# Tracy Solar Energy Center
# Matter No. 21-00962
# §900-2.12 Exhibit 11: Terrestrial Ecology

## Revision 1


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| Exhibit 11 shall contain: | |
| a) An identification and description of the type of plant communities present on the Facility Site, and adjacent properties within one hundred (100) feet of areas to be disturbed by construction, including the interconnections, based upon field observations and data collection. | 11.1.1 |
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# 11.0 EXHIBIT 11 - TERRESTRIAL ECOLOGY

## SUMMARY OF EXHIBIT

Tracy Solar Energy Center, LLC (TSEC) assessed potential impacts to terrestrial vegetation and wildlife resources associated with the construction and operation of the Facility. The Study Area for this exhibit consists of the Facility Site and the surrounding adjacent properties within a 100-foot buffer, as required by 19 New York Codes, Rules, and Regulations (NYCRR) § 900-2.12(a). This exhibit was prepared using existing information obtained from agency correspondence and publicly available sources, the latter includes reports, published literature, online databases, geographic information system data, and site-specific field surveys conducted in support of Exhibit 12 NYS Threatened and Endangered Species and Exhibit 14 Wetlands.

Construction and operation will result in temporary disturbance due to vegetation clearing for construction, as well as permanent impact on vegetated habitats due to access road conversion, pad-mounted inverters, the collector substation, and a Point of Interconnection switchyard. Whenever possible, TSEC sited these components to prioritize avoiding interior forests and wetlands, while siting a majority of components within agricultural areas. Changes in vegetation could influence the behavior of wildlife species by changing the quality and quantity of habitat for foraging, nesting, roosting, or movement between habitats. Siting of Facility components minimized impacts to wildlife habitat to the maximum extent practicable by prioritizing avoidance of wildlife habitat, including forests, shrublands, and wetlands. Most of the Facility Site will be revegetated following construction. At the end of the Facility's lifespan, Facility components will be decommissioned, and the land will be restored as described in Exhibit 23 Site Restoration and Decommissioning. Following completion of decommissioning and restoration, lands within the Facility Site will return to their previous condition and use, including agriculture, depending on the intentions of the landowners.

All major ecological communities within parcels that will host Facility components are common to New York State. Therefore, no impacts to unique or rare natural communities will result from construction. Following construction activities, temporarily disturbed areas will be seeded (and stabilized with mulch and/or straw, if necessary) to reestablish vegetative cover. Other than in active agricultural fields, native species will be utilized to revegetate temporarily disturbed areas.

## 11.1 VEGETATION AND PLANT COMMUNITIES (19 NYCRR § 900-2.12(A))

### 11.1.1 Identification and Description of Plant Communities

Desktop analyses and field surveys identified habitat and invasive plant species presence within the Facility Site as part of the Wildlife Site Characterization report (see Exhibit 12 NYS Threatened and Endangered Species, Appendix 12-A) and as part of wetland and waterbody delineations (see Exhibit 14 Wetlands Appendix 14-C for the Wetlands and Waterbodies Delineation Report).

The Study Area for this exhibit consists of the Facility Site and adjacent properties within a 100-foot buffer surrounding the limit of disturbance, encompassing approximately 1,660 acres, and dominated by deciduous forest (approximately 145 acres) and hay/pasture (approximately 1,190 acres) according to the National Land Cover Dataset (USGS 2019). Plant communities within the Study Area were further classified into specific community descriptions provided in *Ecological Communities of New York State* (Edinger et al. 2014) and mapped based on additional data collected during the 2020 and 2021 field surveys. Figure 11-1 in Appendix 11-A depicts the following ecological communities within the field survey area:

- **Brushy cleared land:** A former forest, woodland, or shrubland that has been clear-cut or cleared by brush-hog. Habitat may contain tree or shrub stumps; woody debris, such as branches and slashings from logged trees; or patchy vegetation with scattered herbs, shrubs, and tree saplings. The amount of vegetative cover depends on soil fertility and the length of time since the land was cleared.
- **Cropland/field crops:** A type of agricultural land with field crops, including alfalfa, wheat, Timothy, and oats, as well as hayfields that are rotated to pastureland.
- **Flower/Herb Garden:** An area of land cultivated for ornamental herbs, shrubs, and culinary herbs.
- **Intermittent stream:** These are the uppermost segments of stream systems where water only flows during the spring from snowmelt or after heavy rain events. They typically have moderate to steep gradients and hydric soils. Flora within the streambed may include emergent and submergent bryophytes, and hydrophytic vascular plants. Fauna associated with intermittent streams are diverse and include species that do not require a permanent supply of flowing water.
- **Pastureland:** A type of agricultural land permanently maintained as a pasture area for livestock.

- **Paved road/path:** A road or pathway that is paved with asphalt, concrete, brick, or stone. There may be sparse vegetation rooted in cracks in the paved surface.
- **Red maple-hardwood swamp:** A hardwood swamp that occurs in poorly drained depressions, usually on inorganic soils. This is a broadly defined community with many regional and edaphic variants. In any one stand, red maple (*Acer rubrum*) is either the only canopy dominant, or it is co-dominant with one or more hardwoods including ashes (*Fraxinus pennsylvanica*, *F. nigra*, and *F. americana*), elms (*Ulmus americana* and *U. rubra*), yellow birch (*Betula alleghaniensis*), and swamp white oak (*Quercus bicolor*). The shrub layer is usually well developed and may be quite dense.
- **Rural structure exterior:** The exterior surfaces of structures (may be made with metal, wood, concrete, glass, or plastics) such as commercial buildings, barns, houses, or bridges in a rural or sparsely populated suburban area. Exteriors may be sparsely vegetated with lichens, mosses, and terrestrial algae; occasionally vascular plants may grow in cracks. Nooks and crannies may provide nesting habitat for birds and insects, and roosting sites for bats.
- **Shallow emergent marsh:** A marsh meadow community that occurs on mineral soil or deep muck soils (rather than true peat) that are permanently saturated and seasonally flooded. This marsh is better drained than a deep emergent marsh; water depths may range from 15 cm to 1 meter (6 inches to 3.3 feet) during flood stages, but the water level usually drops by mid to late summer and the substrate is exposed during an average year. This is a very broadly defined type that includes several distinct variants and many intermediates. Shallow emergent marshes are very common and quite variable. They may be co-dominated by a mixture of species or have a single dominant species.
- **Shrub swamp:** A mostly inland wetland dominated by tall shrubs that occurs along the shore of a lake or river, in a wet depression or valley not associated with lakes, or as a transition zone between a marsh, fen, or bog and a swamp or upland community. The substrate is usually mineral soil or muck. A few examples may have a shallow layer of sphagnous peat. This is a very broadly defined type that includes several distinct communities and many intermediates. Shrub swamps are very common and quite variable. They may be co-dominated by a mixture of species or have a single dominant shrub species.
- **Spruce/fir plantation:** A stand of softwoods planted for the cultivation/harvest of timber products, wildlife habitat, soil erosion control, windbreaks, or landscaping. These plantations may be monocultures (90% of canopy cover is

one species) or mixed stands (two or more co-dominant species in which case more than 50% of the cover consists of one or more species of spruce or fir). Ground layer vegetation is usually sparse due to dense accumulation of leaf litter.

- **Successional northern hardwoods:** Successional northern hardwood forests are comprised of hardwood or mixed forests that occur on sites that have been cleared or otherwise previously disturbed.
- **Successional shrubland:** A shrubland that occurs on sites that have been cleared or disturbed. This community has at least 50% cover of shrubs.
- **Unpaved road/path:** A sparsely vegetated road/pathway made of bare soil, bedrock outcrop, local organic material (e.g., woodchips and logs), sand, or gravel. These roads or pathways are maintained by regular trampling or scraping of the land surface. Abandoned railroad beds where tracks have been removed are included here.
- **Urban structure exterior:** The exterior surfaces of structures (may be made with metal, wood, concrete, glass, or plastics) such as commercial buildings, barns, houses, or bridges in an urban or densely populated suburban area. Exteriors may be sparsely vegetated with lichens, mosses, and terrestrial algae; occasionally vascular plants may grow in cracks. Nooks and crannies may provide nesting habitat for birds and insects, and roosting sites for bats.

### 11.1.2 Invasive Plant Species

Field surveys identified invasive species concentrated in brushy, cleared land and disturbed areas. Invasive species observed within the Study Area included, but were not limited to, multiflora rose (*Rosa multiflora*), Morrow's honeysuckle (*Lonicera morrowii*), garlic mustard (*Alliaria petiolata*), Japanese barberry (*Berberis thunbergii*), giant hogweed (*Heracleum mantegazianum*), common buckthorn (*Rhamnus cathartica*), Canada thistle (*Cirsium arvense*), and bull thistle (*Cirsium vulgare*). Invasive species polygons are based on ground estimates and are not a complete cataloging of invasive species within the Facility Site. Additionally, invasive species polygons represent an estimated gradient of invasive species present from 1% to 100% cover. Invasive species polygons are represented by yellow hatching on Figure 11-1 in Appendix 11-A.

### 11.1.3 Impact to Plant Communities

Construction and operation will result in temporary impacts, permanent conversion, and permanent impact on plant communities, as described below. Table 11.1-1 provides estimated acreages of temporary impacts, permanent conversion, and permanent impact by plant community type within the field survey area.

**Table 11.1-1 Estimated Temporary and Permanent Impacts to Plant Communities (acres)**

| Ecological Community Type[1] | Study Area | Temporary Impacts[2] | Permanent Conversion[3] | Permanent Impact | Total Impacts |
|---|---|---|---|---|---|
| Brushy cleared land | 14.86 | 2.36 | 3.03 | 0 | 5.38 |
| Cropland/field crops | 858.68 | 90.16 | 538.49 | 13.32 | 641.98 |
| Flower/herb garden | 0.48 | 0.01 | 0 | 0 | 0.01 |
| Intermittent stream | 0.55 | 0.07 | 0 | 0 | 0.07 |
| Pastureland | 85.52 | 9.08 | 53.95 | 2.27 | 64.19 |
| Paved road/path | 13.78 | 1.04 | 0 | 0.19 | 1.22 |
| Red maple-hardwood swamp | 234.47 | 1.06 | 4.34 | 0 | 5.40 |
| Rural structure exterior | 28.57 | 1.08 | <0.01 | 0 | 1.09 |
| Shallow emergent marsh | 181.11 | 10.69 | 45.50 | 0.03 | 56.22 |
| Shrub swamp | 45.63 | 0.69 | 5.03 | 0 | 5.72 |
| Spruce/fir plantation | 11.21 | 0.58 | 10.30 | 0 | 10.88 |
| Successional northern hardwoods | 156.33 | 6.40 | 43.0 | 0 | 49.83 |
| Successional shrubland | 22.39 | 1.10 | 16.80 | 0 | 17.90 |
| Unpaved road/path | 1.82 | 0.50 | 1.01 | 0.03 | 1.54 |
| Urban structure exterior | 1.32 | 0.09 | 0.02 | 0.03 | 0.13 |
| **TOTAL[4]** | **1,657** | **125** | **721** | **15** | **862** |

Notes:

[1] Based on *Ecological Communities of New York* (Edinger et al. 2014) as described in Section 11.2.1.

[2] Temporarily impacted areas will be restored following construction and will be allowed to naturally revegetate.

[3] Areas that will be cleared during construction and maintained as early successional communities during operations. The conversion of active row croplands to perennial early successional communities is expected to result in a net benefit to wildlife and soil resources.

[4] Rounded values.

Temporary impacts will primarily occur during construction, with some temporary vegetation disturbance during operations and maintenance. These temporarily impacted areas will be restored following construction and will not be disturbed during Facility operation. This type of disturbance is associated with collector line corridors located outside of photovoltaic (PV) panel array areas and within agricultural or successional old fields, laydown yards, and other temporary workspaces used for construction only. During operations, some temporary vegetation disturbance occurs from vehicular traffic in areas where PV panel arrays are installed. In areas of temporary impacts, TSEC will not use herbicides to prevent sprouting and will not remove trees as part of routine vegetation management during operations.

Permanent conversion will include the conversion of one plant community to another. These permanently converted areas will be cleared or otherwise disturbed during construction and maintained as early successional communities for the life of the Facility. This type of disturbance is associated with areas under PV panel arrays; collector lines within PV panel arrays or located within shrubland or forestland communities; and shrubland, or forestland. PV panels will be mounted on a racking support system secured by metal piers driven into the ground. While a majority of these areas will not be graded or stripped of topsoil, some of the PV panel areas will require either cutting or filling to reach the necessary uniform grades for racking installation. Existing vegetation underneath the PV panel arrays will be cleared or mowed to an appropriate height prior to array installation. Any graded areas will be revegetated with a seed mix designed for solar sites comprised of fescues (*Festuca* spp.), Kentucky bluegrass (*Poa pratensis*), and white clover (*Trifolium repens*). A Vegetation Management Plan will be developed for TSEC in accordance with 19 NYCRR § 900-10.2 Pre-Construction Compliance Filings that includes management strategies for restoration following and construction and for operation of the Facility. Permanent vegetation impacts will occur in areas where existing plant communities will be converted to built facilities. This type of disturbance is associated with the following Facility components: access roads, inverter sites, and substation.

The majority of the impacts to plant communities will occur in field crops. Exhibit 15 Agricultural Resources provides a detailed description of impacts to field crops and other agricultural lands. Temporary and permanent impacts to plant communities will not result in the extirpation or significant reduction of any natural ecological community type, or in the significant reduction of any plant community type within the Study Area.

