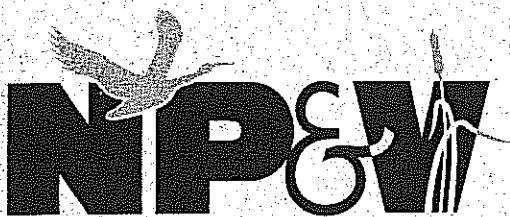


APPENDIX D

ECOLOGICAL IMPACT ANALYSIS MATERIALS

Appendix D-1
NYS Natural Heritage Program Letter



NELSON, POPE & VOORHIS, LLC
ENVIRONMENTAL • PLANNING • CONSULTING

CHARLES J. VOORHIS, CEP, AICP • VICTOR BERT, P.E. • ARTHUR J. KOERBER, P.E.
JOSEPH R. EPIFANIA, P.E. • ROBERT G. NELSON, JR., P.E. • PAUL M. RACZ, P.L.S.
THOMAS F. LEMBO, P.E. • GREGORY D. PETERMAN, P.L.S.
GARY S. BECKER, P.E. • ERIC J. MCFERRAN, P.E.

December 4, 2007

Jean Petrusiak, Director
Information Services
New York Natural Heritage Program
NYSDEC, Division of Fish, Wildlife & Maritime Resources
625 Broadway, 5th Floor
Albany, New York 12233-4757

Re: Request for Natural Heritage Program File Review for a 9.87 acre site called the Preserve at Islandia (NP&V #07246) located south of the intersection of Old Nichol's Road and Schley Street (paper Street), and east of the Old Nichol's Road Erhardt Way intersection, Village of Islandia, Town of Islip (SCTM #504-17-3-7 & 8) Suffolk County, N.Y.

Dear Ms. Petrusiak:

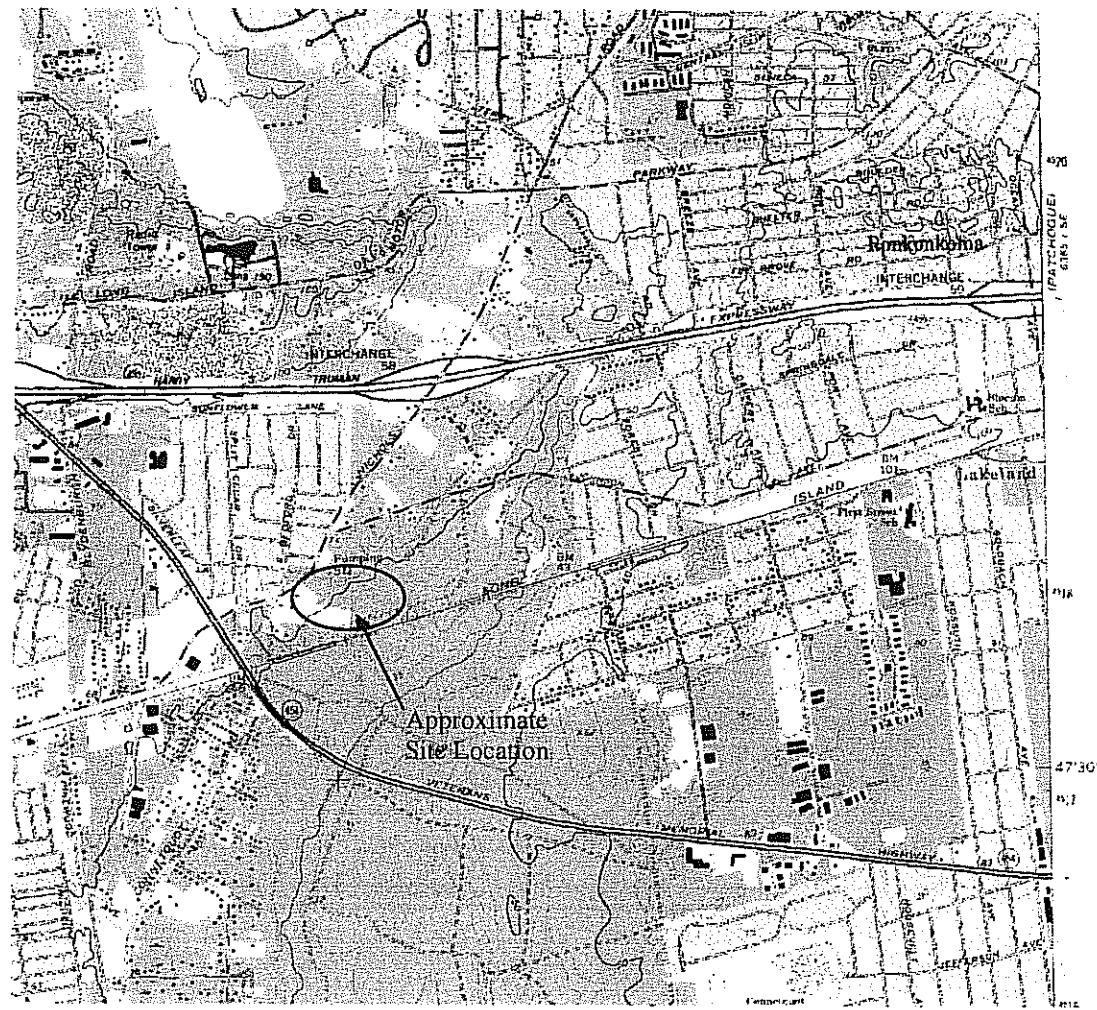
My firm has been retained by the owner of the above-referenced parcel to investigate the environmental resources associated with this site. The proposed project involves change of zone from AG-Agriculture to MF-Multifamily Residence to allow for the development of seventy-two (72) condominium units, 47 of which will be age-restricted, recreational facilities including a pool, clubhouse and tennis courts and a sewage treatment plant. The site is currently occupied by an equestrian facility.

It would be beneficial to consult the Natural Heritage Program files for any information you may have regarding unique habitats, and/or species of vegetation and wildlife. Enclosed is a portion of the Central Islip 7.5 minute quadrangle indicating the location of the site. Please provide any information you may have on this specific site or other unique ecological features within the vicinity. Your attention to this request would be greatly appreciated. Please do not hesitate to call if you have any questions regarding this correspondence.

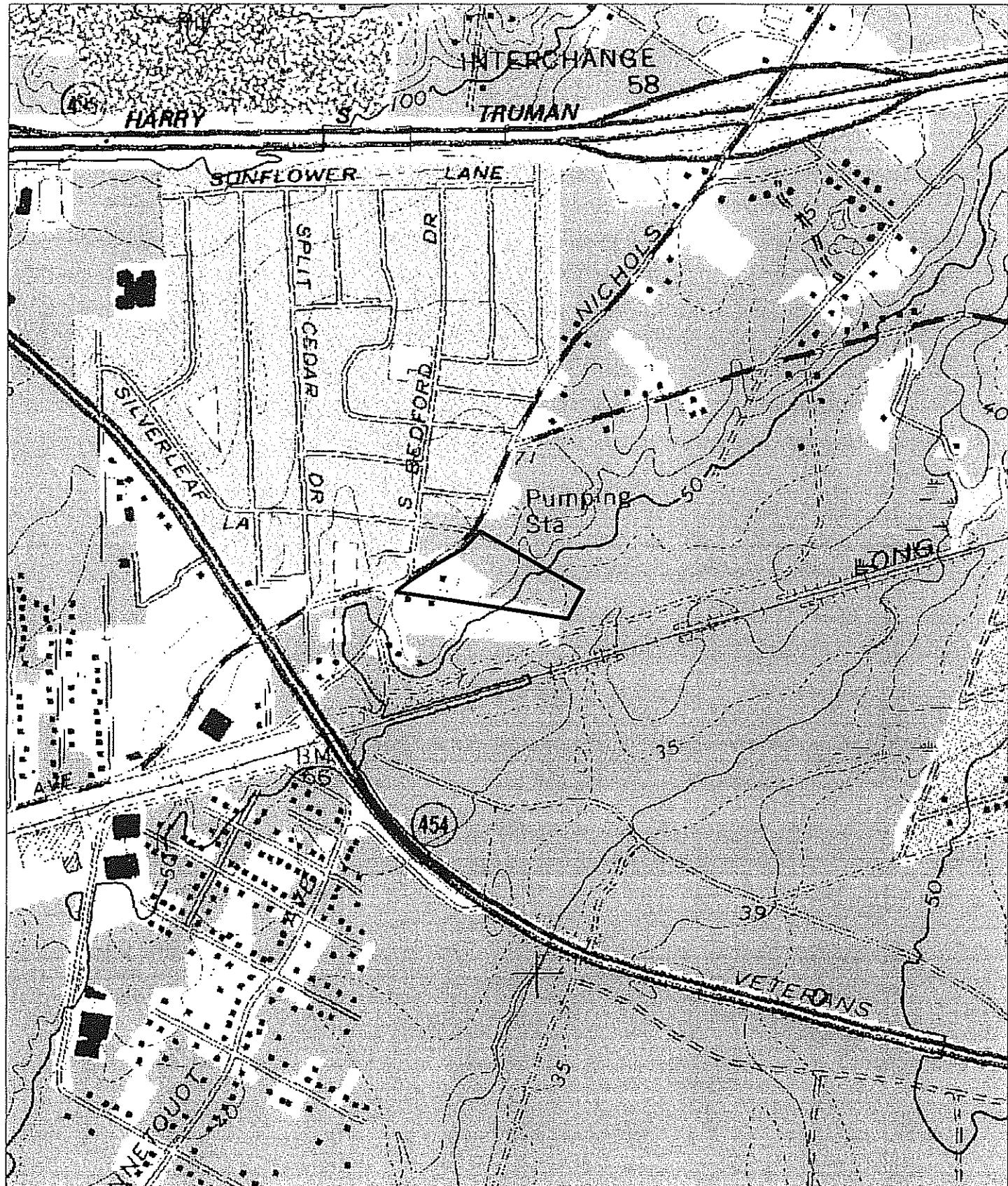
Very truly yours,
NELSON, POPE AND VOORHIS, LLC

