

Marsh Bird Survey Report

Hoffman Falls Wind Project

Towns of Fenner, Nelson, Eaton, and Smithfield
Madison County, New York

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ACRONYMS AND ABBREVIATIONS

EDR	Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C.
GIS	geographic information system
GPS	global positioning system
IPaC	Information for Planning and Consultation
MBS	Marsh Bird Survey
MW	megawatt
NWI	National Wetlands Inventory
NYNHP	New York Natural Heritage Program
NYSDEC	New York State Department of Environmental Conservation
ORES	New York State Office of Renewable Energy Siting
POI	point of interconnection
SGCN	species of greatest conservation need
SGCN-HP	high priority species of greatest conservation need
SSC	species of special concern
USFWS	United States Fish and Wildlife Service

1.0 INTRODUCTION

1.1 Purpose of the Investigation

On behalf of Liberty Renewables Inc. (the Applicant), Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) has prepared this Marsh Bird Survey Report for the Hoffman Falls Wind Project, a proposed wind energy generation facility and associated infrastructure (the Facility) located in Madison County, New York. This report supports an Application for a siting permit under New York’s Accelerated Renewable Energy Growth and Community Benefit Act, Executive Law § 94-c (Section 94-c) regulations.¹ The information included in this report is intended to help the Applicant design the Facility in a manner that minimizes adverse environmental impacts. This information will also assist the New York State Office of Renewable Energy Siting (ORES) and the New York State Department of Environmental Conservation (NYSDEC) in their determination of whether occupied habitat² for one or more state-listed threatened or endangered wildlife species exists within the area under consideration to host the Facility in accordance with the requirements of Section 94-c.

The purpose of this study was to document the presence, abundance, and use patterns of obligate and secretive wetland birds (including rails, bitterns, and grebes) within a defined Marsh Bird Survey (MBS) Study Area. Trained, qualified biologists conducted the 2023 marsh bird surveys based on the methodology established in the NYSDEC 2013 *New York State Marsh Bird Monitoring Program Survey Instructions* (NYSDEC 2013 Survey Instructions; NYSDEC, 2013). **BEGIN CONFIDENTIAL INFORMATION** <

[REDACTED SECTION]

CONFIDENTIAL INFORMATION The scope of these surveys was defined in a Marsh Bird Survey Work Plan (EDR, 2023a), which was submitted to ORES and NYSDEC in April 2023. Based on recommendations provided by ORES and NYSDEC staff following submittal of the Marsh Bird Survey Work Plan and additional on-site review, EDR shifted one point count location to improve coverage of wetlands within the MBS Study Area.

¹ Chapter XVIII, Title 19 of the New York Codes, Rules and Regulations (NYCRR) Part 900. Available at: <https://ores.ny.gov/regulations>

² The New York State Endangered Species Act (Environmental Conservation Law §11-0535) and its implementing regulations at 6 New York Codes, Rules, and Regulations (NYCRR) Part 182 define occupied habitat as follows: a geographic area in New York within which a species listed as endangered or threatened in this Part has been determined by the department to exhibit one or more essential behaviors. Essential behavior refers to any of the behaviors exhibited by a species listed as endangered or threatened in this Part that are a part of its normal or traditional life cycle and that are essential to its survival and perpetuation. Essential behavior includes behaviors associated with breeding, hibernation, reproduction, feeding, sheltering, migration and overwintering.

1.2 Facility Location and Description

The Applicant is proposing to construct a wind energy generation facility of up to 100 megawatts (MW) within the Towns of Fenner, Nelson, Eaton, and Smithfield in Madison, County, New York (**Figure 1**). The proposed Facility will consist of wind turbines, a point of interconnection (POI) substation, temporary construction laydown areas, access roads, and electrical collection lines. The Facility will be constructed within an approximately 4,400-acre area that corresponds closely with the MBS Study Area (**Figure 2**). Within this area, a more limited subset of land will be selected for the siting, design, construction, and operation of the Facility. Some Facility components will be constructed in areas where disturbance has already occurred (e.g., agricultural fields that are used for hay and/or row crop production) to minimize the need for vegetation removal within natural communities.

2.0 BACKGROUND INFORMATION

2.1 Existing Conditions

The Applicant has gathered a substantial amount of information on the existing ecological conditions within the MBS Study Area. These investigations have included developing a Wildlife Site Characterization for the Facility, plus additional desktop analyses and on-site field assessments (e.g., breeding bird surveys, spring and fall raptor migration surveys, winter raptor surveys, wetland delineations). Based on these assessments, the lands currently under consideration for the Facility are primarily composed of agricultural fields, along with mixed forest, evergreen forest, woody wetlands, early successional communities, and developed land (primarily rural single-family houses, farms, and associated yards). As presented in Section 4.5.3 of the Wildlife Site Characterization previously prepared for the Facility in February 2023, emergent herbaceous wetlands and open water make up less than 1% of the area under consideration for the Facility (EDR, 2023b).

2.2 Agency Database Review and Consultation

As part of the Wildlife Site Characterization, EDR consulted with federal and state agencies regarding the potential presence of listed threatened or endangered species within the vicinity of the Facility. This included database review via the United States Fish and Wildlife Service (USFWS) online Information for Planning and Consultation (IPaC) system, correspondence with the New York Natural Heritage Program (NYNHP), and a pre-application consultation meeting with ORES and NYSDEC. EDR performed a review of the IPaC system for the Facility on April 6, 2021, and again on November 4, 2022. **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED]

[REDACTED] >**END CONFIDENTIAL INFORMATION** A site-specific request for documented state-listed species occurrences in the vicinity of the Facility was submitted to NYNHP on November 4, 2022, and a response was received on December 28, 2022. The response letter indicates that the NYNHP database contains records of several state-listed threatened or endangered bird species that have been documented within 10 miles of the Facility. **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED]

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In a pre-application consultation meeting held on June 11, 2021, and in an updated letter that was subsequently issued on March 6, 2023, ORES and NYSDEC indicated that the Facility is not sited within areas of previously mapped occupied habitat for any state-listed species (EDR, 2023a). **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED]

[REDACTED] >END CONFIDENTIAL INFORMATION The Applicant will continue to consult with the appropriate agencies to ensure that the most current state-listed species information is being considered throughout the Facility design and development process.

3.0 2023 MARSH BIRD SURVEYS

3.1 Survey Period and Frequency

Biologists conducted marsh bird surveys during three survey periods: period 1 (May 15 to May 31), period 2 (June 1 to June 14), and period 3 (June 15 to June 30). These survey dates correspond with the optimal times for marsh bird surveys within higher elevation areas of New York State (NYSDEC, 2013). Surveys began the week of May 15, and each point count location within the MBS Study Area was surveyed once during each of the three survey periods. During each survey period, all survey locations were surveyed on the same day by a team of several biologists.

3.2 Survey Methodology

As described in the Marsh Bird Survey Work Plan (EDR, 2023a), the primary method for surveying marsh birds consisted of a regimented series of 11-minute call-broadcast point count surveys that were conducted within on-site wetland habitats. A total of 10 point count locations were designated within the MBS Study Area (**Figure 3**). Point count locations were systematically located to provide coverage of wetland habitats that may represent suitable marsh bird habitat throughout the MBS Study Area. The proposed point count locations were spaced away from obstructions where practicable, and approximately 400 meters apart to reduce the potential for overlapping detections, minimize audible distractions, and improve spatial coverage of the MBS Study Area. When selecting point count locations, EDR identified wetlands that may represent suitable marsh bird habitat within the MBS Study Area using a combination of field visits and desktop analysis. Data sources reviewed during the desktop analysis included USFWS National Wetlands Inventory (NWI) mapped wetlands, NYSDEC mapped wetlands, and preliminary approximate wetlands mapped by EDR. Point count locations were placed adjacent to wetlands that may represent suitable marsh bird habitat.

During each 11-minute survey, a 5-minute passive listening period was followed by six, 1-minute intervals. The 1-minute segments included 30 seconds of species-specific calls and 30 seconds of silence to elicit vocal responses from the primary focal species identified in the NYSDEC 2013 Survey Instructions. For the broadcast portion of the surveys, biologists used standardized marsh bird call sequence audio files, mobile phone or tablet devices, and portable speakers capable of projecting at 80 decibels (dB) measured 1 meter from the speaker, following Great Lakes Coastal Wetland Monitoring Program recommended procedures (GLCWMP, 2021). **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED]

[REDACTED] **>END CONFIDENTIAL INFORMATION** Broadcast equipment was tested and set to the proper volume levels prior to the start of each survey period. Prior to initiating point count surveys, biologists placed the speaker on the ground facing the central portion of the respective wetland, recorded the associated compass direction, and moved approximately 2 meters away from the speaker.

Point count surveys were conducted once during each of the three survey periods between first light (0.5 hour before sunrise) and approximately 2 hours after sunrise as weather conditions permitted. To the greatest extent practicable, surveys were conducted in conditions that were conducive to: (1) hearing bird vocalizations; and (2) seeing birds move about in vegetation and in flight. Surveys were not conducted in conditions that could significantly reduce detectability, such as high winds, steady/heavy precipitation, extensive fog, or extreme temperatures.

Surveys were conducted by qualified biologists with experience and training in both acoustic and visual identification of birds in New York State. Survey data were recorded in a standardized and organized fashion utilizing project-specific data sheets based on the New York State Marsh Bird Monitoring Survey Data Sheet (NYSDEC, 2013) paired with a mobile geographic information system (GIS) application and a global positioning system (GPS). During surveys, biologists noted all bird species seen and heard. Visual identification was aided by the use of binoculars with 8x or 10x magnification. Incidental species that were heard or seen during qualitative meander surveys between point count survey periods were recorded, including any federally listed threatened or endangered species, state-listed threatened or endangered species, state-listed species of special concern (SSC), and birds listed as species of greatest conservation need (SGCN) (NYSDEC, 2015a). Standardized four-letter alpha codes were used for each avian species (Pyle and DeSante, 2022). Behavior and breeding codes were developed based on those used for the New York Breeding Bird Atlas III, and the activity or behavior observed that was most indicative of breeding was documented for each individual bird (eBird, 2023). The following data were recorded for each point count survey:

- Survey date.
- Observer name.
- Point count location identification number.
- Start time.
- Pertinent weather conditions including temperature, wind speed and direction, precipitation, cloud cover, and visibility.

- Detailed vegetation and habitat data (during the first survey period).
- General habitat characteristics and vegetation measurements, including photographs.
- Observed primary and secondary focal species and the number of birds recorded.
- Detailed locations for all state-listed threatened or endangered species and SSC observed.
- Observed activities, behaviors, and signs of breeding (if any) for each individual bird.

Vegetation and habitat data were collected in May within a 50-meter radius of each point count location. Habitat data recorded included water depth, survey location coordinates, how the survey location was accessed, percent cover, dominant plant species, invasive species, edge type, density of marsh vegetation, estimated average marsh vegetation height, Stewart and Kantrud wetland cover class (Stewart and Kantrud, 1971), management practices, and comments regarding disturbances observed (e.g., sources of significant noise, land management activities). Data gathered during field surveys were compiled, organized, and reviewed for quality and consistency each week.

3.3 Survey Results

Surveys were conducted during each of the three survey periods on May 18, June 7, and June 23, 2023. In total, morning point count surveys were completed on three different days and included a total of 30 marsh bird point count surveys and 330 survey-minutes. Three surveys were completed at each point count location. The overall survey effort, including travel among point count locations, one set of vegetation/habitat surveys, and qualitative meander surveys, totaled approximately 1,355 survey-minutes (more than 22 survey-hours). Completed survey information is provided in **Table 1** (Section 6.0).