### 11.1.4 Measures to Avoid or Minimize Plant Community Impacts

TSEC avoided and minimized impacts to vegetation through careful siting of Facility components. The majority of components have been sited in agricultural land, thus avoiding significant impacts to wetlands, shrubland, and forested areas. Approximately 16 acres of agricultural land and zero acres of forest will be permanently impacted through the construction of built facilities. Approximately 603 acres of agricultural land and 47 acres of forest will be permanently converted

to a different vegetative community until the Facility is decommissioned. However, the majority of these communities within the landscape or regional level will be largely protected from disturbance. Access roads were sited on existing roads and farm lanes, wherever possible, and areas of disturbance were confined to the smallest practicable area. Specific examples of avoidance and minimization of impacts to plant communities are outlined below.

As shown on Figure 11-1 in Appendix 11-A, TSEC will use an existing industrial site as a staging area, which will result in no new temporary or permanent impacts to wildlife habitat. TSEC has sited the substation and operations and maintenance building (totaling approximately 0.9 acres) within croplands to minimize tree clearing in surrounded wooded areas. A majority of solar panels in Arrays A1, B1, B2, C1, D1, D2, D3, D4, D5, D8, E1, F1, F2, J1, J2, K1, K2, K3, and K4 have been sited within croplands to minimize tree clearing in surrounded wooded areas..

Minimal PV panels in Arrays K1 and K4 were sited to avoid a wetland complex (W-T04-032) consisting of shallow emergent marsh, shrub swamp, and red maple-hardwood swamp (see Figure 11-1 in Appendix 11-A). Additionally, the collector line between Arrays J4 and K1 borders the edges of forests within croplands. This section of collector line is also designed to cross under a forested wetland (W-T04-032) woods by horizontal directional drilling to avoid tree clearing. Impacts to wetlands are further discussed in Exhibit 14 Wetlands.

Facility components were sited on parcel 43.00-1-4.2 to completely avoid impacts to a contiguous forested area in the western portion of the parcel. No PV panels are sited on this property, and the collector line between Arrays I1 and J1 and J2 crosses this parcel within croplands, avoiding tree clearing.

Some tree clearing will be required for construction and operation of Facility components to account for efficiencies with construction and design. Whenever possible, TSEC sited these components to prioritize avoiding interior forests and wetlands, while siting a majority of components within agricultural areas. Interior forest areas are not influenced by edge effects and are calculated using a 300-foot buffer from the edge of forest habitats (Gehlhausen et al. 2000). To protect adjacent undisturbed vegetation and other ecological resources, a comprehensive sediment and erosion control plan is provided in Exhibit 13 Water Resources and Aquatic Ecology, Appendix 13-B Stormwater Pollution Prevention Plan. Other mitigation measures to avoid or minimize impacts to vegetation include marking sensitive areas (such as wetlands) where no disturbance or vehicular activities will be allowed, educating the construction workforce on respecting and adhering to the physical boundaries of off-limit areas, employing best management practices during construction, and maintaining a clean work area within the designated construction sites. An independent environmental monitor will conduct inspections of areas requiring environmental compliance during construction activities, with an emphasis on those activities in sensitive areas.

All plant communities identified within the Study Area are common to New York State, therefore, no impacts to unique or rare natural communities will result from construction. Following construction activities, temporarily disturbed areas will be seeded (and stabilized with mulch and/or straw, if necessary) to reestablish vegetative cover in these areas. With the exception of active agricultural fields, native species will be allowed to revegetate temporarily disturbed areas. At the end of the Facility's life, TSEC will remove Facility components and restore the land, as described in Exhibit 23 Site Restoration and Decommissioning. Following completion of decommissioning and restoration, lands within the Study Area are expected to return to pre-construction conditions.

An Invasive Species Control and Management Plan will be developed for TSEC in accordance with 19 NYCRR § 900-10.2 Pre-Construction Compliance Filings that includes prescribed measures to control invasive species throughout the area of disturbance.

## 11.2 WILDLIFE, WILDLIFE HABITATS, AND WILDLIFE TRAVEL CORRIDORS

### 11.2.1 Identification and Description of Wildlife and Wildlife Habitat

Wildlife and habitat potentially present within the Study Area were identified through a review of existing information obtained from publicly available sources, and the site-specific Wildlife Site Characterization Study (Exhibit 12 New York State Threatened and Endangered Species, Appendix 12-A), Wintering Grassland Raptor Surveys (Appendix 12-B), and Breeding Bird Surveys (Appendix 12-C). The following public data sources were reviewed:

- New York's Environmental Assessment Form Mapper, maintained by the New York State Department of Environmental Conservation (NYSDEC);
- New York Natural Heritage Program (NYNHP);
- U.S. Fish and Wildlife Service Information for Planning and Conservation (IPaC) and Environmental Conservation Online System Databases;
- New York's Environmental Resource Mapper, maintained by NYSDEC;
- NYSDEC Nature Explorer tool;
- *Checklist of the Amphibians, Reptiles, Birds and Mammals of New York, Including Their Protective Status*, published by the NYSDEC Wildlife Diversity Group (NYSDEC 2019);
- Biodiversity and Wind Siting Mapping Tool, developed by The Nature Conservancy, New York Natural Heritage Program, and the New York State Energy and Research Development Authority;

- eBird;
- Audubon Christmas Bird Counts;
- The U.S. Geological Service Breeding Bird Survey;
- The New York State Breeding Bird Atlas III;
- Data from the New York State Ornithological Association, Inc.;
- National Land Cover data;
- U.S. Fish and Wildlife Service National Wetlands Inventory;
- NYSDEC Freshwater Wetland data;
- Species range maps for mammals provided by the International Union for Conservation of Nature (IUCN);
- iNaturalist research-grade observations (Ueda 2021);
- The National Conservation and Easement database; and
- Data regarding other areas of interest (e.g., Audubon Important Bird Areas, national wildlife refuges, wildlife management areas, grassland focus areas, core forest blocks, and known bat hibernacula).

Table 11.B-1 in Appendix 11-B lists identified mammals, birds, amphibians, terrestrial invertebrates, and reptiles that may occur within the Study Area, based on the data sources listed above, as well as site surveys and on-site observations, as required by 19 NYCRR § 900-2.12(d). Specifically, presence for mammals, including small mammals, was determined using the *Checklist of the Amphibians, Reptiles, Birds and Mammals of New York, Including Their Protective Status* (NYSDEC 2019) and IUCN range maps. Presence for terrestrial invertebrates was determined using research-grade observations reported to iNaturalist for Jefferson County, New York.

No special status lands occur within the Study Area. The National Conservation Easement database did not identify any easement blocks over 150 acres of contiguous forest within the Study Area (TFPL and DU 2020).

### 11.2.2 Impacts to Wildlife, Wildlife Habitats, and Wildlife Travel Corridors (19 NYCRR § 900-2.12(e))

Areas of permanent conversion under PV panel arrays will be maintained as early successional areas. These areas under PV panel arrays are expected to provide considerable habitat value for many wildlife species including pollinators and other invertebrates, small mammals, reptiles, amphibians, and many avian species that utilize old field/grassland habitat. Approximately 15 acres of vegetation will be permanently lost for the lifetime of the Facility components (e.g., access roads and the substation).

Construction-related impacts to wildlife are anticipated to be limited to incidental injury and mortality due to construction activity and vehicular movement, habitat disturbance and impact associated with clearing and earth-moving activities, and temporary displacement of wildlife due to behavioral disturbance. Operation-related impacts to wildlife include direct habitat impact, some habitat and travel corridor degradation through fragmentation, and disturbance/ displacement due to presence of PV panel arrays.

Specific discussion of impacts to threatened and endangered species and their habitats are addressed in Exhibit 12 NYS Threatened or Endangered Species.

**Incidental Injury or Mortality**

Direct impacts from construction may include incidental injury or mortality due to construction equipment. Potential mortality is expected to be low because equipment used in solar energy facility construction generally moves at slow rates or is stationary for long periods (e.g., earth-moving equipment and pile-driving equipment). In addition, much of the land directly impacted within the Facility Site is currently used to produce field crops. Such areas typically provide limited food and cover for most wildlife species, and are routinely subject to disturbance-related farming activities (e.g., plowing, mowing, and pesticide application).

Incidental injury and mortality during Facility construction should be limited to juvenile and sedentary/slow-moving species that are unable to move out of the area disturbed by construction, such as small mammals, ground-nesting bird eggs and hatchlings, reptiles, amphibians, and invertebrates. More mobile species and mature individuals should be able to vacate areas disturbed by construction. Vehicle-related mortality may increase temporarily due to increased traffic during construction; however, as traffic decreases upon the completion of construction, so will the potential for wildlife-vehicle collisions.

**Habitat Disturbance and Loss, Habitat Fragmentation**

Changes in vegetation could influence the behavior of wildlife species by changing the quality and quantity of habitat for foraging, nesting, roosting, or movement between habitats. Facility components have been sited to minimize impacts to wildlife habitat by siting PV panel arrays in agricultural fields used to produce field and row crops to the maximum extent practicable. This minimizes the impacts to higher quality wildlife habitat including forests, shrublands, and wetlands. Table 11.1-1 summarizes impacts to plant community types. It is anticipated that the majority of wildlife present in the Study Area will return to temporarily disturbed areas following construction.

Habitat fragmentation resulting from the Facility's operation may affect the movement within travel corridors, breeding, and/or roosting behavior of various species across the landscape. Facility fencing will limit access to habitats within the Facility Site to species incapable of passing

through the chain-link fence. Examples include deer grazing or bedding in former hay fields, foxes hunting small mammals, or isolation from burrows for some mammals present before construction. Additionally, large, fenced areas may force wildlife to travel greater distances between habitat patches. Wherever possible, hedgerows were preserved to maintain travel corridors between habitat patches, although some will be eliminated resulting in greater travel distances between certain habitat patches. For example, several hedgerows in and around Arrays C1 and E1 will be preserved.

As described above, actively cultivated croplands typically provide only marginal habitat for most wildlife species. Wherever feasible, TSEC has Facility components and temporary impacts from construction in areas currently used for field and row crops in an effort to minimize impacts from habitat fragmentation. Exclusion from habitats will be limited to fencing areas off from wildlife access; TSEC sited fencing as tight to PV array panels as practicable to minimize acreage of these areas. Fragmentation will primarily be limited to collection line and access road corridors through previously contiguous forest patches. Lastly, while the majority of tree clearing is on the edges of existing fields, the interconnection of distant panel arrays will require collection lines to clear some interior forest and increase forest edges and edge effects. Interior forests are areas that are not influenced by edge effects and are calculated using a 300-foot buffer from the edge of forest habitats. As forestland is cleared for construction and operation of the Facility, this moves this 300-foot buffer inward, converting previously interior forest to exterior forest.

With regards to forestland birds, sensitivity to habitat fragmentation varies by species; forest interior species show the highest degree of sensitivity (Bannerman 1998). Of the total forestland within the Study Area, only 35.01 acres have been classified as interior forest. Construction will result in approximately 0.18 acres of interior forest clearing, as well as result in the increase of approximately 1.69 acres of forest edge (edge effect). While some fragmentation impacts to forest interior species are expected locally within the Study Area, a majority of the forested areas within the Study Area will remain intact.

With respect to grassland bird species, construction will result in the permanent impact of 14.5 acres of cropland and pastureland, and 592 acres of cropland and pastureland will be converted to early successional habitat within the solar arrays for the life of the Facility. However, of the total impacts to agricultural land, approximately 642 acres will occur in areas currently cultivated as field crops, which typically provide limited/marginal habitat for grassland birds. In contrast, the maintained early successional areas under PV panel arrays are expected to provide considerable habitat value for many wildlife species, including some grassland bird species. This landscape contains an extensive network of agricultural land, including cropland and pastureland. Given the extent of available agricultural habitat adjacent to the Facility Site and beyond the Study Area, impacts to these habitats do not represent significant fragmentation impacts at the landscape or regional level.

Forested fragmentation effects on bats are not well understood, and the effects may vary between species based on preferred prey, foraging areas, roosting needs, and flight morphology. Although measures to avoid direct take of bats will be implemented for tree clearing, suitable roosting areas for some species may be lost due to tree clearing associated with construction. However, suitable roosting habitat is prevalent throughout the region and near the Facility Site, and the construction will only permanently affect 9% of forested lands within the Study Area. Additionally, the creation of open areas and forest edge may benefit some species, such as little brown bat (*Myotis lucifugus*) and big brown bat (*Eptesicus fuscus*), by increasing foraging opportunities. Given the small percentage of forested habitat impacted, it is unlikely that habitat fragmentation will have a significant impact on any bat species.

**Behavioral Disturbance and Displacement**

Some wildlife displacement may occur due to increased noise and human activity associated with construction. The significance of this impact will vary by species and the seasonal timing of construction activities. Impacts are expected to be minimal given the limited habitat value of the impacted areas. As discussed above, the majority of land within the Facility Site is subject to frequent mechanical disturbance associated with farming activities; therefore, it is anticipated that most wildlife encountered are accustomed to mechanical disturbances associated with large equipment. Outside of localized displacement due to construction disturbance in the immediate vicinity of Facility components, no significant displacement impacts on wildlife species are anticipated during construction.

Habitat alteration and disturbance resulting from operations may render some areas within the Facility Site unsuitable or less suitable for nesting, foraging, roosting, or other wildlife use. As described above, fencing off areas will result in permanent displacement of animals unable to pass through the 4- by 4-inch chain-link fence. However, TSEC sited Facility components mainly on agricultural land subject to frequent disturbances associated with farming activities such as tilling, plowing, pesticide application, mowing/harvesting, and livestock grazing. PV panel arrays have been preferentially sited in these areas to avoid the need to clear significant areas of forest or impact other valuable wildlife habitat such as wetlands. Given that the area underneath the PV panel arrays will be maintained as early successional habitat during operation, it is expected that more generalist grassland avian species, small mammals, terrestrial invertebrates, reptiles, and amphibians will successfully utilize these areas. However, the presence of PV panel arrays may render these habitats unsuitable for certain species that will otherwise utilize these areas for foraging, roosting, and breeding habitat, particularly bird species that generally require large, open grassland areas to hunt for insects or small mammals and establish breeding territories. This displacement of avian and larger mammalian predators may result in an increased number of prey species within the fence line and under the PV panels.