Ashley Marciszyn
Ashley Marciszyn
Administrative Assistant

USGS TOPOGRAPHIC MAP
CENTRAL ISLIP QUADRANGLE
VILLAGE OF ISLANDIA, SUFFOLK COUNTY, NEW YORK
The Preserve at Islandia (NP&V # 07246)



Latest Revisions: 1979



LOCATION MAP

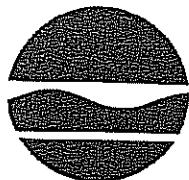
Source: USGS Topographic Quadrangle, Central Islip
Scale: 1" = 1,000'



The Preserve at
Islandia

Draft EIS

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, Albany, New York 12233-4757
Phone: (518) 402-8935 • FAX: (518) 402-8925
Website: www.dec.state.ny.us



Alexander B. Grannis
Commissioner

December 24, 2007

Ashley Marciszyn
Nelson, Pope & Voorhis
572 Walt Whitman Rd
Melville, NY 11747

7MD
RECEIVED
DEC 28 2007
SO
X
NELSON & POPE

Dear Ms. Marciszyn:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to an Environmental Assessment for the proposed 9.87-Acre site - Zoning change to accomodate a Condo Development, site as indicated on the map you provided, located in the Preserve @ Islandia, town of Islip, Suffolk County..

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and should not be released to the public without permission from the New York Natural Heritage Program.

This project location is adjacent to a designated Significant Coastal Fish and Wildlife Habitat. This habitat is part of New York State's Coastal Management Program (CMP), which is administered by the NYS Department of State (DOS). Projects which may impact the habitat are reviewed by DOS for consistency with the CMP. For more information regarding this designated habitat and applicable consistency review requirements, please contact:

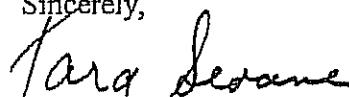
Jeff Zappieri or Vance Barr - (518) 474-6000
NYS Department of State
Division of Coastal Resources and Waterfront Revitalization
41 State Street, Albany, NY 12231

The presence of rare species may result in your project requiring additional permits, permit conditions, or review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should NOT be substituted for on-site surveys that may be required for environmental impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,



Tara Seoane
Information Services
NY Natural Heritage Program

cc: Reg. 1, Regional Mgr.

Natural Heritage Report on Rare Species and Ecological Communities

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor, Albany, NY
12233-4757
(518) 402-8935

- This report contains SENSITIVE information that should not be released to the public without permission from the NY Natural Heritage Program.
- Refer to the User's Guide for explanations of codes, ranks and fields.
- Location maps for certain species and communities may not be provided 1) if the species is vulnerable to disturbance, 2) if the location and/or extent is not precisely known, 3) if the location and/or extent is too large to display, and/or 4) if the animal is listed as Endangered or Threatened by New York State.

Natural Heritage Report on Rare Species and Ecological Communities

COMMUNITIES

Red Maple-Hardwood Swamp

This occurrence of Red Maple-Hardwood Swamp is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state or a high quality example of a more common community type. By meeting specific, documented significance criteria, the NY Natural Heritage Program considers this occurrence to have high ecological and conservation value.

Office Use

NY Legal Status:	Unlisted	NYS Rank:	S4S5	4445
Federal Listing:		Global Rank:	G5	
Last Report:	2001-09-12	EO Rank:		
County:	Suffolk			
Town:	Islip			
Location:	Connetquot River Watershed			
Directions:	Enter Connetquot State Park at the south entry (main entrance) and park in the lot. Proceed up the West Line (Green Trail) for roughly 1600 meters and take a side trail off to the west. All side trails to the west drop down into the swamp, which was surveyed along an approximately north to south transect that ended in the vicinity of the main entrance. The eastern half of the community was surveyed along 3 additional transects by taking Brook Road (red trail) across the river and then following the blue trail north. Portions of the swamp and transects followed can be retraced by taking any of the side trails that go to the east off the Blue Trail. The northern section of the community can be accessed by following a series of sand roads and fire breaks north from the administration building to the Bunes Bridge area and then dropping into the swamp from either side of the river.			
General Quality and Habitat:	This is a large red maple-hardwood swamp consisting of 11 patches ranging in size from 2.5 to 236 acres. The forest is virtually free of exotic species and has good diversity of species and microhabitats. Nested within a pitch pine-oak forest and related communities, this red maple-hardwood swamp has pitch pine in the canopy and subcanopy, and also has embedded patches of pine barrens shrub swamp. Deer densities are high in the area and the community is in a heavily developed landscape. A large red maple-hardwood swamp consisting of 11 patches ranging in size from 2.5 to 236.6 acres. The forest has very few exotic species, observed only in transitional areas and along the edges, and is in a heavily developed landscape. The tree and shrub density is variable. This community is the most prevalent along the Connetquot River and extends beyond the park boundary for a short distance to the north before adjoining heavily developed land. A smaller red maple-black gum swamp is also present within the river corridor in the south half of the park and is continuous with the red maple-hardwood swamp. Several small patches of pine barrens shrub swamp also occur in the area. A large pitch pine-oak forest dominates upland areas of Connetquot State Park. A large pitch pine-oak-heath woodland is embedded within the northeast portion of the pitch pine-oak forest, with several additional smaller patches of this related community scattered throughout the forest.			

1 Record Processed

For detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

For detailed information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org. For descriptions of community types, go to <http://www.dec.ny.gov/animals/29384.html> and click on DRAFT—Ecological Communities of New York State.

Natural Heritage Report on Rare Species and Ecological Communities

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor, Albany, NY
12233-4757
(518) 402-8935

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Natural Heritage Report on Rare Species and Ecological Communities

BUTTERFLIES and SKIPPERS

Satyrium edwardsii

Edwards' Hairstreak NY Legal Status:	Unlisted	NYS Rank:	S3S4 - Vulnerable	Office Use
Federal Listing:		Global Rank:	G4 - Apparently secure	
Last Report:	1991-06-30	EO Rank:	Extant	✓
County:	Suffolk			
Town:	Islip			
Location:	Connetquot River State Park			
Directions:	The butterflies were observed at Connetquot River State Park in the town of Islip.			
General Quality and Habitat:	The state park contains pitch pine, scrub oak, and sandy soil. The Connetquot Brook runs north and south through the park. Smaller brooks and ponds are located in the southern portion of the park.			

COMMUNITIES

Pitch pine-oak forest

This occurrence of Pitch Pine-Oak Forest is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state or a high quality example of a more common community type. By meeting specific, documented significance criteria, the NY Natural Heritage Program considers this occurrence to have high ecological and conservation value.

Office Use

NY Legal Status:	Unlisted	NYS Rank:	S4	Office Use
Federal Listing:		Global Rank:	G4G5	
Last Report:	2001-09-12	EO Rank:		10192
County:	Suffolk			
Town:	Islip			
Location:	Connetquot River Watershed			
Directions:	Enter Connetquot State Park south entrance (Main Entrance) and park in the parking lot. The forest forms the matrix in the park and can be accessed using any of the trails.			
General Quality and Habitat:	This is a large pitch pine-oak forest consisting of 13 patches ranging in size from 1.5 to 1670 acres. The forest has a few exotic species and is in a heavily developed landscape. A large pitch pine-oak forest consisting of 13 patches ranging in size from 1.5 to 1670 acres. The forest has a few exotic species and is in a heavily developed landscape. The tree density and stature is variable. Portions are more open with shorter trees, grading toward woodland, in addition to the taller and denser tree canopy more typical of this community type. This community is the most prevalent at Connequot State Park and extends beyond the park boundary for a short distance in some areas.			

