

Wildlife

A. Existing Conditions

Surveys of wildlife on and around the Concord assemblage occurred October 19 through October 21, 2004. Wildlife surveys focused on the bird, mammal, reptile, and amphibian inhabitants of the site and its surroundings. In addition to on-site wildlife surveys, database surveys of both the US Fish and Wildlife Service and NYSDEC's Natural Heritage Program were conducted by these agencies to determine if there were known records of any rare, threatened or endangered species, or significant wildlife habitats on or near the project site.

1. Special Concern, Rare, Threatened and Endangered Wildlife Species

A letter of inquiry was sent to the US Fish and Wildlife Service (USFWS) office in Cortland, New York, requesting information on the occurrence of endangered or threatened species, or their critical habitat in the vicinity of the project site.

A letter was also sent to the New York Natural Heritage Program requesting rare species information. In a response letter dated 26 October 2004, Betty A. Ketcham indicated that there are "no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of [the project site]."

No threatened or endangered amphibians or reptiles were observed during site visits by LA Group Biologists.

No rare mammals were observed during site visits by LA Group Biologists.

No rare or state-listed birds were observed during site visits by LA Group Biologists.

2. Birds

Using a random search method, surveys took place in designated plant communities, including beech-maple mesic forest, hemlock-northern hardwoods forest, hemlock-hardwood swamps, and successional old fields. Birds also were noted if they were observed on mowed lawns, flying overhead, or on the periphery of the study area.

Table 2-1, "Potential Bird Species of the Concord Resort Site", lists the bird species that have been observed in the region. Field surveys documented a total of 25 species of birds at the proposed project site (see Table 2-2). All species recorded are known to reside in the Catskills. Of the 24 resident species observed, all were potential breeders in the area.

The most common species observed were the Canada Goose, American Crow and Black-capped Chickadee; All three species were routinely seen on all survey dates (19, 20, 21 October 2004).

Several species were observed only once: Red-tailed Hawk, Hairy Woodpecker, and Ruby-crowned Kinglet.

3. Reptiles and Amphibians

On-site amphibian and reptile surveys were conducted on 19, 20, 21 October 2004. Diurnal surveys took place in designated plant community locations. Within these communities, areas of survey concentration took place in the following habitats: (1) brooks flowing through upland forests, (2) brook borders, (3) old logging roads and hiking trails, (4) pond borders, and (5) wetlands and their periphery.

Tables 3-1 and 3-2 indicate the potential reptile and amphibian species of the Concord Resort site. Two species of amphibians and no reptiles were observed during field visits at the proposed project site. These species are listed in Table 3-3. Of the 12 species reported within the Monticello quadrangle during the NYS Amphibian and Reptile Atlas Project, all were judged to be possible inhabitants of the project site.

No snake species were observed during the Concord Resort surveys.

The most common amphibian species observed was the Eastern Red-back Salamander. Salamanders of this species were found under rocks and logs in shallow water or along brook borders in intermittent rocky stream wetlands or in streams that flowed through shallow emergent marshes. One additional salamander species, the Northern Dusky Salamander was observed at the study site.

No anurans were observed in the study area, most likely due to seasonally low temperatures.

4. Mammals

An opportunistic survey for mammals took place on the Concord Resort site, as mammalian species were observed in conjunction with other field work performed on the site. LA Group Biologists recorded mammal observations during bird, reptile, and amphibian surveys and plant community surveys.

Opportunities to document mammals in the field often include the observation of visually detected sign (Cole et al., 1996). Mammals build structures for protection and rearing of their young (e.g., lodges, earthen mounds, leaf nests). Mammalian feeding activities also produce distinctive signs including browse on stems and branches, grass cuttings in rodent runways, and feces. Mammalian tracks are one of the most common signs used to record species presence data. Mammal surveys at the site combined records of direct observation of the animal itself with observations of visually-detected sign.

