
Appendix E



Appendix E-1
Correspondence



January 9, 2014

VIA U.S. MAIL

Ref: 29096.00

Ms. Tara Salerno
Information Services
New York Natural Heritage Program
New York State Department of Environmental Conservation
625 Broadway, 5th Floor
Albany, New York 12233-4757

Re: Environmental Review
Villadom – Elwood Orchard Development
Intersection of Jericho Turnpike and Manor Road
Elwood, Town of Huntington

Dear Ms. Salerno:

VHB Engineering, Surveying and Landscape Architecture, P.C. (VHB) is in the process of performing an environmental review for the redevelopment of an approximately 56-acre parcel (“subject property”) located at the northeastern corner of the intersection of Jericho Turnpike and Manor Road in the hamlet of Elwood (see attached figure). The subject property is currently undeveloped outside of a 7,535-square foot commercial building and a single-family residence. Note that portions of the property were previously mined for sand. This review is an update to an environmental review previously conducted by Nelson, Pope & Voorhis, LLC.

The proposed project involves, among other things, a change of zone for the 49.28±-acre western portion of the subject property (Lot 1; Lot 2 is not proposed to be developed) from General Business (C-6) and Residence (R-40) to the Planned Shopping Center (C-5) zoning district to allow the redevelopment of the subject property with a 486,380 mixed-use development, including retail, office, a fitness club, a library, a supermarket, a restaurant, and approximately 1,650 parking spaces in structured and surface parking. Note that there currently is unauthorized use of portions of the subject property by operators of all-terrain vehicles (ATVs) and paintball enthusiasts.

As part of the State Environmental Quality Review Act (SEQRA) process VHB is evaluating relevant environmental issues, including the potential impacts of the proposed development on natural resources. In order to ensure that the environmental review will address all significant issues, we are writing to ask whether there are any New York Natural Heritage Program records of any species of plant or animal life that is identified as threatened, rare, endangered, exploitably vulnerable, or of special concern on or proximate the subject property. In addition, we are seeking assistance from you to verify whether the site

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New York Natural Heritage Program
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contains any Significant Habitats, and if so, identify their statewide rarity designation. Upon checking your files, please advise us regarding the status of the site.

Thank you for your assistance in this matter. Your responses will be included in the environmental documentation that will be submitted to the Town of Huntington. Please feel free to contact me at (631) 234-3444 or ezamft@vhb.com with any questions you may have concerning this request.

Sincerely,

VHB Engineering, Surveying and Landscape Architecture, P.C.



Eric Zamft, AICP
Director of Planning, Long Island

EJZ/lm

enc.





VILLADOM-ELWOOD ORCHARD
 Huntington, New York

Site Location

Figure 1

Zamft, Eric

From: Natural Heritage <nathert@gw.dec.state.ny.us>
Sent: Tuesday, January 28, 2014 4:59 PM
To: Zamft, Eric
Subject: Reply to your recent request for information, 2014_7
Attachments: 2014_7.pdf

Mr. Zamft,
In response to your request, please see the attached letter.

We are now able to receive, and respond to, requests for project screenings via e-mail. Requests may be submitted to our dedicated e-mailbox, nathert@gw.dec.state.ny.us, with "info request" in the subject line. Instructions for submitting requests can be found at <http://www.dec.ny.gov/animals/31181.html>. While we encourage submission of requests via e-mail, we will still accept mailed requests.

Sincerely,

Nancy Davis

Senior Research Support Specialist
New York Natural Heritage Program
625 Broadway, 5th Floor
Albany, NY 12233-4757
(518) 402-8913 Monday to Wednesday
nxdavisr@gw.dec.state.ny.us

The New York Natural Heritage Program is a partnership between the SUNY College of Environmental Science and Forestry and the New York State Department of Environmental Conservation.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov



Joe Martens
Commissioner

January 27, 2014

Eric Zamft, AICP
VHB Engineering, Surveying and Landscape Architecture, P.C.
2150 Joshua's Path, Suite 300
Hauppauge, NY 11788

Re: Villandom - Elwood Orchard Development
Town/City: Huntington. County: Suffolk.

Dear Eric Zamft, AICP :

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site.

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 as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

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.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. 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, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

A handwritten signature in cursive script that reads "Nancy A. Davis".

Nancy Davis-Ricci
Environmental Review Specialist
New York Natural Heritage Program



**The following rare plants and rare animals have
historical records
at your project site, or in its vicinity.**

The following rare 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, and/or there is uncertainty regarding their continued presence. 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.

If suitable habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there. We recommend that any field surveys to the site include a search for these species, particularly at sites that are currently undeveloped and may still contain suitable habitat.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NYS LISTING</i>	<i>HERITAGE CONSERVATION STATUS</i>
Vascular Plants			
Featherfoil	<i>Hottonia inflata</i>	Threatened	Imperiled in NYS
1967-06-17: Huntington. In an acid woodland pond (possibly a kettle hole).			9778

This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

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

Appendix E-2
Species Adaptability

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 Oak Forest, Successional Forest, Successional Shrubland and Successional Old Field. 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.

Dry Oak Forest Species - Inventory and Characteristics

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			winter	spring	summer	fall		
gray catbird	<i>Dumetella carolinensis</i>	none		Late	X		R / N,F	4 9
black capped chickadee	<i>Parus atricapillus</i>	none	X	X	X	X	A / N,F	4 11
brown-headed cowbird	<i>Molothrus ater</i>	none		X	X	Early	A / N,F	4 6
brown creeper	<i>Certhia familiaris</i>	none		X	X	Early	C / N,F	4 9
American crow	<i>Corvus brachyrhynchos</i>	none	X	X	X	X	A / N,H	4 11
yellow-billed cuckoo	<i>Coccyzus americanus</i>	none		Late	X		R / N,F	4 12
house finch	<i>Carpodacus mexicanus</i>	none		X	X	X	A / N,F	4 20
common flicker	<i>Colaptes auratus</i>	none	X	X	X	X	C / N,F	4 14
Acadian flycatcher	<i>Empidonax virescens</i>	none		Late	X		N / N,F	4 15
great-crested flycatcher	<i>Myiarchus crinitus</i>	none		Late	X		C / N,F	4 15
common grackle	<i>Quiscalus quiscula</i>	none	X	X	X	X	C / N,F	4 6
ruffed grouse	<i>Bonasa umbellus</i>	none	X	X	X	X	C / N,F	4 8
broad-winged hawk	<i>Buteo platypterus</i>	none		X	X		R / N,H	4 16
Cooper's hawk	<i>Accipiter cooperii</i>	special concern		X	X		N / N,H	4 17
red-tailed hawk	<i>Buteo jamaicensis</i>	none	X	X	X	X	C / N,H	4 16
sharp-shinned hawk	<i>Accipiter striatus</i>	special concern	X	X	X	X	N / N,F	4 16
blue jay	<i>Cyanocitta cristata</i>	none	X	X	X	X	A / N,F	4 10
Northern (dark-eyed) junco	<i>Junco hyemalis</i>	none		X	X	Early	R / N,F	4 21
Eastern kingbird	<i>Tyrannus tyrannus</i>	none		X	X	Early	C / N,F	4 15
golden-crowned kinglet	<i>Regulus satrapa</i>	none	X	X		X	R / N,H	4 7
ruby-crowned kinglet	<i>Regulus calendula</i>	none	X	X		X	R / N,H	4 7
purple martin	<i>Progne subis</i>	none		Late	X		R / N,F	4 15
Northern mockingbird	<i>Mimus polyglottos</i>	none	X	X	X	X	C / N,F	4 9
white-breasted nuthatch	<i>Sitta carolinensis</i>	none	X	X	X	X	A / N,F	4 9
northern oriole	<i>Icterus galbula</i>	none		Late	X		C / N,F	4 6
ovenbird	<i>Seiurus aurocapillus</i>	none		Late	X	Early	C / N,F	4 19
common screech owl	<i>Otus asio</i>	none	X	X	X	X	C / N	4 17
great-horned owl	<i>Bubo virginianus</i>	none	X	X	X	X	C / N,H	4 17
long-eared owl	<i>Asio otus</i>	none	X	X	X	X	C / N,H	4 17
American robin	<i>Turdus migratorius</i>	none		X	X	Early	A / N,F	4 7
yellow-bellied sapsucker	<i>Sphyrapicus varius</i>	none		Late	X	Early	C / N,F	14
fox sparrow	<i>Passerella iliaca</i>	none	X	X		X	R / F	20 21

Villadom, Elwood
Expanded EAF
Rezone Application

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	C / N,F	4 20
song sparrow	<i>Melospiza melodia</i>	none	X	X	X	X	C / N,F	4 22
European starling	<i>Sturnus vulgaris</i>	none	X	X	X	X	C / N,F	4 23
scarlet tanager	<i>Piranga olivacea</i>	none		X	X		C / N,F	4
brown thrasher	<i>Toxostoma rufum</i>	none		X	X	Early	R / N,F	4 9
hermit thrush	<i>Catharus guttatus</i>	none	X	X	X	X	C / N,F	4 7
wood thrush	<i>Hylocichla mustelina</i>	none		X	X	Early	C / N,F	4 7
tufted titmouse	<i>Parus bicolor</i>	none	X	X	X	X	C / N,F	4 11
veery	<i>Catharus fuscescens</i>	none		Late	X		R / N,F	4 7
red-eyed vireo	<i>Vireo olivaceus</i>	none		Late	X		C / N,F	4 23
yellow throated vireo	<i>Vireo flavifrons</i>	none		Late	X		R / N,F	4 23
black-and-white warbler	<i>Mniotilta varia</i>	none		X	X		C / N,F	4 18
black-throated blue warbler	<i>Dendroica caerulescens</i>	none		Late	X	Early	C / N,F	18
blue-winged warbler	<i>Vermivora pinus</i>	none		Late	X		R / N,F	4 14
cedar waxwing	<i>Bombycilla cedrorum</i>	none		X	X	Early	C / N,F	4 23 32
whip-poor-will	<i>Caprimulgus vociferous</i>	special concern		Late	X		C / N	4 12
Eastern wood-peewee	<i>Contopus virens</i>	none		X	X		C / N,F	4 15
downy woodpecker	<i>Picoides pubescens</i>	none	X	X	X	X	A / N,F	4 14
hairy woodpecker	<i>Picoides villosus</i>	none	X	X	X	X	C / N,F	4 14
red-bellied woodpecker	<i>Melanerpes carolinus</i>	none	X	X	X	X	C / N,F	4 14
house wren	<i>Troglodytes aedon</i>	none		Late	X	Early	R / N,F	4 9
Mammals								
big-brown bat	<i>Eptesicus fuscus</i>	none	X	X	X	X	C / N,F	1 29
hoary bat	<i>Lasiurus borealis</i>	none			Late	Early	C / N,F	45
Keen's bat	<i>Myotis keenii</i>	none			X	Early	R / N	1 29
little-brown bat	<i>Myotis lucifugus</i>	none	X	X	X	X	C / N,F	1 29
red bat	<i>Lasiurus borealis</i>	none		Late	X	Early	C / N,F	1 29
Eastern pipistrelle	<i>Pipistrellus subflavus</i>	none		X	X	Early	R / N,F	1 29
silver-haired bat	<i>Lasionycteris noctivagans</i>	none			X		R / N,F	1 29
Eastern chipmunk	<i>Tamias striatus</i>	none	X	X	X	X	C / N,F	1 29
Eastern cottontail	<i>Sylvilagus floridanus</i>	none	X	X	X	X	C / N,F	1 29
white-tailed deer	<i>Odocoileus virginianus</i>	none	X	X	X	X	C / N,F	1 25 29
red fox	<i>Vulpes vulpes</i>	none	X	X	X	X	C / N,H	1 29
Eastern mole	<i>Scalopus aquaticus</i>	none	X	X	X	X	C / N,F	1 29