No primary focal marsh bird species were observed during the survey season. Two secondary focal species were observed at multiple point count locations: the swamp sparrow and the willow flycatcher. Swamp sparrows were observed at Points 2, 4, 7, 8, 9, and 10 (16 observations). Observed behaviors typically included singing and flying, and one individual was also observed carrying food to a nearby nest near Point 4 on June 7, 2023, which confirmed breeding for this species at this location (eBird, 2023). The majority of the swamp sparrow observations occurred within 50 meters of point count locations (88%). Willow flycatchers were observed at Points 8 and 9. Observed behaviors included singing and calling. **Error! Reference source not found.** (Section 6.0) provides a summary of all bird species observed during point count surveys, including non-focal species. A total of three bird species were recorded incidentally outside of timed point count surveys. One of these species (white-breasted nuthatch; *Sitta carolinensis*) was only recorded incidentally. Incidental species observed during each survey are noted on the survey data sheets in **Appendices A and B**.

In addition to bird observation data, vegetation and habitat data were collected during the first survey period on May 18, 2023, and are summarized in **Table 3**. Habitat information and vegetative measurements, including representative photographs, are also provided on the survey data sheets in **Appendix B**.

3.3.1 State-Listed Species

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3.3.2 Other Special Status Species

Species for which conservation actions are needed within the next 10 years in order to maintain or increase populations are designated by the NYSDEC as high priority species of greatest conservation need (SGCN-HP; NYSDEC, 2015b).³ Three species listed as SGCN-HP were recorded during the survey period, including the bay-breasted warbler (*Setophaga castanea*), bobolink (*Dolichonyx oryzivorus*), and brown thrasher (*Oxostoma rufum*). A bay-breasted warbler was observed at Point 1, bobolinks were observed at Points 9 and 10, and a brown thrasher was observed at Point 9. Species of conservation concern in New York State are listed by the NYSDEC as SGCN.⁷ These species are in need conservation actions to maintain or increase population levels (NYSDEC, 2015b). A total of four SGCN were observed during the survey period, including the blue-winged warbler (*Vermivora cyanoptera*), ruffed grouse (*Bonasa umbellus*), scarlet tanager (*Piranga olivacea*), and wood thrush (*Hylocichla mustelina*).

4.0 SUMMARY AND CONCLUSIONS

EDR biologists conducted marsh bird surveys at 10 point count locations within the MBS Study Area between May 18 and June 23, 2023. A total of 30 point count surveys were conducted over a period of six weeks, and each point count location was surveyed three times during the survey season. Overall, a total of 19 observations of two secondary focal species (the swamp sparrow [16 observations] and the willow flycatcher [3 observations]) were recorded. Neither of these species are listed as endangered, threatened, or SSC by the state of New York. BEGIN CONFIDENTIAL INFORMATION < [REDACTED]
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The results of the 2023 marsh bird surveys suggest that occupied breeding habitat for state-listed threatened or endangered marsh bird species is not present within the areas evaluated.

The studies conducted for the Facility to date, to document on-site use by state-listed and focal marsh birds, have been effective to inform evaluation of potential impacts to these species, and additional marsh bird study work is not recommended. Additional avian field studies have also been completed for the Facility, and the results of the marsh bird study and these other studies will provide information to make conclusions

³ Some endangered, threatened, and special concern species are also listed as SGCN-HP or SGCN; these species are not described in this section.

about potential impacts to occupied habitat and the requirements for a net conservation benefit plan (if applicable).

5.0 REFERENCES

eBird. 2023. *Breeding Codes*. Available at: <https://ebird.org/atlasny/about/breeding-codes> (Accessed July 2023).

Environmental Design & Research, D.P.C. (EDR). 2023a. *Marsh Bird Survey Work Plan. Hoffman Falls Wind Project*. Prepared for Liberty Renewables, Inc. by Environmental Design & Research, D.P.C., Syracuse, NY. July 2023.

EDR. 2023b. *Wildlife Site Characterization. Hoffman Falls Wind Project*. Prepared for Liberty Renewables, Inc. by Environmental Design & Research, D.P.C., Syracuse, NY. February 2023.

Great Lakes Coastal Wetland Monitoring Program (GLCWMP). 2021. *Wetland Bird Survey Standard Operating Procedures*. Available at: https://www.greatlakeswetlands.org/docs/QAPPs_SOPs/GLCWMP_Bird_SOP_2021.pdf (Accessed July 2023).

New York State Department of Environmental Conservation (NYSDEC). 2013. *New York State Marsh Bird Monitoring Program Survey Instructions*.

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 July 2023).

NYSDEC. 2015b. *New York State Wildlife Action Plan*. Available at: https://www.dec.ny.gov/docs/wildlife_pdf/swapfinaldraft2015.pdf (Accessed July 2023).

Pyle, P., and D.F. DeSante. 2022. *Four-letter (English Name) and Six-letter (Scientific Name) Alpha Codes for 2178 Bird Species (and 141 Non-Species Taxa) in accordance with the 63rd [sic] AOU Supplement (2022), sorted alphabetically by English name*. The Institute for Bird Populations. Available at: https://www.birdpop.org/docs/misc/Alpha_codes_eng.pdf (Accessed April 2023).

Stewart, R.E., and H.A. Kantrud. 1971. *Classification of Natural Ponds and Lakes in the Glaciated Prairie Region*. Bureau of Sport Fisheries and Wildlife, United States Fish and Wildlife Service (USFWS), Washington, D.C.

6.0 TABLES

Table 1. Completed Survey Information

Survey Date	Point Count Locations Surveyed	Start Time (a.m.)	End Time (a.m.)	Temperature Range (°F)	Wind Speed Range (mph)	Wind Direction(s)	Cloud Cover Range (%)	Visibility Range (miles)	Precipitation/ Impacts to Visibility
5/18/2023	1, 2, 3, 4	5:13	8:10	29-35	1-3	S, SSE	0	10+	None
	5, 6, 7	5:22	8:22	30-36	1-7	S, ESE	0-25	10+	None
	8, 9, 10	5:28	7:39	27-32	0-1	NNE	0	10+	None
6/7/2023	1, 2, 3, 4	5:26	7:33	43-44	1-3	WSW, W	50-100	0.62-10	Wildfire Smoke
6/7/2023	5, 6, 7	5:36	8:36	42-45	4-7	W	90-100	0.62-10 ¹	Fog/Wildfire Smoke
6/7/2023	8, 9, 10	5:51	8:10	39-41	1-3	NNW	90-100	0.62-10	Wildfire Smoke
6/23/2023	1, 2, 3, 4	5:23	8:07	65-67	0-3	E, ESE	50-90	10+	None
6/23/2023	5, 6, 7	5:19	7:30	63-64	4-7	SSE, SE	90-100	10+	None
6/23/2023	8, 9, 10	5:42	7:48	60-64	4-7	N	50-90	1-10+	None

¹ This visibility range was updated following the survey based on additional review of weather data.

Table 2. Summary of Avian Species Observed

Alpha Code ¹	Common Name	Scientific Name	Point Count Location(s)
ALFL	Alder Flycatcher	<i>Empidonax alnorum</i>	3, 4, 5, 8
AMCR	American Crow	<i>Corvus brachyrhynchos</i>	1, 2, 3, 4, 5, 8, 9, 10
AMGO	American Goldfinch	<i>Spinus tristis</i>	1, 2, 5, 6, 7, 8, 9
AMRE	American Redstart	<i>Setophaga ruticilla</i>	1, 2
AMRO	American Robin	<i>Turdus migratorius</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
BAOR	Baltimore Oriole	<i>Icterus galbula</i>	3, 8
BAWW	Black-and-white Warbler	<i>Mniotilta varia</i>	2
BBWA	Bay-breasted Warbler	<i>Setophaga castanea</i>	1
BCCH	Black-capped Chickadee	<i>Poecile atricapillus</i>	1, 2, 3, 4, 5, 7, 9, 10
BLJA	Blue Jay	<i>Cyanocitta cristata</i>	1, 3, 4, 5, 6, 7, 8, 9
BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	9, 10
BRTH	Brown Thrasher	<i>Toxostoma rufum</i>	4
BWWA	Blue-winged Warbler	<i>Vermivora cyanoptera</i>	2, 3, 7, 8
CANG	Canada Goose	<i>Branta canadensis</i>	4, 6, 8, 9, 10
CEDW	Cedar Waxwing	<i>Bombycilla cedrorum</i>	2, 4, 5
CHSP	Chipping Sparrow	<i>Spizella passerina</i>	3
COYE	Common Yellowthroat	<i>Geothlypis trichas</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
CSWA	Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>	1, 2, 3, 4, 5, 7, 8
DEJU	Dark-eyed Junco	<i>Junco hyemalis</i>	1, 2, 3
EAKI	Eastern Kingbird	<i>Tyrannus tyrannus</i>	1, 2, 3, 4, 7
EAPH	Eastern Phoebe	<i>Sayornis phoebe</i>	1
EATO	Eastern Towhee	<i>Pipilo erythrophthalmus</i>	3, 5, 7
EAWP	Eastern Wood-Pewee	<i>Contopus virens</i>	1, 6
FISP	Field Sparrow	<i>Spizella pusilla</i>	5

Alpha Code ¹	Common Name	Scientific Name	Point Count Location(s)
GCFL	Great Crested Flycatcher	<i>Myiarchus crinitus</i>	3, 4, 8
GCKI	Golden-crowned Kinglet	<i>Regulus satrapa</i>	1
GRCA	Gray Catbird	<i>Dumetella carolinensis</i>	1, 2, 3, 4, 5, 7, 8, 9, 10
HAWO	Hairy Woodpecker	<i>Dryobates villosus</i>	1
HOWR	House Wren	<i>Troglodytes aedon</i>	2, 3, 9
INBU	Indigo Bunting	<i>Passerina cyanea</i>	1
MALL	Mallard	<i>Anas platyrhynchos</i>	8, 9
MOWA	Mourning Warbler	<i>Geothlypis philadelphia</i>	3, 8
MODO	Mourning Dove	<i>Zenaida macroura</i>	3, 8, 9
NAWA	Nashville Warbler	<i>Leiothlypis ruficapilla</i>	5
NOCA	Northern Cardinal	<i>Cardinalis cardinalis</i>	1, 2, 3, 4, 5
NOFL	Northern Flicker	<i>Colaptes auratus</i>	8, 9, 10
OVEN	Ovenbird	<i>Seiurus aurocapilla</i>	1, 2, 3, 4, 5, 6, 7
PIWO	Pileated Woodpecker	<i>Dryocopus pileatus</i>	3, 8
PUFI	Purple Finch	<i>Haemorhous purpureus</i>	5
RBGR	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	1, 2, 7
RBWO	Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	1, 2, 8, 10
REVI	Red-eyed Vireo	<i>Vireo olivaceus</i>	1, 2, 4, 5, 6, 7, 8, 9
RUGR	Ruffed Grouse	<i>Bonasa umbellus</i>	1, 8
RWBL	Red-winged Blackbird	<i>Agelaius phoeniceus</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
SAVS	Savannah Sparrow	<i>Passerculus sandwichensis</i>	10
SCTA	Scarlet Tanager	<i>Piranga olivacea</i>	6
SOSA	Solitary Sandpiper	<i>Tringa solitaria</i>	1
SOSP	Song Sparrow	<i>Melospiza melodia</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
SWSP	Swamp Sparrow	<i>Melospiza georgiana</i>	2, 4, 7, 8, 9, 10

