reason   | <div><input type="checkbox"/> Clear</div> <div><input type="checkbox"/> Fog</div> <div><input type="checkbox"/> No Moon</div> <div><input type="checkbox"/> Other</div> <div><input type="checkbox"/> Rain</div> <div><input type="checkbox"/> Snow</div>                                |
| If other, explain:  |  |

Raptor Observations

Raptor Observation

|                |      |
|----------------|------|
| Raptor Species | RTHA |
| Bird ID #      | 1    |

Sex

- REDACTED – Matter No. 21-00750
- ☐ Female
- ☐ Male
- ☒ Unknown

Age

- ☒ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

1:34

Time of Final Observation

1:35

Activity Observed

- ☐ Perched
- ☐ Foraging
- ☐ Fly-through
- ☒ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Riding thermals from 30-50 ft above ground, then flew N

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65234                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | PR2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:40 PM   |
| Sunset Time |  |
| End Time    | 01:45 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65235                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | PR3  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:47 PM   |
| Sunset Time |  |
| End Time    | 01:52 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65236                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | MCR1   |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:03 PM   |
| Sunset Time |  |
| End Time    | 02:08 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65237                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | PR4  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:53 PM   |
| Sunset Time |  |
| End Time    | 01:58 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65238                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | MCR2   |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:10 PM   |
| Sunset Time |  |
| End Time    | 02:15 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|





- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female



☐ Male

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species



|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65239                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | NESR2-2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:18 PM   |
| Sunset Time |  |
| End Time    | 02:23 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Male

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species



|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 65240                    |
| Survey Date | 12/12/2019               |
| User        | Tiffany Clay             |

## General

|             |  |
|-------------|--|
| Observer(s) | TC SPF JK  |
| Location ID | NESR2-1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:25 PM   |
| Sunset Time |  |
| End Time    | 02:30 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species



EDR

## 19020 South Ripley Solar Checklist

## Winter Raptor Survey 1

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66562                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | MR1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 12:51 PM   |
| Sunset Time | 05:03 PM   |
| End Time    |  |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No   |

Notes

Weather

Beaufort Wind Code

☐ 0 - Smoke rises vertically (<1 mph)  
☐ 1 - Wind direction shown by smoke drift (1-3 mph)  
☐ 2 - Wind felt on face; leaves rustle (4-7 mph)  
☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)  
☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)  
☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

☐ Clear - 0-10%  
☐ Mostly Clear - 10-25%  
☐ Partly Cloudy - 25-50%  
☐ Mostly Cloudy - 50-90%  
☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

☐ No  
☐ Yes

Visibility

☐ Fair  
☐ Good  
☐ Poor

Visibility Reason

☐ Clear  
☐ Fog  
☐ No Moon  
☐ Other  
☐ Rain  
☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

|                             |   |
|-----------------------------|---|
| Raptor Species              | RTHA  |
| Bird ID #                   | 1   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 12:50   |
| Time of Final Observation   |   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |   |
| Flight Description          | Perched in tree along hedgerow  |
| Notes                       |   |

### Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | RTHA   |
| Bird ID #                   | 2  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown    |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown |
| Time of Initial Observation | 12:55  |
| Time of Final Observation   | 12:55  |

Activity Observed

- REDACTED – Matter No. 21-00750
- ☒ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Perched in tree along same  
hedgerow as 1

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66563                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | NESR1-1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:06 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 01:11 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

RTHA

Bird ID #

1

Sex

- REDACTED – Matter No. 21-00750
- ☐ Female
- ☐ Male
- ☒ Unknown

Age

- ☒ Adult
- ☐ Juvenile
- ☐ Unknown

Time of Initial Observation

1:10

Time of Final Observation

1:11

Activity Observed

- ☒ Perched
- ☐ Foraging
- ☐ Fly-through
- ☐ Flying
- ☐ Feeding
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Perched on top of Spruce in wooded lot

Notes

Incidental Species

TRSP, EUST, AMCR

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66564                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | NESR1-2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:15 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 01:20 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|





- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

AMCR

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66565                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | MR2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 12:59 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 01:05 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

NOCA, DEJU, DOWO

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66566                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | NESR1-3  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:22 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 01:27 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

Raptor Observations

Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

AMCR



|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66567                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | SR2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:36 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 01:41 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

AMCR

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66568                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | SR1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:27 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 01:32 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EABL, BLJA

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66569                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | PR1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:43 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 01:48 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

NOCA

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66570                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | PR2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:49 PM   |
| Sunset Time | 05:03 AM   |
| End Time    | 01:54 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|



- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |      |
|----------------|------|
| Raptor Species | AMKE |
| Bird ID #      | 1    |

|                             |  |
|-----------------------------|--|
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown   |
| Time of Initial Observation | 1:49   |
| Time of Final Observation   | 1:49   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |  |
| Flight Description          | Flew low over road and landed in hedgerow with #2  |
| Notes                       |  |