### 11.2.3 Measures to Avoid or Minimize Impacts to Wildlife and Wildlife Habitats

TSEC avoided and minimized impacts to wildlife and wildlife habitat through careful siting of Facility components. Whenever possible, Facility Site components have been sited on agricultural land, thus avoiding significant impacts to high value and sensitive habitats. Approximately 0.04 acres of interior forest within the Facility Site will be cleared to beyond the fence line around panel arrays, and approximately 1.7 acres of interior forest will be converted to forest edge habitat. However, a majority of the interior forest within the Facility Site will not be impacted and ecologically valuable communities within the Study Area will be largely protected from disturbance. Facility access roads will be sited on existing roads, and farm lanes wherever possible, and areas of disturbance will be confined to the smallest practicable area.

Specific examples of careful siting of Facility Site components to avoid forest impacts include the following:

- **Parcels 43.00-1-33.1, 43.00-1-35.1, 43.00-1-35.2, 43.00-1-35.3, and 43.00-1-35.4:** Facility components were sited to completely avoid a contiguous forested area surrounded by Arrays D5, D6, D7, F1, and F2.
- **Parcel 42.00-2-25:** PV Panels in Arrays F1, F2, and E1 were sited to completely avoid a large contiguous forested area.

Moreover, during construction, TSEC will adhere to the Uniform Standards and Conditions outlined in Table 11.3-1 to further avoid and minimize impacts to wildlife and wildlife habitat during construction, including the requirement that all construction activity be limited to the designated Limits of Disturbance and minimizing tree and vegetation clearing for Facility construction and operations.

Impacts to threatened, and endangered wildlife species have been avoided during Facility Site planning and design and are further discussed in Exhibit 12 NYS Threatened and Endangered Species.

## 11.3 UNIFORM STANDARDS AND CONDITIONS

Table 11.3-1 identifies the applicable Uniform Standards and Conditions for this exhibit.

**Table 11.3-1 Applicable Uniform Standards and Conditions for Terrestrial Ecology**

| Citation | Uniform Standards and Conditions |
|---|---|
| §900-6.4 (b) | Environmental and Agricultural Monitoring.<br><br>(1) The permittee shall hire an independent, third-party environmental monitor to oversee compliance with environmental commitments and siting permit requirements. The environmental monitor shall perform regular site inspections of construction work sites and, in consultation with the NYSDPS, issue regular reporting and compliance audits.<br><br>(2) The environmental monitor shall have stop work authority over all aspects of the facility. Any stop work orders shall be limited to affected areas of the facility. Copies of the reporting and compliance audits shall be provided to the host town(s) upon request.<br><br>(3) The permittee shall identify and provide qualifications and contact information for the independent, third-party environmental monitor to the NYSDPS, with a copy to the Office.<br><br>(4) If the environmental monitor is not qualified, the permittee shall also retain an independent, third-party agriculture-specific environmental monitor as required in section 900-6.4(s) of this Part.<br><br>(5) The permittee shall ensure that its environmental monitor and agricultural monitor are equipped with sufficient access to documentation, transportation, and communication equipment to effectively monitor the permittee's contractor's compliance with the provisions of the siting permit with respect to such permittee's facility components and to applicable sections of the Public Service Law, Executive Law, Environmental Conservation Law (ECL), and Clean Water Act Section 401 Water Quality Certification. |

**Table 11.3-1 Applicable Uniform Standards and Conditions for Terrestrial Ecology**

| Citation | Uniform Standards and Conditions |
|---|---|
| §900-6.4 (e) | Flagging. At least two (2) weeks before tree clearing or ground disturbing activities, the permittee shall stake or flag the planned limits of disturbance (LOD), the boundaries of any delineated NYS-regulated wetlands, waterbodies or streams in the LOD (as identified in the delineations prepared pursuant to sections 900-1.3(e) and (f) of this Part), and any known archeological sites identified in the approved Cultural Resources Avoidance, Minimization and Mitigation Plan required in section 900-10.2(g) of this Part, all on or off ROW access roads, limits of clearing and other areas needed for construction, including, but not limited to, turbine or solar array work areas, proposed infiltration areas for post-construction stormwater management, and laydown and storage areas. In addition, archeological sites shall be surrounded with construction fencing and a sign stating restricted access. |
| §900-6.4 (m) | General Environmental Requirements.<br><br>(1) Limits of Disturbance (LOD). Construction shall not directly disturb areas outside the construction limits shown on the design drawings.<br><br>(4) E&S Materials. Permanent erosion control fabric or netting used to stabilize soils prior to establishment of vegetative cover or other permanent measures shall be one hundred (100) percent biodegradable natural product, excluding silt fence. Use of hay for erosion control or other construction-related purposes is prohibited to minimize the risk of introduction of invasive plant species.<br><br>(5) Spill Kits. All construction vehicles and equipment shall be equipped with a spill kit. All equipment shall be inspected daily for leaks of petroleum, other fluids, or contaminants; equipment may only enter a stream channel if found to be free of any leakage. Any leaks shall be stopped and cleaned up immediately. Spillage of fuels, waste oils, other petroleum products or hazardous materials shall be reported to the NYSDEC's Spill Hotline within two (2) hours, in accordance with the NYSDEC Spill Reporting and Initial Notification Requirements Technical Field Guidance (see section 900-15.1(i)(1)(iii) of this Part). The Office and the NYSDPS shall also be notified of all reported spills in a timely manner. |

**Table 11.3-1 Applicable Uniform Standards and Conditions for Terrestrial Ecology**

| Citation | Uniform Standards and Conditions |
|---|---|
| | (6) Construction Debris. Any debris or excess construction materials shall be removed to a facility duly authorized to receive such material. No burying of construction debris or excess construction materials is allowed.<br><br>(7) Clearing Areas. Tree and vegetation clearing shall be limited to the minimum necessary for facility construction and operation, and as detailed on final construction plans.<br><br>(8) Clearing Methods. When conducting clearing, the permittee shall: (i) Comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control, and ECL Section 9-1303 and any quarantine orders issued thereunder; (ii) Not create a maximum wood chip depth greater than three (3) inches, except for chip roads (if applicable), nor store or dispose wood chips in wetlands, within stream banks, delineated floodways, or active agricultural fields; (iii) Not dispose of vegetation or slash by burning anywhere or burying within a wetland or adjacent area; and (iv) Coordinate with landowners to salvage merchantable logs and fuel wood. Where merchantable logs and fuel wood will not be removed from the Facility Site during clearing activities, final construction plans shall indicate locations of stockpiles to be established for removal from site or future landowner resource recovery.<br><br>(9) Invasive Insects. To control the spread of invasive insects, the permittee shall provide training for clearing and construction crews to identify the Asian Longhorn Beetle and the Emerald Ash Borer and other invasive insects of concern as a potential problem at the Facility Site. If these insects are found, they shall be reported to the NYSDEC as soon as practicable. |