Villadom, Elwood
Expanded EAF
Rezone Application

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			winter	spring	summer	fall		
house mouse	<i>Mus musculus</i>	none	X	X	X	X	N / 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 / N,F	1 29
masked shrew	<i>Sorex cinereus</i>	none	X	X	X	X	C / N,F	1 29
short-tailed shrew	<i>Blarina breuicauda</i>	none	X	X	X	X	A / N,F	1 29
striped skunk	<i>Mephitis mephitis</i>	none	X	X	X	X	N / N,F	1 29
Eastern gray squirrel	<i>Sciurus carolinensis</i>	none	X	X	X	X	A / N,F	1 29
southern-flying squirrel	<i>Glaucomys volans</i>	none	X	X	X	X	C / 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
Herptiles								
spring peeper	<i>Hyla crucifer</i>	none	X	X	X	X	R / N,F	33 35 38
red-backed salamander	<i>Plethodon cinereus cinereus</i>	none	X	X	X	X	R / N,F	34 36
marbled salamander	<i>Ambystoma opacum</i>	special concern	X	X	X	X	R / N,F	34 36 38
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
Eastern spadefoot toad	<i>Scaphiopus holbrookii</i>	special concern	X	X	X	X	C / N,F	33

KEY:

Frequency:

A- abundant

C- common

R- rare

N- not expected

Activity:

N- nesting

H- hunting

R- resting

F- foraging

Successional Woodland Species - Inventory and Characteristics

Common Name	Scientific Name	Status	Found During				Frequency / Habitat Use	References
			winter	spring	summer	fall		
Birds	Birds							
gray catbird	<i>Dumetella carolinensis</i>	none		Late	X		C / N,F	4 9
black capped chickadee	<i>Parus atricapillus</i>	none	X	X	X	X	A / N,F	4 11
brown-headed cowbird	<i>Molothrus ater</i>	none		X	X	Early	A / N,F	4 6
brown creeper	<i>Certhia familiaris</i>	none		X	X	Early	C / N,F	4 9
American crow	<i>Corvus brachyrhynchos</i>	none	X	X	X	X	A / N,H	4 11
yellow-billed cuckoo	<i>Coccyzus americanus</i>	none		Late	X		C / N,F	4 12
mourning dove	<i>Zenaida macroura</i>	none	X	X	X	X	C / N,H	4 8
rock dove	<i>Columba livia</i>	none	X	X	X	X	C / N,F	4 8
house finch	<i>Carpodacus mexicanus</i>	none		X	X	X	A / N,F	4 20
common flicker	<i>Colaptes auratus</i>	none	X	X	X	X	A / N,F	4 14
common grackle	<i>Quiscalus quiscula</i>	none	X	X	X	X	A / N,F	4 6
ruffed grouse	<i>Bonasa umbellus</i>	none	X	X	X	X	R / N,F	4 8
rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	none		Late	X	Early	R / N,F	4 20
Cooper's hawk	<i>Accipiter cooperii</i>	special concern		X	X		N / N,H	4 17
red-tailed hawk	<i>Buteo jamaicensis</i>	none	X	X	X	X	C / H	4 16
sharp-shinned hawk	<i>Accipiter striatus</i>	special concern	X	X	X	X	N / N,F	4 16
blue jay	<i>Cyanocitta cristata</i>	none	X	X	X	X	A / N,F	4 10
Northern (dark-eyed) junco	<i>Junco hyemalis</i>	none	X			Late	C / N,F	4 21
American kestrel	<i>Falco sparverius</i>	none	X	X	X	X	C / N,H	4 17
Eastern kingbird	<i>Tyrannus tyrannus</i>	none		X	X	Early	C / N,F	4 15
golden-crowned kinglet	<i>Regulus satrapa</i>	none	X	X		X	R / N,H	4 7
ruby-crowned kinglet	<i>Regulus calendula</i>	none	X	X		X	R / N,H	4 7
Northern mockingbird	<i>Mimus polyglottos</i>	none	X	X	X	X	C / N,F	4 9
great-horned owl	<i>Bubo virginianus</i>	none	X	X	X	X	C / N,H	4 17
long-eared owl	<i>Asio otus</i>	none	X	X	X	X	C / N,H	4 17
American redstart	<i>Setophaga ruticilla</i>	none		Late	X	X	C / N,F	4 19
American robin	<i>Turdus migratorius</i>	none		X	X	Early	A / N,F	4 7
yellow-bellied sapsucker	<i>Sphyrapicus varius</i>	none		Late	X	Early	C / N,F	14
fox sparrow	<i>Passerella iliaca</i>	none	X	X		X	R / F	20 21
house sparrow	<i>Passer domesticus</i>	none	X	X	X	X	C / N,F	4 20
song sparrow	<i>Melospiza melodia</i>	none	X	X	X	X	A / N,F	4 22

Villadom, Elwood
Expanded EAF
Rezone Application

Common Name	Scientific Name	Status	Found During				Frequency / Habitat Use	References
			winter	spring	summer	fall		
white-throated sparrow	<i>Zonotrichia albicollis</i>	none	X	X	X	X	C / N,F	4 22
European starling	<i>Sturnus vulgaris</i>	none	X	X	X	X	A / N,F	4 23
barn swallow	<i>Hirundo rustica</i>	none		Late	X		C / N,F	4 15
brown thrasher	<i>Toxostoma rufum</i>	none		X	X	Early	C / N,F	4 9
hermit thrush	<i>Catharus guttatus</i>	none	X	X	X	X	R / N,F	4 7
wood thrush	<i>Hylocichla mustelina</i>	none		X	X	Early	C / N,F	4 7
rufous-sided towhee	<i>Pipilo erythrophthalmus</i>	none		Late	X	Early	A / N,F	4 20
red-eyed vireo	<i>Vireo olivaceus</i>	none		Late	X		C / N,F	4 23
black-and-white warbler	<i>Mniotilta varia</i>	none		X	X		C / N,F	4 18
blue-winged warbler	<i>Vermivora pinus</i>	none		Late	X		C / N,F	4 14
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	none		Late	X		C / N,F	4 19
cedar waxwing	<i>Bombycilla cedrorum</i>	none		X	X	Early	C / N,F	4 23 32
whip-poor-will	<i>Caprimulgus vociferous</i>	special concern		Late	X		C / N	4 12
Eastern wood-peewee	<i>Contopus virens</i>	none		X	X		C / N,F	4 15
American woodcock	<i>Philhela minor</i>	none		X	X	X	R / N,F	4 30
downy woodpecker	<i>Picoides pubescens</i>	none	X	X	X	X	A / N,F	4 14
hairy woodpecker	<i>Picoides villosus</i>	none	X	X	X	X	R / N,F	4 14
red-bellied woodpecker	<i>Melanerpes carolinus</i>	none	X	X	X	X	R / N,F	4 14
Carolina wren	<i>Thryothorus ludovicianus</i>	none	X	X	X	X	C / N,F	4 9
house wren	<i>Troglodytes aedon</i>	none		Late	X	Early	C / N,F	4 9
big-brown bat	<i>Eptesicus fuscus</i>	none	X	X	X	X	C / N,F	1 29
hoary bat	<i>Lasiurus borealis</i>	none			Late	Early	C / N,F	45
Keen's bat	<i>Myotis keenii</i>	none			X	Early	R / N	1 29
Mammals								
little-brown bat	<i>Myotis lucifugus</i>	none	X	X	X	X	C / N,F	1 29
red bat	<i>Lasiurus borealis</i>	none		Late	X	Early	C / N,F	1 29
silver-haired bat	<i>Lasionycteris noctivagans</i>	none			X		R / N,F	1 29
Eastern chipmunk	<i>Tamias striatus</i>	none	X	X	X	X	C / 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 / N,H	1 29
Eastern mole	<i>Scalopus aquaticus</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

Villadom, Elwood
Expanded EAF
Rezone Application

Common Name	Scientific Name	Status	Found During				Frequency / Habitat Use	References
			winter	spring	summer	fall		
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 / N,F	1 29
masked shrew	<i>Sorex cinereus</i>	none	X	X	X	X	C / N,F	1 29
short-tailed shrew	<i>Blarina brevicauda</i>	none	X	X	X	X	A / N,F	1 29
striped skunk	<i>Mephitis mephitis</i>	none	X	X	X	X	N / N,F	1 29
Eastern gray squirrel	<i>Sciurus carolinensis</i>	none	X	X	X	X	C / N,F	1 29
meadow vole	<i>Microtus pennsylvanicus</i>	none	X	X	X	X	R / N,F	29 45
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
woodchuck	<i>Marmota monax</i>	none	X	X	X	X	R / N,F	1 29
Herptiles								
Eastern garter snake	<i>Thamnophis sirtalis</i>	none	X	X	X	X	C / N,F	38 40
eastern hognose snake	<i>Heterodon platyrhinos</i>	special concern	X	X	X	X	R / N,H	38
eastern milk snake	<i>Lampropeltis d. triangulum</i>	none	X	X	X	X	C / N,F	38 39