Raptor Observation

|                             |  |
|-----------------------------|--|
| Raptor Species              | AMKE   |
| Bird ID #                   | 2  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown   |
| Time of Initial Observation | 1:49   |
| Time of Final Observation   | 1:49   |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding |

- REDACTED – Matter No. 21-00750
- ☐ Roosting
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

Flew low over road with bird #1

Notes

Incidental Species

HAWO

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66571                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | MCR1   |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:12 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 02:17 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species



|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66572                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | PR4  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:05 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 02:10 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66573                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | PR3  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 01:56 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 02:01 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

Wind Direction

Temperature Range

Cloud Cover (%)

- ☐ Clear - 0-10%
- ☐ Mostly Clear - 10-25%
- ☐ Partly Cloudy - 25-50%
- ☐ Mostly Cloudy - 50-90%
- ☐ Overcast - 90-100%

Snow Depth (inches)

Snow Crust?

- ☐ No
- ☐ Yes

Visibility

- ☐ Fair
- ☐ Good
- ☐ Poor

Visibility Reason

- ☐ Clear
- ☐ Fog
- ☐ No Moon
- ☐ Other
- ☐ Rain
- ☐ Snow

If other, explain:

## Raptor Observations

### Raptor Observation

Raptor Species

Bird ID #

Sex

- ☐ Female



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66574                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | MCR2   |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:19 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 02:24 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |



☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66575                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | NESR2-2  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:27 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 02:32 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

|             |                          |
|-------------|--------------------------|
| Project     | 19020 South Ripley Solar |
| ID          | 66576                    |
| Survey Date | 01/07/2020               |
| User        | Samantha Parker          |

## General

|             |  |
|-------------|--|
| Observer(s) | SPF&TC&HK  |
| Location ID | NESR2-1  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Start Time  | 02:33 PM   |
| Sunset Time | 05:03 PM   |
| End Time    | 02:38 PM   |

## Habitat

|                          |   |
|--------------------------|---|
| Field ID                 |   |
| Habitat Type             | <input type="checkbox"/> Hayfield<br><input type="checkbox"/> Other (describe in notes)<br><input type="checkbox"/> Pastureland<br><input type="checkbox"/> Row crops, fallow in previous growing season<br><input type="checkbox"/> Row crops, harvested in previous growing season<br><input type="checkbox"/> Successional Old Field |
| Field Condition Photos   | None  |
| Crop cover (%)           |   |
| Grass cover (%)          |   |
| Forb cover (%)           |   |
| Shrub cover (%)          |   |
| Remnant veg (%)          |   |
| Mean veg height (inches) |   |
| Dominant plant species   |   |
| Snow depth (inches)      |   |
| Snow crust?              | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Notes                    |   |

## Weather

|                    |   |
|--------------------|---|
| Beaufort Wind Code | <input type="checkbox"/> 0 - Smoke rises vertically |
|--------------------|---|

- ( $<1$  mph)
- ☐ 1 - Wind direction shown by smoke drift (1-3 mph)
- ☐ 2 - Wind felt on face; leaves rustle (4-7 mph)
- ☐ 3 - Leaves, small twigs in constant motion; light flag extended (8-12 mph)
- ☐ 4 - Raises dust and loose paper; small branches are moved (13-18 mph)
- ☐ 5 - Small trees in leaf sway; crested wavelets on inland waters (19-24 mph)

|                     |   |
|---------------------|---|
| Wind Direction      |   |
| Temperature Range   |   |
| Cloud Cover (%)     | <input type="checkbox"/> Clear - 0-10%<br><input type="checkbox"/> Mostly Clear - 10-25%<br><input type="checkbox"/> Partly Cloudy - 25-50%<br><input type="checkbox"/> Mostly Cloudy - 50-90%<br><input type="checkbox"/> Overcast - 90-100% |
| Snow Depth (inches) |   |
| Snow Crust?         | <input type="checkbox"/> No<br><input type="checkbox"/> Yes   |
| Visibility          | <input type="checkbox"/> Fair<br><input type="checkbox"/> Good<br><input type="checkbox"/> Poor   |
| Visibility Reason   | <input type="checkbox"/> Clear<br><input type="checkbox"/> Fog<br><input type="checkbox"/> No Moon<br><input type="checkbox"/> Other<br><input type="checkbox"/> Rain<br><input type="checkbox"/> Snow  |
| If other, explain:  |   |

## Raptor Observations

### Raptor Observation

|                |                                 |
|----------------|---------------------------------|
| Raptor Species |                                 |
| Bird ID #      |                                 |
| Sex            | <input type="checkbox"/> Female |