Natural Heritage Report on Rare Species and Ecological Communities

Aphredoderus sayanus

Pirate Perch	NY Legal Status: Unlisted Federal Listing: Last Report: 1998-12-21 County: Suffolk Town: Islip Location: Connetquot River Watershed Directions: The Connetquot River from tideline at Route 27 north to at least 2.5 mi upstream. The 1976-79 specimen was taken from Route 27 (0.75 mi upstream). Bergen says they occur at least 2.5 miles and probably 3 miles upstream and in tributaries.	NYS Rank: S2 - Imperiled Global Rank: G5 - Demonstrably secure EO Rank: Excellent or Good	Office Use 10163
General Quality and Habitat:	The rank is based on qualitative information from Gil Bergen. Additional data is probably available from the statewide fisheries database. The bottom is sandy. The shore is wooded with shrubs. The water is light brown.		

ASCULAR PLANTS

Carex barrattii

Barratt's Sedge	NY Legal Status: Endangered Federal Listing: Last Report: 1991-05-29 County: Suffolk Town: Islip Location: Connetquot Railroad Directions: From Route 454, go northeast on Nichols Road 0.5 mi east on Johnson Road, park at Lakeland County Park, walk south to the pond, enter the railroad tracks to the south. The plants are to the east at the base of an embankment. The first clump is 1380 feet from the southeast corner of a chain link fence surrounding the electric sub-station, close to pole #704. Continuing east, there are two more small clumps about 230 feet from the canopy edge.	NYS Rank: S1 - Critically imperiled Global Rank: G4 - Apparently secure EO Rank: Excellent or Good	Office Use 9357
General Quality and Habitat:	This is a good population in good habitat. Railroad right-of-way in a wet pine barrens with Carex stricta and Acer rubrum along sections of the right-of-way.		

Eurybia spectabilis

Showy Aster	NY Legal Status: Threatened Federal Listing: Last Report: 2003-09-10 County: Suffolk Town: Islip Location: Connetquot Railroad Directions: Go north on Connetquot Avenue to Veterans Highway. Go east on Veterans Highway a short way to the sand road and gate on the north side. Obtain the key from the park's office and go through the gate and north on the sand road to the railroad. Group one: At the railroad go left on the sand road and the plants will be on the south side of the road. Group two: From the gate at Veterans Highway, take the sand road northeast to the first intersection and turn right.	NYS Rank: S2 - Imperiled Global Rank: G5 - Demonstrably secure EO Rank: Excellent	Office Use 10716
General Quality and Habitat:	There are 500-1000 plants in excellent habitat. A wide sandy shoulder of a sand road through pine barrens. Associated species: Carex, Diadisia teres, Eleocharis, Euthamia tenuifolia, Juncus pelocarpus, Lechea pulchella var. moniliformis, Lobelia nuttallii, Panicum verrucosum, Polygala cruciata, Rhynchospora capitellata, Schizachyrium scoparium, and Solidago nemoralis.		

Natural Heritage Report on Rare Species and Ecological Communities

Lechea pulchella var. maniliformis

Bead Pinweed	NY Legal Status:	Endangered	NYS Rank:	S1 - Critically imperiled	Office Use
	Federal Listing:		Global Rank:	G5T4 - Apparently secure	430
	Last Report:	1990-08-02	EO Rank:	Extant	
	County:	Suffolk			
	Town:	Islip			
	Location:	Connetquot Railroad			
	Directions:	From the junction of Route 454 (Veterans Highway) and the Long Island Railroad, go east 0.8 mi on the railroad tracks. The plants are along the sand road to the south.			
	General Quality and Habitat:	A sand road along a railroad right-of-way.			

Polygala lutea

Orange Milkwort	NY Legal Status:	Endangered	NYS Rank:	S1 - Critically imperiled	Office Use
	Federal Listing:		Global Rank:	G5 - Demonstrably secure	1379
	Last Report:	1985-06-07	EO Rank:	Fair	
	County:	Suffolk			
	Town:	Islip			
	Location:	Connetquot Railroad			
	Directions:	From the Junction of Route 454 (Veterans Highway) and the Long Island Railroad, go east 0.8 mi on the railroad tracks. The plants are to the south along a sand road. 1985: The plants are in the sand road through pine barrens.			
	General Quality and Habitat:	This is a very small population in a disturbed area. Railroad sides are damp artificially, open pine barrens. 1985: Dry. 1984: standing water. Associated species: Rhynchospora capitellata, Viola lanceolata, Utricularia subulata.			

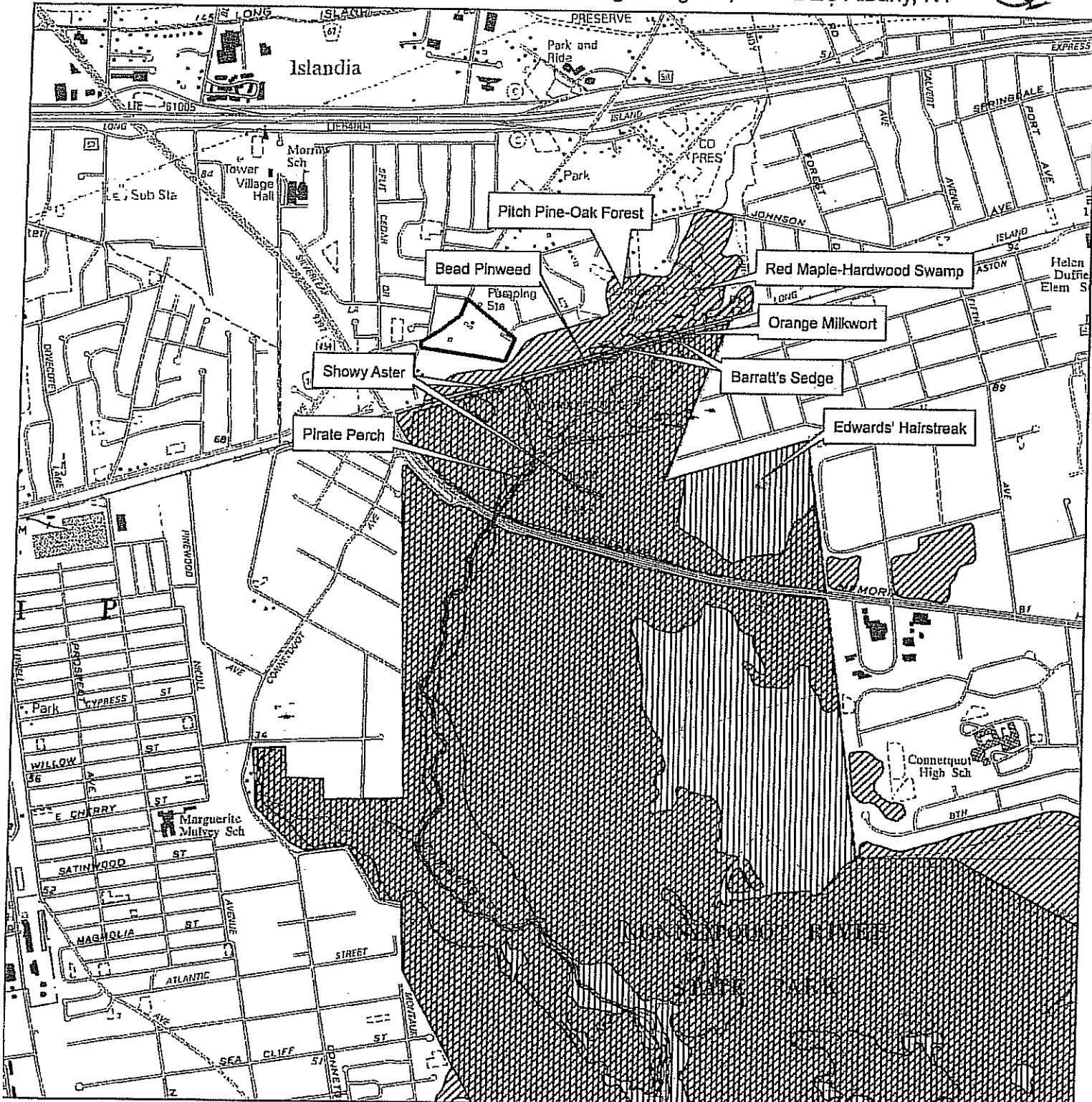
Records Processed

ore detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acrls.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

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Natural Heritage Map of Rare Species and Ecological Communities

Prepared December 21, 2007 by the NY Natural Heritage Program, NYS DEC Albany, NY

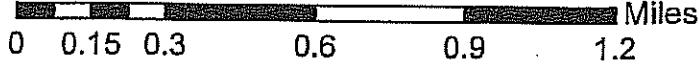


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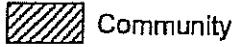
NY Natural Heritage Program Database Records*



Animal

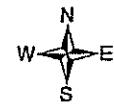


Plant



Community

*The locations that are displayed are considered sensitive and should not be released to the public without permission. We do not provide map locations for all records. Please see report for details.



Natural Heritage Report on Rare Species and Ecological Communities

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935



HISTORICAL RECORDS

The following plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier.

There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown and therefore location maps are generally not provided.