KEY:

Frequency:

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

Activity:

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

Successional Shrubland Species-Inventory and Characteristics

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			Winter	Spring	Summer	Fall		
red-winged blackbird	<i>Agelaius phoeniceus</i>	none		X	X	Early	C / N,F	4 6
common bobwhite	<i>Colinus virginianus</i>	none	X	X	X	X	C / N,F	4 8
indigo bunting	<i>Passerina cyanea</i>	none		Late	X	Early	C / N,F	4 20
Northern cardinal	<i>Cardinalis cardinalis</i>	none	X	X	X	X	C / N,F	4 20
gray catbird	<i>Dumetella carolinensis</i>	none		Late	X		A / N,F	4 9
black capped chickadee	<i>Parus atricapillus</i>	none	X	X	X	X	A / N,F	4 11
brown-headed cowbird	<i>Molothrus ater</i>	none		X	X	Early	A / N,F	4 6
American crow	<i>Corvus brachyrhynchos</i>	none	X	X	X	X	A / H	4 11
black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	none		Late	X		C / N,F	4 11
yellow-billed cuckoo	<i>Coccyzus americanus</i>	none		Late	X		C / N,F	4 12
mourning dove	<i>Zenaida macroura</i>	none	X	X	X	X	A / N,H	4 8
American goldfinch	<i>Carduelis tristis</i>	none		X	X	X	C / N,F	4 20
common flicker	<i>Colaptes auratus</i>	none	X	X	X	X	R / H	4 14
least flycatcher	<i>Empidonax minimus</i>	none		Late	X		R / N,F	4 15
willow flycatcher	<i>Empidonax traillii</i>	none		Late	X		C / N,F	4 15
common grackle	<i>Quiscalus quiscula</i>	none	X	X	X	X	A / N,F	4 6
ruffed grouse	<i>Bonasa umbellus</i>	none	X	X	X	X	C / N,F	4 8
rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	none		Late	X	Early	C / N,F	4 20
Northern harrier	<i>Circus cyaneus</i>	threatened	X	X	X	X	R / H	4 16
Cooper's hawk	<i>Accipiter cooperii</i>	special concern		X	X		N / N,H	4 17
red-tailed hawk	<i>Buteo jamaicensis</i>	none	X	X	X	X	C / H	4 16
sharp-shinned hawk	<i>Accipiter striatus</i>	special concern	X	X	X	X	N / N,F	4 16
blue jay	<i>Cyanocitta cristata</i>	none	X	X	X	X	A / N,F	4 10
Northern (dark-eyed) junco	<i>Junco hyemalis</i>	none	X			Late	C / N,F	4 21
American kestrel	<i>Falco sparverius</i>	none	X	X	X	X	C / H	4 17
Eastern kingbird	<i>Tyrannus tyrannus</i>	none		X	X	Early	A / N,F	4 15
golden-crowned kinglet	<i>Regulus satrapa</i>	none	X	X		X	R / N,H	4 7
ruby-crowned kinglet	<i>Regulus calendula</i>	none	X	X		X	R / N,H	4 7
Eastern meadowlark	<i>Sturnella magna</i>	none		Late	X		C / N,F	4 6
Northern mockingbird	<i>Mimus polyglottos</i>	none	X	X	X	X	A / N,F	4 9
barn owl	<i>Tyto alba</i>	none	X	X	X	X	R / H	4 17
great-horned owl	<i>Bubo virginianus</i>	none	X	X	X	X	C / N,H	4 17

Villadom, Elwood
Expanded EAF
Rezone Application

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			winter	spring	summer	fall		
ring-necked pheasant	<i>Phasianus colchicus</i>	none	X	X	X	X	C / N,F	4 8
American redstart	<i>Setophaga ruticilla</i>	none		Late	X	X	C / N,F	4 19
American robin	<i>Turdus migratorius</i>	none		X	X	Early	A / N,F	4 7
pine siskin	<i>Carduelis pinus</i>	none	X	X	X	X	N / N,F	4 20
fox sparrow	<i>Passerella iliaca</i>	none	X	X		X	C / F	20 21
field sparrow	<i>Spizella pusilla</i>	none		X	X	X	C / N,F	4 21
grasshopper sparrow	<i>Ammodramus savannarum</i>	special concern		X	X	Early	C / N,F	4 20
song sparrow	<i>Melospiza melodia</i>	none	X	X	X	X	A / N,F	4 22
swamp sparrow	<i>Melospiza georgiana</i>	none	X	X	X	X	C / N,F	4 22
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	none	X	X		X	C / F	22 32
white-throated sparrow	<i>Zonotrichia albicollis</i>	none	X	X	X	X	C / N,F	4 22
European starling	<i>Sturnus vulgaris</i>	none	X	X	X	X	A / N,F	4 23
barn swallow	<i>Hirundo rustica</i>	none		Late	X		C / N,F	4 15
brown thrasher	<i>Toxostoma rufum</i>	none		X	X	Early	C / N,F	4 9
hermit thrush	<i>Catharus guttatus</i>	none	X	X	X	X	R / N,F	4 7
wood thrush	<i>Hylocichla mustelina</i>	none		X	X	Early	C / N,F	4 7
rufous-sided towhee	<i>Pipilo erythrophthalmus</i>	none		Late	X	Early	A / N,F	4 20
white eyed vireo	<i>Vireo griseus</i>	none		Late	X		C / N,F	4 23
black-and-white warbler	<i>Mniotilta varia</i>	none		X	X		R / N,F	4 18
blue-winged warbler	<i>Vermivora pinus</i>	none		Late	X		C / N,F	4 14
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	none		Late	X		C / N,F	4 19
prairie warbler	<i>Dendroica discolor</i>	none		Late	X	Early	C / N,F	4 19
cedar waxwing	<i>Bombycilla cedrorum</i>	none		X	X	Early	C / N,F	4 23 32
whip-poor-will	<i>Caprimulgus vociferous</i>	special concern		Late	X		C / F	4 12
American woodcock	<i>Philhela minor</i>	none		X	X	X	C / N,F	4 30
Carolina wren	<i>Thryothorus ludovicianus</i>	none	X	X	X	X	C / N,F	4 9
house wren	<i>Troglodytes aedon</i>	none		Late	X	Early	C / N,F	4 9
common yellowthroat	<i>Geothlypis trichas</i>	none		X	X	Early	C / N,F	4 19
MAMMALS								
Eastern chipmunk	<i>Tamias striatus</i>	none	X	X	X	X	C / 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 / N,H	1 29
Eastern mole	<i>Scalopus aquaticus</i>	none	X	X	X	X	C / N,F	1 29

Villadom, Elwood
Expanded EAF
Rezone Application

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			winter	spring	summer	fall		
house mouse	<i>Mus musculus</i>	none	X	X	X	X	R / 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	R / N,F	1 29
short-tailed shrew	<i>Blarina brevicauda</i>	none	X	X	X	X	A / N,F	1 29
striped skunk	<i>Mephitis mephitis</i>	none	X	X	X	X	N / N,F	1 29
meadow vole	<i>Microtus pennsylvanicus</i>	none	X	X	X	X	C / N,F	29 45
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
woodchuck	<i>Marmota monax</i>	none	X	X	X	X	R / N,F	1 29
HERPTILES								
Eastern garter snake	<i>Thamnophis sirtalis</i>	none	X	X	X	X	C / N,F	38 40
eastern hognose snake	<i>Heterodon platyrhinos</i>	special concern	X	X	X	X	R / N,H	38
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

Successional Old Field Species - Inventory and Characteristics

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			Winter	Spring	Summer	Fall		
Birds								
red-winged blackbird	<i>Agelaius phoeniceus</i>	none		X	X	Early	C / N,F	4 6
Eastern bluebird	<i>Sialia sialis</i>	none		X	X	Early	R / N,F	4 7
common bobwhite	<i>Colinus virginianus</i>	none	X	X	X	X	C / N,F	4 8
indigo bunting	<i>Passerina cyanea</i>	none		Late	X	Early	C / N,F	4 20
Northern cardinal	<i>Cardinalis cardinalis</i>	none	X	X	X	X	C / N,F	4 20
gray catbird	<i>Dumetella carolinensis</i>	none		Late	X		A / N,F	4 9
black capped chickadee	<i>Parus atricapillus</i>	none	X	X	X	X	C / H	4 11
brown-headed cowbird	<i>Molothrus ater</i>	none		X	X	Early	A / H	4 6
American crow	<i>Corvus brachyrhynchos</i>	none	X	X	X	X	A / H	4 11
black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	none		Late	X		C / N,F	4 11
yellow-billed cuckoo	<i>Coccyzus americanus</i>	none		Late	X		C / N,F	4 12
mourning dove	<i>Zenaida macroura</i>	none	X	X	X	X	A / N,H	4 8
rock dove	<i>Columba livia</i>	none	X	X	X	X	A / N,F	4 8
American goldfinch	<i>Carduelis tristis</i>	none		X	X	X	C / N,F	4 20
house finch	<i>Carpodacus mexicanus</i>	none		X	X	X	A / N,F	4 20
common flicker	<i>Colaptes auratus</i>	none	X	X	X	X	C / N,F	4 14
least flycatcher	<i>Empidonax minimus</i>	none		Late	X		R / N,F	4 15
willow flycatcher	<i>Empidonax traillii</i>	none		Late	X		C / N,F	4 15
common grackle	<i>Quiscalus quiscula</i>	none	X	X	X	X	A / N,F	4 6
ruffed grouse	<i>Bonasa umbellus</i>	none	X	X	X	X	C / N,F	4 8
rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	none		Late	X	Early	C / N,F	4 20
Northern harrier	<i>Circus cyaneus</i>	threatened	X	X	X	X	R / H	4 16
Cooper's hawk	<i>Accipiter cooperii</i>	special concern		X	X		N / N,H	4 17
red-tailed hawk	<i>Buteo jamaicensis</i>	none	X	X	X	X	C / H	4 16
sharp-shinned hawk	<i>Accipiter striatus</i>	special concern	X	X	X	X	N / N,F	4 16
blue jay	<i>Cyanocitta cristata</i>	none	X	X	X	X	A / N,F	4 10
Northern (dark-eyed) junco	<i>Junco hyemalis</i>	none	X			Late	C / N,F	4 21
American kestrel	<i>Falco sparverius</i>	none	X	X	X	X	C / H	4 17
Eastern kingbird	<i>Tyrannus tyrannus</i>	none		X	X	Early	A / N,F	4 15
Eastern meadowlark	<i>Sturnella magna</i>	none		Late	X		C / N,F	4 6
Northern mockingbird	<i>Mimus polyglottos</i>	none	X	X	X	X	A / N,F	4 9

