

**LLCOA
Forest Stewardship Plan**

Appendix C



State of New Jersey

MAIL CODE 501-04

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF PARKS & FORESTRY

NEW JERSEY FOREST SERVICE

OFFICE OF NATURAL LANDS MANAGEMENT

P.O. BOX 420

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SHAWN M. LATOURETTE

Commissioner

PHILIP D. MURPHY

Governor

SHEILA Y. OLIVER

Lt. Governor

August 26, 2021

Andrew Bennett
Ridge & Valley Forest Management
PO Box 790
Lafayette, NJ 07848

Re: Longwood Lake Cabin Owners Association FSP
Block(s) - 336 / 338 / 339
Lot(s) - 43.01 / 2 / 2
Jefferson Township, Morris County

Dear Mr. Bennett:

Thank you for your data request regarding rare species information for the above referenced project site.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.3) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the map(s) submitted with the Natural Heritage Data Request Form into our GIS. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1 and 2 (attached) to determine if any priority sites are located on or in the immediate vicinity of the site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html>. If suitable habitat is present at the project site, the species in that list have potential to be present.

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf.

Beginning May 9, 2017, the Natural Heritage Program reports for wildlife species will utilize data from Landscape Project Version 3.3. If you have questions concerning the wildlife records or wildlife species mentioned in this response, we

recommend that you visit the interactive web application at the following URL, <https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=0e6a44098c524ed99bf739953cb4d4c7>, or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

For additional information regarding any Federally listed plant or animal species, please contact the U.S. Fish & Wildlife Service, New Jersey Field Office at <http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html>.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,



Robert J. Cartica
Administrator

c: NHP File No. 21-4007485-22681

Table 1: On Site Data Request Search Results (6 Possible Reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
2. Natural Heritage Priority Sites On Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	5 page(s) included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.3	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	Yes	1 page(s) included

**Possibly on Project Site Based on Search of
Natural Heritage Database: Rare Plant Species and
Ecological Communities Currently Recorded in the
New Jersey Natural Heritage Database**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Vascular Plants</i>									
Botrychium lanceolatum var. angustisegmentum	Lance-leaf Moonwort			HL	G5T4	S2	Y	2014-07-14	Within and adjacent to Rockaway River Wildlife Management Area, Jefferson Township Morris County. Exposed stream beds and edges along tributaries of Beaver Brook, 3.7 km east-northeast of Lake Shawnee, north of powerline.
Botrychium simplex var. tenebrosum	Slender Least Moonwort			HL	G5T4?Q	S2	Y	2014-07-14	Within and adjacent to Rockaway River Wildlife Management Area, Jefferson Township, Morris County. North side of powerline right-of-way located approximately 950 yards northwest of where right-of-way intersects Berkshire Valley Road (County Route 699). Multiple locations from right-of-way north for approximately 350 yards.

Total number of records: 2

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Aves								
	Bald Eagle	<i>Haliaeetus leucocephalus</i>	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Bald Eagle	<i>Haliaeetus leucocephalus</i>	Nest	4	NA	State Endangered	G5	S1B,S2N
	Barred Owl	<i>Strix varia</i>	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Barred Owl	<i>Strix varia</i>	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Blackburnian Warbler	<i>Dendroica fusca</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Black-throated Green Warbler	<i>Dendroica virens</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Blue-headed Vireo (Solitary Vireo)	<i>Vireo solitarius</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Broad-winged Hawk	<i>Buteo platypterus</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Canada Warbler	<i>Wilsonia canadensis</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Canada Warbler	<i>Wilsonia canadensis</i>	Breeding Sighting-Confirmed	2	NA	Special Concern	G5	S3B,S4N
	Cerulean Warbler	<i>Dendroica cerulea</i>	Breeding Sighting	2	NA	Special Concern	G4	S3B,S3N
	Cooper's Hawk	<i>Accipiter cooperii</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Cooper's Hawk	<i>Accipiter cooperii</i>	Nest	2	NA	Special Concern	G5	S3B,S4N
	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Breeding Sighting	4	NA	State Endangered	G4	S1B,S3N
	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Breeding Sighting-Confirmed	4	NA	State Endangered	G4	S1B,S3N
	Great Blue Heron	<i>Ardea herodias</i>	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	<i>Ardea herodias</i>	Nesting Colony	2	NA	Special Concern	G5	S3B,S4N
	Hooded Warbler	<i>Wilsonia citrina</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Least Flycatcher	<i>Empidonax minimus</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Long-eared Owl	<i>Asio otus</i>	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Nashville Warbler	<i>Oreothlypis ruficapilla</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Northern Goshawk	<i>Accipiter gentilis</i>	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Northern Goshawk	<i>Accipiter gentilis</i>	Nest	4	NA	State Endangered	G5	S1B,S3N