If appropriate habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there.

Natural Heritage Report on Rare Species and Ecological Communities



VASCULAR PLANTS

Carex collinsii

Collins' Sedge	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	Office Use 6300
	Federal Listing:	Global Rank: G4 - Apparently secure	
	Last Report: 1925-08-08	EO Rank: Historical, no recent information	✓
	County: Suffolk		
	Town: Islip		
	Location: Central Islip		
	Directions: Central Islip.		
	General Quality and Habitat: Sphagnum thicket-pine barrens swamp.		

Desmodium ciliare

Little-leaf Tick-trefoil	NY Legal Status: Threatened	NYS Rank: S2S3 - Imperiled	Office Use 1815
	Federal Listing:	Global Rank: G5 - Demonstrably secure	
	Last Report: 1928-09-11	EO Rank: Historical, no recent information	✓
	County: Suffolk		
	Town: Islip		
	Location: Central Islip		
	Directions: Central Islip, pine barrens scrub.		
	General Quality and Habitat: Pine barren scrub.		

Natural Heritage Report on Rare Species and Ecological Communities



Digitaria filiformis

Slender Crabgrass	NY Legal Status: Threatened	NYS Rank: S1 - Critically imperiled
Federal Listing:		Global Rank: G5 - Demonstrably secure
Last Report:	1923-09-10	EO Rank: Historical, no recent information
County:	Suffolk	
Town:	Islip	
Location:	Central Islip	
Directions:	Central Islip.	
General Quality and Habitat:	Pine barrens, open dry sand.	

Office Use
1631

Elatine americana

American Waterwort	NY Legal Status: Endangered	NYS Rank: S1 - Critically imperiled	Office Use 1050
Federal Listing:		Global Rank: G4 - Apparently secure	
Last Report:	1974-10-11	EO Rank: Failed to find but search more	
County:	Suffolk		
Town:	Islip		
Location:	Connetquot River Watershed		
Directions:	Connetquot River State Park.		
General Quality and Habitat:	Failed to find the plant along the bank of the pond south of the park headquarters. A state park.		

Helianthus angustifolius

Swamp Sunflower	NY Legal Status: Threatened	NYS Rank: S2 - Imperiled	Office Use 9224
Federal Listing:		Global Rank: G5 - Demonstrably secure	
Last Report:	1923-09-10	EO Rank: Historical, no recent information	
County:	Suffolk		
Town:	Islip		
Location:	Central Islip		
Directions:	Central Islip.		
General Quality and Habitat:	A pine barrens swamp.		

Lespedeza stuevei

Velvety Bush-clover	NY Legal Status: Threatened	NYS Rank: S2 - Imperiled	Office Use 1834
Federal Listing:		Global Rank: G4? - Apparently secure	
Last Report:	1924-09-03	EO Rank: Historical, no recent information	
County:	Suffolk		
Town:	Islip		
Location:	Central Islip		
Directions:	Central Islip.		
General Quality and Habitat:	Dry pine barrens.		

Natural Heritage Report on Rare Species and Ecological Communities



Linum medium var. texanum

Southern Yellow Flax	NY Legal Status: Threatened	NYS Rank: S2 - Imperiled	Office Use 5489
Federal Listing:		Global Rank: G5T5 - Demonstrably secure	
Last Report:	1921-07-21	EO Rank: Historical, no recent information	
County:	Suffolk		
Town:	Islip		
Location:	Central Islip		
Directions:	Central Islip.		
General Quality and Habitat:	Dry roadside pine barrens.		✓

Pseudognaphalium helleri ssp. micradenium

Catfoot	NY Legal Status: Endangered	NYS Rank: SH - Historical	Office Use 2105
Federal Listing:		Global Rank: G4G5T3? - Vulnerable	
Last Report:	1925-09-14	EO Rank: Failed to find but search more	
County:	Suffolk		
Town:	Islip		
Location:	Central Islip		
Directions:	Central Islip.		
General Quality and Habitat:	More habitat is available. Dry sand road; pine barrens.		✓

Sericocarpus linifolius

Flax-leaf Whitetop	NY Legal Status: Threatened	NYS Rank: S2 - Imperiled	Office Use 5216
Federal Listing:		Global Rank: G5 - Demonstrably secure	
Last Report:	1921-07-21	EO Rank: Historical, no recent information	
County:	Suffolk		
Town:	Islip		
Location:	Central Islip		
Directions:	Central Islip. Dry roadside pine barrens.		✓
General Quality and Habitat:	Dry roadside pine barrens.		

Solidago latissimifolia

Coastal Goldenrod	NY Legal Status: Endangered	NYS Rank: S1 - Critically Imperiled	Office Use 10174
Federal Listing:		Global Rank: G5 - Demonstrably secure	
Last Report:	1919-09-19	EO Rank: Historical, no recent information	
County:	Suffolk		
Town:	Islip		
Location:	Central Islip		
Directions:	Central Islip. Connetquot Swamp.		✓
General Quality and Habitat:	A swamp.		

Natural Heritage Report on Rare Species and Ecological Communities



Symphyotrichum concolor var. *concolor*

Silvery Aster	NY Legal Status: Endangered	Office Use 2232
Federal Listing:		
Last Report:	1918-10-10	
County:	Suffolk	
Town:	Islip	
Location:	Central Islip	
Directions:	Central Islip. Sandy soil.	
General Quality	Sandy soil.	
and Habitat:		✓

11 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.naturepreserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

Appendix D-2

Breeding Bird Atlas Information

List of Species Breeding in Atlas Block 6451B

<u>Common Name</u>	<u>Scientific Name</u>	<u>Behavior Code</u>	<u>Date</u>	<u>NY Legal Status</u>
Wood Duck	<i>Aix sponsa</i>	X1	6/15/2003	Game Species
Mallard x Am. Black Duck Hybrid	<i>Anas platyrhynchos x A. rubripes</i>	P2	6/15/2003	Game Species
American Crow	<i>Corvus brachyrhynchos</i>	FL	7/8/2000	Game Species
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	P2	6/25/2000	Protected
Tufted Titmouse	<i>Baeolophus bicolor</i>	FL	7/8/2000	Protected
Cedar Waxwing	<i>Bombycilla cedrorum</i>	P2	7/8/2000	Protected
Red-tailed Hawk	<i>Buteo jamaicensis</i>	T2	6/9/2001	Protected
Northern Cardinal	<i>Cardinalis cardinalis</i>	FY	7/8/2000	Protected
American Goldfinch	<i>Carduelis tristis</i>	P2	7/8/2000	Protected
Veery	<i>Catharus fuscescens</i>	S2	6/25/2000	Protected
Belted Kingfisher	<i>Ceryle alcyon</i>	FY	6/15/2003	Protected
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>	X1	6/10/2000	Protected
Northern Flicker	<i>Colaptes auratus</i>	D2	6/25/2000	Protected
Fish Crow	<i>Corvus ossifragus</i>	FL	6/8/2002	Protected
Blue Jay	<i>Cyanocitta cristata</i>	S2	6/25/2000	Protected
Prairie Warbler	<i>Dendroica discolor</i>	T2	6/9/2001	Protected
Pine Warbler	<i>Dendroica pinus</i>	FY	6/23/2000	Protected
Gray Catbird	<i>Dumetella carolinensis</i>	FY	6/25/2000	Protected
Acadian Flycatcher	<i>Empidonax virescens</i>	X1	6/15/2003	Protected
Common Yellowthroat	<i>Geothlypis trichas</i>	FY	7/8/2000	Protected
Barn Swallow	<i>Hirundo rustica</i>	ON	7/8/2000	Protected
Baltimore Oriole	<i>Icterus galbula</i>	FY	6/9/2001	Protected
Eastern Screech-Owl	<i>Megascops asio</i>	X1	2/20/2002	Protected
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	P2	6/10/2000	Protected
Song Sparrow	<i>Melospiza melodia</i>	FL	6/25/2000	Protected
Northern Mockingbird	<i>Mimus polyglottos</i>	S2	6/25/2000	Protected
Brown-headed Cowbird	<i>Molothrus ater</i>	FL	7/8/2000	Protected
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	FY	7/8/2000	Protected
Downy Woodpecker	<i>Picoides pubescens</i>	T2	6/8/2002	Protected
Hairy Woodpecker	<i>Picoides villosus</i>	T2	6/9/2001	Protected
Eastern Towhee	<i>Pipilo erythrrophthalmus</i>	FL	6/25/2000	Protected
Scarlet Tanager	<i>Piranga olivacea</i>	S2	6/25/2000	Protected
Black-capped Chickadee	<i>Poecile atricapillus</i>	FL	7/8/2000	Protected
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	X1	6/10/2000	Protected
Common Grackle	<i>Quiscalus quiscula</i>	FY	6/10/2000	Protected
Eastern Phoebe	<i>Sayornis phoebe</i>	FY	6/10/2000	Protected
Ovenbird	<i>Seiurus aurocapilla</i>	FL	7/8/2000	Protected
White-breasted Nuthatch	<i>Sitta carolinensis</i>	FY	6/10/2000	Protected
Chipping Sparrow	<i>Spizella passerina</i>	FY	7/8/2000	Protected
Field Sparrow	<i>Spizella pusilla</i>	FL	6/9/2001	Protected
Brown Thrasher	<i>Toxostoma rufum</i>	FY	7/8/2000	Protected
House Wren	<i>Troglodytes aedon</i>	P2	6/9/2001	Protected
American Robin	<i>Turdus migratorius</i>	FL	7/8/2000	Protected
Eastern Kingbird	<i>Tyrannus tyrannus</i>	FL	7/8/2000	Protected
Red-eyed Vireo	<i>Vireo olivaceus</i>	S2	7/8/2000	Protected
Mourning Dove	<i>Zenaida macroura</i>	P2	6/25/2000	Protected
Whip-poor-will	<i>Caprimulgus vociferus</i>	T2	6/8/2002	Protected-Special Concern
Rock Pigeon	<i>Columba livia</i>	P2	6/10/2000	Unprotected
House Sparrow	<i>Passer domesticus</i>	ON	7/8/2000	Unprotected
European Starling	<i>Sturnus vulgaris</i>	FL	6/25/2000	Unprotected

