

C. Vegetation and Wildlife

Terrestrial Environmental Specialists, Inc. (TES) was contracted to perform vegetation and wildlife resources studies on a property in the Village of Bloomingburg, Sullivan County, New York, for a site is referred to as *The Villages of Chestnut Ridge*.

Common vegetation and wildlife resources, as well as endangered species were addressed in the studies of the Chestnut Ridge site. A preliminary review of the site was performed on January 31, 2008. Wildlife field surveys of the Chestnut Ridge site were conducted on April 2, 3, 9, 10, 29, and 30; May 1, 13, 14, 15, 19, 20, 21; and June 2, 3, 4, and 5, 2008.

1. Vegetation

Vegetation data was collected on May 20, 2008 to produce a vegetation cover type map. The wetland delineation map prepared by others was used during this effort. Vegetation cover types were characterized by the dominant plant species, and all plant species observed on the site were recorded. Scientific nomenclature for plant species follows *A Checklist of New York State Plants* (Mitchell and Tucker 1997). Data from this source can be found in Table 2 of the TES report. The general breakdown of vegetative land use covers is as follows:

Acreage of Vegetation/Land Use Cover Types

Chestnut Ridge Site, Village of Bloomingburg, Sullivan County, New York

Vegetation/Land Use Type	Acreage	% of Total Site
Open Field/Hay Fields	113.3	57.3%
Deciduous Forest Upland	22.9	11.6%
Scrub-Shrub Upland	6.3	3.2%
Residential/Developed	4.0	2.0%
Evergreen Plantation	0.6	0.3%
Open Water	2.1	1.1%
Emergent Wetland	0.8	0.4%
Wet Meadow	24.3	12.3%
Scrub-Shrub Wetland	8.1	4.0%
Deciduous Forest Wetland	15.5	7.8%
Total	197.9	100.0%

The USFWS website indicates that northern wild monk's-hood (*Aconitum noveboracense*) is known to exist in Sullivan County. This is a federally listed threatened species. According to Steve Young, Chief Botanist with the New York Natural Heritage Program, the two occurrences of northern wild monk's-hood in Sullivan County were from along the Beaver Kill, but they are no longer present and this species is considered extirpated from the county.

Northern wild monk's-hood prefers partially shaded to shaded cliffs or is found on cool streamside sites. These locations have cool soil, cold air, and cold groundwater that are necessary habitat requirements for northern wild monk's-hood. There was no habitat for this species based on the TES field searches.

No endangered, threatened, or rare plant species were noted by TES during the field surveys.

2. Wildlife

Wildlife or wildlife sign (tracks, nests, scat) were noted by vegetation cover type during each field visit. Birds were identified by sight, call, and song. Amphibians were also identified by sight and sound, and were searched for under cover objects, especially rocks in and near the drainageways on the site. Mammals were identified by sight, sound, and sign – especially tracks in wet substrates. All vegetation cover types on the site were investigated.

Two state and federally listed animal species were initially recognized as potentially occurring in the vicinity of the Chestnut Ridge site. These two species are bog turtle and Indiana bat. Specific surveys were performed for these two species and are presented in appendices to the report in Appendix H.

A habitat survey was conducted for Indiana bats on April 9 and 10, 2008. A search was conducted over the entire site for trees that might provide suitable roosting conditions, such as large shagbark hickory trees and trees with cracks or split trunks. All trees with such characteristics were measured for diameter at breast height. Trees with exfoliating bark were also recorded. Trees were photographed and located by using a handheld Global Positioning System device (GPS).

Because the location of the Chestnut Ridge property is in a county of known bog turtle occurrence (Sullivan County), and the New York Natural Heritage Program indicated the presence of bog turtles near the southwestern boundary of the project site, an extensive search effort was conducted for this species. This effort included Phase 1 and Phase 2 bog turtle surveys following USFWS protocol (Klemens 2001 and USFWS 2006). A Phase 1 bog turtle survey was conducted on April 2 and 3, 2008. A detailed account of these efforts are included in Appendix H. Although suitable habitat for bog turtles was identified on site during the Phase 1 survey, no bog turtles were observed during the Phase 2 survey period from April 29 to June 5, 2008.

Phase 2 Methods followed for these surveys were in accordance with the Guidelines for Bog Turtle Surveys (Klemens 2001 and USFWS 2006). An aerial photograph was used to delineate the boundaries of each designated survey area and the acreage was calculated using an AutoCAD program. The survey used visual scanning methods by slowly walking through the appropriate habitat and searching for turtles. In addition, probing with a wooden stick to detect buried turtles and physically probing by hand under tussocks were methods employed. Each appropriate wetland area was investigated for a minimum of four hours per acre per visit and a total of four visits were performed in each designated survey area. All observations of any