Alpha Code ¹	Common Name	Scientific Name	Point Count Location(s)
TEWA	Tennessee Warbler	<i>Leiothlypis peregrina</i>	1, 4
UNWO	Unknown Woodpecker	Picidae sp.	8
VEER	Veery	<i>Catharus fuscescens</i>	1, 2, 3, 4, 8
WBNU	White-breasted Nuthatch	<i>Sitta carolinensis</i>	N/A (Incidental)
WIFL	Willow Flycatcher	<i>Empidonax traillii</i>	8, 9
WITU	Wild Turkey	<i>Meleagris gallopavo</i>	8, 9, 10
WODU	Wood Duck	<i>Aix sponsa</i>	4
WOTH	Wood Thrush	<i>Hylocichla mustelina</i>	1, 3, 4, 5, 6, 7, 8, 9, 10
WTSP	White-throated Sparrow	<i>Zonotrichia albicollis</i>	5
YBSA	Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	1, 2, 5
YEWA	Yellow Warbler	<i>Setophaga petechia</i>	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
YTVU	Yellow-throated Vireo	<i>Vireo flavifrons</i>	2

¹ Species codes are based on standardized four-letter alpha codes defined by the Institute for Bird Populations in 2022. Current species codes are available at: https://www.birdpop.org/docs/misc/Alpha_codes_eng.pdf

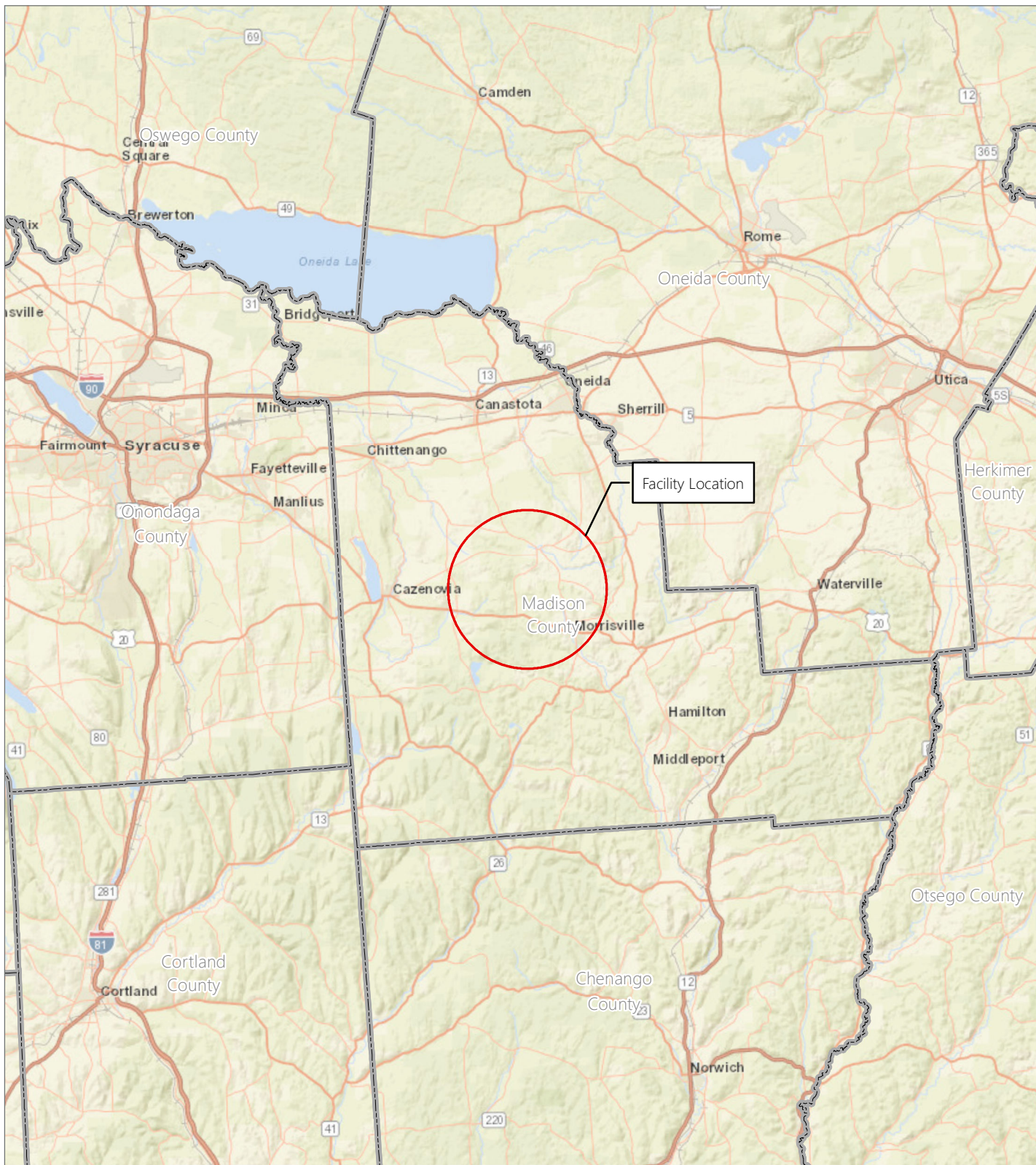
Table 3. Summary of Habitat Metrics for Each Point Count Location

Point Count Location	Primary Wetland Type	Number of Point Count Surveys	Estimated Percent Cover of Open Water	Estimated Percent Cover of Emergent Vegetation	Estimated Percent Cover of Shrub Vegetation	Estimated Percent Cover of Tree Vegetation	Density of Marsh Vegetation ¹	Estimated Average Marsh Vegetation Height (meters)
1	Open Water (Pond)	3	65%	10%	10%	10%	Sparse	0-1
2	Open Water (Marsh)	3	75%	20%	5%	0%	Moderate	0-1
3	Open Water (Pond)	3	75%	5%	10%	10%	Sparse	1-3
4	Open Water (Marsh)	3	30%	10%	50%	5%	Moderate	1-3
5	Open Water (Pond)	3	30%	5%	20%	5%	Moderate	1-3
6	Emergent	3	0%	50%	15%	10%	Moderate	1-3
7	Shrub	3	10%	45%	25%	20%	Moderate	3-6
8	Open Water	3	40%	30%	20%	10%	Moderate	1-3
9	Open Water	3	30%	50%	10%	10%	Moderate	1-3
10	Open Water	3	80%	15%	2%	3%	Sparse	0-1

¹ Marsh vegetation density categories were defined as follows: Sparse (water easily visible through base of widely scattered stems); Moderate (anything that falls between these two extremes); and Rank (water not visible through base of stems at water level and cannot easily push hand through the stems).

FIGURES

Figure 1. Regional Facility Location



Hoffman Falls Wind Project

Towns of Fenner, Nelson, Eaton, and Smithfield,
Madison County, New York

Marsh Bird Survey Report

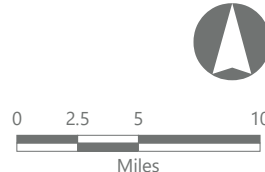
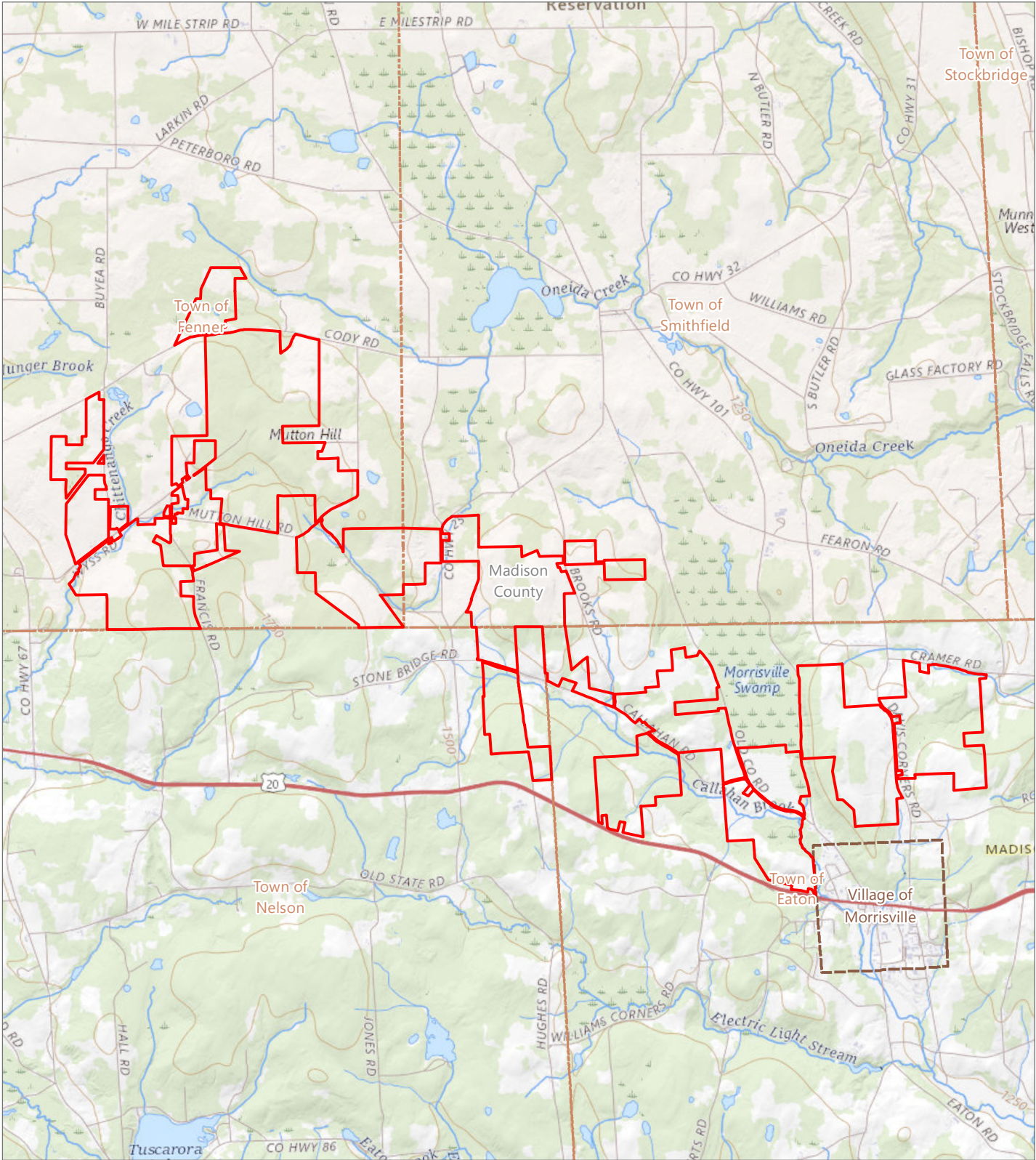