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Northern Parula	Parula americana	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Red-shouldered Hawk	Buteo lineatus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Red-shouldered Hawk	Buteo lineatus	Nest	4	NA	State Endangered	G5	S1B,S3N
	Red-shouldered Hawk	Buteo lineatus	Non-breeding Sighting	2	NA	Special Concern	G5	S1B,S3N
	Sharp-shinned Hawk	Accipiter striatus	Breeding Sighting	2	NA	Special Concern	G5	S3B,S3N
	Veery	Catharus fuscescens	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Veery	Catharus fuscescens	Breeding Sighting-Confirmed	2	NA	Special Concern	G5	S3B,S4N
	Winter Wren	Troglodytes hiemalis	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G4	S3B,S4N
	Worm-eating Warbler	Helmitheros vermivorum	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
<i>Insecta</i>								
	Bronze Copper	Lycaena hyllus	Nectaring	4	NA	State Endangered	G5	S1
	Sable Clubtail	Gomphus rogersi	Larvae Sighting	2	NA	Special Concern	G4	S3
	Sable Clubtail	Gomphus rogersi	Occupied Habitat	2	NA	Special Concern	G4	S3
	Spatterdock Darner	Rhionaeschna mutata	Foraging	2	NA	Special Concern	G4	S3

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Spatterdock Darner	<i>Rhionaeschna mutata</i>	Occupied Habitat	2	NA	Special Concern	G4	S3
<i>Mammalia</i>								
	Bobcat	<i>Lynx rufus</i>	Capture Location	4	NA	State Endangered	G5	S2
	Bobcat	<i>Lynx rufus</i>	Live Individual Sighting	4	NA	State Endangered	G5	S2
	Bobcat	<i>Lynx rufus</i>	On Road	4	NA	State Endangered	G5	S2
	Bobcat	<i>Lynx rufus</i>	Physical evidence	4	NA	State Endangered	G5	S2
	Bobcat	<i>Lynx rufus</i>	Telemetry: Home Range	4	NA	State Endangered	G5	S2
	Indiana Bat	<i>Myotis sodalis</i>	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	<i>Myotis sodalis</i>	Hibernaculum	5	Federally Listed Endangered	State Endangered	G2	S1
	Northern Myotis	<i>Myotis septentrionalis</i>	Active Season Sighting	5	Federally Listed Threatened	NA	G1G2	S1
	Northern Myotis	<i>Myotis septentrionalis</i>	Hibernaculum	5	Federally Listed Threatened	NA	G1G2	S1
	Northern Myotis	<i>Myotis septentrionalis</i>	Maternity Colony	5	Federally Listed Threatened	NA	G1G2	S1

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Northern Myotis	<i>Myotis septentrionalis</i>	Roost Site	5	Federally Listed Threatened	NA	G1G2	S1
<i>Reptilia</i>								
	Bog Turtle	<i>Glyptemys muhlenbergii</i>	Occupied Habitat	5	Federally Listed Threatened	State Endangered	G3	S1
	Eastern Box Turtle	<i>Terrapene carolina carolina</i>	Occupied Habitat	2	NA	Special Concern	G5T5	S3
	Northern Copperhead	<i>Agkistrodon contortrix mokasen</i>	Occupied Habitat	2	NA	Special Concern	G5T5	S3
	Timber Rattlesnake	<i>Crotalus horridus horridus</i>	Occupied Habitat	4	NA	State Endangered	G4T4	S1
	Wood Turtle	<i>Glyptemys insculpta</i>	Occupied Habitat	3	NA	State Threatened	G3	S2

**Vernal Pool Habitat on the
Project Site Based on Search of
Landscape Project 3.3**

Vernal Pool Habitat Type

Vernal Pool Habitat ID

Vernal habitat area 3044

Total number of records: 1

**Other Animal Species
On the Project Site Based on
Additional Species Tracked by
Endangered and Nongame Species Program**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Grank	Srank
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Invertebrate Animals

Polites mystic	Long Dash			G5	S3?
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Total number of records: 1

Table 2: Vicinity Data Request Search Results (6 possible reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	2 page(s) included
2. Natural Heritage Priority Sites within the Immediate Vicinity	Yes	See emailed attachments
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	5 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.3	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	Yes	1 page(s) included

Immediate Vicinity of the Project Site
Based on Search of Natural Heritage Database
Rare Plant Species and Ecological Communities Currently Recorded in
the New Jersey Natural Heritage Database

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Vascular Plants</i>									
Adlumia fungosa	Climbing Fumitory			HL	G4	S2	Y	early 1980's	Foot of Green Pond Mountain at the South end of Green Pond.
Aralia hispida	Bristly Sarsaparilla			HL	G5	S3	Y	2014-09-02	Green Pond Mountain, Jefferson Township, Morris County. Between Berkshire Valley Road (County Route 699) and Berkshire Trail Road. Located from ca. 2.6 - 3.4 miles northeast of the intersection of Berkshire Valley Road and State Highway 15.
Asclepias quadrifolia	Four-leaf Milkweed			HL	G5	S3	Y	2014-06-20	Rockaway River WMA, Jefferson Township, Morris County. Approximately 175 yards west of Berkshire Valley Road and 900 yards southwest of south end of Longwood Lake.
Botrychium lanceolatum var. angustisegmentum	Lance-leaf Moonwort			HL	G5T4	S2	Y	2014-07-14	Within and adjacent to Rockaway River Wildlife Management Area, Jefferson Township Morris County. Exposed stream beds and edges along tributaries of Beaver Brook, 3.7 km east-northeast of Lake Shawnee, north of powerline.
Botrychium simplex var. tenebrosum	Slender Least Moonwort			HL	G5T4?Q	S2	Y	2014-07-14	Within and adjacent to Rockaway River Wildlife Management Area, Jefferson Township, Morris County. North side of powerline right-of-way located approximately 950 yards northwest of where right-of-way intersects Berkshire Valley Road (County Route 699). Multiple locations from right-of-way north for approximately 350 yards.