☐ Unknown

Age

☐ Adult

☐ Juvenile

☐ Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐ Perched

☐ Foraging

☐ Fly-through

☐ Flying

☐ Feeding

☐ Roosting

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

Incidental Species

EUST

EDR

## 19020 South Ripley Solar Checklist

## Winter Raptor Survey\_Driving 1

|             |  |
|-------------|--|
| Project     | 19020 South Ripley Solar   |
| ID          | 68848  |
| Survey Date | 02/03/2020   |
| User        | Joseph Knight  |
| Observer(s) | TC,JK  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Sunset Time | 01:59 PM   |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MR1  |
| Start Time         | 02:01 PM   |
| End Time           | 02:06 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MR2  |
| Start Time         | 02:08 PM   |
| End Time           | 02:12 PM   |
| Raptors Observed?  | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | NESR1-1  |
| Start Time         | 02:19 PM   |
| End Time           | 02:24 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | CORA   |





### Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | NESR1-2  |
| Start Time         | 02:26 PM   |
| End Time           | 02:31 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | AMCR   |

### Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | NESR1-3  |
| Start Time         | 02:33 PM   |
| End Time           | 02:38 AM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

### Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | SR-1   |
| Start Time         | 02:40 PM   |
| End Time           | 02:45 PM   |
| Raptors Observed?  | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Incidental Species | Fffc   |

### Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | SR-2   |
| Start Time         | 02:48 PM   |
| End Time           | 02:53 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

### Daytime Driving Stop

|                   |                             |
|-------------------|-----------------------------|
| Location ID       | PR1                         |
| Start Time        | 02:55 PM                    |
| End Time          | 03:00 PM                    |
| Raptors Observed? | <input type="checkbox"/> No |

Incidental Species

### Daytime Driving Stop

Location ID

PR2

Start Time

03:01 PM

End Time

03:06 PM

Raptors Observed?

☒

No

☐

Yes

Incidental Species

### Daytime Driving Stop

Location ID

PR3

Start Time

03:10 PM

End Time

03:15 PM

Raptors Observed?

☒

No

☐

Yes

Incidental Species

### Daytime Driving Stop

Location ID

PR4

Start Time

03:18 PM

End Time

03:23 PM

Raptors Observed?

☒

No

☐

Yes

Incidental Species

AMCR

### Daytime Driving Stop

Location ID

MCR1

Start Time

03:26 PM

End Time

03:31 PM

Raptors Observed?

☒

No

☐

Yes

Incidental Species

### Daytime Driving Stop

Location ID

MCR2

Start Time

03:33 PM

End Time

03:38 PM

Raptors Observed?

☒ No REDACTED – Matter No. 21-00750  
☐ Yes

Incidental Species

Daytime Driving Stop

Location ID

NESR2-2

Start Time

03:41 PM

End Time

03:46 PM

Raptors Observed?

☒ No  
☐ Yes

Incidental Species

AMCR

Daytime Driving Stop

Location ID

NESR2-1

Start Time

03:48 PM

End Time

03:53 PM

Raptors Observed?

☒ No  
☐ Yes

Incidental Species

|            |                                     |            |
|------------|-------------------------------------|------------|
| [REDACTED] |                                     |            |
| [REDACTED] |                                     | [REDACTED] |
| [REDACTED] |                                     | [REDACTED] |
| [REDACTED] |                                     | [REDACTED] |
| [REDACTED] | <input type="checkbox"/>            | [REDACTED] |
|            | <input type="checkbox"/>            | [REDACTED] |
|            | <input checked="" type="checkbox"/> | [REDACTED] |
| [REDACTED] | <input checked="" type="checkbox"/> | [REDACTED] |
|            | <input type="checkbox"/>            | [REDACTED] |
|            | <input type="checkbox"/>            | [REDACTED] |
| [REDACTED] | [REDACTED]                          |            |
| [REDACTED] | [REDACTED]                          |            |
| [REDACTED] | <input type="checkbox"/>            | [REDACTED] |
|            | <input type="checkbox"/>            | [REDACTED] |
|            | <input type="checkbox"/>            | [REDACTED] |
|            | <input checked="" type="checkbox"/> | [REDACTED] |
|            | <input type="checkbox"/>            | [REDACTED] |
|            | <input type="checkbox"/>            | [REDACTED] |

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Flying in circular pattern west to east over forest amd field, 100+ft

Notes

There were 3 eagles same flight patern

Raptor Observation

Location ID

PR1

Raptor Species

RTHA

Bird ID #

4

Sex

☐ Female
 ☐ Male
 ☒ Unknown

Age

☐ Adult
 ☒ Juvenile
 ☐ Unknown

Time of Initial Observation

2:55

Time of Final Observation

3:00

Activity Observed

☒ Perched
 ☐ Foraging
 ☐ Fly-through
 ☐ Flying
 ☐ Feeding
 ☐ Roosting
 ☐ Breeding
 ☐ Nest-Building
 ☐ Other

If Other, Explain:

