

*Threatened and Endangered Species
Habitat Suitability Assessment Report*

Myers Run
Myers Corners Road
Town of Wappinger
Dutchess County, NY

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Prepared by:

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1.0 INTRODUCTION

The Applicant is proposing a 12 lot residential subdivision on two parcels totaling 22.9 acres located on Myers Corners Road near the intersection with Taryl Court in the Town of Wappinger, Dutchess County, New York.

A Habitat Suitability Assessment was completed for two listed species Indiana bat (*Myotis sodalis*) and bog turtle (*Glyptemys muhlenbergii*) as part of the environmental review for the project and the US Fish and Wildlife Service species list for the site and New York State Department of Environmental Conservation (NYSDEC) Resource Mapper (*Attachment 1 and 2*). A field assessment was completed on September 3, 2020 to determine whether suitable habitat for these species is present in the project area on the site.

The following habitat occurs on the site:

HABITAT COVER TYPES and IMPACTS

		ACRES IDENTIFIED (APPROXIMATE)	PROPOSED IMPACTS (PHYSICAL)
1	Upland Meadow	3	3
2	Tributary/Wetland	2	0
3	Upland Forest	17.9	14

The project area contains upland hardwood forest and upland meadow. The watercourse/tributary and wetland area will not be impacted. Trees in the upland forest are typically only 2-3 inches dbh in size and are black cherry, ash, and birch with areas of larger 12+ inch dbh oaks, maples, and tulip trees.

2.0 HABITAT SUITABILITY ASSESSMENT/CONCLUSION

2.1 Indiana bats

The Indiana bat typically hibernates in caves/mines in the winter and roosts under bark or in tree crevices in the spring, summer, and fall. Suitable potential summer roosting habitat is characterized by trees (dead, dying, or alive) or snags with exfoliating or defoliating bark, or containing cracks or crevices that could potentially be used by Indiana bats as a roost. The minimum diameter of roost trees observed to date is 2.5 inches for males and 4.3 inches for females. However, maternity colonies generally use trees greater than or equal to 9 inches dbh. Overall, roost tree structure appears to be more important to Indiana bats than a particular tree species or habitat type. Females appear to be more habitat specific than males presumably because of the warmer temperature requirements associated with gestation and rearing of young. As a result, they are generally found at lower elevations than males may be found. Roosts are warmed by direct exposure to solar radiation, thus trees exposed to extended periods of direct sunlight are preferred over those in shaded areas. However, shaded roosts may be preferred in very hot conditions. As larger trees afford a greater thermal mass for heat retention, they appear to be preferred over smaller trees.

Streams associated with floodplain forests, and impounded water bodies (ponds, wetlands, reservoirs, etc.) where abundant supplies of flying insects are likely found provide preferred foraging habitat for Indiana bats, some of which may fly up to 2-5 miles from upland roosts on a regular basis. Indiana bats also forage within the canopy of upland forests, over clearings with early successional vegetation (e.g., old fields), along the borders of croplands, along wooded fencerows, and over farm ponds in pastures. While Indiana bats appear to forage in a wide variety of habitats, they seem to tend to stay fairly close to tree cover.

Conclusion - The proposed project will impact 11 acres of woods and 3 acres of upland meadow. Trees in the upland forest are typically only 2-3 inches dbh in size and are black cherry, ash, and birch with areas of larger 12+ inch dbh oaks, maples, and tulip trees and should not provide roosting habitat for bats since there was no exfoliating bark, crevices, or holes observed in the trees on the site. No conservation measures are proposed since there is no likely impact to this species.

2.2 Bog turtle

According to the U.S. Fish and Wildlife Service, in the 2001 Bog Turtle (*Clemmys muhlenbergii*), Northern Population Recovery Plan. Hadley, Massachusetts. 103 pp. last revised on April 13, 2006 bog turtle habitat is recognized by three criteria:

1. **Suitable hydrology.** Bog turtle wetlands are typically spring-fed with shallow surface water or saturated soils present year-round, although in summer the wet area(s) may be restricted to near spring head(s). Typically these wetlands are interspersed with dry and wet pockets. There is often subsurface flow. In addition, shallow rivulets (less than 4 inches deep) or pseudo-rivulets are often present.

2. Suitable soils. Usually a bottom substrate of permanently saturated organic or mineral soils. These are often soft, mucky-like soils (this does not refer to a technical soil type); you will usually sink to your ankles (3-5 inches) or deeper in muck, although in degraded wetlands or summers of dry years this may be limited to areas near spring heads or drainage ditches. In some portions of the species' range, the soft substrate consists of scattered pockets of peat instead of muck.