Immediate Vicinity of the Project Site
Based on Search of Natural Heritage Database
Rare Plant Species and Ecological Communities Currently Recorded in
the New Jersey Natural Heritage Database

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Cardamine douglassii</i>	Purple Bittercress			HL	G5	S2	Y	2014-05-06	Rockaway River Wildlife Management Area, Jefferson Township, Morris County. East of Rockaway River and west of Green Pond Mountain. Two locations: A) Approximately 0.25 mile south of south end of Longwood Lake and B) Approximately 0.46 mile south-southwest of south end of Longwood Lake.
<i>Selaginella rupestris</i>	Rock Spike-moss			HL	G5	S2	Y	2014-08-28	Rockaway River Wildlife Management Area, Jefferson Township, Morris County. Along the White Trail, southwest of Longwood Lake, 1 kilometer southwest of the intersection of Blue Road with Berkshire Valley Road (County Route 699).

Total number of records: 7

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Aves								
	Bald Eagle	<i>Haliaeetus leucocephalus</i>	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Bald Eagle	<i>Haliaeetus leucocephalus</i>	Nest	4	NA	State Endangered	G5	S1B,S2N
	Barred Owl	<i>Strix varia</i>	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Barred Owl	<i>Strix varia</i>	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Blackburnian Warbler	<i>Dendroica fusca</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Black-throated Blue Warbler	<i>Dendroica caerulescens</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Black-throated Green Warbler	<i>Dendroica virens</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Blue-headed Vireo (Solitary Vireo)	<i>Vireo solitarius</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Broad-winged Hawk	<i>Buteo platypterus</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Canada Warbler	<i>Wilsonia canadensis</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Canada Warbler	<i>Wilsonia canadensis</i>	Breeding Sighting-Confirmed	2	NA	Special Concern	G5	S3B,S4N
	Cerulean Warbler	<i>Dendroica cerulea</i>	Breeding Sighting	2	NA	Special Concern	G4	S3B,S3N
	Cooper's Hawk	<i>Accipiter cooperii</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Cooper's Hawk	<i>Accipiter cooperii</i>	Nest	2	NA	Special Concern	G5	S3B,S4N
	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Breeding Sighting	4	NA	State Endangered	G4	S1B,S3N
	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Breeding Sighting-Confirmed	4	NA	State Endangered	G4	S1B,S3N
	Great Blue Heron	<i>Ardea herodias</i>	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	<i>Ardea herodias</i>	Nesting Colony	2	NA	Special Concern	G5	S3B,S4N
	Hooded Warbler	<i>Wilsonia citrina</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Least Flycatcher	<i>Empidonax minimus</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Long-eared Owl	<i>Asio otus</i>	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Nashville Warbler	<i>Oreothlypis ruficapilla</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Northern Goshawk	<i>Accipiter gentilis</i>	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Northern Goshawk	<i>Accipiter gentilis</i>	Nest	4	NA	State Endangered	G5	S1B,S3N
	Northern Parula	<i>Parula americana</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Red-shouldered Hawk	<i>Buteo lineatus</i>	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Red-shouldered Hawk	<i>Buteo lineatus</i>	Nest	4	NA	State Endangered	G5	S1B,S3N

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Red-shouldered Hawk	<i>Buteo lineatus</i>	Non-breeding Sighting	2	NA	Special Concern	G5	S1B,S3N
	Sharp-shinned Hawk	<i>Accipiter striatus</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S3N
	Veery	<i>Catharus fuscescens</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Veery	<i>Catharus fuscescens</i>	Breeding Sighting-Confirmed	2	NA	Special Concern	G5	S3B,S4N
	Winter Wren	<i>Troglodytes hiemalis</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Wood Thrush	<i>Hylocichla mustelina</i>	Breeding Sighting	2	NA	Special Concern	G4	S3B,S4N
	Worm-eating Warbler	<i>Helmitheros vermivorum</i>	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
<i>Insecta</i>								
	Bronze Copper	<i>Lycaena hyllus</i>	Nectaring	4	NA	State Endangered	G5	S1
	Sable Clubtail	<i>Gomphus rogersi</i>	Larvae Sighting	2	NA	Special Concern	G4	S3
	Sable Clubtail	<i>Gomphus rogersi</i>	Occupied Habitat	2	NA	Special Concern	G4	S3
	Ski-tailed Emerald	<i>Somatochlora elongata</i>	Territorial Display	2	NA	Special Concern	G5	S3
	Spatterdock Darner	<i>Rhionaeschna mutata</i>	Foraging	2	NA	Special Concern	G4	S3
	Spatterdock Darner	<i>Rhionaeschna mutata</i>	Occupied Habitat	2	NA	Special Concern	G4	S3
<i>Mammalia</i>								
	Bobcat	<i>Lynx rufus</i>	Capture Location	4	NA	State Endangered	G5	S2