Villadom, Elwood
Expanded EAF
Rezone Application

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

Common Name	Scientific Name	Status	Found During			Fall	Frequency/ Habitat Use	References
			Winter	Spring	Summer			
Eastern mole	<i>Scalopus aquaticus</i>	none	X	X	X	X	C / N,F	1 29
house mouse	<i>Mus musculus</i>	none	X	X	X	X	R / 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	R / N,F	1 29
Norway rat	<i>Rattus norvegicus</i>	none	X	X	X	X	C / N,F	1 29
least shrew	<i>Cryptotis parva</i>	none	X	X	X	X	N / N,F	1 29
short-tailed shrew	<i>Blarina breuicauda</i>	none	X	X	X	X	A / N,F	1 29
striped skunk	<i>Mephitis mephitis</i>	none	X	X	X	X	N / N,F	1 29
meadow vole	<i>Microtus pennsylvanicus</i>	none	X	X	X	X	C / N,F	29 45
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
woodchuck	<i>Marmota monax</i>	none	X	X	X	X	R / N,F	1 29
Herptiles								
Eastern garter snake	<i>Thamnophis sirtalis</i>	none	X	X	X	X	C / N,F	38 40
eastern hognose snake	<i>Heterodon platyrhinos</i>	special concern	X	X	X	X	R / N,H	38
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

Terrestrial Cultural Species - Inventory and Characteristics

Common Name	Scientific Name	Status	Found During				Frequency/ Habitat Use	References
			winter	spring	summer	fall		
Birds								
red-winged blackbird	<i>Agelaius phoeniceus</i>	none		X	X	Early	C / N,F	4 6
Eastern bluebird	<i>Sialia sialis</i>	none		X	X	Early	R / N,F	4 7
common bobwhite	<i>Colinus virginianus</i>	none	X	X	X	X	C / N,F	4 8
indigo bunting	<i>Passerina cyanea</i>	none		Late	X	Early	N / F	4 20
Northern cardinal	<i>Cardinalis cardinalis</i>	none	X	X	X	X	C / N,F	4 20
gray catbird	<i>Dumetella carolinensis</i>	none		Late	X		C / F	4 9
brown-headed cowbird	<i>Molothrus ater</i>	none		X	X	Early	A / H	4 6
American crow	<i>Corvus brachyrhynchos</i>	none	X	X	X	X	A / N,H	4 11
mourning dove	<i>Zenaida macroura</i>	none	X	X	X	X	A / N,H	4 8
rock dove	<i>Columba livia</i>	none	X	X	X	X	A / N,F	4 8
great-crested flycatcher	<i>Myiarchus crinitus</i>	none		Late	X		C / N,F	4 15
common grackle	<i>Quiscalus quiscula</i>	none	X	X	X	X	A / N,F	4 6
Northern harrier	<i>Circus cyaneus</i>	threatened	X	X	X	X	R / H	4 16
Cooper's hawk	<i>Accipiter cooperii</i>	special concern		X	X		N / N,H	4 17
red-tailed hawk	<i>Buteo jamaicensis</i>	none	X	X	X	X	C / H	4 16
sharp-shinned hawk	<i>Accipiter striatus</i>	special concern	X	X	X	X	N / N,F	4 16
blue jay	<i>Cyanocitta cristata</i>	none	X	X	X	X	A / N,F	4 10
American kestrel	<i>Falco sparverius</i>	none	X	X	X	X	C / N,H	4 17
killdeer	<i>Charadrius vociferus</i>	none		X	X	X	C / N,F	4 31 32
Eastern kingbird	<i>Tyrannus tyrannus</i>	none		X	X	Early	A / N,F	4 15
Eastern meadowlark	<i>Sturnella magna</i>	none		Late	X		C / N,F	4 6
Northern mockingbird	<i>Mimus polyglottos</i>	none	X	X	X	X	A / N,F	4 9
common nighthawk	<i>Chordeiles minor</i>	special concern		Late	X		R / N,F	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	X	X	X	C / N,F	4 8
black-bellied plover	<i>Pluvialis squatarola</i>	none		Early	X	Early	R / F	31 32
American robin	<i>Turdus migratorius</i>	none		X	X	Early	A / N,F	4 7
chipping sparrow	<i>Spizella passerina</i>	none	X	X	X	X	C / N,F	4 21
field sparrow	<i>Spizella pusilla</i>	none		X	X	X	R / N,F	4 21
grasshopper sparrow	<i>Ammodramus savannarum</i>	special concern		X	X	Early	R / N,F	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	Early	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	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		Late	X		A / N,F	4 15
chimney swift	<i>Chaetura pelagica</i>	none		X	X		C / F	4 42
brown thrasher	<i>Toxostoma rufum</i>	none		X	X	Early	R / N,F	4 9
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	none		Late	X		N / N,F	4 19
cedar waxwing	<i>Bombycilla cedrorum</i>	none		X	X	Early	C / N,F	4 23 32
whip-poor-will	<i>Caprimulgus vociferous</i>	special concern		Late	X		C / F	4 12
American woodcock	<i>Philhela minor</i>	none		X	X	X	R / N,F	4 30
red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	special concern		X	X	Early	C / N,F	4 14
house wren	<i>Troglodytes aedon</i>	none		Late	X	Early	C / N,F	4 9
Mammals								
Eastern pipistrelle	<i>Pipistrellus subflavus</i>	none		X	X	Early	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 parva</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
Heptiles								
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

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.

Dry Oak Forest Species - Adaptability and Comments

Common Name	Scientific Name	Adapt.	Comments	References
Birds				
Acadian flycatcher	Empidonax virescens	-	prefers cool, damp, mature hardwood forests	4 15
American crow	Corvus brachyrhynchos	=	extremely adaptable; omnivorous	4 11
American robin	Turdus migratorius	=	very adaptable; abundant in parks; nests in man-made structures	4 7
black capped chickadee	Parus atricapillus	=	abundant around parks, urban and suburban areas	4 11
black-and-white warbler	Mniotilta varia	-	builds nests under shrubs and/or trees	4 18
black-throated blue warbler	Dendroica caerulescens	=	migratory, large range; forest interior specie; can adapt to suburb	18
blue jay	Cyanocitta cristata	=	extremely adaptable to human activity and other stresses	4 10
blue-winged warbler	Vermivora pinus	-	primarily abandoned and overgrown field, and thickets	4 14
broad-winged hawk	Buteo platypterus	-	avoids humans; nests only in dense forests; prefers to be near water	4 16
brown creeper	Certhia familiaris	-	prefers predominantly deciduous wooded areas	4 9
brown thrasher	Toxostoma rufum	=	common in parks, suburban areas, wooded edges, dry open areas	4 9
brown-headed cowbird	Molothrus ater	=	lays eggs in other bird's nests; some stay during winter	4 6
cedar waxwing	Bombycilla cedrorum	+	prefers open woodlands, orchards and residential areas	4 23 32
common flicker	Colaptes auratus	=	abundant around parks, suburban and urban areas	4 14
common grackle	Quiscalus quiscula	=	adapts well to urban and suburban habitats	4 6
common screech owl	Otus asio	=	nocturnal; nests in hollow trees, abandoned buildings, nest boxes	4 17
Cooper's hawk	Accipiter cooperii	-	needs extensive woodland	4 17
downy woodpecker	Picoides pubescens	=	found in parks and suburban areas	4 14
Eastern kingbird	Tyrannus tyrannus	=	very adaptable to human activities; prefers open areas	4 15
Eastern wood-peewee	Contopus virens	=	prefers suburban areas, parks and villages with shade trees	4 15
European starling	Sturnus vulgaris	+	extremely adaptable to human activity; considered a pest	4 23
fox sparrow	Passerella iliaca	-	boreal species, winters here in edge, thickets, brushy areas	20 21
golden-crowned kinglet	Regulus satrapa	-	prefers spruce vegetation; no atlas sightings on Long Island	4 7
gray catbird	Dumetella carolinensis	=	abundant around parks, urban and suburban areas	4 9
great-crested flycatcher	Myiarchus crinitus	-	prefers deciduous forests and deciduous open woodland	4 15
great-horned owl	Bubo virginianus	-	nocturnal; rare in wooded areas of less than 20 acres	4 17
hairy woodpecker	Picoides villosus	=	found mainly in deciduous forests	4 14
hermit thrush	Catharus guttatus	=	not common on Long Island; when present, prefers pine barrens	4 7
house finch	Carpodacus mexicanus	+	nests almost entirely on buildings; considered a pest species	4 20
house sparrow	Passer domesticus	+	prefers buildings, urban, suburban, gardens; considered a pest	4 20
house wren	Troglodytes aedon	=	found in suburban areas and gardens; nests in crevices of buildings	4 9
long-eared owl	Asio otus	-	nocturnal; prefers dense forested areas near water	4 17
Northern (dark-eyed) junco	Junco hyemalis	-	prefers forested area with elevation >300 meters; no LI atlas record	4 21