Current Date: 12/7/2007

Appendix D-3

Wildlife Species for Site Habitats

PROJECTION OF WILDLIFE ECOLOGICAL RESPONSE (POWER)

NELSON, POPE & VOORHIS, LLC, MICROCOMPUTER MODEL

SPECIES LIST

INTRODUCTION

This appendix has been included to present the results of a computer model used to investigate the various wildlife species which can be expected to be found on the site considering the habitats established. This model was developed by and for the use of Nelson, Pope & Voorhis, LLC using available information and references for the various species. The model utilizes Excel spreadsheets to identify wildlife species commonly found in various Long Island habitats, based upon thorough research of available literature. The habitats investigated consisted of Successional Field, Successional Wooded Edge, Terrestrial Cultural (lawn/landscaping), Maritime Beach and Intertidal Shoals. Some of the species listed in this model would not be expected on the property given the surrounding development, but are present in similar habitats.

The first column identifies the common name of the species, presented with the main common name in alphabetical order (for example: red-tailed hawk would come before blue jay). The scientific name of particular species is in the second column. The third column shows the legal status of the species, of which there are four possible entries (Endangered, Threatened, Special Concern and Local Concern). The fourth column indicates the seasons during which the species might be expected to be present and the fifth column, of particular importance to the environmental setting, contains information on frequency of the species in the habitat (abundant, common, rare and non expected); the species activity in the habitat (nesting, hunting and resting). References are provided with the reference list provided at the end of the appendix. The printout contained in this appendix, coupled with the discussions provided in the main body of the report, provides significant information of the wildlife found, or expected to be found on site.

Successional Old Field Species - Inventory and Characteristics

Common Name	Scientific Name	Status	Found During Spring		Frequency/Habitat Use	References
			Winter	Summer		
Birds						
red-winged blackbird	<i>Agelaius phoeniceus</i>	none	X	X	Early	C / N,F
Eastern bluebird	<i>Sialia sialis</i>	none	X	X	Early	R / N,F
common bobwhite	<i>Colinus virginianus</i>	none	X	X	X	C / N,F
indigo bunting	<i>Passerina cyanea</i>	none	X	X	X	C / N,F
Northern cardinal	<i>Cardinalis cardinalis</i>	none	X	X	X	C / N,F
gray catbird	<i>Dumetella carolinensis</i>	none	X	X	Late	C / N,F
black capped chickadee	<i>Parus atricapillus</i>	none	X	X	Late	A / N,F
brown-headed cowbird	<i>Molothrus ater</i>	none	X	X	X	C / H
American crow	<i>Corvus brachyrhynchos</i>	none	X	X	X	A / H
black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	none	X	X	Late	A / H
yellow-billed cuckoo	<i>Coccyzus americanus</i>	none	X	X	Late	C / N,F
mourning dove	<i>Zenaida macroura</i>	none	X	X	X	C / N,F
rock dove	<i>Columba livia</i>	none	X	X	X	A / N,H
American goldfinch	<i>Carduelis tristis</i>	none	X	X	X	A / N,F
house finch	<i>Carpodacus mexicanus</i>	none	X	X	X	C / N,F
common flicker	<i>Colaptes auratus</i>	none	X	X	X	A / N,F
least flycatcher	<i>Empidonax minimus</i>	none	X	X	Late	C / N,F
willow flycatcher	<i>Empidonax traillii</i>	none	X	X	Late	R / N,F
common grackle	<i>Quiscalus quiscula</i>	none	X	X	X	C / N,F
ruffed grouse	<i>Bonasa umbellus</i>	none	X	X	X	A / N,F
rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	none	X	X	Late	C / N,F
Northern harrier	<i>Circus cyaneus</i>	threatened	X	X	X	R / H
Cooper's hawk	<i>Accipiter cooperii</i>	special concern	X	X	X	N / N,H
red-tailed hawk	<i>Buteo jamaicensis</i>	none	X	X	X	C / H
sharp-shinned hawk	<i>Accipiter striatus</i>	special concern	X	X	X	N / N,F
blue jay	<i>Cyanocitta cristata</i>	none	X	X	X	A / N,F
Northern (dark-eyed) junco	<i>Junco hyemalis</i>	none	X	X	Late	C / N,F
American kestrel	<i>Falco sparverius</i>	none	X	X	X	C / H
Eastern Kingbird	<i>Tyrannus tyrannus</i>	none	X	X	Early	A / N,F
Eastern meadowlark	<i>Sturnella magna</i>	none	X	X	Late	C / N,F
Northern mockingbird	<i>Mimus polyglottos</i>	none	X	X	X	A / N,F

Common Name	Scientific Name	Status	Found During		Frequency/ Habitat Use	References
			Spring	Summer		
common nighthawk	<i>Chordeiles minor</i>	special concern			R / N,F	4 12
barn owl	<i>Tyto alba</i>	none	X		R / H	4 17
great-horned owl	<i>Bubo virginianus</i>	none	X	X	C / N,H	4 17
ring-necked pheasant	<i>Phasianus colchicus</i>	none	X	X	C / N,F	4 8
American robin	<i>Turdus migratorius</i>	none	X	X	A / N,F	4 7
chipping sparrow	<i>Spizella passerina</i>	none	X	X	C / N,F	4 21
fox sparrow	<i>Passerella iliaca</i>	none	X	X	C / F	20 21
field sparrow	<i>Spizella pusilla</i>	none	X	X	C / N,F	4 21
grasshopper sparrow	<i>Ammmodramus savannarum</i>	special concern	X	X	C / N,F	4 20
house sparrow	<i>Passer domesticus</i>	none	X	X	C / N,F	4 20
Savannah sparrow	<i>Passerculus sandwichensis</i>	none	X	X	R / N,F	4 21
song sparrow	<i>Melospiza melodia</i>	none	X	X	A / N,F	4 22
swamp sparrow	<i>Melospiza georgiana</i>	none	X	X	C / N,F	4 22
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	none	X	X	C / F	22 32
European starling	<i>Sturnus vulgaris</i>	none	X	X	A / N,F	4 23
barn swallow	<i>Hirundo rustica</i>	none	X	X	C / N,F	4 15
brown thrasher	<i>Toxostoma rufum</i>	none	X	X	C / N,F	4 9
rufous-sided towhee	<i>Pipilo erythrrophthalmus</i>	none	X	X	R / N,F	4 20
black-and-white warbler	<i>Mniotilla varia</i>	none	X	X	C / N,F	4 18
blue-winged warbler	<i>Vermivora pinus</i>	none	X	X	C / N,F	4 14
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	none	X	X	R / N,F	4 19
prairie warbler	<i>Dendroica discolor</i>	none	X	X	C / N,F	4 19
yellow warbler	<i>Dendroica petechia</i>	none	X	X	R / N,F	4 18
cedar waxwing	<i>Bombycilla cedrorum</i>	none	X	X	C / N,F	4 23 32
whip-poor-will	<i>Caprimulgus vociferous</i>	special concern	X	X	C / F	4 12
American woodcock	<i>Philohela minor</i>	none	X	X	C / N,F	4 30
red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	special concern	X	X	C / N,F	4 14
house wren	<i>Troglodytes aedon</i>	none	X	X	C / N,F	4 9
common yellowthroat	<i>Geothlypis trichas</i>	none	Late X	X	C / N,F	4 19
Mammals						
Eastern chipmunk	<i>Tamias striatus</i>	none	X	X	C / N,F	1 29
Eastern cottontail	<i>Sylvilagus floridanus</i>	none	X	X	A / N,F	1 29
white-tailed deer	<i>Odocoileus virginianus</i>	none	X	X	C / F	1 25 29
red fox	<i>Vulpes vulpes</i>	none	X	X	C / H	1 29