## 11.4 REFERENCES


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# Appendix 11-A
# Figures

Previously Submitted; No Changes

# Appendix 11-B Revised
# Wildlife Species Potentially Present within the Study Area

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| **Birds** | | | |
| Ducks, Geese and Waterfowl | *Anatidae* | | |
| Snow Goose | *Chen caerulescens* | NL | Appendix 12-B Wintering Grassland Raptor Survey |
| Canada Goose | *Branta canadensis* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Trumpeter Swan | *Cygnus buccinator* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Wood Duck | *Aix sponsa* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Gadwall | *Mareca strepera* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Mallard | *Anas platyrhynchos* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| American Black Duck | *Anas rubripes* | SGCN - HP | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Green-winged Teal | *Anas carolinensis* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Ring-necked Duck | *Aythya collaris* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Common Goldeneye | *Bucephala clangula* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Hooded Merganser | *Lophodytes cucullatus* | NL | Nature Explorer |
| Common Merganser | *Mergus merganser* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Red-breasted Merganser | *Mergus serrator* | NL | Appendix 12-A Wildlife Site Characterization Report |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Pheasants, Grouse, Allies | *Phasianidae* | | |
| Ring-necked Pheasant | *Phasianus colchicus* | NL | Nature Explorer |
| Ruffed Grouse | *Bonasa umbellus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Wild Turkey | *Meleagris gallopavo* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Grebes | *Podicipedidae* | | |
| Pied-billed Grebe | *Podilymbus podiceps* | ST | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Pigeons, Doves | *Columbidae* | | |
| Rock Pigeon | *Columba livia* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Mourning Dove | *Zenaida macroura* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Cuckoos | *Cuculidae* | | |
| Yellow-billed Cuckoo | *Coccyzus americanus* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Black-billed Cuckoo | *Coccyzus erythropthalmus* | NL | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Nightbirds | *Caprimulgidae* | | |
| Common Nighthawk | *Chordeiles minor* | SSC | Nature Explorer |
| Eastern Whip-poor-will | *Antrostomus vociferus* | SSC | Appendix 12-A Wildlife Site Characterization Report |
| Swifts | *Apodidae* | | |
| Chimney Swift | *Chaetura pelagica* | NL | Nature Explorer |
| Hummingbirds | *Trochilidae* | | |
| Ruby-throated Hummingbird | *Archilochus colubris* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Rails, Gallinules, and Coots | *Rallidae* | | |
| Virginia Rail | *Rallus limicola* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Sora | *Porzana carolina* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| American Coot | *Fulica americana* | NL | Nature Explorer |
| Cranes | *Gruidae* | | |
| Sandhill Crane | *Grus canadensis* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Plovers | *Charadriidae* | | |
| Killdeer | *Charadrius vociferus* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Sandpipers | *Scolopacidae* | | |
| Upland Sandpiper | *Bartramia longicauda* | ST | Nature Explorer |
| American Woodcock | *Scolopax minor* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Wilson's Snipe | *Gallinago delicata* | NL | Nature Explorer |
| Spotted Sandpiper | *Actitis macularius* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Gulls, Terns | *Laridae* | | |
| Ring-billed Gull | *Larus delawarensis* | NL | Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Herring Gull | *Larus argentatus* | NL | Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Great Black-backed Gull | *Larus marinus* | NL | Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey |
| Loons | *Gaviidae* | | |
| Common Loon | *Gavia immer* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Herons, Bitterns | *Ardeidae* | | |
| American Bittern | *Botaurus lentiginosus* | SSC | Nature Explorer |
| Least Bittern | *Ixobrychus exilis* | ST | Nature Explorer |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Great Blue Heron | *Ardea herodias* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey |
| Green Heron | *Butorides virescens* | NL | Nature Explorer |
| American Vultures | *Cathartidae* | | |
| Turkey Vulture | *Cathartes aura* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Hawks | *Accipitridae* | | |
| Osprey | *Pandion haliaetus* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Bald Eagle | *Haliaeetus leucocephalus* | ST | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Northern Harrier | *Circus hudsonius* | ST | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Sharp-shinned Hawk | *Accipiter striatus* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Cooper's Hawk | *Accipiter cooperii* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey |
| Northern Goshawk | *Accipiter gentilis* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey |
| Red-shouldered Hawk | *Buteo lineatus* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Broad-winged Hawk | *Buteo platypterus* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Red-tailed Hawk | *Buteo jamaicensis* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Rough-legged Hawk | *Buteo lagopus* | NL | Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey |
| Golden Eagle | *Aquila chrysaetos* | SE | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report |
| Owls | *Strigidae* | | |
| Barn Owl | *Tyto alba* | SGCN - HP | Nature Explorer |
| Eastern Screech-Owl | *Megascops asio* | NL | Nature Explorer |
| Great Horned Owl | *Bubo virginianus* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey |
| Barred Owl | *Strix varia* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey |
| Long-eared Owl | *Asio otus* | NL | Nature Explorer |
| Kingfishers | *Alcedinidae* | | |
| Belted Kingfisher | *Megaceryle alcyon* | NL | Nature Explorer |
| Woodpeckers | *Picidae* | | |
| Red-headed Woodpecker | *Melanerpes erythrocephalus* | SSC | Nature Explorer |
| Red-bellied Woodpecker | *Melanerpes carolinus* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Yellow-bellied Sapsucker | *Sphyrapicus varius* | NL | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Downy Woodpecker | *Picoides pubescens* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Hairy Woodpecker | *Picoides villosus* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey |
| Northern Flicker | *Colaptes auratus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Pileated Woodpecker | *Dryocopus pileatus* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Falcons | *Falconidae* | | |
| American Kestrel | *Falco sparverius* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Merlin | *Falco columbarius* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Peregrine Falcon | *Falco peregrinus* | SE | Appendix 12-A Wildlife Site Characterization Report |
| Tyrant Flycatchers | *Tyrannidae* | | |
| Eastern Wood-Pewee | *Contopus virens* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Acadian Flycatcher | *Empidonax virescens* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Alder Flycatcher | *Empidonax alnorum* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Willow Flycatcher | *Empidonax traillii* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Least Flycatcher | *Empidonax minimus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Eastern Phoebe | *Sayornis phoebe* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Great Crested Flycatcher | *Myiarchus crinitus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Eastern Kingbird | *Tyrannus tyrannus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Vireos | *Vireonidae* | | |
| Yellow-throated Vireo | *Vireo flavifrons* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Blue-headed Vireo | *Vireo solitarius* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Warbling Vireo | *Vireo gilvus* | NL | Nature Explorer |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Red-eyed Vireo | *Vireo olivaceus* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Shrikes | *Laniidae* | | |
| Northern Shrike | *Lanius excubitor* | NL | Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey |
| Jays, Crows | *Corvidae* | | |
| Blue Jay | *Cyanocitta cristata* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| American Crow | *Corvus brachyrhynchos* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Common Raven | *Corvus corax* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Titmice | *Paridae* | | |
| Black-capped Chickadee | *Poecile atricapillus* | NL | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Tufted Titmouse | *Baeolophus bicolor* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Larks | *Alaudidae* | | |
| Horned Lark | *Eremophila alpestris* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Swallows | *Hirundinidae* | | |
| Purple Martin | *Progne subis* | NL | Nature Explorer |
| Tree Swallow | *Tachycineta bicolor* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Northern Rough-winged Swallow | *Stelgidopteryx serripennis* | NL | Nature Explorer |
| Bank Swallow | *Riparia* | NL | Nature Explorer |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Cliff Swallow | *Petrochelidon pyrrhonota* | NL | Nature Explorer |
| Barn Swallow | *Hirundo rustica* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Kinglets | *Regulidae* | | |
| Golden-crowned Kinglet | *Regulus satrapa* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Nuthatches | *Sittidae* | | |
| Red-breasted Nuthatch | *Sitta canadensis* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| White-breasted Nuthatch | *Sitta carolinensis* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Treecreepers | *Certhiidae* | | |
| Brown Creeper | *Certhia americana* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Gnatcatchers | *Polioptilidae* | | |
| Blue-gray Gnatcatcher | *Polioptila caerulea* | NL | Nature Explorer |
| Wrens | *Troglodytidae* | | |
| House Wren | *Troglodytes aedon* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Winter Wren | *Troglodytes hiemalis* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Sedge Wren | *Cistothorus stellaris* | ST | Appendix 12-A Wildlife Site Characterization Report |
| Marsh Wren | *Cistothorus palustris* | NL | Nature Explorer |
| Carolina Wren | *Thryothorus ludovicianus* | NL | Nature Explorer |
| Starlings | *Sturnidae* | | |
| European Starling | *Sturnus vulgaris* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Mimic Thrushes | *Mimidae* | | |
| Gray Catbird | *Dumetella carolinensis* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Brown Thrasher | *Toxostoma rufum* | SGCN - HP | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Northern Mockingbird | *Mimus polyglottos* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Thrushes and Allies | *Turdidae* | | |
| Eastern Bluebird | *Sialia sialis* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Veery | *Catharus fuscescens* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Hermit Thrush | *Catharus guttatus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Wood Thrush | *Hylocichla mustelina* | NL | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| American Robin | *Turdus migratorius* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Waxwings | *Bombycillidae* | | |
| Bohemian Waxwing | *Bombycilla garrulus* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Cedar Waxwing | *Bombycilla cedrorum* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Old World Sparrows | *Passeridae* | | |
| House Sparrow | *Passer domesticus* | NL | Nature Explorer |
| Finches and Allies | *Fringillidae* | | |
| Evening Grosbeak | *Coccothraustes vespertinus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| House Finch | *Haemorhous mexicanus* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Purple Finch | *Haemorhous purpureus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Hoary Redpoll | *Acanthis hornemanni* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Red Crossbill | *Loxia curvirostra* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| White-winged Crossbill | *Loxia leucoptera* | NL | Appendix 12-A Wildlife Site Characterization Report |
| Pine Siskin | *Spinus pinus* | NL | Nature Explorer |
| American Goldfinch | *Spinus tristis* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| New World Sparrows | *Passerellidae* | | |
| Eastern Towhee | *Pipilo erythrophthalmus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| American Tree Sparrow | *Spizella arborea* | NL | Appendix 12-B Wintering Grassland Raptor Survey |
| Chipping Sparrow | *Spizella passerina* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Field Sparrow | *Spizella pusilla* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Vesper Sparrow | *Pooecetes gramineus* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Savannah Sparrow | *Passerculus sandwichensis* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Grasshopper Sparrow | *Ammodramus savannarum* | SSC | Nature Explorer |
| Henslow's Sparrow | *Ammodramus henslowii* | ST | Nature Explorer |
| Song Sparrow | *Melospiza melodia* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| | | | Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Swamp Sparrow | *Melospiza georgiana* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| White-throated Sparrow | *Zonotrichia albicollis* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey |
| Dark-eyed Junco | *Junco hyemalis* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey |
| Blackbirds | *Icteridae* | | |
| Bobolink | *Dolichonyx oryzivorus* | SGCN - HP | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Eastern Meadowlark | *Sturnella magna* | SGCN - HP | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Orchard Oriole | *Icterus spurius* | NL | Nature Explorer |
| Baltimore Oriole | *Icterus galbula* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Red-winged Blackbird | *Agelaius phoeniceus* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Brown-headed Cowbird | *Molothrus ater* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Rusty Blackbird | *Euphagus carolinus* | SGCN - HP | IPaC, Appendix 12-A Wildlife Site Characterization Report |
| Common Grackle | *Quiscalus quiscula* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| New World Warblers | *Parulidae* | | |
| Brewster's Warbler | *Vermivora cyanoptera x chrysoptera* | NL | Nature Explorer |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Ovenbird | *Seiurus aurocapilla* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Worm-eating Warbler | *Helmitheros vermivorum* | NL | Nature Explorer |
| Louisiana Waterthrush | *Parkesia motacilla* | NL | Nature Explorer |
| Northern Waterthrush | *Parkesia noveboracensis* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Golden-winged Warbler | *Vermivora chrysoptera* | SSC | Appendix 12-A Wildlife Site Characterization Report |
| Blue-winged Warbler | *Vermivora cyanoptera* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Black-and-white Warbler | *Mniotilta varia* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Nashville Warbler | *Oreothlypis ruficapilla* | NL | Nature Explorer |
| Mourning Warbler | *Geothlypis philadelphia* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Kentucky Warbler | *Geothlypis formosa* | SGCN - HP | Nature Explorer |
| Common Yellowthroat | *Geothlypis trichas* | NL | Nature Explorer, Appendix 12-C Breeding Bird Survey |
| Hooded Warbler | *Setophaga citrina* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| American Redstart | *Setophaga ruticilla* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Cerulean Warbler | *Setophaga cerulea* | SSC | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Northern Parula | *Setophaga americana* | NL | Nature Explorer |
| Magnolia Warbler | *Setophaga magnolia* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Blackburnian Warbler | *Setophaga fusca* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Yellow Warbler | *Setophaga petechia* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Chestnut-sided Warbler | *Setophaga pensylvanica* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Black-throated Blue Warbler | *Setophaga caerulescens* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Pine Warbler | *Setophaga pinus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Yellow-rumped Warbler | *Setophaga coronata* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |
| Prairie Warbler | *Setophaga discolor* | NL | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report |
| Canada Warbler | *Cardellina canadensis* | SGCN - HP | Nature Explorer, IPaC, Appendix 12-A Wildlife Site Characterization Report |
| Cardinals and Allies | *Cardinalidae* | | |
| Scarlet Tanager | *Piranga olivacea* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Northern Cardinal | *Cardinalis* | NL | Nature Explorer, Appendix 12-B Wintering Grassland Raptor Survey, Appendix 12-C Breeding Bird Survey |
| Rose-breasted Grosbeak | *Pheucticus ludovicianus* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| Indigo Bunting | *Passerina cyanea* | NL | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report, Appendix 12-C Breeding Bird Survey |
| **Mammals** | | | |
| Bats | | | |
| Silver-haired Bat | *Lasionycteris noctivagans* | NL | Nature Explorer |
| Northern Long-eared Bat | *Myotis septentrionalis* | ST | Nature Explorer, Appendix 12-A Wildlife Site Characterization Report |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Indiana Bat | *Myotis sodalis* | SE | Appendix 12-A Wildlife Site Characterization Report |
| Tri-colored Bat | *Perimyotis subflavus* | NL | Nature Explorer |
| Marsupials | | | |
| Virginia Opossum | *Didelphis virginiana* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Shrews and Moles | | | |
| Cinereus Shrew | *Sorex cinereus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| American Water Shrew | *Sorex palustris* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Smoky Shrew | *Sorex fumeus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| American Pygmy Shrew | *Sorex hoyi* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Northern Short-tailed Shrew | *Blarina brevicauda* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Hairy-tailed Mole | *Parascalops breweri* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Star-nosed Mole | *Condylura cristata* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Canids | | | |
| Coyote | *Canis latrans* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Red Fox | *Vulpes* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Gray Fox | *Urocyon cinereoargenteus* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Bear | | | |
| American Black Bear | *Ursus americanus* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Skunk | | | |
| Striped Skunk | *Mephitis* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Raccoon | | | |
| Raccoon | *Procyon lotor* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Mustelids | | | |
| Fisher | *Pekania pennanti* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Ermine | *Mustela erminea* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Long-tailed Weasel | *Mustela frenata* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| American Mink | *Neovison vison* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| North American River Otter | *Lontra canadensis* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Ungulates | | | |
| White-tailed Deer | *Odocoileus virginianus* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Moose | *Alces americanus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Rodents | | | |
| Eastern Chipmunk | *Tamias striatus* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Woodchuck | *Marmota monax* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Eastern Grey Squirrel | *Sciurus carolinensis* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Red Squirrel | *Tamiasciurus hudsonicus* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Southern Flying Squirrel | *Glacomys volans* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Northern Flying Squirrel | *Flaucomys sabrinus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| American Beaver | *Castor canadensis* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| North American Deermouse | *Peromyscus maniculatus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| White-footed Deermouse | *Peromyscus leucopus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Southern Red-backed Vole | *Myodes gapperi* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Meadow Vole | *Microtus pennsylvanicus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Woodland Vole | *Microtus pinetorum* | NL | NYSDEC Wildlife Diversity Group, IUCN |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Common Muskrat | *Ondatra zibethicus* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Southern Bog Lemming | *Synaptomys cooperi* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| House Mouse | *Mus musculus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Meadow Jumping Mouse | *Zapus hudsonius* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| Woodland Jumping Mouse | *Napaeozapus insignis* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| North American Porcupine | *Erethizon dorsata* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Rabbits and Hares | | | |
| Eastern Cottontail | *Sylvilagus floridanus* | NL | NYSDEC Wildlife Diversity Group, IUCN, iNaturalist |
| Snowshoe Hare | *Lepus americanus* | NL | NYSDEC Wildlife Diversity Group, IUCN |
| **Reptiles and Amphibians** | | | |
| Snakes | | | |
| Ring-necked Snake | *Diadophis punctatus* | NL | Nature Explorer |
| Milk Snake | *Lampropeltis triangulum* | NL | Nature Explorer |
| Northern Water Snake | *Nerodia sipedon* | NL | Nature Explorer |
| Smooth Green Snake | *Opheodrys vernalis* | NL | Nature Explorer |
| Dekay's Brown Snake | *Storeria dekayi* | NL | Nature Explorer |
| Red-bellied Snake | *Storeria occipitomaculata* | NL | Nature Explorer |
| Common Garter Snake | *Thamnophis sirtalis* | NL | Nature Explorer |
| Turtles | | | |
| Snapping Turtle | *Chelydra serpentina* | NL | Nature Explorer |
| Painted Turtle | *Chrysemys picta* | NL | Nature Explorer |
| Wood Turtle | *Glyptemys insculpta* | SSC | Nature Explorer |
| Frogs and Toads | | | |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| American Toad | *Anaxyrus americanus* | NL | Nature Explorer |
| Gray Treefrog | *Hyla versicolor* | NL | Nature Explorer |
| Bullfrog | *Lithobates catesbeianus* | NL | Nature Explorer |
| Green Frog | *Lithobates clamitans* | NL | Nature Explorer |
| Pickerel Frog | *Lithobates palustris* | NL | Nature Explorer |
| Northern Leopard Frog | *Lithobates pipiens* | NL | Nature Explorer |
| Wood Frog | *Lithobates sylvaticus* | NL | Nature Explorer |
| Spring Peeper | *Pseudacris crucifer* | NL | Nature Explorer |
| Salamanders | | | |
| Jefferson Salamander | *Ambystoma jeffersonianum* | SSC | Nature Explorer |
| Jefferson Salamander Complex | *Ambystoma jeffersonianum x laterale* | SSC | Nature Explorer |
| Spotted Salamander | *Ambystoma maculatum* | NL | Nature Explorer |
| Dusky Salamander | *Desmognathus fuscus* | NL | Nature Explorer |
| Allegheny Mountain Dusky Salamander | *Desmognathus ochrophaeus* | NL | Nature Explorer |
| Northern Two-lined Salamander | *Eurycea bislineata* | NL | Nature Explorer |
| Spring Salamander | *Gyrinophilus porphyriticus* | NL | Nature Explorer |
| Eastern Newt | *Notophthalmus viridescens* | NL | Nature Explorer |
| Redback Salamander | *Plethodon cinereus* | NL | Nature Explorer |
| Northern Slimy Salamander | *Plethodon glutinosus* | NL | Nature Explorer |
| **Fish** | | | |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Comely Shiner | *Notropis amoenus* | SGCN - HP | Nature Explorer |
| Bridle Shiner | *Notropis bifrenatus* | NL | Nature Explorer |
| Blackchin Shiner | *Notropis heterodon* | SGCN - HP | Nature Explorer |
| Blacknose Shiner | *Notropis heterolepis* | NL | Nature Explorer |
| Swallowtail Shiner | *Notropis procne* | SGCN - HP | Nature Explorer |
| **Mussels and Clams** | | | |
| Brook Floater | *Alasmidonta varicosa* | ST | Nature Explorer |
| Yellow Lampmussel | *Lampsilis cariosa* | SGCN - HP | Nature Explorer, NYNHP |
| Green Floater | *Lasmigona subviridis* | ST | Nature Explorer |
| Eastern Pearlshell | *Margaritifera margaritifera* | SGCN - HP | Nature Explorer |
| **Invertebrates** | | | |
| Alderflies, Dobsonflies, and Fishflies | | | |
| Summer Fishfly | *Chauliodes pectinicornis* | NL | iNaturalist |
| Spring Fishfly | *Chauliodes rastricornis* | NL | iNaturalist |
| Beetles | | | |
| Sweet Click Beetle | *Aeolus mellillus* | NL | iNaturalist |
| | *Agrilus cyanescens* | NL | iNaturalist |
| Eastern Eyed Click Beetle | *Alaus oculatus* | NL | iNaturalist |
| | *Analeptura lineola* | NL | iNaturalist |
| Dandelion Anthaxia Beetle | *Anthaxia inornata* | NL | iNaturalist |
| Eurasian Red-and-black Melyrid | *Anthocomus equestris* | NL | iNaturalist |
| | *Anthrenus fuscus* | NL | iNaturalist |
| Common Carpet Beetle | *Anthrenus scrophulariae* | NL | iNaturalist |
| Two-lined Leatherwing | *Atalantycha bilineata* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| | *Atalantycha neglecta* | NL | iNaturalist |
| | *Bellamira scalaris* | NL | iNaturalist |
| Sumac Flea Beetle | *Blepharida rhois* | NL | iNaturalist |
| | *Calleida punctata* | NL | iNaturalist |
| Russet Alder Leaf Beetle | *Calligrapha alni* | NL | iNaturalist |
| | *Cantharis livida* | NL | iNaturalist |
| Thistle Tortoise Beetle | *Cassida rubiginosa* | NL | iNaturalist |
| Red-rot Decay Stag Beetle | *Ceruchus piceus* | NL | iNaturalist |
| Small Orange Tortoise Beetle | *Charidotella purpurata* | NL | iNaturalist |
| Golden Tortoise Beetle | *Charidotella sexpunctata* | NL | iNaturalist |
| Goldenrod Soldier Beetle | *Chauliognathus pensylvanicus* | NL | iNaturalist |
| Dogbane Leaf Beetle | *Chrysochus auratus* | NL | iNaturalist |
| Twelve-spotted Tiger Beetle | *Cicindela duodecimguttata* | NL | iNaturalist |
| Big Sand Tiger Beetle | *Cicindela formosa* | NL | iNaturalist |
| Eastern Sand Tiger Beetle | *Cicindela formosa generosa* | NL | iNaturalist |
| Punctured Tiger Beetle | *Cicindela punctulata* | NL | iNaturalist |
| Purple Tiger Beetle | *Cicindela purpurea* | NL | iNaturalist |
| Bronzed Tiger Beetle | *Cicindela repanda* | NL | iNaturalist |
| Festive Tiger Beetle | *Cicindela scutellaris* | NL | iNaturalist |
| LeConte's Tiger Beetle | *Cicindela scutellaris lecontei* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Six-spotted Tiger Beetle | *Cicindela sexguttata* | NL | iNaturalist |
| Seven-spotted Lady Beetle | *Coccinella septempunctata* | NL | iNaturalist |
| Three-banded Lady Beetle | *Coccinella trifasciata* | SGCN-HP | iNaturalist |
| Spotted Pink Lady Beetle | *Coleomegilla maculata* | NL | iNaturalist |
| Long-necked Ground Beetle | *Colliuris pensylvanica* | NL | iNaturalist |
| | *Copris fricator* | NL | iNaturalist |
| Spotted Asparagus Beetle | *Crioceris duodecimpunctata* | NL | iNaturalist |
| ant-like longhorn beetle | *Cyrtophorus verrucosus* | NL | iNaturalist |
| Larder Beetle | *Dermestes lardarius* | NL | iNaturalist |
| Eastern Elderberry Borer | *Desmocerus palliatus* | NL | iNaturalist |
| Spotted Cucumber Beetle | *Diabrotica undecimpunctata* | NL | iNaturalist |
| Flat-headed Hardwood Borer | *Dicerca divaricata* | NL | iNaturalist |
| | *Dircaea liturata* | NL | iNaturalist |
| Antelope Beetle | *Dorcus parallelus* | NL | iNaturalist |
| Ghost Tiger Beetle | *Ellipsoptera lepida* | NL | iNaturalist |
| Winter Firefly | *Ellychnia corrusca* | NL | iNaturalist |
| Oriental Beetle | *Exomala orientalis* | NL | iNaturalist |
| Banded Graphisurus | *Graphisurus fasciatus* | NL | iNaturalist |
| Asian Lady Beetle | *Harmonia axyridis* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Clavate Tortoise Beetle | *Helocassis clavata* | NL | iNaturalist |
| Parenthesis Lady Beetle | *Hippodamia parenthesis* | NL | iNaturalist |
| Variegated Lady Beetle | *Hippodamia variegata* | NL | iNaturalist |
| Sigil Lady Beetles | *Hyperaspis* | NL | iNaturalist |
| | *Kuschelina thoracica* | NL | iNaturalist |
| Swamp Milkweed Leaf Beetle | *Labidomera clivicollis* | NL | iNaturalist |
| Blunt Knapweed Flower Weevil | *Larinus obtusus* | NL | iNaturalist |
| Three-lined Potato Beetle | *Lema daturaphila* | NL | iNaturalist |
| Colorado Potato Beetle | *Leptinotarsa decemlineata* | NL | iNaturalist |
| Lily Leaf Beetle | *Lilioceris lilii* | NL | iNaturalist |
| American Rose Chafer | *Macrodactylus subspinosus* | NL | iNaturalist |
| Red-banded Fungus Beetle | *Megalodacne fasciata* | NL | iNaturalist |
| | *Microgoes oculatus* | NL | iNaturalist |
| Goldenrod Leaf Miner Beetle | *Microrhopala vittata* | NL | iNaturalist |
| | *Molorchus bimaculatus* | NL | iNaturalist |
| Northeastern Pine Sawyer Beetle | *Monochamus notatus* | NL | iNaturalist |
| White-spotted Sawyer Beetle | *Monochamus scutellatus* | NL | iNaturalist |
| American Carrion Beetle | *Necrophila americana* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Pustulated Carrion Beetle | *Nicrophorus pustulatus* | NL | iNaturalist |
| | *Odontocorynus umbellae* | NL | iNaturalist |
| Hermit Flower Beetle | *Osmoderma eremicola* | NL | iNaturalist |
| Rough Hermit Beetle | *Osmoderma scabra* | NL | iNaturalist |
| Black Vine Weevil | *Otiorhynchus sulcatus* | NL | iNaturalist |
| | *Oxyporus rufipennis* | NL | iNaturalist |
| Grapevine Beetle | *Pelidnota punctata* | NL | iNaturalist |
| Common Eastern Firefly | *Photinus pyralis* | NL | iNaturalist |
| Willow Leaf Beetle | *Plagiodera versicolora* | NL | iNaturalist |
| Woodland Ground Beetle | *Poecilus lucublandus* | NL | iNaturalist |
| Green Immigrant Leaf Weevil | *Polydrusus formosus* | NL | iNaturalist |
| Japanese Beetle | *Popillia japonica* | NL | iNaturalist |
| Fourteen-spotted Lady Beetle | *Propylea quatuordecimpunctata* | NL | iNaturalist |
| | *Pseudanostirus hieroglyphicus* | NL | iNaturalist |
| Ribbed Pine Borer | *Rhagium inquisitor* | NL | iNaturalist |
| Common Red Soldier Beetle | *Rhagonycha fulva* | NL | iNaturalist |
| | *Scaphinotus viduus* | NL | iNaturalist |
| Big-headed Ground Beetle | *Scarites subterraneus* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Strangalepta Flower Longhorn Beetle | *Strangalepta abbreviata* | NL | iNaturalist |
| | *Synchroa punctata* | NL | iNaturalist |
| Red Milkweed Beetle | *Tetraopes tetrophthalmus* | NL | iNaturalist |
| Goldenrod Leaf Beetle | *Trirhabda canadensis* | NL | iNaturalist |
| Banded Longhorn Beetle | *Typocerus velutinus* | NL | iNaturalist |
| Butterflies and Moths | | | |
| Water Veneer | *Acentria ephemerella* | NL | iNaturalist |
| Distinct Quaker | *Achatia distincta* | NL | iNaturalist |
| Garden Webworm Moth | *Achyra rantalis* | NL | iNaturalist |
| Snowy-shouldered Acleris Moth | *Acleris nivisellana* | NL | iNaturalist |
| Walnut Shoot Moth | *Acrobasis demotella* | NL | iNaturalist |
| Dark Acrolophus | *Acrolophus mora* | NL | iNaturalist |
| American Dagger | *Acronicta americana* | NL | iNaturalist |
| Clear Dagger | *Acronicta clarescens* | NL | iNaturalist |
| Large Gray Dagger | *Acronicta insita* | NL | iNaturalist |
| Marsh Dagger | *Acronicta insularis* | NL | iNaturalist |
| Hesitant Dagger | *Acronicta modica* | NL | iNaturalist |
| North American Luna Moth | *Actias luna* | NL | iNaturalist |
| Juniper Conch | *Aethes rutilana* | NL | iNaturalist |
| Large Tabby | *Aglossa pinguinalis* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Unspotted Looper Moth | *Allagrapha aerea* | NL | iNaturalist |
| Common Roadside-Skipper | *Amblyscirtes vialis* | NL | iNaturalist |
| Walnut Sphinx | *Amorpha juglandis* | NL | iNaturalist |
| American Copper Underwing | *Amphipyra pyramidoides* | NL | iNaturalist |
| Yellow-spotted Webworm Moth | *Anageshna primordialis* | NL | iNaturalist |
| White-spotted Sable | *Anania funebris* | NL | iNaturalist |
| Guenee's Pearl | *Anania tertialis* | NL | iNaturalist |
| Common Gray | *Anavitrinella pampinaria* | NL | iNaturalist |
| Least Skipper | *Ancyloxypha numitor* | NL | iNaturalist |
| Schlaeger's Fruitworm Moth | *Antaeotricha schlaegeri* | NL | iNaturalist |
| Polyphemus Moth | *Antheraea polyphemus* | NL | iNaturalist |
| Anna Tiger Moth | *Apantesis anna* | NL | iNaturalist |
| Virgin Tiger Moth | *Apantesis virgo* | NL | iNaturalist |
| Checkered Apogeshna Moth | *Apogeshna stenialis* | NL | iNaturalist |
| Infant Moth | *Archiearis infans* | NL | iNaturalist |
| Ugly-nest Caterpillar Moth | *Archips cerasivorana* | NL | iNaturalist |
| Short-lined Chocolate | *Argyrostrotis anilis* | NL | iNaturalist |