Flight Description

NA

Notes

EDR

## 19020 South Ripley Solar Checklist

## Winter Raptor Survey\_Driving 1

|             |  |
|-------------|--|
| Project     | 19020 South Ripley Solar   |
| ID          | 76519  |
| Survey Date | 03/04/2020   |
| User        | Samantha Parker  |
| Observer(s) | SPF & JK   |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Sunset Time | 06:13 PM   |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MR1  |
| Start Time         | 02:03 PM   |
| End Time           | 02:08 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | AMCR, RBGU   |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MR2  |
| Start Time         | 02:10 PM   |
| End Time           | 02:15 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | NESR1-1  |
| Start Time         | 02:17 PM   |
| End Time           | 02:22 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | AMCR   |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | NESR1-2  |
| Start Time         | 02:23 PM   |
| End Time           | 02:28 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | NESR1-3  |
| Start Time         | 02:29 PM   |
| End Time           | 02:34 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | SR-1   |
| Start Time         | 02:35 PM   |
| End Time           | 02:40 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | SR-2   |
| Start Time         | 02:49 PM   |
| End Time           | 02:54 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                   |  |
|-------------------|--|
| Location ID       | PR1  |
| Start Time        | 02:55 PM   |
| End Time          | 03:00 PM   |
| Raptors Observed? | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |



## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | PR2  |
| Start Time         | 03:01 PM   |
| End Time           | 03:06 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | MODO   |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MCR2   |
| Start Time         | 03:08 PM   |
| End Time           | 03:13 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | PR3  |
| Start Time         | 03:17 PM   |
| End Time           | 03:22 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | PR4  |
| Start Time         | 03:25 PM   |
| End Time           | 03:30 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | Red Fox  |

## Daytime Driving Stop

|             |          |
|-------------|----------|
| Location ID | MCR1     |
| Start Time  | 03:33 PM |
| End Time    | 03:38 PM |



Raptors Observed?

☒

REDACTED – Matter No. 21-00750  
No

☐

Yes

Incidental Species

### Daytime Driving Stop

Location ID

NESR2-2

Start Time

03:40 PM

End Time

03:45 PM

Raptors Observed?

☒

No

☐

Yes

Incidental Species

AMCR

### Daytime Driving Stop

Location ID

NESR2-1

Start Time

03:47 PM

End Time

03:52 PM

Raptors Observed?

☒

No

☐

Yes

Incidental Species

### Raptor Observation

Location ID

Raptor Species

Bird ID #

Sex

☐

Female

☐

Male

☐

Unknown

Age

☐

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☐

Flying

☐

Feeding

☐

Roosting



REDACTED – Matter No. 21-00750

☐ Breeding

☐ Nest-Building

☐ Other

If Other, Explain:

Flight Description

Notes

EDR

## 19020 South Ripley Solar Checklist

## Winter Raptor Survey\_Driving 1

|             |  |
|-------------|--|
| Project     | 19020 South Ripley Solar   |
| ID          | 84395  |
| Survey Date | 04/01/2020   |
| User        | Samantha Parker  |
| Observer(s) | SPF  |
| Survey Type | <input checked="" type="checkbox"/> Driving<br><input type="checkbox"/> Stationary |
| Sunset Time | 07:45 PM   |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | PR4  |
| Start Time         | 04:01 PM   |
| End Time           | 04:06 PM   |
| Raptors Observed?  | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Incidental Species | AMCR   |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MCR1   |
| Start Time         | 04:10 PM   |
| End Time           | 04:15 PM   |
| Raptors Observed?  | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Incidental Species |  |

## Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | PR3  |
| Start Time         | 04:17 PM   |
| End Time           | 04:22 PM   |
| Raptors Observed?  | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Incidental Species |  |

### Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MCR2   |
| Start Time         | 04:25 PM   |
| End Time           | 04:30 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

### Daytime Driving Stop

|                    |   |
|--------------------|---|
| Location ID        | PR2   |
| Start Time         | 04:32 PM  |
| End Time           | 04:37 PM  |
| Raptors Observed?  | <input type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | EABL  |

### Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | PR1  |
| Start Time         | 04:39 PM   |
| End Time           | 04:44 PM   |
| Raptors Observed?  | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Incidental Species | DEJU, EUST   |

### Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | SR-2   |
| Start Time         | 04:48 PM   |
| End Time           | 04:53 PM   |
| Raptors Observed?  | <input type="checkbox"/> No<br><input checked="" type="checkbox"/> Yes |
| Incidental Species | COGR   |

### Daytime Driving Stop

|                   |  |
|-------------------|--|
| Location ID       | NESR2-2                                |
| Start Time        | 04:57 PM                               |
| End Time          | 05:02 PM                               |
| Raptors Observed? | <input checked="" type="checkbox"/> No |

Incidental Species

SOSP

Daytime Driving Stop

Location ID

NESR2-1

Start Time

05:06 PM

End Time

05:11 PM

Raptors Observed?