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Bobcat	<i>Lynx rufus</i>	Live Individual Sighting	4	NA	State Endangered	G5	S2
	Bobcat	<i>Lynx rufus</i>	On Road	4	NA	State Endangered	G5	S2
	Bobcat	<i>Lynx rufus</i>	Physical evidence	4	NA	State Endangered	G5	S2
	Bobcat	<i>Lynx rufus</i>	Telemetry: Home Range	4	NA	State Endangered	G5	S2
	Indiana Bat	<i>Myotis sodalis</i>	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
	Indiana Bat	<i>Myotis sodalis</i>	Hibernaculum	5	Federally Listed Endangered	State Endangered	G2	S1
	Northern Myotis	<i>Myotis septentrionalis</i>	Active Season Sighting	5	Federally Listed Threatened	NA	G1G2	S1
	Northern Myotis	<i>Myotis septentrionalis</i>	Hibernaculum	5	Federally Listed Threatened	NA	G1G2	S1
	Northern Myotis	<i>Myotis septentrionalis</i>	Maternity Colony	5	Federally Listed Threatened	NA	G1G2	S1
	Northern Myotis	<i>Myotis septentrionalis</i>	Roost Site	5	Federally Listed Threatened	NA	G1G2	S1
<i>Reptilia</i>								
	Bog Turtle	<i>Glyptemys muhlenbergii</i>	Occupied Habitat	5	Federally Listed Threatened	State Endangered	G3	S1

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Eastern Box Turtle	<i>Terrapene carolina carolina</i>	Occupied Habitat	2	NA	Special Concern	G5T5	S3
	Northern Copperhead	<i>Agkistrodon contortrix mokasen</i>	Occupied Habitat	2	NA	Special Concern	G5T5	S3
	Timber Rattlesnake	<i>Crotalus horridus horridus</i>	Occupied Habitat	4	NA	State Endangered	G4T4	S1
	Wood Turtle	<i>Glyptemys insculpta</i>	Occupied Habitat	3	NA	State Threatened	G3	S2

**Vernal Pool Habitat
In the Immediate Vicinity of
Project Site Based on Search of
Landscape Project 3.3**

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Vernal habitat area	3039
Vernal habitat area	3044
Total number of records:	2

**Other Animal Species
In the Immediate Vicinity of the Project Site Based on
Additional Species Tracked by
Endangered and Nongame Species Program**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Grank	Srank
<i>Invertebrate Animals</i>					
Polites mystic	Long Dash			G5	S3?
Total number of records:	1				



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New Jersey Ecological Services Field Office
4 E. Jimmie Leeds Road, Suite 4
Galloway, NJ 08205
Phone: (609) 646-9310 Fax: (609) 646-0352
<http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

In Reply Refer To:

August 26, 2021

Consultation Code: 05E2NJ00-2021-SLI-1535

Event Code: 05E2NJ00-2021-E-03820

Project Name: Longwood Lake Cabin Owners Association Forest Stewardship Plan

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species that may occur in your proposed action area and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*)

If the enclosed list indicates that any listed species may be present in your action area, please visit the New Jersey Field Office consultation web page as the next step in evaluating potential project impacts: <http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

On the New Jersey Field Office consultation web page you will find:

- habitat descriptions, survey protocols, and recommended best management practices for listed species;
- recommended procedures for submitting information to this office; and
- links to other Federal and State agencies, the Section 7 Consultation Handbook, the Service's wind energy guidelines, communication tower recommendations, the National Bald Eagle Management Guidelines, and other resources and recommendations for protecting wildlife resources.

The enclosed list may change as new information about listed species becomes available. As per Federal regulations at 50 CFR 402.12(e), the enclosed list is only valid for 90 days. Please return to the ECOS-IPaC website at regular intervals during project planning and implementation to obtain an updated species list. When using ECOS-IPaC, be careful about drawing the boundary of your Project Location. Remember that your action area under the ESA is not limited to just the footprint of the project. The action area also includes all areas that may be indirectly affected

through impacts such as noise, visual disturbance, erosion, sedimentation, hydrologic change, chemical exposure, reduced availability or access to food resources, barriers to movement, increased human intrusions or access, and all areas affected by reasonably foreseeable future that would not occur without ("but for") the project that is currently being proposed.