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Common Name	Scientific Name	Adapt.	Comments	References
Northern mockingbird	Mimus polyglottos	+	prefers to nest near humans	4 9
northern oriole	Icterus galbula	=	prefers deciduous woodland and shade trees	4 6
ovenbird	Seiurus aurocapillus	-	prefers open forest floor and woodlot greater than 35 acres	4 19
purple martin	Progne subis	-	found in parks, suburbs, cities and open woods; nests in nest boxes	4 15
red-bellied woodpecker	Melanerpes carolinus	=	prefers forest openings; mostly found on Long Island north shore	4 14
red-eyed vireo	Vireo olivaceus	=	found in parks and suburban areas with shade trees and undergrowth	4 23
red-tailed hawk	Buteo jamaicensis	-	needs 100 foot radius undisturbed area for nest	4 16
ruby-crowned kinglet	Regulus calendula	-	occurs as non-breeding species; present during migration	4 7
ruffed grouse	Bonasa umbellus	-	prefers dense cover, thick woods; avoids humans	4 8
scarlet tanager	Piranga olivacea	-	rare in wooded area of less than 50 acres; affected by fragmentation	4
sharp-shinned hawk	Accipiter striatus	-	avoids humans; nests in heavily forested areas	4 16
song sparrow	Melospiza melodia	=	common to most habitats except deep forest, open field and marsh	4 22
tufted titmouse	Parus bicolor	=	common in suburban areas	4 11
veery	Catharus fuscescens	-	prefers damp forest with undergrowth; affected by fragmentation	4 7
whip-poor-will	Caprimulgus vociferous	-	nocturnal; prefers open woods with adjacent fields	4 12
white-breasted nuthatch	Sitta carolinensis	=	abundant in parks, urban and suburban areas	4 9
wood thrush	Hylocichla mustelina	=	prefers vacant wood (trees >40 feet); may adapt of wooded suburban	4 7
yellow throated vireo	Vireo flavifrons	-	sensitive to fragmentation and urbanization	4 23
yellow-bellied sapsucker	Sphyrapicus varius	=	nests in tree cavity; found in parks, yards and gardens	14
yellow-billed cuckoo	Coccyzus americanus	-	avoids heavy urban areas; prefers wooded open or edges for nests	4 12
Mammals				
big-brown bat	Eptesicus fuscus	+	roosts in structures; found throughout LI; hunts over water	1 29
hoary bat	Lasiurus borealis	=	roosts in trees, sometimes found in parks	45
Keen's bat	Myotis keenii	+	roosts in buildings, crevices and bark; more common on eastern LI	1 29
little-brown bat	Myotis lucifugus	+	roosts in buildings and man made structures; hunts over water	1 29
red bat	Lasiurus borealis	-	feeds in marsh area; nests within 1000 yards of marsh in trees	1 29
Eastern pipistrelle	Pipistrellus subflavus	=	found near water in open woods, also found in buildings	1 29
silver-haired bat	Lasionycteris noctivagans	-	prefers wooded areas near water, primarily during summer months	1 29
Eastern chipmunk	Tamias striatus	=	prefers open woods, thickets, and rocky areas	1 29
Eastern cottontail	Sylvilagus floridanus	=	will adapt to suburban areas, if there is sufficient cover	1 29
white-tailed deer	Odocoileus virginianus	-	requires range of one-half square mile	1 25 29
red fox	Vulpes vulpes	-	builds den in wooded areas with loose-sandy soil and good drainage	1 29
Eastern mole	Scalopus aquaticus	=	tunnels underground	1 29
house mouse	Mus musculus	+	lives in association with man, not expected away from buildings	1 29
meadow-jumping mouse	Zapus hudsonicus	=	found around water in pine barrens; prefers open areas with grasses	1 29
white-footed mouse	Peromyscus leucopus	=	common to most all habitats; does not adapt well to human activity	1 29

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Common Name	Scientific Name	Adapt.	Comments	References
Virginia opossum	<i>Didelphis 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
masked shrew	<i>Sorex cinereus</i>	=	tunnels underground; common in wood and wet habitats	1 29
short-tailed shrew	<i>Blarina breuicauda</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
Eastern gray squirrel	<i>Sciurus carolinensis</i>	=	found in parks, urban and suburban areas; very adaptable	1 29
southern-flying squirrel	<i>Glaucimys volans</i>	-	common in deep mixed, deciduous and coniferous woods	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				
spring peeper	<i>Hyla crucifer</i>	=	prefers pools/marsh near woodland; found high in trees in summer	33 35 38
red-backed salamander	<i>Plethodon cinereus cinereus</i>	-	terrestrial, prevalent in moist situations	34 36
marbled salamander	<i>Ambystoma opacum</i>	=	moist to sandy areas; lays eggs in fall in low spots wet by rain	34 36 38
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
Eastern spadefoot toad	<i>Scaphiopus holbrooki</i>	-	nocturnal; burrows in sandy soil; eats insects, worms; gardens, etc.	33

Successional Woodland Species - Adaptability and Comments

Common Name	Scientific Name	Adapt.	Comments	References
Birds				
American crow	<i>Corvus brachyrhynchos</i>	=	extremely adaptable; omnivorous	4 11
American kestrel	<i>Falco sparverius</i>	-	adaptable; prefers open areas and parks; will nest near humans	4 17
American redstart	<i>Setophaga ruticilla</i>	-	urbanization and agriculture have negative effects	4 19
American robin	<i>Turdus migratorius</i>	=	very adaptable; abundant in parks; nests in man-made structures	4 7
American woodcock	<i>Philhela minor</i>	-	prefers moist woodland and thicket near open fields	4 30
barn swallow	<i>Hirundo rustica</i>	+	nests almost entirely on buildings	4 15
black capped chickadee	<i>Parus atricapillus</i>	=	abundant around parks, urban and suburban areas	4 11
black-and-white warbler	<i>Mniotilta varia</i>	-	builds nests under shrubs and/or trees	4 18
blue jay	<i>Cyanocitta cristata</i>	=	extremely adaptable to human activity and other stresses	4 10
blue-winged warbler	<i>Vermivora pinus</i>	-	primarily abandoned and overgrown field, and thickets	4 14
brown creeper	<i>Certhia familiaris</i>	-	prefers predominantly deciduous wooded areas	4 9
brown thrasher	<i>Toxostoma rufum</i>	=	common in parks,suburban areas, wooded edges, dry open areas	4 9
brown-headed cowbird	<i>Molothrus ater</i>	=	lays eggs in other bird's nests; some stay during winter	4 6
Carolina wren	<i>Thryothorus ludovicianus</i>	=	associated with woodland thickets and brushy areas, often near water	4 9
cedar waxwing	<i>Bombycilla cedrorum</i>	+	prefers open woodlands, orchards and residential areas	4 23 32
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	-	prefers first growth woods, with some open brush area	4 19
common flicker	<i>Colaptes auratus</i>	=	abundant around parks, suburban and urban areas	4 14
common grackle	<i>Quiscalus quiscula</i>	=	adapts well to urban and suburban habitats	4 6
Cooper's hawk	<i>Accipiter cooperii</i>	-	needs extensive woodland	4 17
downy woodpecker	<i>Picoides pubescens</i>	=	found in parks and suburban areas	4 14
Eastern kingbird	<i>Tyrannus tyrannus</i>	=	very adaptable to human activities; prefers open areas	4 15
Eastern wood-peewee	<i>Contopus virens</i>	=	prefers suburban areas, parks and villages with shade trees	4 15
European starling	<i>Sturnus vulgaris</i>	+	extremely adaptable to human activity; considered a pest	4 23
fox sparrow	<i>Passerella iliaca</i>	-	boreal species, winters here in edge, thickets, brushy areas	20 21
golden-crowned kinglet	<i>Regulus satrapa</i>	-	prefers spruce vegetation; no atlas sightings on Long Island	4 7
gray catbird	<i>Dumetella carolinensis</i>	=	abundant around parks, urban and suburban areas	4 9
great-horned owl	<i>Bubo virginianus</i>	-	nocturnal; rare in wooded areas of less than 20 acres	4 17
hairy woodpecker	<i>Picoides villosus</i>	=	found mainly in deciduous forests	4 14
hermit thrush	<i>Catharus guttatus</i>	=	not common on Long Island; when present, prefers pine barrens	4 7
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

Common Name	Scientific Name	Adapt.	Comments	References
house wren	Troglodytes aedon	=	found in suburban areas and gardens; nests in crevices of buildings	4 9
long-eared owl	Asio otus	-	nocturnal; prefers dense forested areas near water	4 17
mourning dove	Zenaida macroura	=	abundant around parks, urban and suburban areas	4 8
Northern (dark-eyed) junco	Junco hyemalis	-	prefers forested area with elevation >300 meters; no LI atlas record	4 21
Northern mockingbird	Mimus polyglottos	+	prefers to nest near humans	4 9
red-bellied woodpecker	Melanerpes carolinus	=	prefers forest openings; mostly found on Long Island north shore	4 14
red-eyed vireo	Vireo olivaceus	=	found in parks and suburban areas with shade trees and undergrowth	4 23
red-tailed hawk	Buteo jamaicensis	-	needs 100 foot radius undisturbed area for nest	4 16
rock dove	Columba livia	+	nests almost entirely on buildings; considered a pest species	4 8
rose-breasted grosbeak	Pheucticus ludovicianus	=	mainly found on north shore	4 20
ruby-crowned kinglet	Regulus calendula	-	occurs as non-breeding species; present during migration	4 7
ruffed grouse	Bonasa umbellus	-	prefers dense cover, thick woods; avoids humans	4 8
rufous-sided towhee	Pipilo erythrophthalmus	-	may be present year round on Long Island	4 20
sharp-shinned hawk	Accipiter striatus	-	avoids humans; nests in heavily forested areas	4 16
song sparrow	Melospiza melodia	=	common to most habitats except deep forest, open field and marsh	4 22
whip-poor-will	Caprimulgus vociferous	-	nocturnal; prefers open woods with adjacent fields	4 12
white-throated sparrow	Zonotrichia albicollis	-	prefers brushy areas and thick undergrowth	4 22
wood thrush	Hylocichla mustelina	=	prefers vacant wood (trees >40 feet); may adapt of wooded suburban	4 7
yellow-bellied sapsucker	Sphyrapicus varius	=	nests in tree cavity; found in parks, yards and gardens	14
yellow-billed cuckoo	Coccyzus americanus	-	avoids heavy urban areas; prefers wooded open or edges for nests	4 12
Mammals				
big-brown bat	Eptesicus fuscus	+	roosts in structures; found throughout LI; hunts over water	1 29
hoary bat	Lasiurus borealis	=	roosts in trees, sometimes found in parks	45
Keen's bat	Myotis keenii	+	roosts in buildings, crevices and bark; more common on eastern LI	1 29
little-brown bat	Myotis lucifugus	+	roosts in buildings and man made structures; hunts over water	1 29
red bat	Lasiurus borealis	-	feeds in marsh area; nests within 1000 yards of marsh in trees	1 29
silver-haired bat	Lasionycteris noctivagans	-	prefers wooded areas near water, primarily during summer months	1 29
Eastern chipmunk	Tamias striatus	=	prefers open woods, thickets, and rocky areas	1 29
Eastern cottontail	Sylvilagus floridanus	=	will adapt to suburban areas, if there is sufficient cover	1 29
white-tailed deer	Odocoileus virginianus	-	requires range of one-half square mile	1 25 29
red fox	Vulpes vulpes	-	builds den in wooded areas with loose-sandy soil and good drainage	1 29
Eastern mole	Scalopus aquaticus	=	tunnels underground	1 29
meadow-jumping mouse	Zapus hudsonicus	=	found around water in pine barrens; prefers open areas with grasses	1 29
white-footed mouse	Peromyscus leucopus	=	common to most all habitats; does not adapt well to human activity	1 29