☐ No
☒ Yes

Incidental Species

MODO, SOSP, CANG

Daytime Driving Stop

Location ID

SR-1

Start Time

05:14 PM

End Time

05:19 PM

Raptors Observed?

☐ No
☒ Yes

Incidental Species

Daytime Driving Stop

Location ID

NESR1-3

Start Time

05:20 PM

End Time

05:25 PM

Raptors Observed?

☒ No
☐ Yes

Incidental Species

CORA

Daytime Driving Stop

Location ID

NESR1-2

Start Time

05:26 PM

End Time

05:31 PM

Raptors Observed?

☐ No
☒ Yes

Incidental Species

WODU

Daytime Driving Stop

Location ID

NESR1-1

|                    |  |
|--------------------|--|
| Start Time         | 05:34 PM   |
| End Time           | 05:39 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MR2  |
| Start Time         | 05:40 PM   |
| End Time           | 05:45 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species |  |

Daytime Driving Stop

|                    |  |
|--------------------|--|
| Location ID        | MR1  |
| Start Time         | 05:47 PM   |
| End Time           | 05:52 PM   |
| Raptors Observed?  | <input checked="" type="checkbox"/> No<br><input type="checkbox"/> Yes |
| Incidental Species | AMCR, EUST, AMRO   |

Raptor Observation

|                |  |
|----------------|--|
| Location ID    | PR4  |
| Raptor Species | <input type="checkbox"/> AMKE<br><input type="checkbox"/> BAEA<br><input type="checkbox"/> BANO<br><input type="checkbox"/> BWHH<br><input type="checkbox"/> COHA<br><input type="checkbox"/> EASO<br><input type="checkbox"/> GHOW<br><input type="checkbox"/> GOEA<br><input type="checkbox"/> MERL<br><input type="checkbox"/> NOGO<br><input type="checkbox"/> NOHA<br><input type="checkbox"/> OSPR<br><input type="checkbox"/> Other (Describe)<br><input type="checkbox"/> PEFA |

- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☒ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

|                             |   |
|-----------------------------|---|
| Bird ID #                   | 1   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 4:03  |
| Time of Final Observation   | 4:05  |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |   |
| Flight Description          | riding thermals approx. 200 feet high   |
| Notes                       |   |

### Raptor Observation

|                |  |
|----------------|--|
| Location ID    | MCR1   |
| Raptor Species | <input checked="" type="checkbox"/> AMKE<br><input type="checkbox"/> BAEA<br><input type="checkbox"/> BANO |

- ☐ BWAH
- ☐ COHA
- ☐ EASO
- ☐ GHOW
- ☐ GOEA
- ☐ MERL
- ☐ NOGO
- ☐ NOHA
- ☐ OSPR
- ☐ Other (Describe)
- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☐ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

|                             |  |
|-----------------------------|--|
| Bird ID #                   | 2  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown   |
| Time of Initial Observation | 4:10   |
| Time of Final Observation   | 4:11   |
| Activity Observed           | <input type="checkbox"/> Perched<br><input checked="" type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building |

|                    |          |
|--------------------|----------|
| If Other, Explain: |          |
| Flight Description | Hovering |
| Notes              |          |

Raptor Observation

|                |  |
|----------------|--|
| Location ID    | MCR1   |
| Raptor Species | <div><input checked="" type="checkbox"/> AMKE</div> <div><input type="checkbox"/> BAEA</div> <div><input type="checkbox"/> BANO</div> <div><input type="checkbox"/> BWHA</div> <div><input type="checkbox"/> COHA</div> <div><input type="checkbox"/> EASO</div> <div><input type="checkbox"/> GHOW</div> <div><input type="checkbox"/> GOEA</div> <div><input type="checkbox"/> MERL</div> <div><input type="checkbox"/> NOGO</div> <div><input type="checkbox"/> NOHA</div> <div><input type="checkbox"/> OSPR</div> <div><input type="checkbox"/> Other (Describe)</div> <div><input type="checkbox"/> PEFA</div> <div><input type="checkbox"/> RLHA</div> <div><input type="checkbox"/> RSHA</div> <div><input type="checkbox"/> RTHA</div> <div><input type="checkbox"/> SEOW</div> <div><input type="checkbox"/> SNOW</div> <div><input type="checkbox"/> SSHA</div> <div><input type="checkbox"/> TUVU</div> <div><input type="checkbox"/> Unknown Accipiter</div> <div><input type="checkbox"/> Unknown Buteo</div> <div><input type="checkbox"/> Unknown Raptor</div> |
| Bird ID #      | 3  |
| Sex            | <div><input type="checkbox"/> Female</div> <div><input type="checkbox"/> Male</div> <div><input checked="" type="checkbox"/> Unknown</div>   |
| Age            | <div><input checked="" type="checkbox"/> Adult</div> <div><input type="checkbox"/> Juvenile</div>  |



|                             |  |
|-----------------------------|--|
| Time of Initial Observation | 4:10   |
| Time of Final Observation   | 4:15   |
| Activity Observed           | <div> <input checked="" type="checkbox"/> Perched         <input type="checkbox"/> Foraging         <input type="checkbox"/> Fly-through         <input type="checkbox"/> Flying         <input type="checkbox"/> Feeding         <input type="checkbox"/> Roosting         <input type="checkbox"/> Breeding         <input type="checkbox"/> Nest-Building         <input type="checkbox"/> Other       </div> |
| If Other, Explain:          |  |
| Flight Description          | Perched on telephone wire  |
| Notes                       |  |