We appreciate your concern for threatened and endangered species. The Service encourages Federal and non-Federal project proponents to consider listed, proposed, and candidate species early in the planning process. Feel free to contact this office if you would like more information or assistance evaluating potential project impacts to federally listed species or other wildlife resources. Please include the Consultation Tracking Number in the header of this letter with any correspondence about your project.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

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

This species list is provided by:

New Jersey Ecological Services Field Office

4 E. Jimmie Leeds Road, Suite 4
Galloway, NJ 08205
(609) 646-9310

Project Summary

Consultation Code: 05E2NJ00-2021-SLI-1535

Event Code: 05E2NJ00-2021-E-03820

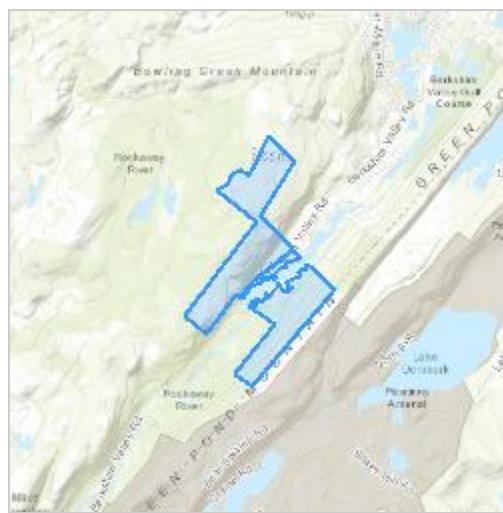
Project Name: Longwood Lake Cabin Owners Association Forest Stewardship Plan

Project Type: LAND - MANAGEMENT PLANS

Project Description: Longwood Lake Cabin Owners Association Forest Stewardship Plan

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.9869102,-74.5441103194496,14z>



Counties: Morris County, New Jersey

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i>	Endangered
There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	
Northern Long-eared Bat <i>Myotis septentrionalis</i>	Threatened
No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none">▪ The specified area occurs within the range of the northern long-eared bat. Species profile: https://ecos.fws.gov/ecp/species/9045	

Reptiles

NAME	STATUS
Bog Turtle <i>Clemmys muhlenbergii</i>	Threatened

Population: Wherever found, except GA, NC, SC, TN, VA
No critical habitat has been designated for this species.
Species profile: <https://ecos.fws.gov/ecp/species/6962>

Flowering Plants

NAME	STATUS
Small Whorled Pogonia <i>Isotria medeoloides</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890	Threatened

Critical habitats

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

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

REFUGE INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10

NAME	BREEDING SEASON
Black-capped Chickadee <i>Poecile atricapillus practicus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 27 to Jul 20
Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

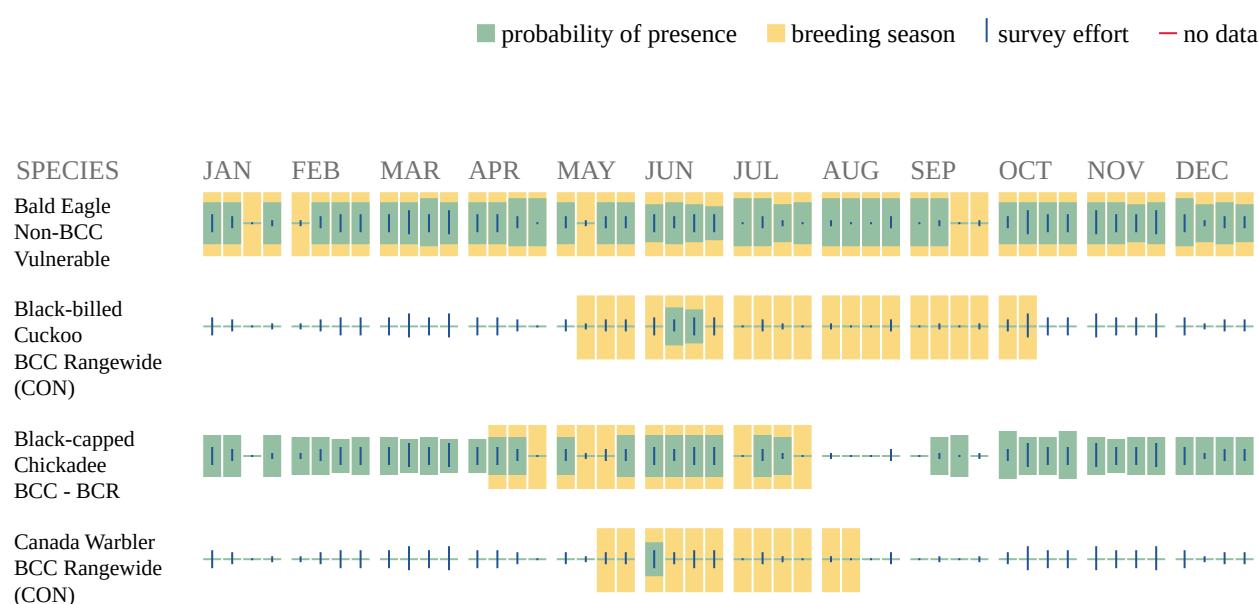
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