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Common Name	Scientific Name	Adapt.	Comments	References
Virginia opossum	<i>Didelphis 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
masked shrew	<i>Sorex cinereus</i>	=	tunnels underground; common in wood and wet habitats	1 29
short-tailed shrew	<i>Blarina breuicauda</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
Eastern gray squirrel	<i>Sciurus carolinensis</i>	=	found in parks, urban and suburban areas; very adaptable	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 platyrhinos</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

Successional Shrubland Species - Adaptability and Comments

Common Name	Scientific Name	Adapt.	Comments	References
red-winged blackbird	Agelaius phoeniceus	=	needs water	4 6
common bobwhite	Colinus virginianus	-	somewhat tolerant of humans during spring and summer months	4 8
indigo bunting	Passerina cyanea	-	inhabits open woodlands with dense thickets for cover	4 20
Northern cardinal	Cardinalis cardinalis	=	found around gardens, yards, parks	4 20
gray catbird	Dumetella carolinensis	=	abundant around parks, urban and suburban areas	4 9
black capped chickadee	Parus atricapillus	=	abundant around parks, urban and suburban areas	4 11
brown-headed cowbird	Molothrus ater	=	lays eggs in other bird's nests; some stay during winter	4 6
American crow	Corvus brachyrhynchos	=	extremely adaptable; omnivorous	4 11
black-billed cuckoo	Coccyzus erythrophthalmus	-	avoids human activities	4 11
yellow-billed cuckoo	Coccyzus americanus	-	avoids heavy urban areas; prefers wooded open or edges for nests	4 12
mourning dove	Zenaida macroura	=	abundant around parks, urban and suburban areas	4 8
American goldfinch	Carduelis tristis	=	prefers diet of thistles and dandelions	4 20
common flicker	Colaptes auratus	=	abundant around parks, suburban and urban areas	4 14
least flycatcher	Empidonax minimus	=	prefers open areas and woodland borders; uncommon on Long Island	4 15
willow flycatcher	Empidonax traillii	-	found mostly on south shore and western north shore areas	4 15
common grackle	Quiscalus quiscula	=	adapts well to urban and suburban habitats	4 6
ruffed grouse	Bonasa umbellus	-	prefers dense cover, thick woods; avoids humans	4 8
rose-breasted grosbeak	Pheucticus ludovicianus	=	mainly found on north shore	4 20
Northern harrier	Circus cyaneus	-	avoids humans; extremely protective of nests	4 16
Cooper's hawk	Accipiter cooperii	-	needs extensive woodland	4 17
red-tailed hawk	Buteo jamaicensis	-	needs 100 foot radius undisturbed area for nest	4 16
sharp-shinned hawk	Accipiter striatus	-	avoids humans; nests in heavily forested areas	4 16
blue jay	Cyanocitta cristata	=	extremely adaptable to human activity and other stresses	4 10
Northern (dark-eyed) junco	Junco hyemalis	-	prefers forested area with elevation >300 meters; no LI atlas record	4 21
American kestrel	Falco sparverius	-	adaptable; prefers open areas and parks; will nest near humans	4 17
Eastern kingbird	Tyrannus tyrannus	=	very adaptable to human activities; prefers open areas	4 15
golden-crowned kinglet	Regulus satrapa	-	prefers spruce vegetation; no atlas sightings on Long Island	4 7
ruby-crowned kinglet	Regulus calendula	-	occurs as non-breeding species; present during migration	4 7
Eastern meadowlark	Sturnella magna	-	found in marshes during winter months	4 6
Northern mockingbird	Mimus polyglottos	+	prefers to nest near humans	4 9
barn owl	Tyto alba	=	hunts in open areas, nests in man made structures and hollow trees	4 17
great-horned owl	Bubo virginianus	-	nocturnal; rare in wooded areas of less than 20 acres	4 17

Common Name	Scientific Name	Adapt.	Comments	References
ring-necked pheasant	<i>Phasianus colchicus</i>	-	needs fields with cover along edge	4 8
American redstart	<i>Setophaga ruticilla</i>	-	urbanization and agriculture have negative effects	4 19
American robin	<i>Turdus migratorius</i>	=	very adaptable; abundant in parks; nests in man-made structures	4 7
pine siskin	<i>Carduelis pinus</i>	=	one atlas confirmed breeding record on Long Island	4 20
fox sparrow	<i>Passerella iliaca</i>	-	boreal species, winters here in edge, thickets, brushy areas	20 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
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
white-crowned sparrow	<i>Zonotrichia leucophrys</i>	=	often found in suburban areas and city parks	22 32
white-throated sparrow	<i>Zonotrichia albicollis</i>	-	prefers brushy areas and thick undergrowth	4 22
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
brown thrasher	<i>Toxostoma rufum</i>	=	common in parks and suburban areas, wooded edges and dry open areas	4 9
hermit thrush	<i>Catharus guttatus</i>	=	not common on Long Island; when present, prefers pine barrens	4 7
wood thrush	<i>Hylocichla mustelina</i>	=	prefers vacant wood (trees >40 feet); may adapt of wooded suburban	4 7
rufous-sided towhee	<i>Pipilo erythrophthalmus</i>	-	may be present year round on Long Island	4 20
white eyed vireo	<i>Vireo griseus</i>	-	avoids human activity; prefers dense swampy thickets	4 23
black-and-white warbler	<i>Mniotilta varia</i>	-	builds nests under shrubs and/or trees	4 18
blue-winged warbler	<i>Vermivora pinus</i>	-	primarily abandoned and overgrown field, and thickets	4 14
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	-	prefers first growth woods, with some open brush area	4 19
prairie warbler	<i>Dendroica discolor</i>	-	prefers scrub fields and open pine barrens habitat	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>Philhela minor</i>	-	prefers moist woodland and thicket near open fields	4 30
Carolina wren	<i>Thryothorus ludovicianus</i>	=	associated with woodland thickets and brushy areas, often near water	4 9
house wren	<i>Troglodytes aedon</i>	=	found in suburban areas and gardens; nests in crevices of buildings	4 9
common yellowthroat	<i>Geothlypis trichas</i>	=	found in all open brushy wet areas	4 19
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
short-tailed shrew	<i>Blarina breuicauda</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 platyrhinos</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

Successional Old Field Species - Adaptability and Comments

Common Name	Scientific Name	Adapt.	Comments	References
Birds				
American crow	<i>Corvus brachyrhynchos</i>	=	extremely adaptable; omnivorous	4 11
American goldfinch	<i>Carduelis tristis</i>	=	prefers diet of thistles and dandelions	4 20
American kestrel	<i>Falco sparverius</i>	-	adaptable; prefers open areas and parks; will nest near humans	4 17
American robin	<i>Turdus migratorius</i>	=	very adaptable; abundant in parks; nests in man-made structures	4 7
American woodcock	<i>Philhela minor</i>	-	prefers moist woodland and thicket near open fields	4 30
barn owl	<i>Tyto alba</i>	=	hunts in open areas, nests in man made structures and hollow trees	4 17
barn swallow	<i>Hirundo rustica</i>	+	nests almost entirely on buildings	4 15
black capped chickadee	<i>Parus atricapillus</i>	=	abundant around parks, urban and suburban areas	4 11
black-and-white warbler	<i>Mniotilta varia</i>	-	builds nests under shrubs and/or trees	4 18
black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	-	avoids human activities	4 11
blue jay	<i>Cyanocitta cristata</i>	=	extremely adaptable to human activity and other stresses	4 10
blue-winged warbler	<i>Vermivora pinus</i>	-	primarily abandoned and overgrown field, and thickets	4 14
brown thrasher	<i>Toxostoma rufum</i>	=	common in parks and suburban areas, wooded edges and dry open areas	4 9
brown-headed cowbird	<i>Molothrus ater</i>	=	lays eggs in other bird's nests; some stay during winter	4 6
cedar waxwing	<i>Bombycilla cedrorum</i>	+	prefers open woodlands, orchards and residential areas	4 23 32
chestnut-sided warbler	<i>Dendroica pensylvanica</i>	-	prefers first growth woods, with some open brush area	4 19
chipping sparrow	<i>Spizella passerina</i>	+	abundant around man made structures	4 21
common bobwhite	<i>Colinus virginianus</i>	-	somewhat tolerant of humans during spring and summer months	4 8
common flicker	<i>Colaptes auratus</i>	=	abundant around parks, suburban and urban areas	4 14
common grackle	<i>Quiscalus quiscula</i>	=	adapts well to urban and suburban habitats	4 6
common nighthawk	<i>Chordeiles minor</i>	=	primarily a grassland specie; will nest in burnt areas and roofs	4 12
common yellowthroat	<i>Geothlypis trichas</i>	=	found in all open brushy wet areas	4 19
Cooper's hawk	<i>Accipiter cooperii</i>	-	needs extensive woodland	4 17
Eastern bluebird	<i>Sialia sialis</i>	-	found almost entirely in nesting boxes, extremely rare in wild	4 7
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
European starling	<i>Sturnus vulgaris</i>	+	extremely adaptable to human activity; considered a pest	4 23
field sparrow	<i>Spizella pusilla</i>	-	associated with grasslands, fields and brushy wooded edges	4 21
fox sparrow	<i>Passerella iliaca</i>	-	boreal species, winters here in edge, thickets, brushy areas	20 21
grasshopper sparrow	<i>Ammodramus savannarum</i>	-	requires grasslands	4 20
gray catbird	<i>Dumetella carolinensis</i>	=	abundant around parks, urban and suburban areas	4 9
great-horned owl	<i>Bubo virginianus</i>	-	nocturnal; rare in wooded areas of less than 20 acres	4 17

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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>Zenaida 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 erythrophthalmus</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 petchia</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

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

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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 pelagica</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>Philhela 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>Didelphis 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>Lampropettis 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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Appendix E-3
Breeding Bird Survey