Figure 2. Marsh Bird Survey (MBS) Study Area



Hoffman Falls Wind Project

Towns of Fenner, Nelson, Eaton, and Smithfield,
Madison County, New York

Marsh Bird Survey Report

 MBS Study Area

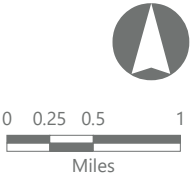
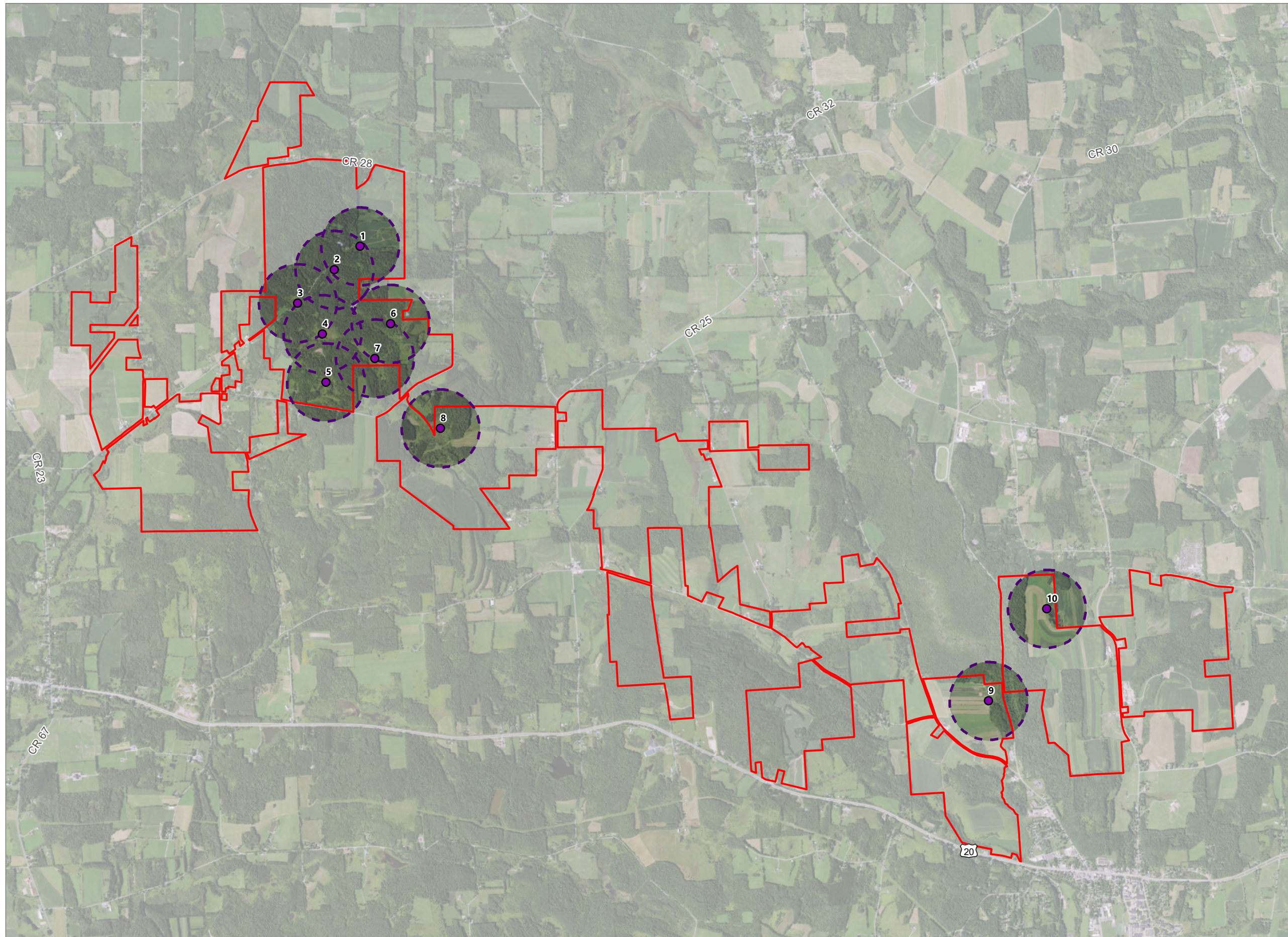


Figure 3. Survey Locations



Hoffman Falls Wind Project

Towns of Fenner, Nelson, Eaton, and Smithfield, Madison County, New York

Marsh Bird Survey Report

- Point Count Location
- Area within 400 meters of Point Count Location
- MBS Study Area



Prepared July 28, 2023
Basemap: NYSDOP "2019" orthoimagery map service

APPENDIX A

EDR Survey Data Sheets



Field Data Sheet

Marsh Bird Survey

Submitted By: bsmith@edrdpc.com
Submitted Time: May 18, 2023 8:30 AM

Survey Information

Project Name: Hoffman Falls
Survey Date: May 18, 2023
Surveyor First and Last Name: Brooke Smith
Points Surveyed: 5-7
Survey Start Time (hhmm 24hr): 05:22
Survey End Time (hhmm 24hr): 08:22

Weather Conditions at Start of Survey

Temperature (°F): 30
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: S
Cloud Cover: Mostly Clear (10-25%)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes: Frost covered vegetation



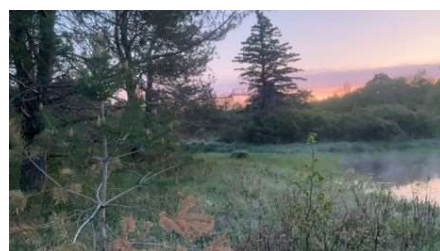
Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 5
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Open water (pond)
Bearing Direction: East
Noise Level: 0 = No appreciable effect
Dominant Plants: Grass, conifers, dogwood, ferns, dandelion
Invasive Plants: Bedstraw
Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
COYE YEWA GRCA FISP BCCH OVEN WOTH SOSP WTSP NAWA AMCR NOCA CSWA
BLJA AMRO

Notes :
Frost covered vegetation, steam above water

Do you need to report observations of another wetland?
Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 6
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Emergent
Bearing Direction: Northwest
Noise Level: 0 = No appreciable effect
Dominant Plants: Ferns, dogwood, beech, red maple
Invasive Plants: Phragmites, purple loosestrife

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): COYE YEWA OVEN AMRO CANG AMGO RWBL SOSP SCTA EAWP

Notes :

Do you need to report observations of another wetland? Yes

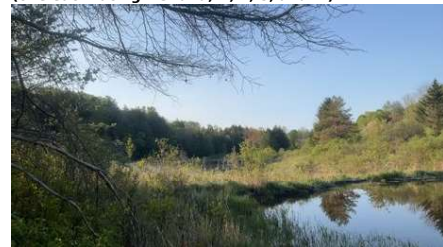


Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 7
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Shrub
Bearing Direction: East
Noise Level: 0 = No appreciable effect
Dominant Plants: Grasses, viburnum, ferns, dogwood, maple
Invasive Plants: Phragmites

Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys

(Alpha Codes or Common Names):

REVI BCCH RBGR OVEN EATO RWBL SOSP COYE WOTH CSWA YEWA SWSP GRCA BLJA

Notes :

Do you need to report observations of another wetland?

No



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 36

Wind Speed (mph): 4 - 7 (Light Breeze; Leaves rustle)

Wind Direction: ESE

Cloud Cover: None (Clear)

Visibility: Good (10+ miles; clear)

Precipitation: None (Clear)

Weather Notes:

Were there any notable weather events/changes during the survey? No

If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed?

No

Were any state-listed species of special concern observed?

No

Were probable, possible, or confirmed breeding behaviors observed for any Listed Species (Endangered/Threatened/Special Concern)?

No

Additional Photo(s):

Were any alternate point count survey locations used due to access or visual constraints?

Yes

Alternate Point Count Survey Locations: 7

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):

Surveyor Initials:

BS

Overall Survey Notes:



Field Data Sheet

Marsh Bird Survey

Submitted By: fsimeone@edrpsc.com
Submitted Time: May 18, 2023 10:28 AM

Survey Information

Project Name: Hoffman Falls
Survey Date: May 18, 2023
Surveyor First and Last Name: Frank Simeone
Points Surveyed: 1-4
Survey Start Time (hhmm 24hr): 05:13
Survey End Time (hhmm 24hr): 08:10

Weather Conditions at Start of Survey

Temperature (°F): 29
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: S
Cloud Cover: None (Clear)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes:



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 3
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Pond
Bearing Direction: Northwest
Noise Level: 1 = Faint (dog barking, car passing, distant traffic)
Dominant Plants: Goldenrod, horsetail, aster sp, pine spp (white or red), spruce spp, sensitive fern,
Invasive Plants: Multiflora rose, honeysuckle, phragmites, reed canary grass

Representative Photos
(one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
COYE, GRCA, HOWR, BWWA, SOSP, EATO, MODO, CSWA, BLJA, YEWA, WOTH, OVEN, NOCA, RWBL, AMCR, AMRO, BCCH, MOWA

Notes :
Open water has small island with same forbes and herbaceous veg but with conifer trees.

Do you need to report observations of another wetland?
Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 4

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Emergent openwater marsh

Bearing Direction: East

Noise Level: 0 = No appreciable effect

Dominant Plants: Horsetail, sensitive fern, broadleaf cattail, clover,

Invasive Plants: Honeysuckle, phragmites, reed canary grass

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): WODU, CANG, GRCA, RWBL, EAKI, COYE, YEWA, NOCA, AMRO, CSWA, AMCR, BLJA, TEWA, GCFL

Notes : SWSP singing constantly, just 1

Do you need to report observations of another wetland? Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 2

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water/marsh

Bearing Direction: South

Noise Level: 0 = No appreciable effect

Dominant Plants: Sensitive fern, nannyberry, willow spp, horsetail

Invasive Plants: Honeysuckle, reed canary grass

Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys

(Alpha Codes or Common Names):

COYE, REVI, RBGR, RWBL, NOCA, EAKI, AMGO, DEJU, YEWA, CSWA, RBWO, OVEN, YTVI, YBSA, AMRO, HOWR, SOSP

Notes :

Willow surround wetland. Emergent wetland outside of open water

Do you need to report observations of another wetland?

Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 1

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water marsh

Bearing Direction: South

Noise Level: 0 = No appreciable effect

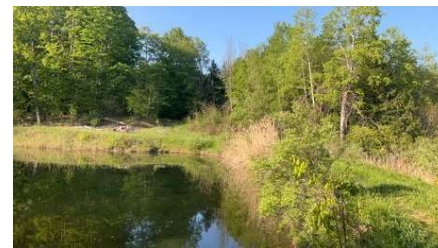
Dominant Plants: Willow spp, horsetail, sedge spp, rose spp, nannyberry, maple spp

Invasive Plants: Phragmites

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys
(Alpha Codes or Common Names):
RWBL, COYE, SOSP, YEWA, CSWA, AMRO, RUGR, DEJU, TEWA, OVEN, AMRE, BBWA,
REVI, BCCH, EAPH, EAKI, NOCA, RBWO, SOSA

Notes :



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 35
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: SSE
Cloud Cover: None (Clear)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes:
Were there any notable weather events/changes during the survey? No
If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed?
No
Were any state-listed species of special concern observed?
No
Were probable, possible, or confirmed breeding behaviors observed for
any Listed Species (Endangered/Threatened/Special Concern)?
No

Additional Photo(s):

Were any alternate point count survey locations used due to access or
visual constraints?
No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):
WBNU,

Surveyor Initials:
FS

Overall Survey Notes:
SWSP at 2 and 4



Field Data Sheet

Marsh Bird Survey

Submitted By: abutler@edrdpc.com
Submitted Time: May 19, 2023 11:43 AM

Survey Information

Project Name: Hoffman Falls
Survey Date: May 18, 2023
Surveyor First and Last Name: Anna Butler
Points Surveyed: 8, 9, 10
Survey Start Time (hhmm 24hr): 05:28
Survey End Time (hhmm 24hr): 07:39

Weather Conditions at Start of Survey

Temperature (°F): 27
Wind Speed (mph): 0 - 1 (Calm; Smoke rises vertically)
Wind Direction: NNE
Cloud Cover: None (Clear)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes:



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 10
Anthropogenic Disturbance/Management Practices: Traffic Noise
Primary Wetland Cover Type: Open water (pond)
Bearing Direction: South
Noise Level: 1 = Faint (dog barking, car passing, distant traffic)
Dominant Plants: Cattail, reed grass
Invasive Plants: Reed grass

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): BCCH, RWBL, BOBO, GRCA, AMCR, CANG, AMRO, SOSP, WITU

Notes : Primary species RWBL

Do you need to report observations of another wetland? Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 9
Anthropogenic Disturbance/Management Practices: Traffic Noise
Primary Wetland Cover Type: Open water
Bearing Direction: East
Noise Level: 2 = Moderate (unable to hear birds beyond 100m)
Dominant Plants: Reed grass, spirea, willow
Invasive Plants: Reed grass

Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):

RWBL, SOSP, WOTH, COYE, AMGO, BCCH, YEWA, BLJA, GRCA, BOBO, AMRO, WITU

Notes :

Do you need to report observations of another wetland?

Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 8

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water

Bearing Direction: Southwest

Noise Level: 0 = No appreciable effect

Dominant Plants: Cattail, dogwood, fern

Invasive Plants:

Representative Photos

(one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys

(Alpha Codes or Common Names):

COYE, YEWA, CSWA, MODO, BLJA, RWBL, AMCR, AMGO, MALL, PIWO, ALFL, RUGR, GCFL, SOSF, CANG, SWSP, BWVA, WOTH, REVI, NOFL, AMRO, BAOR

Notes :

Do you need to report observations of another wetland?

No



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 32

Wind Speed (mph): 0 - 1 (Calm; Smoke rises vertically)

Wind Direction: NNE

Cloud Cover: None (Clear)

Visibility: Good (10+ miles; clear)

Precipitation: None (Clear)

Weather Notes:

Were there any notable weather events/changes during the survey? No

If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed?

No

Were any state-listed species of special concern observed?

No

Were probable, possible, or confirmed breeding behaviors observed for any Listed Species (Endangered/Threatened/Special Concern)?

No

Additional Photo(s):

Were any alternate point count survey locations used due to access or visual constraints?

No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):

Surveyor Initials:

AB

Overall Survey Notes:



Field Data Sheet

Marsh Bird Survey

Submitted By: bsmith@edrdpc.com

Submitted Time: June 7, 2023 7:52 AM

Survey Information

Project Name: Hoffman Falls

Survey Date: June 7, 2023

Surveyor First and Last Name: Brooke Smith

Points Surveyed: 5-7

Survey Start Time (hhmm 24hr): 05:36

Survey End Time (hhmm 24hr): 08:36

Weather Conditions at Start of Survey

Temperature (°F): 42

Wind Speed (mph): 4 - 7 (Light Breeze; Leaves rustle)

Wind Direction: W

Cloud Cover: Overcast (90-100%)

Visibility: Good (10+ miles; clear)

Precipitation: Fog

Weather Notes: Some smoke/ fog (wildfire pollution) covering sky but not effecting ground visibility



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 6
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Emergent
Bearing Direction: West
Noise Level: 0 = No appreciable effect
Dominant Plants: Ferns, maple trees, marsh marigolds dogwood, milkweed
Invasive Plants: N / A
Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 7
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Shrub
Bearing Direction: Southeast
Noise Level: 0 = No appreciable effect
Dominant Plants: Ferns, dogwood, maple, sedge, arrowwood
Invasive Plants:
Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): AMRO COYE WOTH RWBL

Notes : N/A

Do you need to report observations of another wetland? Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 7
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Shrub
Bearing Direction: Southeast
Noise Level: 0 = No appreciable effect
Dominant Plants: Ferns, dogwood, maple, sedge, arrowwood
Invasive Plants:
Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys

(Alpha Codes or Common Names):

GRCA CSWA BWWA EAKI YEWA RWBL SOSP OVEN AMGO SWSP BCCH AMRO RBGR EATO

Notes :

Do you need to report observations of another wetland?

Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 5

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Pond

Bearing Direction: East

Noise Level: 0 = No appreciable effect

Dominant Plants: Sedge, dogwood, conifers, ferns, marsh marigolds

Invasive Plants:

Representative Photos

(one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys
(Alpha Codes or Common Names):
CSWA EATO REVI ALFL GRCA RWBL SOSP OVEN CEDW YBSA YEWA PUF1 WOTH
AMGO

Notes :

Do you need to report observations of another wetland?
No



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 45
Wind Speed (mph): 4 - 7 (Light Breeze; Leaves rustle)
Wind Direction: W
Cloud Cover: Overcast (90-100%)
Visibility: Good (10+ miles; clear)
Precipitation: Fog
Weather Notes:
Were there any notable weather events/changes during the survey? No
If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed?
No
Were any state-listed species of special concern observed?
No
Were probable, possible, or confirmed breeding behaviors observed for
any Listed Species (Endangered/Threatened/Special Concern)?
No

Additional Photo(s):

Were any alternate point count survey locations used due to access or
visual constraints?
No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):

Surveyor Initials:
BS

Overall Survey Notes:



Field Data Sheet

Marsh Bird Survey

Submitted By: fsimeone@edrdpc.com
Submitted Time: June 7, 2023 1:55 PM

Survey Information

Project Name: Hoffman Falls
Survey Date: June 7, 2023
Surveyor First and Last Name: Frank Simeone
Points Surveyed: 1-4
Survey Start Time (hhmm 24hr): 05:26
Survey End Time (hhmm 24hr): 07:33

Weather Conditions at Start of Survey

Temperature (°F): 43
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: WSW
Cloud Cover: Mostly Cloudy (50% - 90%)
Visibility: Fair (0.62-10 miles; mist or light/moderate precipitation)
Precipitation: Other - Describe in notes
Weather Notes: Wildfire smoke haze



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 2

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water/marsh

Bearing Direction: South

Noise Level: 1 = Faint (dog barking, car passing, distant traffic)

Dominant Plants: Sedge, willow, sensitive fern, dogwood,

Invasive Plants: Honeysuckle

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): VEER, RWBL, AMRE, BCCH, COYE, AMRO, CEDW, BAWW, RBGR, AMCR, GRCA, BWWA

Notes : None

Do you need to report observations of another wetland? Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 1

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water/pond

Bearing Direction: Southeast

Noise Level: 0 = No appreciable effect

Dominant Plants: Willow, clover, dandelion, grass, dogwood, fir, rubus spp, sedge

Invasive Plants: Phragmites, Multiflora rose, honeysuckle

Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys

(Alpha Codes or Common Names):

OVEN, GRCA, INBU, RBGR, COYE, SOSP, WOTH, AMRO, EAKI, BLJA, HAWO, AMCR, GCKI, CSWA

Notes :

Do you need to report observations of another wetland?

Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 4

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water/marsh

Bearing Direction: Northeast

Noise Level: 0 = No appreciable effect

Dominant Plants: Dogwood, sedge, sensitive fern, goldenrod, honeysuckle, willow, spruce, fir, pine

Invasive Plants: Phragmites

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
RWBL, COYE, GRCA, WOTH, REVI, SOSP, YEWA, ALFL, CSWA, BRTH, GCFL, NOCA, EAKI

Notes :

Do you need to report observations of another wetland?
Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 3

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water/pond

Bearing Direction: Northwest

Noise Level: 1 = Faint (dog barking, car passing, distant traffic)

Dominant Plants: Goldenrod, willow, grass, clover, bedstraw, dandelion, dogwood, vetch, ostrich fern, sedge, spruce, pine, fir, aspen

Invasive Plants: Phragmites, Multiflora rose, honeysuckle

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
ALFL, SOSP, CSWA, COYE, AMRO, EATO, GCFL, NOCA, PIWO, VEER, OVEN, AMCR, BLJA, YEWA, BCCH, GRCA, RWBL

Notes :



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 44
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: W
Cloud Cover: Overcast (90-100%)
Visibility: Fair (0.62-10 miles; mist or light/moderate precipitation)
Precipitation: Other - Describe in notes
Weather Notes: Wildlife smoke haze during entire survey
Were there any notable weather events/changes during the survey? No
If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed? No
Were any state-listed species of special concern observed? No
Were probable, possible, or confirmed breeding behaviors observed for any Listed Species (Endangered/Threatened/Special Concern)? No

Additional Photo(s):

Were any alternate point count survey locations used due to access or visual constraints? No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):

Surveyor Initials: FS

Overall Survey Notes:



Field Data Sheet

Marsh Bird Survey
Submitted By: abutler@edrpsc.com
Submitted Time: June 9, 2023 11:43 AM

Survey Information

Project Name: Hoffman Falls
Survey Date: June 7, 2023
Surveyor First and Last Name: Anna Butler
Points Surveyed: 8, 9, 10
Survey Start Time (hhmm 24hr): 05:51
Survey End Time (hhmm 24hr): 08:10

Weather Conditions at Start of Survey

Temperature (°F): 39
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: NNW
Cloud Cover: Overcast (90-100%)
Visibility: Fair (0.62-10 miles; mist or light/moderate precipitation)
Precipitation: Fog
Weather Notes: Fog mixed with wildfire smoke



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 8
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Open water
Bearing Direction: West
Noise Level: 0 = No appreciable effect
Dominant Plants: Cattail, sensitive fern, willow, dogwood
Invasive Plants: Honeysuckle
Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys

(Alpha Codes or Common Names):

RWBL, WITU, ALFL, UNWO, AMGO, REVI, AMCR, MOD0, COYE, YEWA, AMRO, BLJA, CANG, WIFL, WOTH

Notes :

Two beaver lodges

Do you need to report observations of another wetland?

Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 9

Anthropogenic Disturbance/Management Practices: Traffic Noise

Primary Wetland Cover Type: Open water

Bearing Direction: East

Noise Level: 2 = Moderate (unable to hear birds beyond 100m)

Dominant Plants: Reed grass, dogwood

Invasive Plants: Reed grass

Representative Photos

(one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): RWBL, CANG, AMRO, BLJA, WOTH, COYE, WIFL, SOSP, MALL, YEWA, AMGO, HOWR

Notes :

Do you need to report observations of another wetland? Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 10
Anthropogenic Disturbance/Management Practices: Traffic Noise
Primary Wetland Cover Type: Open water
Bearing Direction: East
Noise Level: 1 = Faint (dog barking, car passing, distant traffic)
Dominant Plants: Reed grass, cattail
Invasive Plants: Reed grass
Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): RWBL, AMRO, GRCA, SOSP, AMCR, SAVS, RBWO, NOFL, BOBO

Notes :

Do you need to report observations of another wetland? No



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 41
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: NNW
Cloud Cover: Overcast (90-100%)
Visibility: Fair (0.62-10 miles; mist or light/moderate precipitation)
Precipitation: Other - Describe in notes
Weather Notes: Wildfire smoke
Were there any notable weather events/changes during the survey? No
If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed?
 No
Were any state-listed species of special concern observed?
 No
Were probable, possible, or confirmed breeding behaviors observed for any Listed Species (Endangered/Threatened/Special Concern)?
 No

Additional Photo(s):

Were any alternate point count survey locations used due to access or visual constraints?
 No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):

Surveyor Initials:
 AB

Overall Survey Notes:



Field Data Sheet

Marsh Bird Survey
 Submitted By: bsmith@edrdpc.com
 Submitted Time: June 23, 2023 7:34 AM

Survey Information

Project Name: Hoffman Falls
Survey Date: June 23, 2023
Surveyor First and Last Name: Brooke Smith
Points Surveyed: 5-7
Survey Start Time (hhmm 24hr): 05:19
Survey End Time (hhmm 24hr): 07:30

Weather Conditions at Start of Survey

Temperature (°F): 63
Wind Speed (mph): 4 - 7 (Light Breeze; Leaves rustle)
Wind Direction: SSE
Cloud Cover: Overcast (90-100%)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes:



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 5
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Open water (pond)
Bearing Direction: East
Noise Level: 0 = No appreciable effect
Dominant Plants: Grasses, dogwood, conifers
Invasive Plants: Bedstraw
Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
COYE EATO BCCH AMGO GRCA CSWA SOSP WOTH YEWA ALFL CEDW AMRO

Notes :
N/A

Do you need to report observations of another wetland?
Yes



Field Data Sheet

Wetland Condition Observations

- Corresponding Point ID(s):** 6
- Anthropogenic Disturbance/Management Practices:** None notable
- Primary Wetland Cover Type:** Emergent
- Bearing Direction:** Northwest
- Noise Level:** 0 = No appreciable effect
- Dominant Plants:** Ferns and maples
- Invasive Plants:**