Nine mammalian species were either observed or evidenced at the proposed project site. These species are listed in Table 4-1. Common species such as the Eastern chipmunk was repeatedly observed near the trails in beech-maple mesic forest, a favored habitat of chipmunks. Both the red squirrel and the gray squirrel were often observed, as was their sign, including hemlock cone middens made by red squirrels and leaf nests constructed by gray squirrels. Eastern cottontail rabbits were observed in a mowed grass tract adjacent to a shrub swamp. Tracks and scat of Eastern coyote were also observed on the property by LA Group Biologists.

Several large beaver dams were found at the outlet of a naturally occurring pond southeast of the golf course. Current beaver activity was observed in that area as several surrounding trees were freshly gnawed. A beaver hut was observed in a flooded area adjacent to the dam.

The tracks, scat, and browse of white-tailed deer also were observed regularly, as were several individuals feeding in mowed grassy areas. On several occasions deer were observed in groups of two or three.

Table 2-1. Potential bird species of the Concord Resort Site (NYS Breeding Bird Atlas, 2000-2004).

Common Name	Scientific Name
Great Blue Heron	<i>Ardea herodias</i>
Green Heron	<i>Butorides virescens</i>
Canada Goose	<i>Branta canadensis</i>
American Black Duck	<i>Anas rubripes</i>
Wood Duck	<i>Aix sponsa</i>
Mallard Duck	<i>Anas platyrhynchos</i>
Common Merganser	<i>Mergus merganser</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Osprey	<i>Pandion haliaetus</i>
Turkey Vulture	<i>Cathartes aura</i>
Wild Turkey	<i>Meleagris gallopavo</i>
Killdeer	<i>Charadrius vociferus</i>
Rock Dove	<i>Columba livia</i>
Mourning Dove	<i>Zenaida macroura</i>
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>

Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Chimney Swift	<i>Chaetura pelagica</i>
Ruby-throated Hummingbird	<i>Archilochus colubris</i>
Belted Kingfisher	<i>Ceryle alcyon</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Northern Flicker	<i>Colaptes auratus</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
Eastern Wood-Pee-wee	<i>Contopus virens</i>
Willow Flycatcher	<i>Empidonax trailli</i>
Alder Flycatcher	<i>Empidonax alnorum</i>
Least Flycatcher	<i>Empidonax minimus</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Cliff Swallow	<i>Hirundo pyrrhonota</i>
Barn Swallow	<i>Hirundo rustica</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Black-capped Chickadee	<i>Parus atricapillus</i>
Tufted Titmouse	<i>Parus bicolor</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Brown Creeper	<i>Certhia americana</i>
Carolina Wren	<i>Thryothorus ludovicianus</i>
House Wren	<i>Troglodytes aedon</i>
Eastern Bluebird	<i>Sialia sialis</i>
Veery	<i>Catharus fuscescens</i>
Hermit Thrush	<i>Catharus guttatus</i>
Wood Thrush	<i>Hylocichla mustelina</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
European Starling	<i>Sturnus vulgaris</i>
Blue-headed Vireo	<i>Vireo solitarius</i>
Yellow-throated Vireo	<i>Vireo flavifrons</i>
Warbling Vireo	<i>Vireo gilvus</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Yellow Warbler	<i>Dendroica petechia</i>
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>
Magnolia Warbler	<i>Dendroica magnolia</i>
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Black-throated Green Warbler	<i>Dendroica virens</i>