List of Species Breeding in Atlas Block 6352C

Common Name	Scientific Name	Behavior Code	Date	NY Legal Status
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	FS	6/7/2000	Protected
Wood Duck	<i>Aix sponsa</i>	FL	6/15/2001	Game Species
Mallard	<i>Anas platyrhynchos</i>	FL	4/30/2000	Game Species
Mallard x Am. Black Duck Hybrid	<i>Anas platyrhynchos x A. rubripes</i>	P2	5/25/2000	Game Species
Gadwall	<i>Anas strepera</i>	P2	6/7/2001	Game Species
Tufted Titmouse	<i>Baeolophus bicolor</i>	FL	6/30/2000	Protected
Canada Goose	<i>Branta canadensis</i>	FL	6/30/2000	Game Species
Red-tailed Hawk	<i>Buteo jamaicensis</i>	NE	4/13/2000	Protected
Northern Cardinal	<i>Cardinalis cardinalis</i>	FL	6/20/2000	Protected
House Finch	<i>Carpodacus mexicanus</i>	FL	6/30/2000	Protected
Chimney Swift	<i>Chaetura pelagica</i>	X1	6/5/2003	Protected
Killdeer	<i>Charadrius vociferus</i>	X1	5/2/2003	Protected
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	T2	6/7/2001	Protected
Northern Flicker	<i>Colaptes auratus</i>	D2	6/7/2000	Protected
Rock Pigeon	<i>Columba livia</i>	P2	5/25/2000	Unprotected
Eastern Wood-Pewee	<i>Contopus virens</i>	T2	6/15/2001	Protected
American Crow	<i>Corvus brachyrhynchos</i>	FL	5/25/2000	Game Species
Fish Crow	<i>Corvus ossifragus</i>	FL	6/15/2001	Protected
Blue Jay	<i>Cyanocitta cristata</i>	FY	5/25/2000	Protected
Yellow Warbler	<i>Dendroica petechia</i>	FY	6/23/2000	Protected
Gray Catbird	<i>Dumetella carolinensis</i>	FY	6/7/2000	Protected
Willow Flycatcher	<i>Empidonax traillii</i>	S2	6/30/2000	Protected
Barn Swallow	<i>Hirundo rustica</i>	NE	6/15/2001	Protected
Wood Thrush	<i>Hylocichla mustelina</i>	FL	6/15/2001	Protected
Baltimore Oriole	<i>Icterus galbula</i>	FY	6/7/2001	Protected
Orchard Oriole	<i>Icterus spurius</i>	T2	6/13/2002	Protected
Eastern Screech-Owl	<i>Megascops asio</i>	T2	5/16/2002	Protected
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	FL	7/12/2001	Protected
Song Sparrow	<i>Melospiza melodia</i>	FY	6/7/2001	Protected
Northern Mockingbird	<i>Mimus polyglottos</i>	FY	6/7/2001	Protected
Black-and-white Warbler	<i>Mniotilta varia</i>	X1	6/7/2000	Protected
Brown-headed Cowbird	<i>Molothrus ater</i>	FL	6/23/2000	Protected
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	T2	6/15/2001	Protected
House Sparrow	<i>Passer domesticus</i>	ON	5/25/2000	Unprotected
Indigo Bunting	<i>Passerina cyanea</i>	X1	6/30/2000	Protected
Ring-necked Pheasant	<i>Phasianus colchicus</i>	S2	5/25/2000	Game Species
Downy Woodpecker	<i>Picoides pubescens</i>	FY	7/7/2000	Protected
Hairy Woodpecker	<i>Picoides villosus</i>	FY	7/13/2000	Protected
Eastern Towhee	<i>Pipilo erythrophthalmus</i>	FL	7/12/2001	Protected
Scarlet Tanager	<i>Piranga olivacea</i>	S2	6/30/2000	Protected
Black-capped Chickadee	<i>Poecile atricapillus</i>	FL	6/23/2000	Protected
Blue-gray Gnatcatcher	<i>Poliopitila caerulea</i>	P2	6/7/2001	Protected
Common Grackle	<i>Quiscalus quiscula</i>	ON	5/25/2000	Protected
Ovenbird	<i>Seiurus aurocapilla</i>	S2	6/30/2000	Protected
White-breasted Nuthatch	<i>Sitta carolinensis</i>	FY	6/7/2001	Protected
American Goldfinch	<i>Spinus tristis</i>	P2	7/7/2000	Protected
Chipping Sparrow	<i>Spizella passerina</i>	T2	5/2/2003	Protected
Field Sparrow	<i>Spizella pusilla</i>	FY	6/30/2000	Protected
European Starling	<i>Sturnus vulgaris</i>	ON	4/13/2000	Unprotected
Carolina Wren	<i>Thryothorus ludovicianus</i>	FY	7/12/2001	Protected
Brown Thrasher	<i>Toxostoma rufum</i>	S2	7/7/2000	Protected
House Wren	<i>Troglodytes aedon</i>	FL	7/11/2002	Protected
American Robin	<i>Turdus migratorius</i>	FL	7/7/2000	Protected
Eastern Kingbird	<i>Tyrannus tyrannus</i>	FL	7/1/2002	Protected
Blue-winged Warbler	<i>Vermivora pinus</i>	T2	6/7/2001	Protected
Warbling Vireo	<i>Vireo gilvus</i>	FY	6/7/2000	Protected
White-eyed Vireo	<i>Vireo griseus</i>	X1	6/30/2000	Protected
Red-eyed Vireo	<i>Vireo olivaceus</i>	S2	6/30/2000	Protected
Mourning Dove	<i>Zenaida macroura</i>	NE	4/13/2000	Protected

Current Date: 1/3/2013



Appendix E-4
Suffolk County Legislature, Resolution 614-
2007

Intro. Res. No. 1144-2007

Laid on Table 2/6/2007

Introduced by Legislators Vilorio-Fisher and Browning

**RESOLUTION NO. 614 -2007, ADOPTING LOCAL
LAW NO. 22 -2007, A LOCAL LAW TO PROHIBIT
THE SALE, INTRODUCTION AND PROPAGATION OF
INVASIVE, NON-NATIVE PLANT SPECIES**

WHEREAS, there was duly presented and introduced to this County Legislature at a meeting held on February 6, 2007, a proposed local law entitled, "**A LOCAL LAW TO PROHIBIT THE SALE, INTRODUCTION AND PROPAGATION OF INVASIVE, NON-NATIVE PLANT SPECIES**"; now, therefore be it

RESOLVED, that said local law be enacted in form as follows:

LOCAL LAW NO. 22 -2007, SUFFOLK COUNTY, NEW YORK

**A LOCAL LAW TO PROHIBIT THE SALE, INTRODUCTION
AND PROPAGATION OF INVASIVE, NON-NATIVE PLANT
SPECIES**

BE IT ENACTED BY THE COUNTY LEGISLATURE OF THE COUNTY OF SUFFOLK, as follows:

Section 1. Legislative Intent.

This Legislature hereby finds that Resolution No. 985-2005 established the Suffolk County Water and Land Invasives Control Task Force in order to develop a long term plan for controlling invasive species in Suffolk County.

This Legislature determines that the Suffolk County Water and Land Invasives Control Task Force recommended that certain invasive species be prohibited from being sold in Suffolk County as a first step in preventing these species from being introduced in Suffolk County through a "Do Not Sell" list.

This Legislature further determines that the Suffolk County Water and Land Invasives Control Task Force recommended the establishment of a Suffolk County Water and Land Invasives Advisory Board.

This Legislature hereby finds and determines that invasive nonnative aquatic plants can displace native species and alter natural ecosystems and are considered to be the second leading cause of species extinction and endangerment worldwide.

This Legislature also finds and determines that these invasive plants can negatively impact agriculture, industry and human health.

This Legislature further finds and determines that during the 20th Century, invasive species were responsible for documented losses of 97 billion dollars to the U.S. economy.

Therefore, the purpose of this law is to protect the ecology of Suffolk County by prohibiting the sale of invasive plants in Suffolk County.

Section 2. Definitions.

As used in this law, the following terms shall have the meanings indicated:

"INVASIVE SPECIES"— a plant species that is (1) non-native to the ecosystem under consideration, and (2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health, including their cultivars and varieties, which harm must significantly outweigh any benefits.

"NON-NATIVE"— with respect to a particular ecosystem, a species that has not historically occurred in that ecosystem, and which is not listed in the New York Flora Atlas as being native to New York.

"PERSON"— any individual, firm, partnership, corporation, company, society, association, or any organized group of persons whether incorporated or not.

"PROPAGATE" – purposefully increasing the population of a species by means of manipulating its sexual and/or asexual reproduction process.

Section 3. Prohibitions.

- A) No person shall knowingly sell, transport, distribute, propagate or knowingly cause to be sold, transported, distributed, or propagated to any person located within the County of Suffolk, or to any person making the purchase from within the County of Suffolk, any invasive species as listed on Exhibit "A" herein, as said Exhibit may be amended by law from time to time, with the advice of the Water and Land Invasives Advisory Board.
- B) No person shall knowingly sell, transport, distribute, propagate or knowingly cause to be sold, transported, distributed, or propagated to any person located within the County of Suffolk, or to any person making the purchase from within the County of Suffolk, any invasive species as listed on Exhibits "A" and "B" herein on or after January 1, 2011, as said Exhibits may be amended by law from time to time, with the advice of the Water and Land Invasives Advisory Board.

Section 4. Creation of a Suffolk County Water and Land Invasives Advisory Board.