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
OVEN AMGO REVI COYE BLJA

Notes :

Do you need to report observations of another wetland?
Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 7

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Shrub

Bearing Direction: Southeast

Noise Level: 0 = No appreciable effect

Dominant Plants: Maples ferns dogwood

Invasive Plants:

Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
AMGO YEWA BCCH REVI COYE BLJA SWSP SOSP RWBL

Notes :

Do you need to report observations of another wetland?
No



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 64
Wind Speed (mph): 4 - 7 (Light Breeze; Leaves rustle)
Wind Direction: SE
Cloud Cover: Overcast (90-100%)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes:
Were there any notable weather events/changes during the survey? No
If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed? No
Were any state-listed species of special concern observed? No
Were probable, possible, or confirmed breeding behaviors observed for any Listed Species (Endangered/Threatened/Special Concern)? No

Additional Photo(s):

Were any alternate point count survey locations used due to access or visual constraints? No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):

Surveyor Initials: BS

Overall Survey Notes:



Field Data Sheet

Marsh Bird Survey
Submitted By: fsimeone@edrdpc.com
Submitted Time: June 23, 2023 7:41 PM

Survey Information

Project Name: Hoffman Falls
Survey Date: June 23, 2023
Surveyor First and Last Name: Frank Simeone
Points Surveyed: 1-4
Survey Start Time (hhmm 24hr): 05:23
Survey End Time (hhmm 24hr): 08:07

Weather Conditions at Start of Survey

Temperature (°F): 65
Wind Speed (mph): 0 - 1 (Calm; Smoke rises vertically)
Wind Direction: E
Cloud Cover: Mostly Cloudy (50% - 90%)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes:



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 4
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Open water/marsh
Bearing Direction: East
Noise Level: 0 = No appreciable effect
Dominant Plants: Sedge, sensitive fern, cattail, dogwood, pine, spruce, fir,
Invasive Plants: Honeysuckle, reed canary grass, phragmites,
Representative Photos (one each facing wetland, N, E, S, and W):





Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys

(Alpha Codes or Common Names):

ALFL, RWBL, VEER, WOTH, RWBL, BCCH, SOSP, OVEN, COYE, YEWA, GRCA, CEDW, REVI

Notes :

2 SWSP

Do you need to report observations of another wetland?

Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 3

Anthropogenic Disturbance/Management Practices: None notable

Primary Wetland Cover Type: Open water/pond

Bearing Direction: Northwest

Noise Level: 1 = Faint (dog barking, car passing, distant traffic)

Dominant Plants: Goldenrod, daisy, bedstraw, oak, sensitive fern, horsetail, willow,

Invasive Plants: Multiflora rose, phragmites, red canary grass, honeysuckle

Representative Photos

(one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): OVEN, GRCA, BLJA, COYE, YEWA, BAOR, CHSP, AMRO, DEJU, SOSP, CSWA, DOWO, WOTH, EAKI, HOWR, AMCR

Notes :

Do you need to report observations of another wetland? Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 1
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Open water/pond
Bearing Direction: Northwest
Noise Level: 0 = No appreciable effect
Dominant Plants: Grass, dandelion, goldenrod, fir, spruce, willow
Invasive Plants: Multiflora rose, phragmites
Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): VEER, EAWP, SOSP, NOCA, OVEN, RBWO, REVI, BLJA, WOTH, AMGO, YEWA, YBSA
Notes :
Do you need to report observations of another wetland? Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 2
Anthropogenic Disturbance/Management Practices: None notable
Primary Wetland Cover Type: Open water/marsh
Bearing Direction: South
Noise Level: 0 = No appreciable effect
Dominant Plants: Sedge, sensitive fern, willow, nannyberry, dogwood, pine
Invasive Plants: Reed canary grass

Representative Photos
(one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys
(Alpha Codes or Common Names):
RWBL, GRCA, SOSP, NOCA, CSWA, COYE, AMCR, YEWA, EAKI, BCCH, YBSA

Notes :



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 67
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: ESE
Cloud Cover: Mostly Cloudy (50% - 90%)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes:
Were there any notable weather events/changes during the survey? No
If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed? No
Were any state-listed species of special concern observed? No
Were probable, possible, or confirmed breeding behaviors observed for any Listed Species (Endangered/Threatened/Special Concern)? No

Additional Photo(s):

Were any alternate point count survey locations used due to access or visual constraints? No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):
MOWA, EATO,

Surveyor Initials:
FS

Overall Survey Notes:
2 SWSP heard at 4



Field Data Sheet

Marsh Bird Survey

Submitted By: abutler@edrdpc.com
Submitted Time: June 27, 2023 2:43 PM

Survey Information

Project Name: Hoffman Falls
Survey Date: June 23, 2023
Surveyor First and Last Name: Anna Butler
Points Surveyed: 8, 9, 10
Survey Start Time (hhmm 24hr): 05:42
Survey End Time (hhmm 24hr): 07:48

Weather Conditions at Start of Survey

Temperature (°F): 60
Wind Speed (mph): 4 - 7 (Light Breeze; Leaves rustle)
Wind Direction: N
Cloud Cover: Mostly Cloudy (50% - 90%)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes: 30.03 pressure



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 9
Anthropogenic Disturbance/Management Practices: Traffic Noise
Primary Wetland Cover Type: Open water
Bearing Direction: East
Noise Level: 2 = Moderate (unable to hear birds beyond 100m)
Dominant Plants: Willow, sensitive fern, reed grass
Invasive Plants: Reed grass
Representative Photos
(one each facing wetland, N, E, S, and W):



Field Data Sheet





Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
WOTH, AMRO, SWSP, REVI, RWBL, SOSP, HOWR, COYE, YEWA, NOFL, BOBO, MODO, AMCR, WIFL

Notes :
Road close to wetland

Do you need to report observations of another wetland?
Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 10
Anthropogenic Disturbance/Management Practices: Traffic Noise
Primary Wetland Cover Type: Open water
Bearing Direction: Southeast
Noise Level: 1 = Faint (dog barking, car passing, distant traffic)
Dominant Plants: Reed grass, cattail
Invasive Plants: Reed grass
Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names):
RWBL, BOBO, COYE, GRCA, SWSP, SOSP, WOTH, YEWA, AMGO, SAVS

Notes :

Do you need to report observations of another wetland?
Yes



Field Data Sheet

Wetland Condition Observations

Corresponding Point ID(s): 8
Anthropogenic Disturbance/Management Practices: Traffic Noise
Primary Wetland Cover Type: Open water
Bearing Direction: West
Noise Level: 1 = Faint (dog barking, car passing, distant traffic)
Dominant Plants: Sensitive fern, goldenrod, cattail, dogwood
Invasive Plants:
Representative Photos (one each facing wetland, N, E, S, and W):



Field Data Sheet



Field Data Sheet

Incidental bird species observed during timed point count surveys (Alpha Codes or Common Names): WOTH, VEER, RWBL, COYE, YEWA, SOSPO, GRCA, BLJA, ALFL, NOFL, RBWO, AMGO
Notes :
Do you need to report observations of another wetland? No



Field Data Sheet

Weather Conditions at End of Survey

Temperature (°F): 64
Wind Speed (mph): 1 - 3 (Light Air; Smoke drifts)
Wind Direction: N
Cloud Cover: Mostly Cloudy (50% - 90%)
Visibility: Good (10+ miles; clear)
Precipitation: None (Clear)
Weather Notes: Two light rain showers between survey points
Were there any notable weather events/changes during the survey? No
If Yes, Describe (Notes):

Bird Observation Summary

Were any state-listed threatened or endangered species observed? No
Were any state-listed species of special concern observed? No
Were probable, possible, or confirmed breeding behaviors observed for any Listed Species (Endangered/Threatened/Special Concern)? No

Additional Photo(s):

Were any alternate point count survey locations used due to access or visual constraints? No

Alternate Point Count Survey Locations:

Incidental bird species observed outside of timed point count surveys



Field Data Sheet

(Alpha Codes or Common Names):

Surveyor Initials:

AB

Overall Survey Notes:

APPENDIX B

NYSDEC Marsh Bird Monitoring Survey and Sample Habitat Data Sheets

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., 14 May 2011): 5/18/23 Observer(s): FRANK SYMONI
 Project Name: 2102E110FFMAN
 Region (circle): 1 2 3 4 5 6 (7) 8 9 Survey replication (circle): 0 2 3

Secondary Species: *For all secondary focal species:*
 At each point, record each individual on separate line. Only mark minute segment in which first detected. Indicate distance band: 0-50m, 50-100m, >100m.
 COMO BLTE WIFL
 AMCO COTE SWSP
 WISN MAWR

**Put an "S" in the appropriate column if the bird was seen, a "1" if the bird was heard, and "1S" if both heard and seen

Point #	Start time (military)	Species	**Responded During:											Call type ^d	Distance (m)	Distance aide ^e	Direction	Direction of Speaker	Comments	
			Pass 0-1	Pass 1-2	Pass 2-3	Pass 3-4	Pass 4-5	LEBI 5-6	SORA 6-7	VIRA 7-8	KIRA 8-9	AMBI 9-10	PBGR 10-11							Before / After
3	514															2	-	NW	NO FURTHER SIGHTINGS	
4	618	SWSP		1	1	1	1	1	1	1	1	1	1	1	SONG	50-100	2	0	E	SIGHTING CONSTANTLY
2	709	SWSP	1	1	1S	1S	1		1	1					SONG	50	2	0	S	
1	751	-														2		S		

***Wind code:**
 0 smoke rises vertically
 1 wind direction shown by smoke drift
 2 wind felt on face, leaves rustle
 3 leaves and small twigs in constant motion
 4 wind raises dust and loose paper, small branches move
 5 small trees sway, crested wavelets on inland waters

^bSky code:
 0 clear/few clouds
 1 partly cloudy/variable
 2 cloudy or overcast
 4 fog or smoke
 5 drizzle
 6 snow
 8 rain showers

^cBackground noise:
 0 no noise
 1 faint
 2 moderate (can't hear birds beyond 100m)
 3 loud (can't hear birds beyond 50m)
 4 intense (can't hear birds beyond 25m)

^dCall type:
 LEBI: coo, kak, ank
 SORA: whinny, perweep, keep
 VIRA: grunt, ticket, kicker
 KIRA: kek-burr, grunt
 AMBI: pump-er-lunk, kok
 PBGR: owhoop, hyena, ek-ek
If call is not listed above, describe the call in comment section.

^eDistance aid:
 0 unaided
 1 rangefinder
 2 maps / aerial photos
 3 distance markers
 4 rangefinder and maps

W3- 1, 1, 1, 1
 W2 0, 1, 0
 W4- 1, 1, 0
 W1 0, 1, 0

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., 14 May 2011): 18 May 2023 Observer(s): AB
 Project Name: Hoffman Falls
 Region (circle): 1 2 3 4 5 6 **7** 8 9 Survey replication (circle): **1** 2 3

Secondary Species: *For all secondary focal species:*
 COMO BLTE WIFL *At each point, record each individual on separate*
 AMCO COTE SWSP *line. Only mark minute segment in which first*
 WISN MAWR *detected. Indicate distance band: 0-50m, 50-*
100m, >100m.