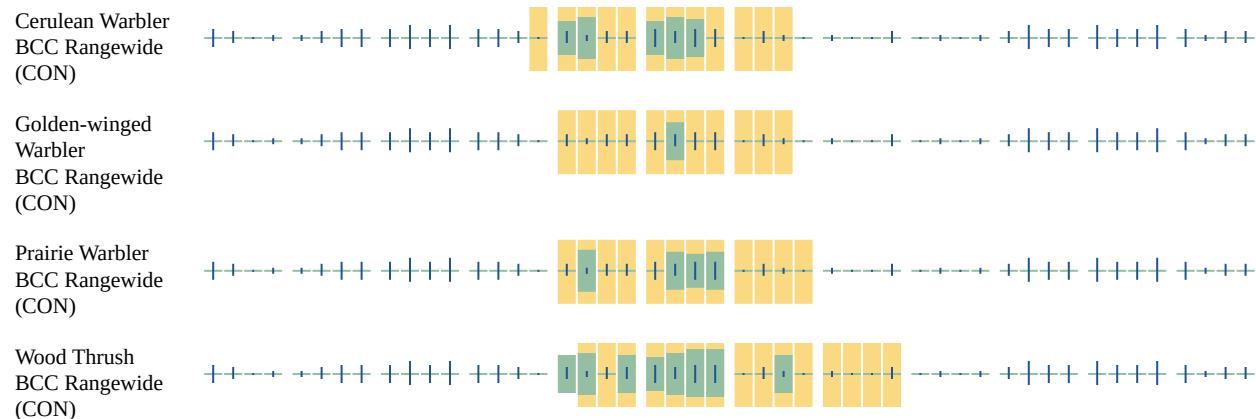
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#)

requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

LAKE

- [L1UBHh](#)

FRESHWATER FORESTED/SHRUB WETLAND

- [PFO1D](#)
- [PFO1E](#)

RIVERINE

- [R5UBH](#)

Frequently Asked Questions About The Natural Heritage Priority Sites GIS File

What are Natural Heritage Priority Sites?

Through its Natural Heritage Database, the Office of Natural Lands Management (ONLM) identifies critically important areas to conserve New Jersey's biological diversity, with particular emphasis on rare plant species and ecological communities. The database provides detailed information on rare species and ecological communities to planners, developers, and conservation agencies for use in resource management, environmental impact assessment, and both public and private land protection efforts.

Using the database, ONLM has identified 343 Natural Heritage Priority Sites, representing some of the best remaining habitat for rare species and rare ecological communities in the state. Although the primary focus of these sites is rare plant species and ecological communities, the DEP Endangered and Nongame Species Program also provided key information and assisted with the delineation of a number of the sites that encompass significant habitats for rare animals. These areas should be considered to be top priorities for the preservation of biological diversity in New Jersey. If these sites become degraded or destroyed, we may lose some of the unique components of our natural heritage.

How are Natural Heritage Priority Sites used in conservation of biological diversity?

Natural Heritage Priority Site maps are used by individuals and agencies concerned with the protection and management of land. The maps have been used by municipalities preparing natural resource inventories; public and private conservation organizations preparing open space acquisition goals; land developers and consultants identifying environmentally sensitive lands; and public and private landowners developing land management plans. However, the coverage was not developed for regulatory purposes, and should not be used as a substitute for the on-site surveys and Natural Heritage Database searches required by regulatory agencies.

Natural Heritage Priority Sites contain some of the best and most viable occurrences of rare plant species and ecological communities, but they do not cover all known habitat for these elements or most rare animal species in New Jersey. Most of the state has not been surveyed for rare species and ecological communities. If information is needed on whether or not endangered or threatened species have been documented from a

particular area, a Natural Heritage Database search can be requested by contacting the Office of Natural Lands Management.

What do the boundaries of the sites contain?

The boundaries of each Natural Heritage Priority Site are drawn to encompass critical habitat for the rare species or ecological communities. Often the boundaries extend to include additional buffer lands that should be managed to protect this critical habitat. A justification for the boundary is provided for each site.

Boundaries of site polygons may overlap. Site polygons may also be nested so that one site may be found entirely within a larger site. When viewing the shape file, a larger site may sometimes obscure a smaller site within it. Such confusion can be eliminated by highlighting the area of interest and checking the attribute table to reveal all sites within the selected area.

How was the GIS coverage developed?

The coverage was originally developed as lines on USGS topographic paper maps and subsequently edited to fit on either 1995/97 color infrared aerial imagery, 1991 black and white aerial imagery or scanned USGS 1:24,000 topographic maps as an ArcView shape file (NJ State Plane Coordinate System, NAD83). Within the Highlands Region the coverage was developed using the NJDEP 2002 Land use/Land cover: Highlands Study Area (DRAFT) coverage, and then subsequently edited using 2002 High Resolution Orthophotography, as well as scanned USGS 1:24,000 topographic maps, as references.

What attributes are included with the shape file?