- A) There is hereby created a Suffolk County Water and Land Invasives Advisory Board, which shall consist of the following nine (9) members:
 - 1) The Chairperson of the Suffolk County Legislature's Environment, Planning and Agriculture Committee, or his/her designee, who shall serve as chair;
 - 2) The Commissioner of the Suffolk County Department of Environment and Energy, or his/her designee;
 - 3) The Suffolk County Executive, or his/her designee;
 - 4) The Presiding Officer of the Suffolk County Legislature, or his/her designee;
 - 5) The Commissioner of the Suffolk County Department of Parks, Recreation & Conservation, or his/her designee;
 - 6) A member of an environmental group chosen by the Chairperson of the Suffolk County Legislature's Environment, Planning and Agriculture Committee;
 - 7) A representative chosen by the Long Island Farm Bureau;

- 8) A representative chosen by the Long Island Nursery and Landscape Association; and
- 9) A member of the Long Island Invasive Species Management Area (LIISMA).
- B) The Suffolk County Water and Land Invasives Advisory Board shall advise the Commissioner of the Suffolk County Department of Environment and Energy and the Suffolk County Legislature on matters relating to invasive species in the County, and shall recommend to the Suffolk County Legislature appropriate revisions to the "Do Not Sell" list established pursuant to Section 3 of this law, on no less than an annual basis.
- C) The Suffolk County Water and Land Invasives Advisory Board shall hold its first meeting no later than thirty (30) days after the oaths of office of all members have been filed.
- D) The members of the Suffolk County Water and Land Invasives Advisory Board shall serve without compensation and members number 6 through 9 listed in subsection A, above, shall be appointed to serve initial terms ending on December 31, 2008, and shall be appointed to serve a term of two year thereafter.
- E) Five (5) members of the Suffolk County Water and Land Invasives Advisory Board shall constitute a quorum for the purposes of conducting the business of the Board.
- F) The Suffolk County Water and Land Invasives Advisory Board shall hold regular meetings, keep a record of all of its proceedings and determine the rules of its own proceedings with special meetings to be called by the Chairperson upon his or her own initiative or upon receipt of a written request thereof signed by at least five (5) members of the Suffolk County Water and Land Invasives Advisory Board. Written notice of the time and place of such special meetings shall be given to each member at least four (4) days before the date fixed by the notice for such special meeting.
- G) All clerical services involving the month-to-month operation of the Suffolk County Water and Land Invasives Advisory Board, as well as supplies and postage as necessary, shall be provided by the staff of the Clerk of the County Legislature. The Suffolk County Water and Land Invasives Advisory Board may request, receive, and utilize such facilities, resources, and data of any department, office, or agency of Suffolk County as it may reasonably request to properly carry out its powers and duties.
- H) The Suffolk County Water and Land Invasives Advisory Board shall hold no less than four (4) meetings annually, and shall conduct at least two (2) public hearings within the County of Suffolk for the purpose of obtaining necessary information or other data from the public. The time and place of each public hearing shall be published in the official County newspapers.
- I) All vacancies in the membership of the Suffolk County Water and Land Invasives Advisory Board shall be filled in the manner provided for their original appointment.

Section 5. Exemptions.

- A.) The prohibitions contained in this law shall not apply to bona fide scientific experiments or for educational purposes, provided that no invasive species used in such bona fide scientific experiments or for educational purposes shall be

permitted to be sold or distributed.

- B) Any person desiring to use any invasive species for bona fide scientific experiments or for educational purposes shall be required to apply for a written waiver of the provisions of this law from the Suffolk County Department of Environmental and Energy, on a form to be prescribed in Exhibit "C" herein.

Section 6. Penalties.

- Any person who violates Section 3 of this law shall be guilty of a violation, punishable by a fine of \$1,000 for a first and second offense; and shall be guilty of an unclassified misdemeanor for a third, and each subsequent offense, punishable by a fine of \$2000 and/or no more than 30 days in jail.

Section 7. Rules and Regulations.

The Suffolk County Department of Environment and Energy shall issue and promulgate such rules and regulations as it deems necessary and appropriate to carry out the provisions of this law.

Section 8. Applicability.

- A) The prohibition described in Section 3(A) of this law shall apply to actions occurring on or after January 1, 2009.
- B) The prohibition described in Section 3(B) of this law shall apply to actions occurring on or after January 1, 2011.

Section 9. Severability.

- If any clause, sentence, paragraph, subdivision, section, or part of this law or the application thereof to any person, individual, corporation, firm, partnership, entity, or circumstance shall be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such order or judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section, or part of this law, or in its application to the person, individual, corporation, firm, partnership, entity, or circumstance directly involved in the controversy in which such order or judgment shall be rendered.

Section 10. SEQRA Determination.

- This Legislature, being the State Environmental Quality Review Act (SEQRA) lead agency, hereby finds and determines that this law constitutes a Type II action pursuant to Section 617.5(c)(6) and (27) of Title 6 of the NEW YORK CODE OF RULES AND REGULATIONS (6 NYCRR) and within the meaning of Section 8-0109(2) of the NEW YORK ENVIRONMENTAL CONSERVATION LAW as a promulgation of regulations, rules, policies, procedures, and legislative decisions in connection with continuing agency administration, management and information collection. The Suffolk County Council on Environmental Quality (CEQ) is hereby directed to circulate any appropriate SEQRA notices of determination of non-applicability or non-significance in accordance with this law.

Section 11. Effective Date.

-

This law shall take effect on the sixtieth (60) day immediately subsequent to filing in the Office of the Secretary of State.

DATED: June 26, 2007

APPROVED BY:

/s/ Steve Levy
County Executive of Suffolk County

Date: July 12, 2007

After a public hearing duly held on July 10, 2007
Filed with the Secretary of State on August 6, 2007

EXHIBIT "A"

<u>Scientific Name</u>	<u>Common Name</u>
<i>Alliaria petiolata</i>	Garlic mustard
<i>Ampelopsis brevipedunculata</i>	Porcelain-berry
<i>Anthriscus sylvestris</i>	wild chervil
<i>Aralia elata</i>	Japanese Angelica Tree
<i>Artemisia vulgaris</i>	mugwort, common wormwood
<i>Cabomba caroliniana</i> A. Gray	Carolina fanwort; Cabomba
<i>Cardamine impatiens</i> L.	Narrowleaf bittercress
<i>Caulerpa taxifolia</i>	the marine "killer algae"
<i>Celastrus orbiculatus</i>	Oriental bittersweet
<i>Centaurea maculosa (biebersteinii)</i>	Spotted knapweed
<i>Cirsium arvense</i>	Canada thistle
<i>Cynanchum louiseae / nigrum (AKA Vincetoxicum nigrum)</i>	Black Swallow-wort
<i>Cynanchum rossicum (AKA Vincetoxicum rossicum)</i>	Pale Swallow-wort
<i>Egeria densa</i>	Brazilian water weed
<i>Eleagnus angustifolia</i>	Russian olive
<i>Eleagnus umbellate</i>	Autumn Olive
<i>Euphorbia cyparissias</i>	Cypress spurge
<i>Euphorbia esula</i>	Leafy spurge
<i>Froelichia gracilis</i> (Hook.) Moq.	Cottonweed
<i>Glaucium flavum</i> Crantz	sea poppy, yellow horned poppy
<i>Glossostigma diandrum</i>	Mudmat
<i>Heracleum mantegazzianum</i>	Giant hogweed
<i>Hesperis matronalis</i> L.	Dame's rocket
<i>Humulus japonicus</i>	Japanese Hops
<i>Hydrilla verticillata</i>	Hydrilla
<i>Hydrocharis morsus-ranae</i>	European Frog-bit (aquatic)
<i>Impatiens glandulifera</i> Royle	Tall impatiens; purple balsam

<i>Lepidium latifolium</i>	Tall pepperweed, perennial pepperweed
<i>Lespedeza cuneata</i>	Chinese lespedeza
<i>Ligustrum obtusifolium</i> Sie.&Zucc	Border privet
<i>Ludwigia hexapetala</i>	Water primrose
<i>Ludwigia peploides</i>	Floating primrose-willow; water purslane
<i>Lythrum salicaria</i>	Purple loosestrife
<i>Microstegium vimineum</i>	Japanese stilt grass
<i>Myriophyllum aquaticum</i> (Vell.) Verdc (AKA <i>M. brasilense</i>)	Parrot feather, Brazilian water milfoil
<i>Myriophyllum spicatum</i> L.	Eurasian water milfoil
<i>Najas minor</i> Allioni	Eutrophic water-nymph
<i>Nelumbo nucifera</i>	pink lotus
<i>Nymphoides peltata</i>	yellow floating heart
<i>Paulownia tomentosa</i>	Princess Tree
<i>Phalaris arundinacea</i> L.	Reed Canary-grass
<i>Phragmites australis</i>	Common reed grass (nonnative genotype)

Scientific Name

Polygonum cuspidatum
Polygonum perfoliatum
Polygonum sachaliensis (Fallopia)
Potamogeton crispus L.
Pueraria montana var. *lobata*
Ranunculus ficaria
Rhamnus cathartica
Rosa multiflora
Rubus phoenicolasias Maxim.
Salvinia molesta
Senecio jacobaea
Silphium perfoliatum L.
Trapa natans
Vitex rotundifolia L. f.

Common Name

Japanese knotweed
Mile a minute vine
Giant knotweed
Curly leaf pondweed
Kudzu
Lesser celandine
Common buckthorn
Multiflora rose
Wineberry
Giant salvinia
Tansy ragwort; stinking willie
Cup-plant
Water chestnut
Beach vitex; roundleaf chastetree

EXHIBIT "B"**Scientific Name**

Lonicera bella
Lonicera morrowii
Lonicera maackii "Rem Red"
Lonicera japonica
Lonicera tatarica
Lonicera xylosteum L.
Myosotis scorpioides L.

Common Name

Bell's honeysuckle
Morrow's honeysuckle
honeysuckle
Japanese honeysuckle
Tartarian honeysuckle
Dwarf, Fly honeysuckle
Forget-me-not (aquatic)

Return this form to the Suffolk County Department of Environment and Energy

All requirements of this form must be completed by the applicant. The information that you provide must be legible. Please type or print (clearly) in black ink.

Requested Invasive Species Information

Scientific Name:	
Common Name:	

Applicant Information

Name:					
Affiliation:					
Phone Number:		Fax Number:			
Mailing Address:					
City:		State:		Zip Code:	
E-Mail Address:					

Purpose/Need for Variance

Project Description: (please attach additional pages if necessary)					
Purpose of Project:					
Start Date:		End Date:			
Project Location:					
City:		State:		Zip Code:	

What measures will be taken to ensure that the invasive species being applied for in this variance will not escape, spread or negatively affect the surrounding natural environment, agriculture or forest crop, and/or human health?

Once the project has ended, how will the species be disposed of (please describe in detail)?

Additional Material Required

- USGS Topographical Map with Site clearly shown
- Photographs before project begins and after project ends
- A description of the results/findings of the research work

Applicant
Signature

Date

For Department of Environment and Energy Use Only

Does the applicant meet the requirements for a variance?

Yes _____ No _____

Notes:

Approved: _____

Date: _____

Denied: _____

Date: _____