3. Suitable vegetation. Dominant vegetation of low grasses and sedges (in emergent wetlands), often with a scrub-shrub wetland component. Common emergent vegetation includes, but is not limited to: tussock sedge (*Carex stricta*), soft rush (*Juncus effusus*), rice cut grass (*Leersia oryzoides*), sensitive fern (*Onoclea sensibilis*), tearthumbs (*Polygonum spp.*), jewelweeds (*Impatiens spp.*), arrowheads (*Sagittaria spp.*), skunk cabbage (*Symplocarpus foetidus*), panic grasses (*Panicum spp.*), other sedges (*Carex spp.*), spike rushes (*Eleocharis spp.*), grass-of-Parnassus (*Parnassia glauca*), shrubby cinquefoil (*Dasiphora fruticosa*), sweet-flag (*Acorus calamus*), and in disturbed sites, reed canary grass (*Phalaris arundinacea*) or purple loosestrife (*Lythrum salicaria*). Common scrub-shrub species include alder (*Alnus spp.*), red maple (*Acer rubrum*), willow (*Salix spp.*), tamarack (*Larix laricina*), and in disturbed sites, multiflora rose (*Rosa multiflora*). Some forested wetland habitats are suitable given hydrology, soils and/or historic land use. These forested wetlands include red maple, tamarack, and cedar swamps.

Conclusion - The area delineated on the site is forested wetland associated with a watercourse that flows through a culvert under Myers Corners Road. No groundwater seeps or rivulets were observed on the site. Soils on the site are non-calcareous Canandaigua silt loam (*Figure 2*). Bog turtles require stable groundwater hydrology, mucky soils, and open canopy wetland which does not occur on this site. There is no potential bog turtle habitat on or in the immediate vicinity of the site.

3.0 PHOTOGRAPHS

Watercourse



Proposed Project Area



Class B watercourse near Myers Corners Road .

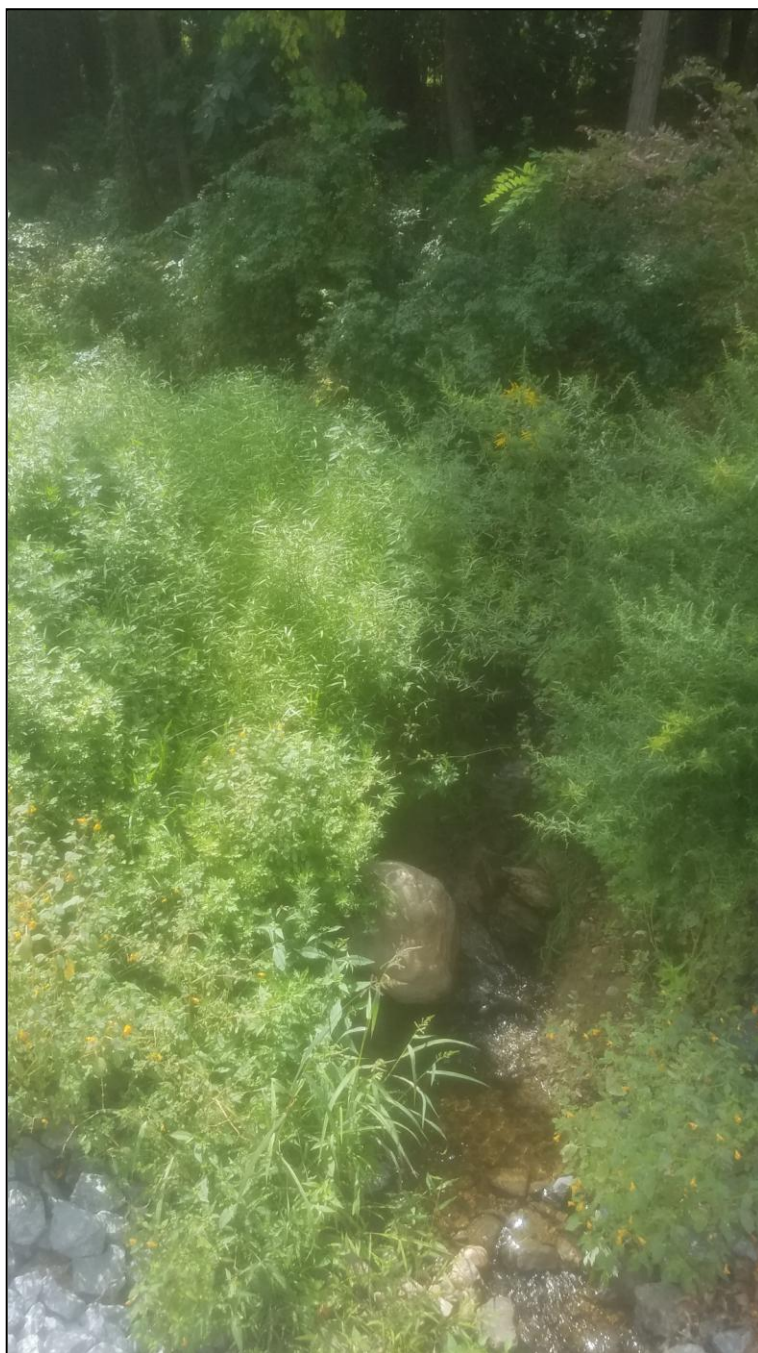


Figure 1 Location Map



Figure 2 Soil Map



Map Unit Symbol	Map Unit Name
Ca	Canandaigua silt loam, neutral substratum
DwB	Dutchess-Cardigan complex, undulating, rocky
DwC	Dutchess-Cardigan complex, rolling, rocky

Attachment 1 - USFWS List

Attachment 2 - NYSDEC Mapper