Raptor Observation

|                |  |
|----------------|--|
| Location ID    | PR3  |
| Raptor Species | <div> <input type="checkbox"/> AMKE         <input type="checkbox"/> BAEA         <input type="checkbox"/> BANO         <input type="checkbox"/> BWHA         <input type="checkbox"/> COHA         <input type="checkbox"/> EASO         <input type="checkbox"/> GHOW         <input type="checkbox"/> GOEA         <input type="checkbox"/> MERL         <input type="checkbox"/> NOGO         <input type="checkbox"/> NOHA         <input type="checkbox"/> OSPR         <input type="checkbox"/> Other (Describe)         <input type="checkbox"/> PEFA         <input type="checkbox"/> RLHA         <input type="checkbox"/> RSHA         <input type="checkbox"/> RTHA         <input type="checkbox"/> SEOW         <input type="checkbox"/> SNOW         <input type="checkbox"/> SSHA       </div> |

- ☒ TUVU  
☐ Unknown Accipiter  
☐ Unknown Buteo  
☐ Unknown Raptor

|                             |   |
|-----------------------------|---|
| Bird ID #                   | 5   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 4:17  |
| Time of Final Observation   | 4:18  |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |   |
| Flight Description          | riding thermals approx. 200 ft  |
| Notes                       |   |

### Raptor Observation

|                |   |
|----------------|---|
| Location ID    | PR3   |
| Raptor Species | <input type="checkbox"/> AMKE<br><input type="checkbox"/> BAEA<br><input type="checkbox"/> BANO<br><input type="checkbox"/> BWHA<br><input type="checkbox"/> COHA<br><input type="checkbox"/> EASO<br><input type="checkbox"/> GHOW<br><input type="checkbox"/> GOEA<br><input type="checkbox"/> MERL |

- ☐ NOGO
- ☐ NOHA
- ☐ OSPR
- ☐ Other (Describe)
- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☒ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

|                             |  |
|-----------------------------|--|
| Bird ID #                   | 5  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown  |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown   |
| Time of Initial Observation | 4:21   |
| Time of Final Observation   | 4:21   |
| Activity Observed           | <input type="checkbox"/> Perched<br><input checked="" type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |  |
| Flight Description          | riding thermals approx. 200 feet high  |
| Notes                       |  |

# Raptor Observation

|                             |   |
|-----------------------------|---|
| Location ID                 | PR3   |
| Raptor Species              | <input type="checkbox"/> AMKE<br><input type="checkbox"/> BAEA<br><input type="checkbox"/> BANO<br><input type="checkbox"/> BWHa<br><input type="checkbox"/> COHA<br><input type="checkbox"/> EASO<br><input type="checkbox"/> GHOW<br><input type="checkbox"/> GOEA<br><input type="checkbox"/> MERL<br><input type="checkbox"/> NOGO<br><input type="checkbox"/> NOHA<br><input type="checkbox"/> OSPR<br><input type="checkbox"/> Other (Describe)<br><input type="checkbox"/> PEFA<br><input type="checkbox"/> RLHA<br><input type="checkbox"/> RSHA<br><input type="checkbox"/> RTHA<br><input type="checkbox"/> SEOW<br><input type="checkbox"/> SNOW<br><input type="checkbox"/> SSHA<br><input checked="" type="checkbox"/> TUVU<br><input type="checkbox"/> Unknown Accipiter<br><input type="checkbox"/> Unknown Buteo<br><input type="checkbox"/> Unknown Raptor |
| Bird ID #                   | 6   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 4:21  |
| Time of Final Observation   | 4:21  |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging   |



Bird ID #

7

REDACTED – Matter No. 21-00750

Sex

☐

Female

☐

Male

☒

Unknown

Age

☒

Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

4:34

Time of Final Observation

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☒

Flying

☐

Feeding

☐

Roosting

☐

Breeding

☐

Nest-Building

☐

Other

If Other, Explain:

Flight Description

7 vultures riding thermals  
approx 200 ft up

Notes

## Raptor Observation

Location ID

PR1

Raptor Species

☐

AMKE

☐

BAEA

☐

BANO

☐

BWAH

☐

COHA

☐

EASO

☐

GHOW

☐

GOEA

☐

MERL

☐

NOGO

☐

NOHA

☐

OSPR

☐

Other (Describe)

- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☒ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

|                             |   |
|-----------------------------|---|
| Bird ID #                   | 8   |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 4:41  |
| Time of Final Observation   | 4:41  |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input checked="" type="checkbox"/> Fly-through<br><input type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |   |
| Flight Description          | 5 vultures flying over fields approx 50 ft up then riding thermals 200 ft up  |
| Notes                       |   |

### Raptor Observation

|                |  |
|----------------|--|
| Location ID    | SR-2                                     |
| Raptor Species | <input checked="" type="checkbox"/> AMKE |

- ☐ BAEA
- ☐ BANO
- ☐ BWHa
- ☐ COHA
- ☐ EASO
- ☐ GHOW
- ☐ GOEA
- ☐ MERL
- ☐ NOGO
- ☐ NOHA
- ☐ OSPR
- ☐ Other (Describe)
- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☐ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

|                             |   |
|-----------------------------|---|
| Bird ID #                   | 9   |
| Sex                         | <input type="checkbox"/> Female<br><input checked="" type="checkbox"/> Male<br><input type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 4:46  |
| Time of Final Observation   | 4:53  |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input checked="" type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting |



- REDACTED – Matter No. 21-00750
- ☐ Breeding
- ☐ Nest-Building
- ☐ Other

If Other, Explain:

Flight Description

sitting on telephone wire and  
foraging in field

Notes

## Raptor Observation

Location ID

SR-2

Raptor Species

- ☐ AMKE
- ☐ BAEA
- ☐ BANO
- ☐ BWHA
- ☐ COHA
- ☐ EASO
- ☐ GHOW
- ☐ GOEA
- ☐ MERL
- ☐ NOGO
- ☐ NOHA
- ☐ OSPR
- ☐ Other (Describe)
- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☒ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

Bird ID #

10

Sex

- ☐ Female
- ☐ Male
- ☒ Unknown

Age

☒

REDACTED – Matter No. 21-00750  
Adult

☐

Juvenile

☐

Unknown

Time of Initial Observation

4:48

Time of Final Observation

4:53

Activity Observed

☐

Perched

☐

Foraging

☐

Fly-through

☒

Flying

☐

Feeding

☐

Roosting

☐

Breeding

☐

Nest-Building

☐

Other

If Other, Explain:

Flight Description

3 vultures riding thermals  
approx 200 ft up

Notes

## Raptor Observation

Location ID

SR-1

Raptor Species

☐

AMKE

☐

BAEA

☐

BANO

☐

BWHA

☐

COHA

☐

EASO

☐

GHOW

☐

GOEA

☐

MERL

☐

NOGO

☐

NOHA

☐

OSPR

☐

Other (Describe)

☐

PEFA

☐

RLHA

☐

RSHA

☐

RTHA



- ☐ SEOW  
☐ SNOW  
☐ SSHA  
☒ TUVU  
☐ Unknown Accipiter  
☐ Unknown Buteo  
☐ Unknown Raptor

|                             |   |
|-----------------------------|---|
| Bird ID #                   | 11  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 5:15  |
| Time of Final Observation   | 5:16  |
| Activity Observed           | <input type="checkbox"/> Perched<br><input type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |   |
| Flight Description          | riding thermals approx 200 ft   |
| Notes                       |   |

## Raptor Observation

|                |   |
|----------------|---|
| Location ID    | NESR1-2   |
| Raptor Species | <input checked="" type="checkbox"/> AMKE<br><input type="checkbox"/> BAEA<br><input type="checkbox"/> BANO<br><input type="checkbox"/> BWHA<br><input type="checkbox"/> COHA<br><input type="checkbox"/> EASO |

- ☐ GHOW
- ☐ GOEA
- ☐ MERL
- ☐ NOGO
- ☐ NOHA
- ☐ OSPR
- ☐ Other (Describe)
- ☐ PEFA
- ☐ RLHA
- ☐ RSHA
- ☐ RTHA
- ☐ SEOW
- ☐ SNOW
- ☐ SSHA
- ☐ TUVU
- ☐ Unknown Accipiter
- ☐ Unknown Buteo
- ☐ Unknown Raptor

|                             |   |
|-----------------------------|---|
| Bird ID #                   | 12  |
| Sex                         | <input type="checkbox"/> Female<br><input type="checkbox"/> Male<br><input checked="" type="checkbox"/> Unknown   |
| Age                         | <input checked="" type="checkbox"/> Adult<br><input type="checkbox"/> Juvenile<br><input type="checkbox"/> Unknown  |
| Time of Initial Observation | 5:28  |
| Time of Final Observation   | 5:31  |
| Activity Observed           | <input checked="" type="checkbox"/> Perched<br><input checked="" type="checkbox"/> Foraging<br><input type="checkbox"/> Fly-through<br><input checked="" type="checkbox"/> Flying<br><input type="checkbox"/> Feeding<br><input type="checkbox"/> Roosting<br><input type="checkbox"/> Breeding<br><input type="checkbox"/> Nest-Building<br><input type="checkbox"/> Other |
| If Other, Explain:          |   |