Common Name	Scientific Name	Status	Found During		Frequency/ Habitat Use	References
			Summer	Fall		
Eastern mole	<i>Scalopus aquaticus</i>	none	x	x	C / N,F	1 29
house mouse	<i>Mus musculus</i>	none	x	x	R / N,F	1 29
meadow-jumping mouse	<i>Zapus hudsonicus</i>	none	x	x	R / N,F	1 29
white-footed mouse	<i>Peromyscus leucopus</i>	none	x	x	C / N,F	1 29
Virginia opossum	<i>Didelphis virginiana</i>	none	x	x	C / N,F	1 29
raccoon	<i>Procyon lotor</i>	none	x	x	C / F	1 29
black rat	<i>Rattus rattus</i>	none	x	x	R / N,F	1 29
Norway rat	<i>Rattus norvegicus</i>	none	x	x	C / N,F	1 29
least shrew	<i>Cryptotis parvus</i>	none	x	x	N / N,F	1 29
short-tailed shrew	<i>Blarina brevicauda</i>	none	x	x	A / N,F	1 29
striped skunk	<i>Mephitis mephitis</i>	none	x	x	N / N,F	1 29
meadow vole	<i>Microtus pennsylvanicus</i>	none	x	x	C / N,F	29 45
pine vole	<i>Microtus pinetorum</i>	none	x	x	C / N,F	1 29
long-tailed weasel	<i>Mustela frenata</i>	none	x	x	R / N,H	1 29
woodchuck	<i>Marmota monax</i>	none	x	x	R / N,F	1 29
Herptiles						
Eastern garter snake	<i>Thamnophis sirtalis</i>	none	x	x	C / N,F	38 40
eastern hognose snake	<i>Heterodon platirhinos</i>	special concern	x	x	R / N,H	38
eastern milk snake	<i>Lampropeltis d. triangulum</i>	none	x	x	C / N,F	38 39
Fowler's toad	<i>Bufo woodhousei towleri</i>	none	x	x	C / F	33 37

KEY:

Frequency:

- A- abundant
- C- common
- R- rare
- N- not expected

Activity:

- N- nesting
- H- hunting
- R- resting
- F- foraging

Terrestrial Cultural Species - Inventory and Characteristics

Common Name	Scientific Name	Status	winter	spring	Found During summer	fall	Frequency/ Habitat Use	References
Birds								
redwinged blackbird	<i>Agelaius phoeniceus</i>	none	none	X	X	Early	C / NF	4 6
Eastern bluebird	<i>Sialia sialis</i>	none	none	X	X	Early	R / NF	4 7
common bobwhite	<i>Colinus virginianus</i>	none	none		Late	X	C / NF	4 8
Indigo bunting	<i>Passerina cyanea</i>	none	none	X	X	Early	N / F	4 20
Northern cardinal	<i>Cardinalis cardinalis</i>	none	none		Late	X	C / NF	4 20
gray catbird	<i>Dumetella carolinensis</i>	none	none		Late	X	C / F	4 9
brown-headed cowbird	<i>Molothrus ater</i>	none	none	X	X	Early	A / H	4 6
American crow	<i>Corvus brachyrhynchos</i>	none	none	X	X	X	A / N,H	4 11
mourning dove	<i>Zenaidura macroura</i>	none	none	X	X	X	A / N,H	4 8
rock dove	<i>Columba livia</i>	none	none	X	X	X	A / N,F	4 8
great-crested flycatcher	<i>Myiarchus crinitus</i>	none	none	X	X	X	C / NF	4 15
common grackle	<i>Quiscalus quiscula</i>	threatened	X	X	X	X	A / NF	4 6
Northern harrier	<i>Circus cyaneus</i>	special concern		X	X	X	R / H	4 16
Cooper's hawk	<i>Accipiter cooperii</i>	none	X	X	X	X	N / NH	4 17
red-tailed hawk	<i>Buteo jamaicensis</i>	special concern		X	X	X	C / H	4 16
sharp-shinned hawk	<i>Accipiter striatus</i>	none	X	X	X	X	N / NF	4 16
blue jay	<i>Cyanocitta cristata</i>	none	X	X	X	X	A / NF	4 10
American kestrel	<i>Falco sparverius</i>	none		X	X	X	C / NH	4 17
killdeer	<i>Charadrius vociferus</i>	none		X	X	X	C / NF	4 31 32
Eastern kingbird	<i>Tyrannus tyrannus</i>	none		X	X	Early	A / NF	4 15
Eastern meadowlark	<i>Sturnella magna</i>	none			Late	X	C / NF	4 6
Northern mockingbird	<i>Mimus polyglottos</i>	none		X	X	X	A / NF	4 9
common nighthawk	<i>Chordeiles minor</i>	special concern		X	X	X	R / NF	4 12
barn owl	<i>Tyto alba</i>	none	X	X	X	X	R / N,H	4 17
great-horned owl	<i>Bubo virginianus</i>	none	X	X	X	X	R / N,H	4 17
ring-necked pheasant	<i>Phasianus colchicus</i>	none				X	C / NF	4 8
black-bellied plover	<i>Pluvialis squatarola</i>	none				X	R / F	31 32
American robin	<i>Turdus migratorius</i>	none				X	A / NF	4 7
chipping sparrow	<i>Spizella passerina</i>	none				X	C / NF	4 21
field sparrow	<i>Spizella pusilla</i>	special concern		X	X	X	R / NF	4 21
grasshopper sparrow	<i>Ammodramus savannarum</i>			X	X	X	R / NF	4 20

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			winter	spring	summer	fall		
house sparrow	<i>Passer domesticus</i>	none	x	x	x	x	A / N,F	4-20
Savannah sparrow	<i>Passerculus sandwichensis</i>	none	x	x	x	x	R / N,F	4-21
song sparrow	<i>Melospiza melodia</i>	none	x	x	x	x	C / N,F	4-22
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	none	x	x	x	x	C / F	22-32
European starling	<i>Sturnus vulgaris</i>	none	x	x	x	x	A / N,F	4-23
barn swallow	<i>Hirundo rustica</i>	none	x	x	x	x	A / N,F	4-15
chimney swift	<i>Chaetura pelasgica</i>	none	x	x	x	x	C / F	4-42
brown thrasher	<i>Toxostoma rufum</i>	none	x	x	x	x	R / N,F	4-9
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	none	x	x	x	x	N / N,F	4-19
cedar waxwing	<i>Bombycilla cedrorum</i>	none	x	x	x	x	C / N,F	4-23-32
chip-poor-will	<i>Caprimulgus vociferus</i>	special concern	x	x	x	x	C / F	4-12
American woodcock	<i>Philohela minor</i>	none	x	x	x	x	R / N,F	4-30
red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	special concern	x	x	x	x	C / N,F	4-14
house wren	<i>Troglodytes aedon</i>	none	x	x	x	x	C / N,F	4-9
Mammals								
Eastern pipistrelle	<i>Pipistrellus subflavus</i>	none	x	x	x	x	N / F	1-29
Eastern cottontail	<i>Sylvilagus floridanus</i>	none	x	x	x	x	A / N,F	1-29
white-tailed deer	<i>Odocoileus virginianus</i>	none	x	x	x	x	C / F	1-25-29
red fox	<i>Vulpes vulpes</i>	none	x	x	x	x	C / H	1-29
house mouse	<i>Mus musculus</i>	none	x	x	x	x	C / N,F	1-29
meadow-jumping mouse	<i>Zapus hudsonicus</i>	none	x	x	x	x	R / N,F	1-29
white-footed mouse	<i>Peromyscus leucopus</i>	none	x	x	x	x	C / N,F	1-29
Virginia opossum	<i>Didelphis virginiana</i>	none	x	x	x	x	C / N,F	1-29
raccoon	<i>Procyon lotor</i>	none	x	x	x	x	C / F	1-29
black rat	<i>Rattus rattus</i>	none	x	x	x	x	N / N,F	1-29
Norway rat	<i>Rattus norvegicus</i>	none	x	x	x	x	C / N,F	1-29
least shrew	<i>Cryptotis parvus</i>	none	x	x	x	x	N / N,F	1-29
striped skunk	<i>Mephitis mephitis</i>	none	x	x	x	x	N / N,F	1-29
pine vole	<i>Microtus pinetorum</i>	none	x	x	x	x	C / N,F	1-29
long-tailed weasel	<i>Mustela frenata</i>	none	x	x	x	x	R / N,H	1-29
Reptiles								
Eastern garter snake	<i>Thamnophis sirtalis</i>	none	x	x	x	x	C / N,F	38-40
eastern milk snake	<i>Lampropeltis d. triangulum</i>	none	x	x	x	x	C / N,F	38-39
Fowler's toad	<i>Bufo woodhousei fowleri</i>	none	x	x	x	x	C / F	33-37

KEY:

Frequency:
A- abundant
C- common
R- rare
N- not expected

Activity:
N- nesting
H- hunting
R- resting
F- foraging

Appendix D-4

Wildlife Species Adaptability for Site Habitats

PROJECTION OF WILDLIFE ECOLOGICAL RESPONSE (POWER)

NELSON, POPE & VOORHIS, LLC, MICROCOMPUTER MODEL

SPECIES ADAPTABILITY

This portion of the appendix has been included to present the results of a computer program to identify "Species Adaptability." This list is another component of the program developed for use by Nelson, Pope & Voorhis, LLC to determine potential impacts of the proposed project on wildlife. In this application the "Adaptability" of the observed and expected species are shown. The "adaptability" as indicated in the table, refers to whether an individual species may potentially benefit from (+) a habitat change from natural to urban/suburban setting; or, be impacted (-), or remain constant (=), as a result of this change. These values are not intended to represent the dynamics of actual species on the subject site under post-development conditions. The column entitled "Comments" provides relevant information which was obtained from the literature, as regards special habits of the particular species, such as adaptability, nesting, food, etc. This column is particularly important in assessing the potential impacts to the species as a result of the proposed project. The preceding text considers the site specific aspects of the proposed development in regard to individual species. This appendix is included to provide the reader with the benefit of what the literature which was consulted in connection with the Habitat Suitability Model suggests, in terms of generalized species dynamics resulting from land use. References are the same as those cited in the previous Species List portion of the appendix.