| White-spotted Leafroller Moth | *Argyrotaenia alisellana* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Gray-banded Leafroller Moth | *Argyrotaenia mariana* | NL | iNaturalist |
| Yellow-winged Oak Leafroller Moth | *Argyrotaenia quercifoliana* | NL | iNaturalist |
| Io Moth | *Automeris io* | NL | iNaturalist |
| Eyed Baileya Moth | *Baileya ophthalmica* | NL | iNaturalist |
| Three-lined Balsa Moth | *Balsa tristrigella* | NL | iNaturalist |
| Bog Bibarrambla Moth | *Bibarrambla allenella* | NL | iNaturalist |
| Hollow-spotted Blepharomastix Moth | *Blepharomastix ranalis* | NL | iNaturalist |
| Meadow Fritillary | *Boloria bellona* | NL | iNaturalist |
| Forage Looper Moth | *Caenurgina erechtea* | NL | iNaturalist |
| Brown Scoopwing | *Calledapteryx dryopterata* | NL | iNaturalist |
| Juniper Hairstreak | *Callophrys gryneus* | NL | iNaturalist |
| Eastern Pine Elfin | *Callophrys niphon* | NL | iNaturalist |
| Hoary Elfin | *Callophrys polios* | NL | iNaturalist |
| Promethea Silkmoth | *Callosamia promethea* | NL | iNaturalist |
| Poison Ivy Leaf-miner Moth | *Cameraria guttifinitella* | NL | iNaturalist |
| Pale Beauty | *Campaea perlata* | NL | iNaturalist |
| Maple Trumpet Skeletonizer Moth | *Catastega aceriella* | NL | iNaturalist |
| Northern Azure | *Celastrina lucia* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Maple-Basswood Leafroller Moth | *Cenopis pettitana* | NL | iNaturalist |
| Waved Sphinx | *Ceratomia undulosa* | NL | iNaturalist |
| Common Wood-Nymph | *Cercyonis pegala* | NL | iNaturalist |
| Laugher Moth | *Charadra deridens* | NL | iNaturalist |
| Blackberry Looper Moth | *Chlorochlamys chloroleucaria* | NL | iNaturalist |
| Harris's Checkerspot | *Chlosyne harrisii* | NL | iNaturalist |
| Spruce Budworm Moth | *Choristoneura fumiferana* | NL | iNaturalist |
| Oblique-banded Leafroller Moth | *Choristoneura rosaceana* | NL | iNaturalist |
| Topiary Grass-veneer | *Chrysoteuchia topiarius* | NL | iNaturalist |
| Morbid Owlet | *Chytolita morbidalis* | NL | iNaturalist |
| Yellow-collared Scape Moth | *Cisseps fulvicollis* | NL | iNaturalist |
| Black-patched Clepsis Moth | *Clepsis melaleucanus* | NL | iNaturalist |
| White Triangle Tortrix | *Clepsis persicana* | NL | iNaturalist |
| Common Ringlet | *Coenonympha california* | NL | iNaturalist |
| Clouded Sulphur | *Colias philodice* | NL | iNaturalist |
| Close-banded Yellowhorn Moth | *Colocasia propinquilinea* | NL | iNaturalist |
| Dusky Groundling | *Condica vecors* | NL | iNaturalist |
| Grass-veneers and Allies | *Crambinae* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Double-banded Grass-veneer | *Crambus agitatellus* | NL | iNaturalist |
| Virginia Ctenucha Moth | *Ctenucha virginica* | NL | iNaturalist |
| Brown-hooded Owlet | *Cucullia convexipennis* | NL | iNaturalist |
| Eastern Tailed-Blue | *Cupido comyntas* | NL | iNaturalist |
| Sweetfern Geometer Moth | *Cyclophora pendulinaria* | NL | iNaturalist |
| Hickory Shuckworm Moth | *Cydia caryana* | NL | iNaturalist |
| Filbertworm Moth | *Cydia latiferreana* | NL | iNaturalist |
| Monarch | *Danaus plexippus* | NL | iNaturalist |
| Angus' Datana Moth | *Datana angusii* | NL | iNaturalist |
| Yellow-necked Caterpillar Moth | *Datana ministra* | NL | iNaturalist |
| Lettered Sphinx | *Deidamia inscriptum* | NL | iNaturalist |
| | *Desmia* | NL | iNaturalist |
| White-spotted Brown | *Diastictis ventralis* | NL | iNaturalist |
| Spotted Dichomeris Moth | *Dichomeris punctidiscellus* | NL | iNaturalist |
| Rosy Maple Moth | *Dryocampa rubicunda* | NL | iNaturalist |
| Bad-wing Moth | *Dyspteris abortivaria* | NL | iNaturalist |
| Orange-barred Carpet Moth | *Dysstroma hersiliata* | NL | iNaturalist |
| Imperial Moth | *Eacles imperialis* | NL | iNaturalist |
| Pine Imperial Moth | *Eacles imperialis pini* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Locust Twig Borer Moth | *Ecdytolopha insiticiana* | NL | iNaturalist |
| Three-spotted Concealer | *Eido trimaculella* | NL | iNaturalist |
| Pondside Crambid Moth | *Elophila icciusalis* | NL | iNaturalist |
| Maple Spanworm Moth | *Ennomos magnaria* | NL | iNaturalist |
| Elm Spanworm Moth | *Ennomos subsignaria* | NL | iNaturalist |
| Dreamy Duskywing | *Erynnis icelus* | NL | iNaturalist |
| Juvenal's Duskywing | *Erynnis juvenalis* | NL | iNaturalist |
| Columbine Duskywing | *Erynnis lucilius* | NL | iNaturalist |
| Beggar Moth | *Eubaphe mendica* | NL | iNaturalist |
| Milkweed Tussock Moth | *Euchaetes egle* | NL | iNaturalist |
| Least-marked Euchlaena Moth | *Euchlaena irraria* | NL | iNaturalist |
| | *Euchlaena muzaria* | NL | iNaturalist |
| Olympia Marble | *Euchloe olympia* | SC | iNaturalist |
| Scalloped Sallow | *Eucirroedia pampina* | NL | iNaturalist |
| Spiny Oak-slug Moth | *Euclea delphinii* | NL | iNaturalist |
| White Pine Coneborer Moth | *Eucopina tocullionana* | NL | iNaturalist |
| Beautiful Wood-nymph | *Eudryas grata* | NL | iNaturalist |
| Pearly Wood-nymph | *Eudryas unio* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Powdered Geometer Moths | *Eufidonia* | NL | iNaturalist |
| Powder Moth | *Eufidonia notataria* | NL | iNaturalist |
| Pandorus Sphinx | *Eumorpha pandorus* | NL | iNaturalist |
| Dun Skipper | *Euphyes vestris* | NL | iNaturalist |
| American Sharp-angled Carpet | *Euphyia intermediata* | NL | iNaturalist |
| Small Pine Looper Moth | *Eupithecia palpata* | NL | iNaturalist |
| Curved-toothed Geometer Moth | *Eutrapela clemataria* | NL | iNaturalist |
| Purple-backed Cabbageworm Moth | *Evergestis pallidata* | NL | iNaturalist |
| Harvester | *Feniseca tarquinius* | NL | iNaturalist |
| Boxwood Leaftier Moth | *Galasa nigrinodis* | NL | iNaturalist |
| Yarrow Plume Moth | *Gillmeria pallidactyla* | NL | iNaturalist |
| | *Glaucolepis saccharella* | NL | iNaturalist |
| Silvery Blue | *Glaucopsyche lygdamus* | NL | iNaturalist |
| Chickweed Geometer Moth | *Haematopis grataria* | NL | iNaturalist |
| Banded Tussock Moth | *Halysidota tessellaris* | NL | iNaturalist |
| Clymene Moth | *Haploa clymene* | NL | iNaturalist |
| Grapeleaf Skeletonizer Moth | *Harrisina americana* | NL | iNaturalist |
| Common Spring Moth | *Heliomata cycladata* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Black-marked Plume Moth | *Hellinsia inquinatus* | NL | iNaturalist |
| Snowberry Clearwing | *Hemaris diffinis* | NL | iNaturalist |
| Hummingbird Clearwing | *Hemaris thysbe* | NL | iNaturalist |
| Indian Skipper | *Hesperia sassacus* | NL | iNaturalist |
| Three-spotted Fillip | *Heterophleps triguttaria* | NL | iNaturalist |
| Pistachio Emerald | *Hethemia pistasciaria* | NL | iNaturalist |
| Brown Bark Carpet Moth | *Horisme intestinata* | NL | iNaturalist |
| Cecropia Moth | *Hyalophora cecropia* | NL | iNaturalist |
| Unadorned Carpet Moth | *Hydrelia inornata* | NL | iNaturalist |
| Bedstraw Hawkmoth | *Hyles gallii* | NL | iNaturalist |
| Pine Measuringworm Moth | *Hypagyrtis piniata* | NL | iNaturalist |
| One-spotted Variant | *Hypagyrtis unipunctata* | NL | iNaturalist |
| Baltimore Snout | *Hypena baltimoralis* | NL | iNaturalist |
| Giant Leopard Moth | *Hypercompe scribonia* | NL | iNaturalist |
| Fall Webworm Moth | *Hyphantria cunea* | NL | iNaturalist |
| Painted Lichen Moth | *Hypoprepia fucosa* | NL | iNaturalist |
| Yellow-fringed Dolichomia Moth | *Hypsopygia olinalis* | NL | iNaturalist |
| Single-dotted Wave | *Idaea dimidiata* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Common Idia Moth | *Idia aemula* | NL | iNaturalist |
| Bent-line Gray | *Iridopsis larvaria* | NL | iNaturalist |
| Bridled Arches Moth | *Lacinipolia lorea* | NL | iNaturalist |
| Hemlock Looper Moth | *Lambdina fiscellaria* | NL | iNaturalist |
| Northern Pine Sphinx | *Lapara bombycoides* | NL | iNaturalist |
| Light-ribboned Wave | *Leptostales ferruminaria* | NL | iNaturalist |
| Northern Pearly-eye | *Lethe anthedon* | NL | iNaturalist |
| Eyed Brown | *Lethe eurydice* | NL | iNaturalist |
| Unarmed Wainscot | *Leucania inermis* | NL | iNaturalist |
| White Satin Moth | *Leucoma salicis* | NL | iNaturalist |
| Green Leuconycta Moth | *Leuconycta diphteroides* | NL | iNaturalist |
| Viceroy | *Limenitis archippus* | NL | iNaturalist |
| Red-spotted Admiral | *Limenitis arthemis* | NL | iNaturalist |
| American White Admiral | *Limenitis arthemis arthemis* | NL | iNaturalist |
| Double-lined Prominent | *Lochmaeus bilineata* | NL | iNaturalist |
| White Spring Moth | *Lomographa vestaliata* | NL | iNaturalist |
| Hobomok Skipper | *Lon hobomok* | NL | iNaturalist |
| Hickory Tussock Moth | *Lophocampa caryae* | NL | iNaturalist |
| Spotted Tussock Moth | *Lophocampa maculata* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Merrick's Pyralid Moth | *Loxostegopsis merrickalis* | NL | iNaturalist |
| Small Copper | *Lycaena phlaeas* | NL | iNaturalist |
| Black-and-yellow Lichen Moth | *Lycomorpha pholus* | NL | iNaturalist |
| LD Moth | *Lymantria dispar* | NL | iNaturalist |
| Common Angle | *Macaria aemulataria* | NL | iNaturalist |
| Red-headed Inchworm Moth | *Macaria bisignata* | NL | iNaturalist |
| Minor Angle | *Macaria minorata* | NL | iNaturalist |
| White Pine Angle | *Macaria pinistrobata* | NL | iNaturalist |
| Lesser Maple Spanworm Moth | *Macaria pustularia* | NL | iNaturalist |
| Mottled Prominent | *Macrurocampa marthesia* | NL | iNaturalist |
| Eastern Tent Caterpillar Moth | *Malacosoma americana* | NL | iNaturalist |
| Forest Tent Caterpillar Moth | *Malacosoma disstria* | NL | iNaturalist |
| Black-dotted Glyph | *Maliattha synochitis* | NL | iNaturalist |
| Dark Marathyssa Moth | *Marathyssa inficita* | NL | iNaturalist |
| Little Wood Satyr | *Megisto cymela* | NL | iNaturalist |
| Hitched Arches | *Melanchra adjuncta* | NL | iNaturalist |
| Zebra Caterpillar Moth | *Melanchra picta* | NL | iNaturalist |
| Pale Metarranthis Moth | *Metarranthis indeclinata* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Minor Grass-veneer | *Microcrambus minor* | NL | iNaturalist |
| White-dotted Prominent | *Nadata gibbosa* | NL | iNaturalist |
| Large Yellow Underwing | *Noctua pronuba* | NL | iNaturalist |
| Mourning Cloak | *Nymphalis antiopa* | NL | iNaturalist |
| Compton Tortoiseshell | *Nymphalis l-album* | NL | iNaturalist |
| Astronomer Moth | *Olethreutes astrologana* | NL | iNaturalist |
| | *Olethreutes auricapitana* | NL | iNaturalist |
| Banded Olethreutes Moth | *Olethreutes fasciatana* | NL | iNaturalist |
| Woolly-backed Moth | *Olethreutes furfuranum* | NL | iNaturalist |
| | *Olethreutes quadrifidum* | NL | iNaturalist |
| White-streaked Prominent | *Oligocentria lignicolor* | NL | iNaturalist |
| White-marked Tussock Moth | *Orgyia leucostigma* | NL | iNaturalist |
| Cynical Quaker | *Orthodes cynica* | NL | iNaturalist |
| Splendid Palpita Moth | *Palpita magniferalis* | NL | iNaturalist |
| Faint-spotted Palthis Moth | *Palthis asopialis* | NL | iNaturalist |
| Three-lined Leafroller Moth | *Pandemis limitata* | NL | iNaturalist |
| Red-lined Panopoda Moth | *Panopoda rufimargo* | NL | iNaturalist |
| Eastern Panthea Moth | *Panthea furcilla* | NL | iNaturalist |
| Blinded Sphinx | *Paonias excaecata* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Small-eyed Sphinx | *Paonias myops* | NL | iNaturalist |
| Canadian Tiger Swallowtail | *Papilio canadensis* | NL | iNaturalist |
| Eastern Giant Swallowtail | *Papilio cresphontes* | NL | iNaturalist |
| Black Swallowtail | *Papilio polyxenes* | NL | iNaturalist |
| Spicebush Swallowtail | *Papilio troilus* | NL | iNaturalist |
| Maple Leafcutter Moth | *Paraclemensia acerifoliella* | NL | iNaturalist |
| Chestnut-marked Pondweed Moth | *Parapoynx badiusalis* | NL | iNaturalist |
| Obscure Pondweed Moth | *Parapoynx obscuralis* | NL | iNaturalist |
| Green Pug | *Pasiphila rectangulata* | NL | iNaturalist |
| Titian Peale's Moth | *Perispasta caeculalis* | NL | iNaturalist |
| Morrison's Pero Moth | *Pero morrisonaria* | NL | iNaturalist |
| American Oak Beauty | *Phaeoura quernaria* | NL | iNaturalist |
| Dark-banded Owlet | *Phalaenophana pyramusalis* | NL | iNaturalist |
| Small Phigalia Moth | *Phigalia strigataria* | NL | iNaturalist |
| Half-wing Moth | *Phigalia titea* | NL | iNaturalist |
| Pearl Crescent | *Phyciodes tharos* | NL | iNaturalist |
| | *Phyllocnistis vitifoliella* | NL | iNaturalist |
| American Lappet Moth | *Phyllodesma americana* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Basswood Miner Moth | *Phyllonorycter lucetiella* | NL | iNaturalist |
| Beech Midget | *Phyllonorycter maestingella* | NL | iNaturalist |
| Mustard White | *Pieris oleracea* | NL | iNaturalist |
| Cabbage White | *Pieris rapae* | NL | iNaturalist |
| Tufted Apple Bud Moth | *Platynota idaeusalis* | NL | iNaturalist |
| Common Tan Wave | *Pleuroprucha insulsaria* | NL | iNaturalist |
| Putnam's Looper Moth | *Plusia putnami* | NL | iNaturalist |
| Long Dash | *Polites mystic* | NL | iNaturalist |
| Peck's Skipper | *Polites peckius* | NL | iNaturalist |
| Tawny-edged Skipper | *Polites themistocles* | NL | iNaturalist |
| Eastern Comma | *Polygonia comma* | NL | iNaturalist |
| Question Mark | *Polygonia interrogationis* | NL | iNaturalist |
| Small Bird-dropping Moth | *Ponometia erastrioides* | NL | iNaturalist |
| Carpenterworm Moth | *Prionoxystus robiniae* | NL | iNaturalist |
| Friendly Probole Moth | *Probole amicaria* | NL | iNaturalist |
| Pale Glyph | *Protodeltote albidula* | NL | iNaturalist |
| Large Mossy Glyph | *Protodeltote muscosula* | NL | iNaturalist |
| Pink-barred Pseudeustrotia Moth | *Pseudeustrotia carneola* | NL | iNaturalist |
| Poplar Leafroller Moth | *Pseudosciaphila duplex* | NL | iNaturalist |
| Dotted Leaftier Moth | *Psilocorsis reflexella* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Isabella Tiger Moth | *Pyrrharctia isabella* | NL | iNaturalist |
| Spotted Grass Moth | *Rivula propinqualis* | NL | iNaturalist |
| Hickory Hairstreak | *Satyrium caryaevorus* | NL | iNaturalist |
| Morning-glory Prominent | *Schizura ipomaeae* | NL | iNaturalist |
| Unicorn Prominent | *Schizura unicornis* | NL | iNaturalist |
| Many-spotted Scoparia Moth | *Scoparia basalis* | NL | iNaturalist |
| Dark Brown Scoparia Moth | *Scoparia penumbralis* | NL | iNaturalist |
| Large Lace-border Moth | *Scopula limboundata* | NL | iNaturalist |
| Carrot Seed Moth | *Sitochroa palealis* | NL | iNaturalist |
| Six-spotted Gray | *Spargaloma sexpunctata* | NL | iNaturalist |
| Distinct Sparganothis Moth | *Sparganothis distincta* | NL | iNaturalist |
| Mosaic Sparganothis Moth | *Sparganothis xanthoides* | NL | iNaturalist |
| Aphrodite Fritillary | *Speyeria aphrodite* | NL | iNaturalist |
| Great Spangled Fritillary | *Speyeria cybele* | NL | iNaturalist |
| Great Ash Sphinx | *Sphinx chersis* | NL | iNaturalist |
| Laurel Sphinx | *Sphinx kalmiae* | NL | iNaturalist |
| Virginian Tiger Moth | *Spilosoma virginica* | NL | iNaturalist |
| | *Stigmella prunifoliella* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| | *Symmerista* | NL | iNaturalist |
| Maple Callus Borer Moth | *Synanthedon acerni* | NL | iNaturalist |
| Triangle-marked Twirler Moth | *Taygete attributella* | NL | iNaturalist |
| Y-backed Telphusa | *Telphusa longifasciella* | NL | iNaturalist |
| White Slant-line | *Tetracis cachexiata* | NL | iNaturalist |
| Yellow Slant-line | *Tetracis crocallata* | NL | iNaturalist |
| Bronze Copper | *Tharsalea hyllus* | NL | iNaturalist |
| Northern Cloudywing | *Thorybes pylades* | NL | iNaturalist |
| Essex Skipper | *Thymelicus lineola* | NL | iNaturalist |
| Birch Conch | *Thyraylia nana* | NL | iNaturalist |
| Large Tolype Moth | *Tolype velleda* | NL | iNaturalist |
| Early Button Slug Moth | *Tortricidia testacea* | NL | iNaturalist |
| White-striped Black | *Trichodezia albovittata* | NL | iNaturalist |
| Snowy Urola Moth | *Urola nivalis* | NL | iNaturalist |
| Red Admiral | *Vanessa atalanta* | NL | iNaturalist |
| Painted Lady | *Vanessa cardui* | NL | iNaturalist |
| American Lady | *Vanessa virginiensis* | NL | iNaturalist |
| Dark-barred Twin-spot Carpet | *Xanthorhoe ferrugata* | NL | iNaturalist |
| Crocus Geometer Moths | *Xanthotype* | NL | iNaturalist |
| | *Xestia* | NL | iNaturalist |
| Greater Black-letter Dart | *Xestia dolosa* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Brown-spotted Zale Moth | *Zale helata* | NL | iNaturalist |
| Grayish Fan-foot | *Zanclognatha pedipilalis* | NL | iNaturalist |
| Caddisflies | | | |
| | *Nectopsyche exquisita* | NL | iNaturalist |
| Cockroaches and Termites | | | |
| Pennsylvania Wood Cockroach | *Parcoblatta pennsylvanica* | NL | iNaturalist |
| Daddy Longlegs | | | |
| European Harvestman | *Phalangium opilio* | NL | iNaturalist |
| Dragonflies and Damselflies | | | |