Table 2-1. continued

Common Name	Scientific Name
Blackburnian Warbler	<i>Dendroica fusca</i>
Pine Warbler	<i>Dendroica pinus</i>
Prairie Warbler	<i>Dendroica discolor</i>
Black-and-white Warbler	<i>Mniotilta varia</i>
American Redstart	<i>Setophaga ruticilla</i>
Ovenbird	<i>Seiurus aurocapillus</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Scarlet Tanager	<i>Piranga olivacea</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>
Indigo Bunting	<i>Passerina cyanea</i>
Chipping Sparrow	<i>Spizella passerina</i>
Savannah Sparrow	<i>Passerculus passerina</i>
Field Sparrow	<i>Spizella pusilla</i>
Song Sparrow	<i>Melospiza melodia</i>
Swamp Sparrow	<i>Melospiza georgiana</i>
Dark-Eyed Junco	<i>Junco hyemalis</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Common Grackle	<i>Quiscalus quiscula</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Baltimore Oriole	<i>Icterus galbula</i>
Purple Finch	<i>Carpodacus purpureus</i>
House Finch	<i>Carpodacus mexicanus</i>
American Goldfinch	<i>Carduelis tristis</i>
House Sparrow	<i>Passer domesticus</i>

Table 2-2. Bird species observed October 19 through October 21, 2004 at the Concord Resort Site in the Town of Thompson, Sullivan County, New York.

Common Name	Scientific Name
Great Blue Heron	<i>Ardea herodias</i>
Canada Goose	<i>Branta canadensis</i>
American Black Duck	<i>Anas rubripes</i>
Mallard Duck	<i>Anas platyrhynchos</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Wild Turkey	<i>Meleagris gallopavo</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Black-capped Chickadee	<i>Parus atricapillus</i>
Tufted Titmouse	<i>Parus bicolor</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Brown Creeper	<i>Certhia americana</i>
Hermit Thrush	<i>Catharus guttatus</i>
European Starling	<i>Sturnus vulgaris</i>
Field Sparrow	<i>Spizella pusilla</i>
Song Sparrow	<i>Melospiza melodia</i>
American Tree Sparrow	<i>Spizella arborea</i>
Dark-Eyed Junco	<i>Junco hyemalis</i>
House Finch	<i>Carpodacus mexicanus</i>

Table 3-1. Potential reptile and amphibian species of the Concord Resort Site based on distribution maps in Conant and Collins (1998) and Sullivan County Audubon Society.

Group	Common Name	Scientific Name
Turtles	Common Snapping Turtle	<i>Chelydra serpentina</i>
	Wood Turtle	<i>Clemmys insculpta</i>
	Painted Turtle	<i>Chrysemys picta</i>
	Spotted Turtle	<i>Clemmys guttata</i>
	Eastern Box Turtle	<i>Terrapene carolina carolina</i>
	Red-eared Slider	<i>Trachemys scripta elegans</i>
	Common Musk Turtle	<i>Sternotherus odoratus</i>
Snakes	Northern Water Snake	<i>Nerodia sipedon</i>
	Brown Snake	<i>Storeria dekayi</i>
	Redbelly Snake	<i>Storeria occipitomaculata</i>
	Common Garter Snake	<i>Thamnophis sirtalis</i>
	Eastern Ribbon Snake	<i>Thamnophis sauritis</i>
	Eastern Hognose Snake	<i>Heterodon platirhinos</i>
	Northern Ringneck Snake	<i>Diadophis punctatus</i>
	Northern Black Racer	<i>Coluber constrictor</i>
	Smooth Green Snake	<i>Opheodrys vernalis</i>
	Black Rat Snake	<i>Elaphe obsoleta</i>
	Milk Snake	<i>Lampropeltis triangulum</i>
	Timber rattlesnake	<i>Crotalus horridus</i>
Northern Copperhead	<i>Agkistrodon contortrix</i>	
Salamanders	Spotted Salamander	<i>Ambystoma maculatum</i>
	Jefferson Salamander	<i>Ambystoma jeffersonianum</i>
	Marbled Salamander	<i>Ambystoma opacum</i>
	Blue-spotted Salamander	<i>Ambystoma laterale</i>
	Eastern Red-spotted Newt	<i>Notophthalmus viridescens</i>
	Northern Dusky Salamander	<i>Desmognathus fuscus</i>
	Allegheny Mountain Dusky Salamander	<i>Desmognathus ochrophaeus</i>
	Eastern Red-backed Salamander	<i>Plethodon cinereus</i>
	Slimy Salamander	<i>Plethodon glutinosus</i>
	Spring Salamander	<i>Gyrinophilus porphyriticus</i>
	Northern Red Salamander	<i>Pseudotriton ruber ruber</i>
	Two-lined Salamander	<i>Eurycea bislineata</i>
Longtail Salamander	<i>Eurycea longicauda</i>	
Four-toed Salamander	<i>Hemidactylium scutatum</i>	