(Note: Text fields in the attribute table are truncated at 254 characters. Therefore, some text may be deleted from the attribute table of some of the sites. The complete text for all the site records is contained in the **Prisites.rtf** file that is included in the Prisites Winzip distribution file.)

Identifying attributes – The Sitecode and Sitename fields are assigned by the Office of Natural Lands Management to track each site by a unique alphanumeric code and name. The Version field indicates the year and month of the current version of the Natural Heritage Priority Sites coverage.

Locational attributes – Information about where each

site is located can be found in the County, Quadname (US Geological Survey 7.5 minute topographic quadrangle map) and Municipal(ity) fields. More detailed information can be gathered by overlaying county and municipal coverages that are available from NJ DEP.

Descriptive attributes – A description of the site can be found in the Descriptio(n) field, while the Boundjust field contains a written justification for the site boundaries.

Significance attributes – The relative significance of each site is determined by assigning a biodiversity significance rank (Biodivrank). Justification for the rank can be found in the BiodivComm(ents) field. The Siteclass field indicates whether the site is categorized as a macrosite or a standard site. Standard sites are smaller in size (usually less than 3200 acres in size), while macrosites tend to be larger (usually greater than 3200 acres in size). It is not unusual to find several standard sites entirely contained within the boundaries of a macrosite.

What is the biodiversity significance rank and how is it used?

Each site is ranked according to its significance for biological diversity using a scale developed by The Nature Conservancy, the network of Natural Heritage Programs and the New Jersey Natural Heritage Program. The ranks can be used to distinguish between sites that are of global significance for conservation of biological diversity vs. those that are of state significance. The global biodiversity significance ranks range from B1 to B5. Within the Highlands Region the global biodiversity significance rank has been combined with a state biodiversity significance rank which provides information about the significance of the site on a state level. The state biodiversity significance ranks for sites in the Highlands Region range from V1 to V5. Therefore, all sites have been assigned a global biodiversity rank (B rank), but not all sites have been assigned a state biodiversity rank (V rank). The specific definitions for each rank are as follows:

B1 - Outstanding significance on a global level, generally the “last of the least” in the world, such as the only known occurrence of any element (species or ecological community), the best or an excellent occurrence of an element ranked critically imperiled globally, or a concentration (4+) of good or excellent occurrences of elements that are imperiled or critically imperiled globally. The site should be viable and defensible for the elements or ecological processes contained.

B2 - Very high significance on a global level, such as the

most outstanding occurrence of any ecological community. Also includes areas containing other occurrences of elements that are critically imperiled globally, a good or excellent occurrence of an element that is imperiled globally, an excellent occurrence of an element that is rare globally, or a concentration (4+) of good occurrences of globally rare elements or viable occurrences of globally imperiled elements.

B3 - High significance on a global level, such as any other viable occurrence of an element that is globally imperiled, a good occurrence of a globally rare element, an excellent occurrence of any ecological community, or a concentration (4+) of good or excellent occurrences of elements that are critically imperiled in the State.

B4 - Moderate significance on a global level, such as a viable occurrence of a globally rare element, a good occurrence of any ecological community, a good or excellent occurrence or only viable state occurrence of an element that is critically imperiled in the State, an excellent occurrence of an element that is imperiled in the State, or a concentration (4+) of good occurrences of elements that are imperiled in the State or excellent occurrences of elements that are rare in the State.

B5 - Of general biodiversity interest.

V1 - Outstanding significance on a state level. Only known occurrence in the state for an element **or** Site with an excellent occurrence or the best occurrence in the state for an element ranked critically imperiled in the state **or** a concentration (4+) of good or excellent occurrences of elements that are imperiled or critically imperiled in the state.

V2 - Very high significance on a state level. Includes sites containing other occurrences of elements that are critically imperiled in the state **or** a concentration (4+) of other occurrences of state imperiled elements and/or good or excellent occurrences of state rare elements.

V3 - High significance on a state level. Includes sites containing the best occurrence in the state or an excellent occurrence of a state imperiled element **or** multiple (2+) other occurrences for state imperiled elements and/or excellent, good or moderate quality occurrences of state rare elements.

V4 - Moderate significance on a state level. Includes sites containing the best occurrence in the state or an excellent occurrence of a state rare element **or** any site with other occurrences of a state imperiled element **or** multiple (2+) other occurrences of state rare elements.

V5 - Any site with any other occurrence of a state rare element.

How can I obtain Natural Heritage Priority Site maps for an area of interest to me?

Natural Heritage Priority Site hard copy maps can be obtained by submitting a written request accompanied by a check or money order made payable to the Office of Natural Lands Management at the following address:

Office of Natural Lands Management
P.O. Box 404
Trenton, NJ 08625-0404
Phone: 609-984-1339; Fax: 609-984-1427

Individual 8.5" X 11" maps are available at the following rate:

1 - 10 site maps & reports:	\$1.50/site
11 - 20 site maps & reports:	\$1.00/site
> 20 sites:	\$0.50/site

Digital GIS Coverage of Natural Heritage Priority Sites

A digital version of the ArcView GIS file of Natural Heritage Priority Sites is also available. The 2007 version of Natural Heritage Priority Sites will be sent as an email attachment upon request. There is no charge for emailing the GIS data.