| Canada Darner | *Aeshna canadensis* | NL | iNaturalist |
| Lance-tipped Darner | *Aeshna constricta* | NL | iNaturalist |
| Shadow Darner | *Aeshna umbrosa* | NL | iNaturalist |
| Common Green Darner | *Anax junius* | NL | iNaturalist |
| Lilypad Clubtail | *Arigomphus furcifer* | NL | iNaturalist |
| Springtime Darner | *Basiaeschna janata* | NL | iNaturalist |
| Halloween Pennant | *Celithemis eponina* | NL | iNaturalist |
| Aurora Damsel | *Chromagrion conditum* | NL | iNaturalist |
| Stream Cruiser | *Didymops transversa* | NL | iNaturalist |
| Racket-tailed Emerald | *Dorocordulia libera* | NL | iNaturalist |
| Familiar Bluet | *Enallagma civile* | NL | iNaturalist |
| Stream Bluet | *Enallagma exsulans* | NL | iNaturalist |
| Orange Bluet | *Enallagma signatum* | NL | iNaturalist |
| Swamp Darner | *Epiaeschna heros* | NL | iNaturalist |
| Beaverpond Baskettail | *Epitheca canis* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Common Baskettail | *Epitheca cynosura* | NL | iNaturalist |
| Prince Baskettail | *Epitheca princeps* | NL | iNaturalist |
| Spiny Baskettail | *Epitheca spinigera* | NL | iNaturalist |
| Eastern Pondhawk | *Erythemis simplicicollis* | NL | iNaturalist |
| Harlequin Darner | *Gomphaeschna furcillata* | NL | iNaturalist |
| Dragonhunter | *Hagenius brevistylus* | NL | iNaturalist |
| Fragile Forktail | *Ischnura posita* | NL | iNaturalist |
| Eastern Forktail | *Ischnura verticalis* | NL | iNaturalist |
| Chalk-fronted Corporal | *Ladona julia* | NL | iNaturalist |
| Spotted Spreadwing | *Lestes congener* | NL | iNaturalist |
| Slender Spreadwing | *Lestes rectangularis* | NL | iNaturalist |
| Lyre-tipped Spreadwing | *Lestes unguiculatus* | NL | Nature Explorer |
| Swamp Spreadwing | *Lestes vigilax* | NL | iNaturalist |
| Hudsonian Whiteface | *Leucorrhinia hudsonica* | NL | iNaturalist |
| Dot-tailed Whiteface | *Leucorrhinia intacta* | NL | iNaturalist |
| Slaty Skimmer | *Libellula incesta* | NL | iNaturalist |
| Widow Skimmer | *Libellula luctuosa* | NL | iNaturalist |
| Twelve-spotted Skimmer | *Libellula pulchella* | NL | iNaturalist |
| Four-spotted Skimmer | *Libellula quadrimaculata* | NL | iNaturalist |
| Painted Skimmer | *Libellula semifasciata* | NL | iNaturalist |
| Swift River Cruiser | *Macromia illinoiensis* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Elfin Skimmer | *Nannothemis bella* | NL | iNaturalist |
| Blue Dasher | *Pachydiplax longipennis* | NL | iNaturalist |
| Eastern Amberwing | *Perithemis tenera* | NL | iNaturalist |
| Common Whitetail | *Plathemis lydia* | NL | iNaturalist |
| Meadowhawks | *Sympetrum* | NL | iNaturalist |
| Autumn Meadowhawk | *Sympetrum vicinum* | NL | iNaturalist |
| Flies | | | |
| Woodland Pool Mosquito | *Aedes canadensis* | NL | iNaturalist |
| Oblique Streaktail | *Allograpta obliqua* | NL | iNaturalist |
| Carbonifera goldenrod gall midge | *Asteromyia carbonifera* | NL | iNaturalist |
| Greater Bee Fly | *Bombylius major* | NL | iNaturalist |
| Pygmy Bee Fly | *Bombylius pygmaeus* | NL | iNaturalist |
| | *Calycomyza flavinotum* | NL | iNaturalist |
| Ornate Snipe Fly | *Chrysopilus ornatus* | NL | iNaturalist |
| | *Chrysops geminatus* | NL | iNaturalist |
| Bathroom Moth Fly | *Clogmia albipunctata* | NL | iNaturalist |
| | *Condylostylus patibulatus* | NL | iNaturalist |
| Cattail Mosquito | *Coquillettidia perturbans* | NL | iNaturalist |
| | *Dioctria hyalipennis* | NL | iNaturalist |
| European Drone Fly | *Eristalis arbustorum* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Black-shouldered Drone Fly | *Eristalis dimidiata* | NL | iNaturalist |
| Common Drone Fly | *Eristalis tenax* | NL | iNaturalist |
| Tomato Bristle Fly | *Hystricia abrupta* | NL | iNaturalist |
| | *Laphria flavicollis* | NL | iNaturalist |
| Bumble Bee Mimic Robber Fly | *Laphria thoracica* | NL | iNaturalist |
| Milkweed Leaf-miner Fly | *Liriomyza asclepiadis* | NL | iNaturalist |
| | *Liriomyza carphephori* | NL | iNaturalist |
| Common European Greenbottle Fly | *Lucilia sericata* | NL | iNaturalist |
| Hairy-eyed Bee-mimic Fly | *Mallota posticata* | NL | iNaturalist |
| Narcissus Bulb Fly | *Merodon equestris* | NL | iNaturalist |
| Beautiful Patterneye | *Orthonevra pulchella* | NL | iNaturalist |
| Dusky Bog Fly | *Parhelophilus rex* | NL | iNaturalist |
| | *Phytomyza loewii* | NL | iNaturalist |
| | *Phytomyza minuscula group* | NL | iNaturalist |
| Oak Leaf Gall Midge | *Polystepha pilulae* | NL | iNaturalist |
| Dark Ricefield Mosquito | *Psorophora columbiae* | NL | iNaturalist |
| Common Snipe Fly | *Rhagio mystaceus* | NL | iNaturalist |
| Black Horse Fly | *Tabanus atratus* | NL | iNaturalist |
| Antlered Crane Fly | *Tanyptera dorsalis* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Eastern Calligrapher | *Toxomerus geminatus* | NL | iNaturalist |
| Margined Calligrapher | *Toxomerus marginatus* | NL | iNaturalist |
| Swift Feather-legged Fly | *Trichopoda pennipes* | NL | iNaturalist |
| Four-barred Knapweed Gall Fly | *Urophora quadrifasciata* | NL | iNaturalist |
| Tiger Bee Fly | *Xenox tigrinus* | NL | iNaturalist |
| Woodland Pool Mosquito | *Aedes canadensis* | NL | iNaturalist |
| Grasshoppers, Locusts, and Crickets | | | |
| Davis's Shieldback | *Atlanticus davisi* | NL | iNaturalist |
| Wingless Mountain Grasshopper | *Booneacris glacialis* | NL | iNaturalist |
| Sprinkled Locust | *Chloealtis conspersa* | NL | iNaturalist |
| Green-striped Grasshopper | *Chortophaga viridifasciata* | NL | iNaturalist |
| Northern Green-striped Grasshopper | *Chortophaga viridifasciata viridifasciata* | NL | iNaturalist |
| Slender Meadow Katydid | *Conocephalus fasciatus* | NL | iNaturalist |
| Carolina Grasshopper | *Dissosteira carolina* | NL | iNaturalist |
| Fall Field Cricket | *Gryllus pennsylvanicus* | NL | iNaturalist |
| Spring Field Cricket | *Gryllus veletis* | NL | iNaturalist |
| Two-striped Grasshopper | *Melanoplus bivittatus* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Northern Spur-throat Grasshopper | *Melanoplus borealis* | NL | iNaturalist |
| Huckleberry Spur-throat Grasshopper | *Melanoplus fasciatus* | NL | iNaturalist |
| Pine-tree Spur-throat Grasshopper | *Melanoplus punctulatus* | NL | iNaturalist |
| Pine Tree Cricket | *Oecanthus pini* | NL | iNaturalist |
| Marsh meadow grasshopper | *Pseudochorthippus curtipennis* | NL | iNaturalist |
| Roesel's Bush-cricket | *Roeseliana roeselii* | NL | iNaturalist |
| Boll's Grasshopper | *Spharagemon bolli* | NL | iNaturalist |
| Lacewings | | | |
| Black-horned Green Lacewing | *Chrysopa nigricornis* | NL | iNaturalist |
| | *Chrysopa oculata* | NL | iNaturalist |
| Mantises | | | |
| European Mantis | *Mantis religiosa* | NL | iNaturalist |
| Mayflies | | | |
| Giant Mayfly | *Hexagenia limbata* | NL | iNaturalist |
| Mites | | | |
| Poison Ivy Leaf Mite | *Aculops rhois* | NL | iNaturalist |
| Sawflies, Wasps, Bees, and Ants | | | |
| | *Acrotaphus wiltii* | NL | iNaturalist |
| Spongy Oak Apple Gall Wasp | *Amphibolips confluenta* | NL | iNaturalist |
| Oak Apple Gall Wasp | *Amphibolips cookii* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Translucent Oak Gall Wasp | *Amphibolips nubilipennis* | NL | iNaturalist |
| Acorn Plum Gall Wasp | *Amphibolips quercusjuglans* | NL | iNaturalist |
| Lobed Mason Wasp | *Ancistrocerus antilope* | NL | iNaturalist |
| Spinola's Mason Wasp | *Ancistrocerus spinolae* | NL | iNaturalist |
| Clark's Mining Bee | *Andrena clarkella* | NL | iNaturalist |
| Hairy-banded Mining Bee | *Andrena hirticincta* | NL | iNaturalist |
| Oblong Woolcarder Bee | *Anthidium oblongatum* | NL | iNaturalist |
| Orange-tipped Wood-digger Bee | *Anthophora terminalis* | NL | iNaturalist |
| Queen Ant Kidnapper | *Aphilanthops frigidus* | NL | iNaturalist |
| Western Honey Bee | *Apis mellifera* | NL | iNaturalist |
| Pure Green-Sweat bee | *Augochlora pura* | NL | iNaturalist |
| Golden Sweat Bee | *Augochlorella aurata* | NL | iNaturalist |
| Metallic Epauletted-Sweat bee | *Augochloropsis metallica* | NL | iNaturalist |
| Four-banded Stink Bug Wasp | *Bicyrtes quadrifasciatus* | NL | iNaturalist |
| Rusty-patched Bumble Bee | *Bombus affinis* | SGCN-HP | iNaturalist |
| Black-and-gold Bumble Bee | *Bombus auricomus* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Northern Amber Bumble Bee | *Bombus borealis* | SGCN-HP | iNaturalist |
| Lemon Cuckoo-Bumble bee | *Bombus citrinus* | NL | iNaturalist |
| Golden Northern Bumble Bee | *Bombus fervidus* | SGCN-HP | iNaturalist |
| Brown-belted Bumble Bee | *Bombus griseocollis* | NL | iNaturalist |
| Common Eastern Bumble Bee | *Bombus impatiens* | NL | iNaturalist |
| American Bumble Bee | *Bombus pensylvanicus* | SGCN-HP | iNaturalist |
| Tricolored Bumble Bee | *Bombus ternarius* | NL | iNaturalist |
| Yellow-banded Bumble Bee | *Bombus terricola* | SGCN-HP | iNaturalist |
| Half-black Bumble Bee | *Bombus vagans* | NL | iNaturalist |
| Hairless Rover Ant | *Brachymyrmex depilis* | NL | iNaturalist |
| New York Carpenter Ant | *Camponotus novaeboracensis* | NL | iNaturalist |
| Eastern Black Carpenter Ant | *Camponotus pennsylvanicus* | NL | iNaturalist |
| Typical Weevil Wasps and Allies | *Cerceris* | NL | iNaturalist |
| Smoky-winged Beetle Bandit Wasp | *Cerceris fumipennis* | NL | iNaturalist |
| Nearctic Blue Mud-dauber Wasp | *Chalybion californicum* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Steel-blue Cricket-hunter Wasp | *Chlorion aerarium* | NL | iNaturalist |
| | *Chrysis cessata* | NL | iNaturalist |
| Cherry Ant | *Crematogaster cerasi* | NL | iNaturalist |
| Feather-legged Scoliid Wasp | *Dielis plumipes* | NL | iNaturalist |
| Mossy Rose Gall Wasp | *Diplolepis rosae* | NL | iNaturalist |
| Common Aerial Yellowjacket | *Dolichovespula arenaria* | NL | iNaturalist |
| Bald-faced Hornet | *Dolichovespula maculata* | NL | iNaturalist |
| Fraternal Potter Wasp | *Eumenes fraternus* | NL | iNaturalist |
| Uncertain Field Ant | *Formica incerta* | NL | iNaturalist |
| Pale Field Ant | *Formica pallidefulva* | NL | iNaturalist |
| Blueberry Digger Bee | *Habropoda laboriosa* | NL | iNaturalist |
| Confusing Furrow Bee | *Halictus confusus* | NL | iNaturalist |
| Ligated Furrow Bee | *Halictus ligatus* | NL | iNaturalist |
| Orange-legged Furrow Bee | *Halictus rubicundus* | NL | iNaturalist |
| Produced Small-Mason | *Hoplitis producta* | NL | iNaturalist |
| | *Lasioglossum vierecki* | NL | iNaturalist |
| Shaded Fuzzy Ant | *Lasius aphidicola* | NL | iNaturalist |
| Smaller Yellow Ant | *Lasius claviger* | NL | iNaturalist |
| New World Fuzzy Ant | *Lasius nearcticus* | NL | iNaturalist |
| | *Leucospis affinis* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Broad-handed Leafcutter | *Megachile latimanus* | NL | iNaturalist |
| Black Giant Ichneumonid Wasp | *Megarhyssa atrata* | NL | iNaturalist |
| Long-tailed Giant Ichneumonid Wasp | *Megarhyssa macrurus* | NL | iNaturalist |
| Pickerelweed Long-horned Bee | *Melissodes apicatus* | NL | iNaturalist |
| Drury's Long-horned Bee | *Melissodes druriellus* | NL | iNaturalist |
| | *Microbembex monodonta* | NL | iNaturalist |
| Bufflehead Mason Bee | *Osmia bucephala* | NL | iNaturalist |
| American Pelecinid Wasp | *Pelecinus polyturator* | NL | iNaturalist |
| Flat-collared Beewolf | *Philanthus ventilabris* | NL | iNaturalist |
| European Paper Wasp | *Polistes dominula* | NL | iNaturalist |
| Dark Paper Wasp | *Polistes fuscatus* | NL | iNaturalist |
| | *Pseudomethoca frigida* | NL | iNaturalist |
| Yellow-legged Mud-dauber Wasp | *Sceliphron caementarium* | NL | iNaturalist |
| Eastern Cicada-killer Wasp | *Sphecius speciosus* | NL | iNaturalist |
| Great Black Digger Wasp | *Sphex pensylvanicus* | NL | iNaturalist |
| Vampire Ant | *Stigmatomma pallipes* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Immigrant Pavement Ant | *Tetramorium immigrans* | NL | iNaturalist |
| | *Timulla vagans* | NL | iNaturalist |
| Pigeon Horntail | *Tremex columba* | NL | iNaturalist |
| European Hornet | *Vespa crabro* | NL | iNaturalist |
| Downy Yellowjacket | *Vespula flavopilosa* | NL | iNaturalist |
| German Yellowjacket | *Vespula germanica* | NL | iNaturalist |
| Eastern Yellowjacket | *Vespula maculifrons* | NL | iNaturalist |
| Widow Yellowjacket | *Vespula vidua* | NL | iNaturalist |
| Eastern Carpenter Bee | *Xylocopa virginica* | NL | iNaturalist |
| Snails and Slugs | | | |
| Northern Walkingstick | *Diapheromera femorata* | NL | iNaturalist |
| Hedgehog Slug | *Arion intermedius* | NL | iNaturalist |
| Western Dusky Slug | *Arion subfuscus* | NL | iNaturalist |
| Brown-lipped Snail | *Cepaea nemoralis* | NL | iNaturalist |
| Leopard Slug | *Limax maximus* | NL | iNaturalist |
| Spiders | | | |
| Grass Spiders | *Agelenopsis* | NL | iNaturalist |
| Cross Orbweaver | *Araneus diadematus* | NL | iNaturalist |
| Marbled Orbweaver | *Araneus marmoreus* | NL | iNaturalist |
| Shamrock Orbweaver | *Araneus trifolium* | NL | iNaturalist |
| Six-spotted Orbweaver | *Araniella displicata* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Yellow Garden Spider | *Argiope aurantia* | NL | iNaturalist |
| Banded Garden Spider | *Argiope trifasciata* | NL | iNaturalist |
| Asiatic Wall Jumping Spider | *Attulus fasciger* | NL | iNaturalist |
| Dark Fishing Spider | *Dolomedes tenebrosus* | NL | iNaturalist |
| Six-spotted Fishing Spider | *Dolomedes triton* | NL | iNaturalist |
| Common candy-striped spider | *Enoplognatha ovata* | NL | iNaturalist |
| Hoy's Jumping Spider | *Evarcha hoyi* | NL | iNaturalist |
| Boreal Paradise Spider | *Habronattus borealis* | NL | iNaturalist |
| Maddison's Jumping Spider | *Habronattus calcaratus maddisoni* | NL | iNaturalist |
| | *Habronattus decorus* | NL | iNaturalist |
| Eastern Parson Spider | *Herpyllus ecclesiasticus* | NL | iNaturalist |
| Furrow Orbweaver | *Larinioides cornutus* | NL | iNaturalist |
| Grey Cross Spider | *Larinioides sclopetarius* | NL | iNaturalist |
| Tuft-legged Orbweaver | *Mangora placida* | NL | iNaturalist |
| Eastern Cave Long-jawed Spider | *Meta ovalis* | NL | iNaturalist |
| Goldenrod Crab Spider | *Misumena vatia* | NL | iNaturalist |
| flea jumping spider | *Naphrys pulex* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Common White-cheeked Jumping Spider | *Pelegrina proterva* | NL | iNaturalist |
| Bold Jumping Spider | *Phidippus audax* | NL | iNaturalist |
| Brilliant Jumping Spider | *Phidippus clarus* | NL | iNaturalist |
| Marbled Purple Jumping Spider | *Phidippus purpuratus* | NL | iNaturalist |
| American Nursery Web Spider | *Pisaurina mira* | NL | iNaturalist |
| Zebra Jumping Spider | *Salticus scenicus* | NL | iNaturalist |
| Black Purseweb Spider | *Sphodros niger* | NL | iNaturalist |
| False Widow Spiders | *Steatoda* | NL | iNaturalist |
| Triangulate Combfoot | *Steatoda triangulosa* | NL | iNaturalist |
| Broad-Faced Sac Spider | *Trachelas tranquillus* | NL | iNaturalist |
| Hart's Jumping Spider | *Tutelina harti* | NL | iNaturalist |
| Featherlegged Orbweaver | *Uloborus glomosus* | NL | iNaturalist |
| Ticks | | | |
| American Dog Tick | *Dermacentor variabilis* | NL | iNaturalist |
| Eastern Black-legged Tick | *Ixodes scapularis* | NL | iNaturalist |
| True Bugs | | | |
| Two-striped Planthopper | *Acanalonia bivittata* | NL | iNaturalist |
| | *Acanthocephala terminalis* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| | *Atymna querci* | NL | iNaturalist |
| Chinch Bug | *Blissus leucopterus* | NL | iNaturalist |
| Eastern Boxelder Bug | *Boisea trivittata* | NL | iNaturalist |
| Green Stink Bug | *Chinavia hilaris* | NL | iNaturalist |
| Dogwood Spittlebug | *Clastoptera proteus* | NL | iNaturalist |
| Saddled Leafhopper | *Colladonus clitellarius* | NL | iNaturalist |
| Twice-stabbed Stink Bug | *Cosmopepla lintneriana* | NL | iNaturalist |
| Grape Phylloxera | *Daktulosphaira vitifoliae* | NL | iNaturalist |
| Widefooted Treehopper | *Enchenopa latipes* | NL | iNaturalist |
| Keeled Treehopper | *Entylia carinata* | NL | iNaturalist |
| Big-eyed Toad Bug | *Gelastocoris oculatus* | NL | iNaturalist |
| Red-banded Leafhopper | *Graphocephala coccinea* | NL | iNaturalist |
| Brown Marmorated Stink Bug | *Halyomorpha halys* | NL | iNaturalist |
| Coppery Leafhopper | *Jikradia olitoria* | NL | iNaturalist |
| Western Conifer Seed Bug | *Leptoglossus occidentalis* | NL | iNaturalist |
| Fringetree Lace Bug | *Leptoypha mutica* | NL | iNaturalist |
| American Giant Water Bug | *Lethocerus americanus* | NL | iNaturalist |
| Small Milkweed Bug | *Lygaeus kalmii* | NL | iNaturalist |
| Eastern Small Milkweed Bug | *Lygaeus kalmii angustomarginatus* | NL | iNaturalist |