Successional Old Field Species - Adaptability and Comments			
Common Name	Scientific Name	Adapt.	Comments
Birds			
American crow	<i>Corvus brachyrhynchos</i>	=	extremely adaptable; omnivorous
American goldfinch	<i>Carduelis tristis</i>	=	prefers diet of thistles and dandelions
American kestrel	<i>Falco sparverius</i>	-	adaptable; prefers open areas and parks; will nest near humans
American robin	<i>Turdus migratorius</i>	=	very adaptable; abundant in parks; nests in man-made structures
American woodcock	<i>Philohela minor</i>	-	prefers moist woodland and thicket near open fields
barn owl	<i>Tyto alba</i>	=	hunts in open areas, nests in man made structures and hollow trees
barn swallow	<i>Hirundo rustica</i>	+	nests almost entirely on buildings
black capped chickadee	<i>Parus atricapillus</i>	=	abundant around parks, urban and suburban areas
black-and-white warbler	<i>Mniotilla varia</i>	-	builds nests under shrubs and/or trees
black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	-	avoids human activities
blue jay	<i>Cyanocitta cristata</i>	=	extremely adaptable to human activity and other stresses
blue-winged warbler	<i>Vermivora pinus</i>	-	primarily abandoned and overgrown field, and thickets
brown thrasher	<i>Toxostoma rufum</i>	=	common in parks and suburban areas, wooded edges and dry open areas
brown-headed cowbird	<i>Molothrus ater</i>	=	lays eggs in other bird's nests; some stay during winter
cedar waxwing	<i>Bombycilla cedrorum</i>	+	prefers open woodlands, orchards and residential areas
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	-	prefers first growth woods, with some open brush area
chipping sparrow	<i>Spizella passerina</i>	+	abundant around man made structures
common bobwhite	<i>Colinus virginianus</i>	-	somewhat tolerant of humans during spring and summer months
common flicker	<i>Colaptes auratus</i>	=	abundant around parks, suburban and urban areas
common grackle	<i>Quiscalus quiscula</i>	=	adapts well to urban and suburban habitats
common nighthawk	<i>Chordeiles minor</i>	=	primarily a grassland species; will nest in burnt areas and roofs
common yellowthroat	<i>Geothlypis trichas</i>	=	found in all open brushy wet areas
Cooper's hawk	<i>Accipiter cooperii</i>	-	needs extensive woodland
Eastern bluebird	<i>Sialia sialis</i>	-	found almost entirely in nesting boxes, extremely rare in wild
Eastern kingbird	<i>Tyrannus tyrannus</i>	=	very adaptable to human activities; prefers open areas
Eastern meadowlark	<i>Sturnella magna</i>	-	found in marshes during winter months
European starling	<i>Sturnus vulgaris</i>	+	extremely adaptable to human activity; considered a pest
field sparrow	<i>Spizella pusilla</i>	-	associated with grasslands, fields and brushy wooded edges
fox sparrow	<i>Passerella iliaca</i>	-	boreal species, winters here in edge, thickets, brushy areas
grasshopper sparrow	<i>Ammodramus savannarum</i>	-	requires grasslands
gray catbird	<i>Dumetella carolinensis</i>	=	abundant around parks, urban and suburban areas
great-horned owl	<i>Bubo virginianus</i>	-	nocturnal; rare in wooded areas of less than 20 acres

Common Name	Scientific Name	Adapt.	Comments	References
house finch	<i>Carpodacus mexicanus</i>	+	nests almost entirely on buildings; considered a pest species	4.20
house sparrow	<i>Passer domesticus</i>	+	prefers buildings, urban, suburban, gardens; considered a pest	4.20
house wren	<i>Troglodytes aedon</i>	=	found in suburban areas and gardens; nests in crevices of buildings	4.9
indigo bunting	<i>Passerina cyanea</i>	-	inhabits open woodlands with dense thickets for cover	4.20
least flycatcher	<i>Empidonax minimus</i>	=	prefers open areas and woodland borders; uncommon on Long Island	4.15
mourning dove	<i>Zenaidura macroura</i>	=	abundant around parks, urban and suburban areas	4.8
Northern (dark-eyed) junco	<i>Junco hyemalis</i>	-	prefers forested area with elevation >300 meters; no LI atlas record	4.21
Northern cardinal	<i>Cardinalis cardinalis</i>	=	found around gardens, yards, parks	4.20
Northern harrier	<i>Circus cyaneus</i>	-	avoids humans; extremely protective of nests	4.16
Northern mockingbird	<i>Mimus polyglottos</i>	+	prefers to nest near humans	4.9
prairie warbler	<i>Dendroica discolor</i>	-	prefers scrub fields and open pine barrens habitat	4.19
red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	=	prefers open woodlands, parks and suburban areas	4.14
red-tailed hawk	<i>Buteo jamaicensis</i>	-	needs 100 foot radius undisturbed area for nest	4.16
red-winged blackbird	<i>Agelaius phoeniceus</i>	=	needs water	4.6
ring-necked pheasant	<i>Phasianus colchicus</i>	-	needs fields with cover along edge	4.8
rock dove	<i>Columba livia</i>	+	nests almost entirely on buildings; considered a pest species	4.8
rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	=	mainly found on north shore	4.20
ruffed grouse	<i>Bonasa umbellus</i>	-	prefers dense cover, thick woods; avoids humans	4.8
rufous-sided towhee	<i>Pipilo erythrrophthalmus</i>	-	may be present year round on Long Island	4.20
Savannah sparrow	<i>Passerculus sandwichensis</i>	-	found in shore areas; not expected inland	4.21
sharp-shinned hawk	<i>Accipiter striatus</i>	-	avoids humans; nests in heavily forested areas	4.16
song sparrow	<i>Melospiza melodia</i>	=	common to most habitats except deep forest, open field and marsh	4.22
swamp sparrow	<i>Melospiza georgiana</i>	-	prefers fresh water marshes; may be found in weedy fields, parks	4.22
whip-poor-will	<i>Caprimulgus vociferous</i>	-	nocturnal; prefers open woods with adjacent fields	4.12
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	=	often found in suburban areas and city parks	22.32
willow flycatcher	<i>Empidonax traillii</i>	-	found mostly on south shore and western north shore areas	4.15
yellow warbler	<i>Dendroica petechia</i>	=	rare breeder on LI, winter sps, abundant in parks & yards	4.18
yellow-billed cuckoo	<i>Coccyzus americanus</i>	-	avoids heavy urban areas; prefers wooded open or edges for nests	4.12
Mammals				
Eastern chipmunk	<i>Tamias striatus</i>	=	prefers open woods, thickets, and rocky areas	1.29
Eastern cottontail	<i>Sylvilagus floridanus</i>	=	will adapt to suburban areas, if there is sufficient cover	1.29
white-tailed deer	<i>Odocoileus virginianus</i>	-	requires range of one-half square mile	1.25.29
red fox	<i>Vulpes vulpes</i>	-	builds den in wooded areas with loose-sandy soil and good drainage	1.29
Eastern mole	<i>Scalopus aquaticus</i>	=	tunnels underground	1.29
house mouse	<i>Mus musculus</i>	+	lives in association with man, not expected away from buildings	1.29
meadow-jumping mouse	<i>Zapus hudsonicus</i>	=	found around water in pine barrens; prefers open areas with grasses	1.29