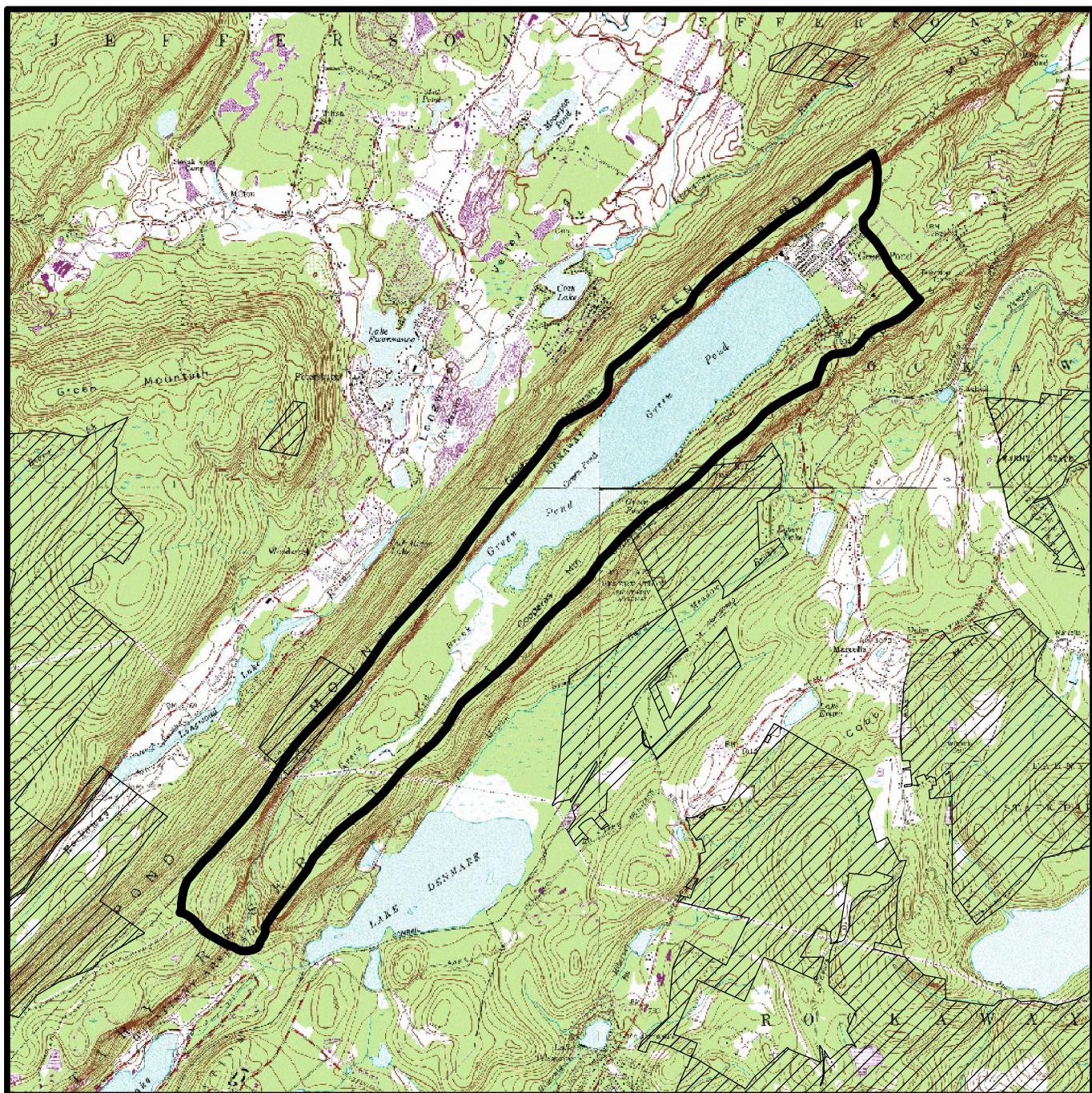
How often are the maps updated?

The Natural Heritage Priority Site information is constantly being updated in the Natural Heritage Database. A new edition of the maps will be made available after significant revisions or additions to the Database.

May 17, 2007



NJ Department of Environmental Protection
Division of Parks and Forestry
Natural Lands Management



Natural Heritage Priority Site
Green Pond Mountain
Morris County

Natural Heritage Priority Site

Green Pond Mountain

Locational Information

Quad Name: Dover ; Newfoundland ; Boonton ; Franklin

County: Morris

Municipality: Rockaway Twp ; Jefferson Twp

Description of Site

An extensive matrix of forests, talus slopes, wooded wetlands and aquatic plant communities on Green Pond Mountain.

Boundary Justification

Boundaries drawn to include the watersheds on Green Pond Mountain which drain into Green Pond and Green Pond Brook.

Biodiversity Rank B4V1

Contains habitat for a concentration of state critically imperiled, imperiled and rare plant species.