**Table 11.B-1 Wildlife Species Potentially Present within the Study Area**

| Common Name | Scientific Name | Conservation Status | Source[1] |
|---|---|---|---|
| Sumac Gall Aphid | *Melaphis rhois* | NL | iNaturalist |
| | *Merocoris distinctus* | NL | iNaturalist |
| Citrus Flatid Planthopper | *Metcalfa pruinosa* | NL | iNaturalist |
| | *Mormidea lugens* | NL | iNaturalist |
| | *Nabis roseipennis* | NL | iNaturalist |
| Northern Dog-day Cicada | *Neotibicen canicularis* | NL | iNaturalist |
| Say's Cicada | *Okanagana rimosa* | NL | iNaturalist |
| Large Milkweed Bug | *Oncopeltus fasciatus* | NL | iNaturalist |
| Meadow spittlebug | *Philaenus spumarius* | NL | iNaturalist |
| Four-lined Plant Bug | *Poecilocapsus lineatus* | NL | iNaturalist |
| | *Ranatra* | NL | iNaturalist |
| Masked Hunter | *Reduvius personatus* | NL | iNaturalist |
| Two-spotted Grass Bug | *Stenotus binotatus* | NL | iNaturalist |
| | *Stictocephala lutea* | NL | iNaturalist |
| Anchor Stink Bug | *Stiretrus anchorago* | NL | iNaturalist |
| Pale Green Assassin Bug | *Zelus luridus* | NL | iNaturalist |

Sources: Ueda 2021; IUCN 2021; NYSDEC 2019, 2020a, 2020b, 2020c; USFWS 2020

Notes:

[1] Potential presence for mammals identified in *The Checklist of the Amphibians, Reptiles, Birds and Mammals of New York, Including Their Protective Status* (NYSDEC 2019) was determined through species range maps provided by IUCN.

Conservation Status Codes:

FT = Federally Threatened Species

NL = Not Listed

SE = NYS Endangered Species

SGCN = NYS Species of Greatest Conservation Need

SGCN-HP = NYS Species of Greatest Conservation Need – High Priority

SSC = NYS Species of Special Concern

ST = NYS Threatened Species