**Put an "S" in the appropriate column if the bird was seen, a "1" if the bird was heard, and "1S" if both heard and seen

Point #	Start time (military)	Species	**Responded During:											Call type ^d	Distance (m)	Distance aide ^e	Direction	Direction of Speaker	Comments	
			Pass 0-1	Pass 1-2	Pass 2-3	Pass 3-4	Pass 4-5	LEBI 5-6	SORA 6-7	VIRA 7-8	KIRA 8-9	AMBI 9-10	PBGR 10-11							Before / After
10	528																			No marsh birds detected
9	618																			No marsh birds detected
8	728	SWSP	1												Sing	0-50	0	S	W	

^aWind code: 0 smoke rises vertically
 1 wind direction shown by smoke drift
 2 wind felt on face, leaves rustle
 3 leaves and small twigs in constant motion
 4 wind raises dust and loose paper, small branches move
 5 small trees sway, crested wavelets on inland waters

^bSky code: 0 clear/few clouds
 1 partly cloudy/variable
 2 cloudy or overcast
 4 fog or smoke
 5 drizzle
 6 snow
 8 rain showers

^cBackground noise: 0 no noise
 1 faint
 2 moderate (can't hear birds beyond 100m)
 3 loud (can't hear birds beyond 50m)
 4 intense (can't hear birds beyond 25m)

^dC all type: LEBI: coo, kak, ank
 SORA: whinny, perweep, keep
 VIRA: grunt, ticket, kicker
 KIRA: kek-burr, grunt
 AMBI: pump-er-lunk, kok
 PBGR: owhoop, hyena, ek-ek
If call is not listed above, describe the call in comment section.

^eDistance aid: 0 unaided
 1 rangefinder
 2 maps / aerial photos
 3 distance markers
 4 rangefinder and maps

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., 14 May 2011): 5/18/22 Observer(s): Brooke Smith
 Project Name: Hoffman Falls Wind
 Region (circle): 1 2 3 4 5 6 7 8 9 Survey replication (circle): 1 2 3

Secondary Species: *For all secondary focal species:*
 At each point, record each individual on separate line. Only mark minute segment in which first detected. Indicate distance band: 0-50m, 50-100m, >100m.
 COMO BLTE WIFL
 AMCO COTE SWSP
 WISN MAWR

**Put an "S" in the appropriate column if the bird was seen, a "1" if the bird was heard, and "1S" if both heard and seen

Point #	Start time (military)	Species	**Responded During:								Call type ^d	Distance (m)	Distance aide ^e	Direction	Direction of Speaker	Comments	
			Pass 0-1	Pass 1-2	Pass 2-3	Pass 3-4	Pass 4-5	LEBI 5-6	SORA 6-7	VIRA 7-8							KIRA 8-9
5	0827	none															
6	0642	none															
7	0722	SWSP	1S										0-50	0	Q	Q	

***Wind code:**
 0 smoke rises vertically
 1 wind direction shown by smoke drift
 2 wind felt on face, leaves rustle
 3 leaves and small twigs in constant motion
 4 wind raises dust and loose paper, small branches move
 5 small trees sway, crested wavelets on inland waters

^bSky code:
 0 clear/few clouds
 1 partly cloudy/variable
 2 cloudy or overcast
 4 fog or smoke
 5 drizzle
 6 snow
 8 rain showers

^cBackground noise:
 0 no noise
 1 faint
 2 moderate (can't hear birds beyond 100m)
 3 loud (can't hear birds beyond 50m)
 4 intense (can't hear birds beyond 25m)

^dCall type:
 LEBI: coo, kak, ank
 SORA: whinny, perweep, keep
 VIRA: grunt, ticket, kicker
 KIRA: kek-burr, grunt
 AMBI: pump-er-lunk, kok
 PBGR: owhoop, hyena, ek-ek
If call is not listed above, describe the call in comment section.

^eDistance aid:
 0 unaided
 1 rangefinder
 2 maps / aerial photos
 3 distance markers
 4 rangefinder and maps

HABITAT DATASHEET

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Project Name: L1028 HOFFMAN Region: 7
 Date (e.g. 05 May 2013): 18 MAY 2023 Observer(s): F.S.

Survey point (e.g. X-0001): 3 Coordinates: 42.952267°N - 75.743656°W

Water depth (cm): 60 / @ POINT How accessed (circle): canoe motorboat walk wade

Cover type:	Emergent	Shrub	<u>Open H₂O</u>	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	<u>5%</u>	<u>10%</u>	<u>75%</u>		<u>10%</u>			

Dominant plant species:		Invasive plants: (circle all species present and write percent cover)	
1. <u>HORSETAIL</u>		<u>Phragmites</u> <u>5%</u>	Purple loosestrife: % <u>Reed canary grass</u> <u>10%</u>
2. <u>ASTER SPP (GOLDENROD)</u>		Water chestnut: %	<u>Multiflora rose</u> <u>5%</u> <u>Honeysuckle</u> <u>5%</u>
3. <u>REED CANARY</u>		Yellow iris: %	Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) FARM POND Comments:

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Survey point (e.g. X-0001): 4 Coordinates: 42.9494062°N - 75.7420035°W

Water depth (cm): 20 / @ POINT How accessed (circle): canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	<u>10%</u>	<u>50%</u>	<u>30%</u>	<u>5%</u>	<u>5%</u>			

Dominant plant species:		Invasive plants: (circle all species present and write percent cover)	
1. <u>DOGWOOD</u>		<u>Phragmites</u> <u>5%</u>	Purple loosestrife: % <u>Reed canary grass</u> <u>15%</u>
2. <u>REED CANARY</u>		Water chestnut: %	<u>Multiflora rose</u> <u>5%</u> <u>Honeysuckle</u> <u>25%</u>
3. <u>HONEYSUCKLE</u>		Yellow iris: %	Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) Comments: BEAVER DAM

HABITAT DATASHEET

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Project Name: 21028 HOFFMAN Region: 7
 Date (e.g. 05 May 2013): 18/MAY/2023 Observer(s): FRANK SIMONE

Survey point (e.g. X-0001): 2 Coordinates: 42.9553285°N -75.7404062°W
 Water depth (cm): 50/30 POINT How accessed (circle): canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	<u>20</u>	<u>5</u>	<u>75</u>					

Dominant plant species:		Invasive plants: (circle all species present and write percent cover)	
1. <u>REED CANARY GRASS</u>	Phragmites: %	Purple loosestrife: %	<u>Reed canary grass: 20</u> %
2. <u>WILLOW SPP</u>	Water chestnut: %	Multiflora rose: %	<u>Honeysuckle: 5</u> %
3. <u>HONEYSUCKLE</u>	Yellow iris: %	Other: _____	

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh
 Density of marsh vegetation (circle one): None Sparse Moderate Rank
 Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m
 Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4
 Management: (list type and date of management) EMERGENT Comments: !

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Project Name: _____ Region: _____
 Date (e.g. 05 May 2013): _____ Observer(s): _____

Survey point (e.g. X-0001): 1 Coordinates: 42.9574708°N -75.737149°W
 Water depth (cm): 60/0 @ POINT How accessed (circle): canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	<u>10</u>	<u>10</u>	<u>65</u>		<u>10</u>	<u>5</u>		

Dominant plant species:		Invasive plants: (circle all species present and write percent cover)	
1. <u>WILLOW SPP</u>	Phragmites: <u>5</u> %	Purple loosestrife: _____ %	Reed canary grass: _____ %
2. <u>SEDGE SPP</u>	Water chestnut: _____ %	Multiflora rose: _____ %	<u>Honeysuckle: 2</u> %
3. <u>HORSETAIL</u>	Yellow iris: _____ %	Other: _____	

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh
 Density of marsh vegetation (circle one): None Sparse Moderate Rank
 Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m
 Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4
 Management: (list type and date of management) FARM POND Comments: _____

HABITAT DATASHEET

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Project Name: Hoffman Falls	Region: 7
Date (e.g. 05 May 2013): 18 May 2023 Observer(s): AB	

Survey point (e.g. X-0001): 8 **Coordinates:**

Water depth (cm): 0-10, 30-40 **How accessed (circle):** canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	30	20	40		10			

Dominant plant species:	Invasive plants: (circle all species present and write percent cover)
1. Cattail	Phragmites: _____ % Purple loosestrife: _____ % Reed canary grass: _____ %
2. Fern	Water chestnut: _____ % Multiflora rose: _____ % Honeysuckle: _____ %
3. Dogwood	Yellow iris: _____ % Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) **Comments:**

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Survey point (e.g. X-0001): **Coordinates:**

Water depth (cm): **How accessed (circle):** canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:								

Dominant plant species:	Invasive plants: (circle all species present and write percent cover)
1.	Phragmites: _____ % Purple loosestrife: _____ % Reed canary grass: _____ %
2.	Water chestnut: _____ % Multiflora rose: _____ % Honeysuckle: _____ %
3.	Yellow iris: _____ % Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) **Comments:**

HABITAT DATASHEET

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Project Name: Hoffman Falls	Region: 7
Date (e.g. 05 May 2013): 18 May 2023 Observer(s): AB	

Survey point (e.g. X-0001): 10 **Coordinates:**

Water depth (cm): 0 at pt - then 2m **How accessed (circle):** canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	15	2	80		3			

Dominant plant species:	Invasive plants: (circle all species present and write percent cover)
1. Cattail	Phragmites: _____ % Purple loosestrife: _____ % Reed canary grass: 5 %
2. Reed grass	Water chestnut: _____ % Multiflora rose: _____ % Honeysuckle: _____ %
3. Honeysuckle	Yellow iris: _____ % Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) **Comments:**

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Survey point (e.g. X-0001): 9 **Coordinates:**

Water depth (cm): 0 at pt, 30 in at 20 **How accessed (circle):** canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	50	10	30		10			

Dominant plant species:	Invasive plants: (circle all species present and write percent cover)
1. Reed grass	Phragmites: _____ % Purple loosestrife: _____ % Reed canary grass: 10 %
2. Willow	Water chestnut: _____ % Multiflora rose: _____ % Honeysuckle: _____ %
3. Spirea	Yellow iris: _____ % Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) **Comments:**

HABITAT DATASHEET

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Project Name: Hoffman Falls Wind	Region: 7
Date (e.g. 05 May 2013): 5/18/2023	Observer(s): Brooke Smith

Survey point (e.g. X-0001): 5 **Coordinates:**

Water depth (cm): 0-20cm **How accessed (circle):** canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	5	20	30		5			40

Dominant plant species:	Invasive plants: (circle all species present and write percent cover)
1. dogwood	Phragmites: _____ % Purple loosestrife: _____ % Reed canary grass: _____ %
2. grasses	Water chestnut: _____ % Multiflora rose: _____ % Honeysuckle: _____ %
3. ferns	Yellow iris: <u>10</u> % Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) **Comments:**
man made pond

HABITAT DATASHEET - NEW YORK STATE MARSH BIRD MONITORING PROGRAM

Survey point (e.g. X-0001): 6 **Coordinates:**

Water depth (cm): 20m **How accessed (circle):** canoe motorboat walk wade

Cover type:	Emergent	Shrub	Open H ₂ O	Floating	Trees	Snags	Mudflat	Upland
Percent cover:	50	15			10	15		10

Dominant plant species:	Invasive plants: (circle all species present and write percent cover)
1. Red maple	Phragmites: <u>5</u> % Purple loosestrife: _____ % Reed canary grass: _____ %
2. Fern	Water chestnut: _____ % Multiflora rose: _____ % Honeysuckle: _____ %
3. Beech	Yellow iris: _____ % Other: _____

Edge type (circle): roadside/marsh ditch or berm/marsh upland/marsh open water/marsh interior/marsh

Density of marsh vegetation (circle one): None Sparse Moderate Rank

Estimated average marsh vegetation height (meters) (circle one): 0-1m 1-3m 3-6m >6m

Stewart & Kantrud wetland cover class (circle one): Type 1 Type 2 Type 3 Type 4

Management: (list type and date of management) **Comments:**

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., 14 May 2011): 7 JUNE '23 Observer(s): FRANK SIMONE
 Project Name: 21020 HOFFMAN
 Region (circle): 1 2 3 4 5 6 7 8 9 Survey replication (circle): 1 2 3

Secondary Species:
 COMO BLTE WFL
 AMCO COTE SWSP
 WISN MAWR

For all secondary focal species:
 At each point, record each individual on separate line. Only mark minute segment in which first detected. Indicate distance band: 0-50m, 50-100m, >100m.