Flight Description

REDACTED - Matter No. 21-00750  
Flying and foraging on N side of road then flew to S side of road and perched in bush

Notes



## **APPENDIX F**

### Avian Species List

**Avian Species List - Winter Raptor Survey for the South Ripley Solar Project (2019-2020)**

| Common Name             | Alpha Code <sup>1</sup> | Scientific Name                 | Conservation Status <sup>2</sup> |
|-------------------------|-------------------------|---------------------------------|----------------------------------|
| American crow           | AMCR                    | <i>Corvus brachyrhynchos</i>    |                                  |
| American goldfinch      | AMGO                    | <i>Spinus tristis</i>           |                                  |
| American kestrel        | AMKE                    | <i>Falco sparverius</i>         | NYS SGCN                         |
| American robin          | AMRO                    | <i>Turdus migratorius</i>       |                                  |
| American tree sparrow   | ATSP                    | <i>Spizella arborea</i>         |                                  |
| American woodcock       | AMWO                    | <i>Scolopax minor</i>           | NYS SGCN                         |
| bald eagle              | BAEA                    | <i>Haliaeetus leucocephalus</i> | NYS Threatened                   |
| black-capped chickadee  | BCCH                    | <i>Poecile atricapillus</i>     |                                  |
| blue jay                | BLJA                    | <i>Cyanocitta cristata</i>      |                                  |
| Canada goose            | CANG                    | <i>Branta canadensis</i>        |                                  |
| common grackle          | COGR                    | <i>Quiscalus quiscula</i>       |                                  |
| comon raven             | CORA                    | <i>Corvus corax</i>             |                                  |
| dark-eyed junco         | DEJU                    | <i>Junco hyemalis</i>           |                                  |
| downy woodpecker        | DOWO                    | <i>Picoides pubescens</i>       |                                  |
| eastern bluebird        | EABL                    | <i>Sialia sialis</i>            |                                  |
| eastern phoebe          | EAPH                    | <i>Sayornis phoebe</i>          |                                  |
| eastern towhee          | EATO                    | <i>Pipilo erythrophthalmus</i>  |                                  |
| European starling       | EUST                    | <i>Sturnus vulgaris</i>         |                                  |
| hairy woodpecker        | HAWO                    | <i>Leuconotopicus villosus</i>  |                                  |
| house sparrow           | HOSP                    | <i>Passer domesticus</i>        |                                  |
| killdeer                | KILL                    | <i>Charadrius vociferus</i>     |                                  |
| mourning dove           | MODO                    | <i>Zenaida macroura</i>         |                                  |
| northern cardinal       | NOCA                    | <i>Cardinalis cardinalis</i>    |                                  |
| northern harrier        | NOHA                    | <i>Circus hudsonius</i>         | NYS Threatened                   |
| northern shrike         | NSHR                    | <i>Lanius borealis</i>          |                                  |
| red-bellied woodpecker  | RBWO                    | <i>Melanerpes carolinus</i>     |                                  |
| red-tailed hawk         | RTHA                    | <i>Buteo jamaicensis</i>        |                                  |
| red-winged blackbird    | RWBL                    | <i>Agelaius phoeniceus</i>      |                                  |
| ring-billed gull        | RBGU                    | <i>Larus delawarensis</i>       |                                  |
| rock pigeon             | ROPI                    | <i>Columba livia</i>            |                                  |
| sharp-shinned hawk      | SSHA                    | <i>Accipiter striatus</i>       | NYS SSC                          |
| song sparrow            | SOSP                    | <i>Melospiza melodia</i>        |                                  |
| turkey vulture          | TUVU                    | <i>Cathartes aura</i>           |                                  |
| white-breasted nuthatch | WBNU                    | <i>Sitta carolinensis</i>       |                                  |
| wood duck               | WODU                    | <i>Aix sponsa</i>               |                                  |

<sup>1</sup>Source for four-letter alpha codes: [https://www.birdpop.org/docs/misc/Alpha\\_codes\\_eng.pdf](https://www.birdpop.org/docs/misc/Alpha_codes_eng.pdf).

<sup>2</sup>Conservation status refers to special status species designations in New York State (NYS). "SGCN" = Species of Greatest Conservation Need; "SSC" = Species of Special Concern. Sources: <https://www.dec.ny.gov/animals/7494.html>; [https://www.dec.ny.gov/docs/wildlife\\_pdf/sgnc2015list.pdf](https://www.dec.ny.gov/docs/wildlife_pdf/sgnc2015list.pdf).