Table 3-1. continued

Group	Common Name	Scientific Name
	Eastern Hellbender	<i>Cryptobranchus alleganiensis alleganiensis</i>
Anurans	American Toad	<i>Bufo americanus</i>
	Gray Treefrog	<i>Hyla versicolor</i>
	Spring Peeper	<i>Pseudacris crucifer</i>
	Bullfrog	<i>Rana catesbeiana</i>
	Green Frog	<i>Rana clamitans</i>
	Wood Frog	<i>Rana sylvatica</i>
	Northern Leopard Frog	<i>Rana pipiens</i>
	Pickerel Frog	<i>Rana palustris</i>

Table 3-2. Amphibian and reptile species recorded over the first 8 years of the New York State Herp Atlas Project (a NYSDEC-managed statewide herpetofaunal survey) in the Monticello USGS 7.5 minute topographic quadrangle.

Group	Common Name	Scientific Name
Snakes	Eastern Milk Snake	<i>Lampropeltis triangulum triangulum</i>
Turtles	Common Snapping Turtle	<i>Chelydra serpentina</i>
Salamanders	Spotted Salamander	<i>Ambystoma maculatum</i>
	Eastern Red-spotted Newt	<i>Notophthalmus viridescens</i>
	Four-toed Salamander	<i>Hemidactylium scutatum</i>
	Northern Spring Salamander	<i>Gyrinophilus porphyriticus porphyriticus</i>
Anurans	Pickerel Frog	<i>Rana palustris</i>
	Wood Frog	<i>Rana sylvatica</i>
	Bull Frog	<i>Rana catesbeiana</i>
	Green Frog	<i>Rana clamitans</i>
	Spring Peeper	<i>Pseudacris crucifer</i>
	American Toad	<i>Bufo americanus</i>
	Gray Tree Frog	<i>Hyla versicolor</i>

Table 3-3. Reptile and amphibian species observed October 19 through October 21, 2004 at the Concord Resort Site in the town of Thompson, Sullivan County, New York.

Group	Common Name	Scientific Name
Salamanders	Eastern Red-back Salamander	<i>Plethodon cinereus</i>
	Northern Dusky Salamander	<i>Desmognathus fuscus</i>

Table 4-1. Mammalian species observed and/or evidenced October 19 through October 21, 2004 at the Concord Resort Site in the Town of Thompson, Sullivan County, New York.

Common Name	Scientific Name
Whitetail Deer	<i>Odocoileus virginianus</i>
Gray Squirrel	<i>Sciurus carolinensis</i>
Red Squirrel	<i>Tamiasciurus hudsonicus</i>
Eastern Chipmunk	<i>Tamias striatus</i>
Eastern Cottontail	<i>Sylvilagus floridanus</i>
River Otter	<i>Lontra canadensis</i>
Woodchuck	<i>Marmota monax</i>
Beaver	<i>Castor canadensis</i>
Eastern Coyote	<i>Canis latrans</i>

Literature Cited:

Cole, F. R. and D. E. Wilson. 1996. Mammalian diversity and natural history. Pg. 9-39 in Measuring and monitoring biological diversity: standard methods for mammals, Wilson, D. E., F. R. Cole, R. Rudran, J. D. Nichols, and M. S. Foster editors. Smithsonian Press, Washington, D.C.

Conant, R., and J.T. Collins. 1998. A Field Guide to Reptiles and Amphibians, Eastern and Central North America, Third Edition. Houghton Mifflin Company, Boston.

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