Common Name	Scientific Name	Adapt.	Comments	References
white-footed mouse	<i>Peromyscus leucopus</i>	=	common to most all habitats; does not adapt well to human activity	1 29
Virginia opossum	<i>Didelphis virginiana</i>	=	common in suburban areas, as well as woods, marsh and coastal areas	1 29
raccoon	<i>Procyon lotor</i>	+	nocturnal; very adaptive; found in urban and forest areas	1 29
black rat	<i>Rattus rattus</i>	=	lives in association with man, mainly city water front buildings	1 29
Norway rat	<i>Rattus norvegicus</i>	+	nocturnal; usually associated with human activity	1 29
least shrew	<i>Cryptotis parva</i>	-	not commonly documented on Long Island	1 29
short-tailed shrew	<i>Blarina brevicauda</i>	=	tunnels underground; abundant in a variety of habitats	1 29
striped skunk	<i>Mephitis mephitis</i>	=	prefers mixed wood & brush within 2 miles of water; not expected on LI	1 29
meadow vole	<i>Microtus pennsylvanicus</i>	=	tunnels underground; prefers open woodland	29 45
pine vole	<i>Microtus pinetorum</i>	=	tunnels underground; prefers sandy soil in woods and field; can swim	1 29
long-tailed weasel	<i>Mustela frenata</i>	-	prefers dense wood, but may appear in all land habitats near water	1 29
woodchuck	<i>Marmota monax</i>	-	appears primarily in scrub woods and brushy areas; not common on LI	1 29
Herptiles				
Eastern garter snake	<i>Thamnophis sirtalis</i>	=	occupies a variety of habitats	38 40
eastern hognose snake	<i>Heterodon platirhinos</i>	=	sandy soil and sunny roadside; feeds on herptiles and insects	38
eastern milk snake	<i>Lampropeltis d. triangulum</i>	=	occupies a variety of habitats	38 39
Fowler's toad	<i>Bufo woodhousei fowleri</i>	-	found in suburban areas, gardens; breeds in shallow permanent ponds	33 37

Terrestrial Cultural Species : Adaptability				
Common Name	Scientific Name	Adapt.	Comments	References
Birds				
red-winged blackbird	<i>Agelaius phoeniceus</i>	=	needs water	4 6
Eastern bluebird	<i>Sialia sialis</i>	-	found almost entirely in nesting boxes, extremely rare in wild	4 7
common bobwhite	<i>Colinus virginianus</i>	-	somewhat tolerant of humans during spring and summer months	4 8
indigo bunting	<i>Passerina cyanea</i>	-	inhabits open woodlands with dense thickets for cover	4 20
Northern cardinal	<i>Cardinalis cardinalis</i>	=	found around gardens, yards, parks	4 20
gray catbird	<i>Dumetella carolinensis</i>	=	abundant around parks, urban and suburban areas	4 9
brown-headed cowbird	<i>Molothrus ater</i>	=	lays eggs in other bird's nests; some stay during winter	4 6
American crow	<i>Corvus brachyrhynchos</i>	=	extremely adaptable; omnivorous	4 11
mourning dove	<i>Zenaidura macroura</i>	=	abundant around parks, urban and suburban areas	4 8
rock dove	<i>Columba livia</i>	+	nests almost entirely on buildings; considered a pest species	4 8
great-crested flycatcher	<i>Myiarchus crinitus</i>	-	prefers deciduous forests and deciduous open woodland	4 15
common grackle	<i>Quiscalus quiscula</i>	=	adapts well to urban and suburban habitats	4 6
Northern harrier	<i>Circus cyaneus</i>	-	avoids humans; extremely protective of nests	4 16
Cooper's hawk	<i>Accipiter cooperii</i>	-	needs extensive woodland	4 17
red-tailed hawk	<i>Buteo jamaicensis</i>	-	needs 100 foot radius undisturbed area for nest	4 16
sharp-shinned hawk	<i>Accipiter striatus</i>	-	avoids humans; nests in heavily forested areas	4 16
blue jay	<i>Cyanocitta cristata</i>	=	extremely adaptable to human activity and other stresses	4 10
American kestrel	<i>Falco sparverius</i>	-	adaptable; prefers open areas and parks; will nest near humans	4 17
killdeer	<i>Charadrius vociferus</i>	=	grassland species prefers coastal and wet areas with sparse growth	4 31 32
Eastern kingbird	<i>Tyrannus tyrannus</i>	=	very adaptable to human activities; prefers open areas	4 15
Eastern meadowlark	<i>Sturnella magna</i>	-	found in marshes during winter months	4 6
Northern mockingbird	<i>Mimus polyglottos</i>	+	prefers to nest near humans	4 9
common nighthawk	<i>Chordeiles minor</i>	=	primarily a grassland species; will nest in burnt areas and roofs	4 12
barn owl	<i>Tyto alba</i>	=	hunts in open areas, nests in man made structures and hollow trees	4 17
great-horned owl	<i>Bubo virginianus</i>	-	nocturnal; rare in wooded areas of less than 20 acres	4 17
ring-necked pheasant	<i>Phasianus colchicus</i>	-	needs fields with cover along edge	4 8
black-bellied plover	<i>Pluvialis squatarola</i>	-	non-breeder on LI; may forage during summer, occasionally winter	31 32
American robin	<i>Turdus migratorius</i>	=	very adaptable; abundant in parks; nests in man-made structures	4 7
chipping sparrow	<i>Spizella passerina</i>	+	abundant around man made structures	4 21
field sparrow	<i>Spizella pusilla</i>	-	associated with grasslands, fields and brushy wooded edges	4 21
grasshopper sparrow	<i>Ammodramus savannarum</i>	-	requires grasslands	4 20
house sparrow	<i>Passer domesticus</i>	+	prefers buildings, urban, suburban, gardens; considered a pest	4 20

Common Name	Scientific Name	Adapt.	Comments	References
Savannah sparrow	<i>Passerculus sandwichensis</i>	-	found in shore areas; not expected inland	4 21
song sparrow	<i>Melospiza melodia</i>	=	common to most habitats except deep forest, open field and marsh	4 22
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	=	often found in suburban areas and city parks	22 32
European starling	<i>Sturnus vulgaris</i>	+	extremely adaptable to human activity; considered a pest	4 23
barn swallow	<i>Hirundo rustica</i>	+	nests almost entirely on buildings	4 15
chimney swift	<i>Chaetura pelasgica</i>	+	nests in chimneys, with few exceptions	4 42
brown thrasher	<i>Toxostoma rufum</i>	=	common in parks, suburban areas, wooded edges, dry open areas	4 9
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	-	prefers first growth woods, with some open brush area	4 19
cedar waxwing	<i>Bombycilla cedrorum</i>	+	prefers open woodlands, orchards and residential areas	4 23 32
whip-poor-will	<i>Caprimulgus vociferous</i>	-	nocturnal; prefers open woods with adjacent fields	4 12
American woodcock	<i>Philohela minor</i>	-	prefers moist woodland and thicket near open fields	4 30
red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	=	prefers open woodlands, parks and suburban areas	4 14
house wren	<i>Troglodytes aedon</i>	=	found in suburban areas and gardens; nests in crevices of buildings	4 9
Mammals				
Eastern pipistrelle	<i>Pipistrellus subflavus</i>	=	found near water in open woods, also found in buildings	1 29
Eastern cottontail	<i>Sylvilagus floridanus</i>	=	will adapt to suburban areas, if there is sufficient cover	1 29
white-tailed deer	<i>Odocoileus virginianus</i>	-	requires range of one-half square mile	1 25 29
red fox	<i>Vulpes vulpes</i>	-	builds den in wooded areas with loose-sandy soil and good drainage	1 29
house mouse	<i>Mus musculus</i>	+	lives in association with man, not expected away from buildings	1 29
meadow-jumping mouse	<i>Zapus hudsonicus</i>	=	found around water in pine barrens; prefers open areas with grasses	1 29
white-footed mouse	<i>Peromyscus leucopus</i>	=	common to most all habitats; does not adapt well to human activity	1 29
Virginia opossum	<i>Didephis virginiana</i>	=	common in suburban areas, woods, marsh and coastal areas	1 29
raccoon	<i>Procyon lotor</i>	+	nocturnal; very adaptive; found in urban and forest areas	1 29
black rat	<i>Rattus rattus</i>	=	lives in association with man, mainly city water front buildings	1 29
Norway rat	<i>Rattus norvegicus</i>	+	nocturnal; usually associated with human activity	1 29
least shrew	<i>Cryptotis parva</i>	-	not commonly documented on Long Island	1 29
striped skunk	<i>Mephitis mephitis</i>	=	prefers mixed wood & brush within 2 miles of water; not expected on LI	1 29
pine vole	<i>Microtus pinetorum</i>	=	tunnels underground; prefers sandy soil in woods and field, can swim	1 29
long-tailed weasel	<i>Mustela frenata</i>	-	prefers dense wood, but may appear in all land habitats near water	1 29
Herptiles				
Eastern garter snake	<i>Thamnophis sirtalis</i>	=	occupies a variety of habitats	38 40
eastern milk snake	<i>Lampropeltis d. triangulum</i>	=	occupies a variety of habitats	38 39
Fowler's toad	<i>Bufo woodhousei fowleri</i>	-	found in suburban areas, gardens; breeds in shallow permanent ponds	33 37

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