**Put an "S" in the appropriate column if the bird was seen, a "1" if the bird was heard, and "1S" if both heard and seen

Point #	Start time (military)	Species	**Responded During:										Call type ^d	Distance (m)	Distance aide ^e	Direction	Direction of Speaker	Comments
			Pass 0-1	Pass 1-2	Pass 2-3	Pass 3-4	Pass 4-5	LEBI 5-6	SORA 6-7	VIRA 7-8	KIRA 8-9	AMBI 9-10						
2	526	SWSP	1	1		1	1					1	SONG	0-50	2	0	S	
1	605	-															S	
4	649	SWSP	S		1							1S	SONG	0-50	2	0	NE	SEEN (CF) (INSECT) NEST NEARBY
4	11	SWSP										1S	CALL	0-50	2	0	NE	[CALLS ONLY, (ALL SAME)]
3	716	-													2		NW	[BIRD, ADULT MALE]

^aWind code:
 0 smoke rises vertically
 1 wind direction shown by smoke drift
 2 wind felt on face, leaves rustle
 3 leaves and small twigs in constant motion
 4 wind raises dust and loose paper, small branches move
 5 small trees sway, crested wavelets on inland waters

^bSky code:
 0 clear/few clouds
 1 partly cloudy/variable
 2 cloudy or overcast
 3 fog or smoke
 4 drizzle
 5 snow
 6 rain showers

^cBackground noise:
 0 no noise
 1 faint
 2 moderate (can't hear birds beyond 100m)
 3 loud (can't hear birds beyond 50m)
 4 intense (can't hear birds beyond 25m)

^dCall type:
 LEBI: coo, kak, ank
 SORA: whiny, perweep, keep
 VIRA: grunt, ricket, kieker
 KIRA: kek-burr, grunt
 AMBI: pump-er-lunk, kok
 PBGR: owhoop, hyena, ek-ek
 If call is not listed above, describe the call in comment section.

^eDistance aid:
 0 unaided
 1 rangefinder
 2 maps / aerial photos
 3 distance markers
 4 rangefinder and maps

OVEN, GREY, INB, RIGOR, COYE, SOSP, WOTR, AMRO, EAKI, B-LJA, MAWO, SOSP, ANCL, GCEL, CSWA, COYE
 3) ALFL, SOSP, CSWA, COTE, AMRO, EATO, GCR, NOCA, PWO, VEER, OVEN, AMCH, BLJA, YECP, BCCH, GREY, RWBL
 4) RWBL, COYE, GREY, WOTH, REVI, SOSP, YEW, ALFL, CSWA, BRTH, GCEL, NOCA, EAKI, BAWW, RBGR, ANCL, GREY, BWNA, VEER, RWBL, AMCH, BCCH, COYE

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., 14 May 2011): 7 June 2023 Observer(s): AP
 Project Name: Zloty - Hoffman Falls
 Region (circle): 1 2 3 4 5 6 **(7)** 8 9 Survey replication (circle): 1 **(2)** 3

Secondary Species: *For all secondary focal species:*
 At each point, record each individual on separate line. Only mark minute segment in which first detected. Indicate distance band: 0-50m, 50-100m, >100m.
 COMO BLTE WFL
 AMCO COTE SWSP
 WISN MAWR

**Put an "S" in the appropriate column if the bird was seen, a "1" if the bird was heard, and "1S" if both heard and seen

Point #	Start time (military)	Species	**Responded During:											Call type ^d	Distance (m)	Distance aid ^e	Direction	Direction of Speaker	Comments		
			Pass 0-1	Pass 1-2	Pass 2-3	Pass 3-4	Pass 4-5	L1:B1 5-6	SORA 6-7	VIRA 7-8	KIRA 8-9	AMBI 9-10	PBGR 10-11							Before / After	
8	551	SWSP					1								Song	0-50	0	S	N		
9	723	SWSP					1								Song	0-50	0	E	E		
10	759																				

***Wind code:**
 0 smoke rises vertically
 1 wind direction shown by smoke drift
 2 wind felt on face, leaves rustle
 3 leaves and small twigs in constant motion
 4 wind raises dust and loose paper, small branches move
 5 small trees sway, created wavelets on inland waters

^bSky code:
 0 clear/few clouds
 1 partly cloudy/variable
 2 cloudy or overcast
 4 fog or smoke
 5 drizzle
 6 snow
 8 rain showers

^cBackground noise:
 0 no noise
 1 faint
 2 moderate (can't hear birds beyond 100m)
 3 loud (can't hear birds beyond 50m)
 4 intense (can't hear birds beyond 25m)

^dCall type:
 LEBI: coo, kak, mk
 SORA: whinny, perweep, keep
 VIRA: grunt, tickle, kicker
 KIRA: kek-burr, grunt
 AMBI: pump-or-lunk, kok
 PBGR: ovboop, lyena, ek-ek
If call is not listed above, describe the call in comment section.

^eDistance aid:
 0 unaided
 1 rangefinder
 2 maps / aerial photos
 3 distance markers
 4 rangefinder and maps

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., 14 May 2011): 23 JUNE 2023 Observer(s): FRANK SMCONE
Project Name: TUFFMAN 21628
Region (circle): 1 2 3 4 5 6 7 8 9 Survey replication (circle): 1 2 3

Secondary Species:
COMO BLTE WIFL
AMCO COTE SWSP
WISN MAWR
For all secondary focal species:
At each point, record each individual on separate line. Only mark minute segment in which first detected. Indicate distance band: 0-50m, 50-100m, >100m.

**Put an "S" in the appropriate column if the bird was seen, a "1" if the bird was heard, and "1S" if both heard and seen

Table with columns: Point #, Start time (military), Species, Responded During (Pass 0-1 to Pass 4-5, LEBI 5-6, SORA 6-7, VIRA 7-8, KIRA 8-9, AMBI 9-10, PBGR 10-11, Before / After), Call type, Distance (m), Distance aid, Direction, Direction of Speaker, Comments. Contains handwritten data for points 5, 6, 7, 1, and 2.

Handwritten notes on the right side of the page:
1) VEER, EAMP, SUSP, NOCA, OVEN, RBLO, DEVI, BLJA, AMCO, YEWA
2) RWOL, GRG, NOCA, CSWA, COY, AMCK, YEWA, EAKI, BCCH, HLOW
3) OVEN, GRGA, BLJA, COYE, YEWA, BAK, CHSP, AMCO, OEU, SUSP, CSWA, DOW, WGM, EAKI, HLOW, AMCO
4) ALFL, RWOL, VEER, WGM, KWAJ, BCCH, SUSP, OVEN, COTE, YEWA, GRGA, DEVI, REVI

Legend table with columns: Wind code, Sky code, Background noise, Call type, Distance aid. Lists codes for wind direction, cloud cover, noise levels, bird calls (LEBI, SORA, VIRA, KIRA, AMBI, PBGR), and distance measurement methods.

Handwritten notes at the bottom left: MOWA, EATB, CSWA, BLJA, YEWA

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., [4 May 2011]): 23 June 2023 Observer(s): AB
 Project Name: 21025-Hoffman Falls
 Region (circle): 1 2 3 4 5 6 **7** 8 9 Survey replication (circle): 1 2 **3**

Secondary Species: *For all secondary focal species:*
 COMO BLTE WIFL *At each point, record each individual on separate line. Only mark minute segment in which first*
 AMCO COTE SWSP *detected. Indicate distance band: 0-50m, 50-*
 WISN MAWR *100m, >100m*

**Put an "S" in the appropriate column if the bird was seen, a "H" if the bird was heard, and "HS" if both heard and seen

Point #	Start time (military)	Species	**Responded During:									Call type ^d	Distance (m)	Distance aide ^e	Direction	Direction of Speaker	Comments	
			Pass 0-1	Pass 1-2	Pass 2-3	Pass 3-4	Pass 4-5	LEBI 5-6	SORA 6-7	VIRA 7-8	KIRA 8-9							AMBI 9-10
9	5:42	SWSP	1										50-75	0-50	0	E	E	
10	6:30	SWSP		1									50-75	0-50	0	E	SE	
8	7:37	SWSP	1										50-75	0-50	0	SW	W	

*Wind code: 0 smoke rises vertically 1 wind direction shown by smoke drift 2 wind felt on face, leaves rustle 3 leaves and small twigs in constant motion 4 wind raises dust and loose paper, small branches move 5 small trees sway, crested wavelets on inland waters	*Sky code: 0 clear/few clouds 1 partly cloudy/variable 2 cloudy or overcast 4 fog or smoke 5 drizzle 6 snow 8 rain/showers	*Background noise: 0 no noise 1 faint 2 moderate (can't hear birds beyond 100m) 3 loud (can't hear birds beyond 50m) 4 intense (can't hear birds beyond 25m)	*Call type: LEBI: coo, kak, ank SORA: whinny, perwop, keep VIRA: grunt, tickle, kicker KIRA: kek-burr, grunt AMBI: puny-er-lunk, ko-k PBGR: owhoop, hyena, ek-ek <i>If call is not listed above, describe the call in comment section.</i>	*Distance aid: 0 unaided 1 rangefinder 2 maps / aerial photos 3 distance markers 4 rangefinder and maps
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Survey Date: June 23, 2023

New York State Marsh Bird Monitoring Survey Data Sheet

Date (e.g., 14 May 2011): 10 June 2023 Observer(s): Bronx Smith
 Project Name: Hoffman Falls
 Region (circle): 1 2 3 4 5 6 7 8 9 Survey replication (circle): 1 2 3

Secondary Species: *For all secondary local species:*
 At each point, record each individual on separate line. Only mark minute segment in which first detected. Indicate distance band: 0-50m, 50-100m, >100m.
 COMO BLTE WIFL
 AMCO COTE SWSP
 WISN MAWR

**Put an "S" in the appropriate column if the bird was seen, a "1" if the bird was heard, and "1S" if both heard and seen

Point #	Start time (military)	Species	**Responded During:								Call type ^d	Distance (m)	Distance aided ^e	Direction	Direction of Speaker	Comments	
			Pass 0-1	Pass 1-2	Pass 2-3	Pass 3-4	Pass 4-5	LEBI 5-6	SORA 6-7	VIRA 7-8							KIRA 8-9
10	0517	None															
9	0621	None															
7	0658	S. OSE	1										0-50	D	D	D	heard to the SE.

*Wind code: 0 smoke rises vertically 1 wind direction shown by smoke drift 2 wind felt on face, leaves rustle 3 leaves and small twigs in constant motion 4 wind raises dust and loose paper, small branches move 5 small trees sway, created wavelets on inland waters	^bSky code: 0 clear/few clouds 1 partly cloudy/variable 2 cloudy or overcast 4 fog or smoke 5 drizzle 6 snow 8 rain showers	^cBackground noise: 0 no noise 1 faint 2 moderate (can't hear birds beyond 100m) 3 loud (can't hear birds beyond 50m) 4 intense (can't hear birds beyond 25m)	^dCall type: LEBI: coo, kuk, aude SORA: whinny, perweep, keep VIRA: grunt, ticket, kicker KIRA: kek-burr, grunt AMBI: pump-cr-lunk, kok PBGR: owhoop, lyena, ek-ek <i>If call is not listed above, describe the call in comment section</i>	^eDistance aid: 0 unaided 1 rangefinder 2 maps / aerial photos 3 distance markers 4 rangefinder and maps
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