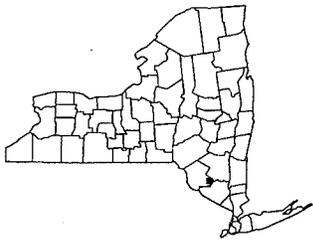
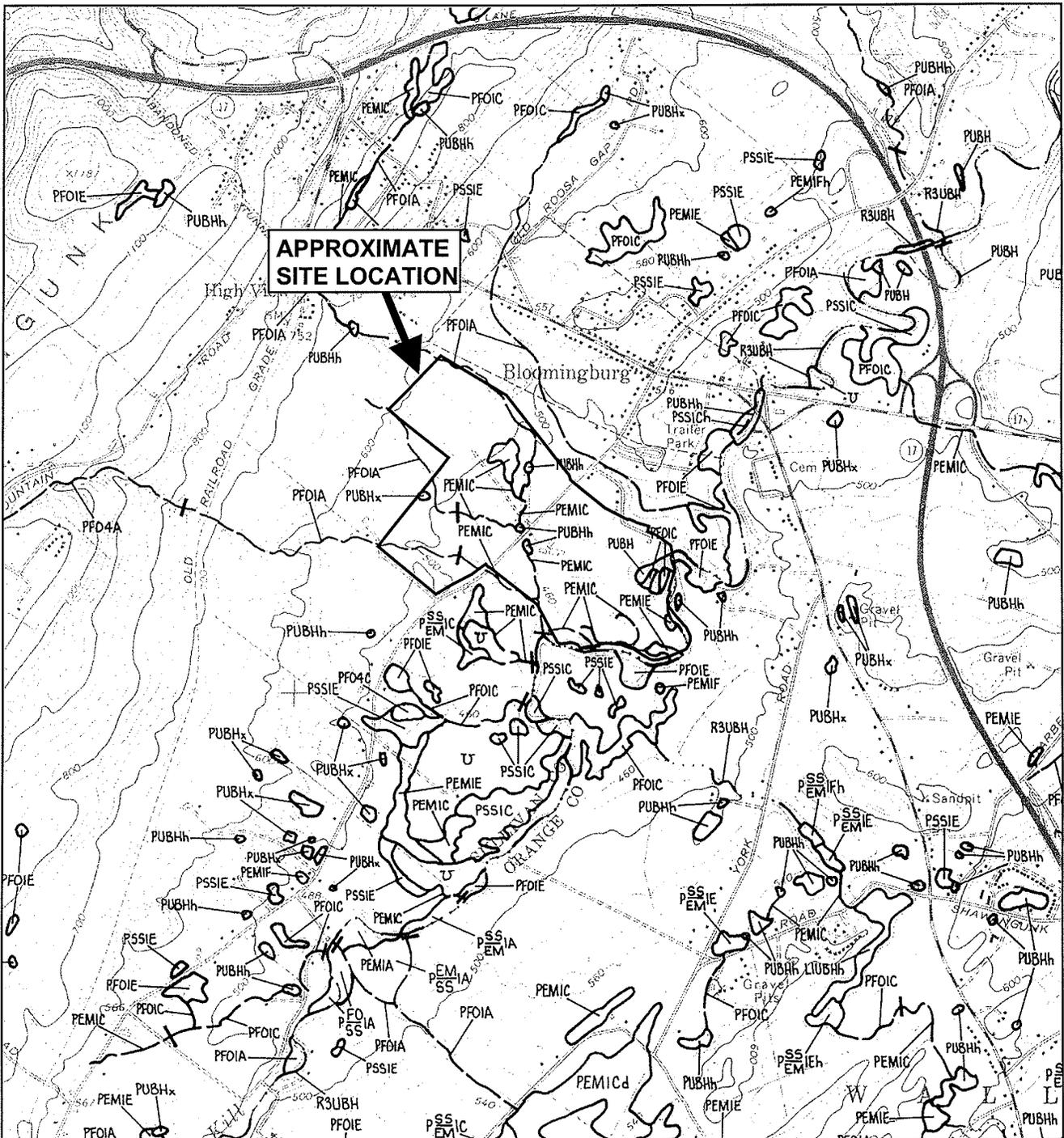
turtles found were recorded. Turtles located were photographed, measured, weighed, and returned to the location where found.

Background information on amphibians and reptiles was reported from the Wurtsboro Quadrangle during the 1990-1999 New York Herpetological Atlas Project sponsored by the New York State Department of Environmental Conservation (NYSDEC) and other organizations. These data are available as maps on the NYSDEC website (www.dec.ny.gov/animals/7140.html).

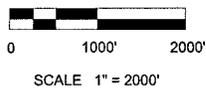
Local breeding bird information is available from the 1980-1985 and 2000-2005 New York Breeding Bird Atlas Projects sponsored by the NYSDEC and the New York State Ornithological Association. These data were collected in 5 km x 5 km "blocks" throughout the state and are available on the NYSDEC website (www.dec.ny.gov/animals/7312.html). These data provide a degree of certainty regarding breeding status of each species by using the type of sighting as an indication that the species is either a confirmed, probable, or possible breeder. Data from this source is presented in Table B-2 of the TES report.

Distributional information on mammals was obtained from a recent work on this group (Whitaker and Hamilton, 1998). Data from this source are presented in Table B-3 of the TES report.

During survey efforts at Chestnut Ridge, bald eagle and northern harrier were seen by TES on site. These are state-listed species. They don't breed onsite. NYS DEC Special concern species - American bittern, spotted turtle, and wood turtles were seen onsite.



QUADRANGLE LOCATION



NORTH



National Wetlands Inventory Map

U.S. Fish & Wildlife Service

Wurtsboro Quadrangle
1984

