NYS DEC

Division of Lands and Forests

Camillus Forest Unique Area Unit Management Plan

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New York State Department of Environmental Conservation

George E. Pataki, *Governor* **Erin M. Crotty, Commissioner**

New York State Department of Environmental Conservation

Region 7

Camillus Forest Unique Area Unit Management Plan

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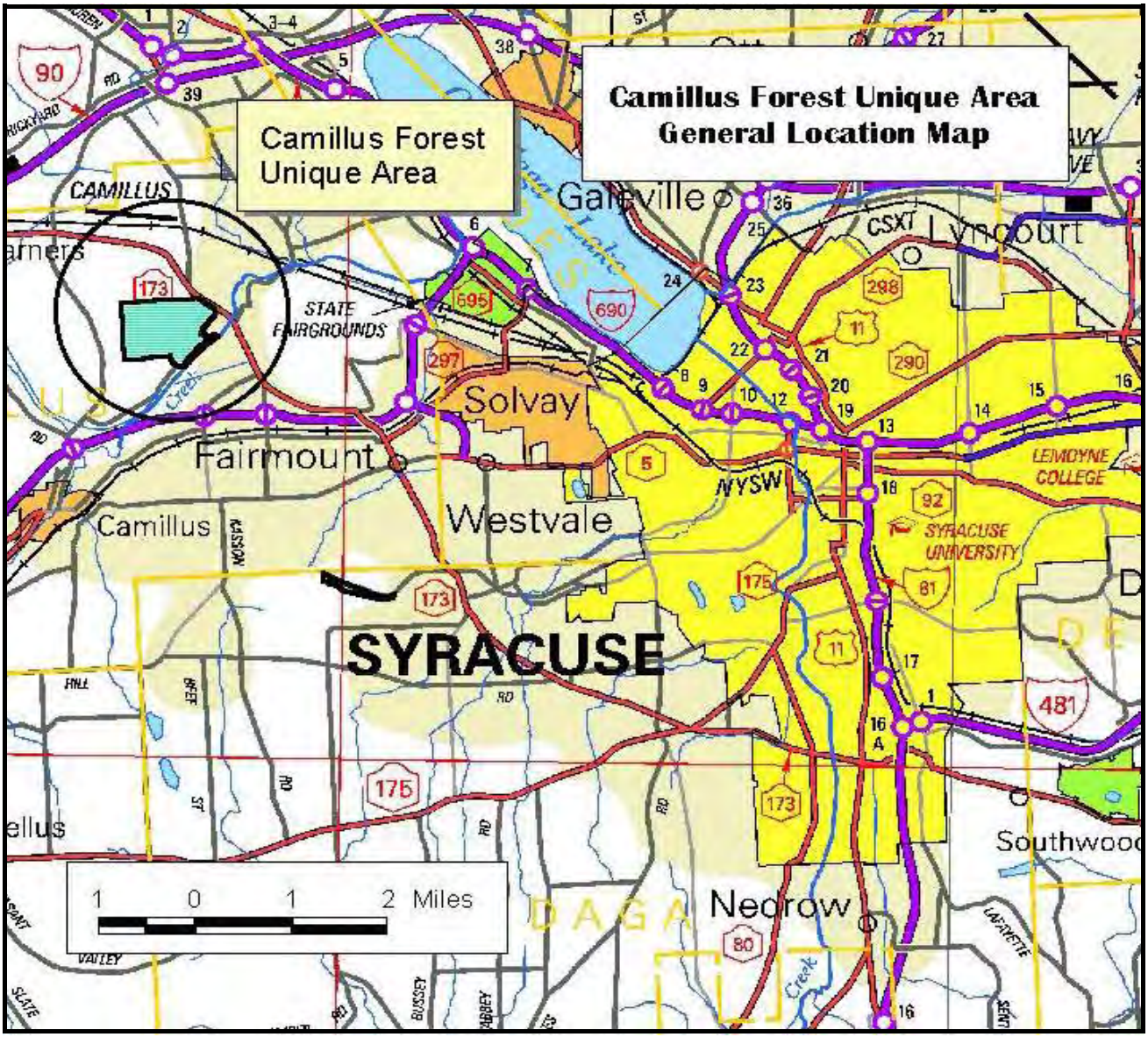
Camillus Forest Unique Area General Location Map
Camillus Forest Unique Area
CAMILLUS
STATE FAIRGROUNDS
Galeville
Lyncourt
CSXT
Solvay
Fairmount
Camillus
Westvale
SYRACUSE
NYSW
LEMOYNE COLLEGE
SYRACUSE UNIVERSITY
Southwood
Nedrow
1 0 1 2 Miles
90
173
695
690
297
298
290
11
5
92
81
175
481
80

Camillus Forest Unique Area Unit Management Plan
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Executive Summary

It is the policy of the Department of Environmental Conservation (DEC) to manage lands for multiple benefits to serve our customers, the People of New York State. This unit management plan (UMP) is the first step in carrying out this policy on the Camillus Forest Unique Area. This plan has been developed to address management activities on this parcel of land for the next 10 years. However, some management recommendations contained herein may extend beyond the 10-year period.

The 355-acre Camillus Forest Unique Area was established by Governor George E. Pataki in March of 1997 with the goal of preserving the land for public enjoyment and education of present and future generations of Central New Yorkers. Collectively, the area is an exceptional and diverse open space resource that provides a multitude of passive recreational use opportunities. The "crown jewel" of the property is a 40-acre forest located in its southwest corner. It is a magnificent old sugar maple and American beech forest that is nearly two centuries old and is one of the finest examples of a mature northern hardwood forest in Central New York. This forest is slowly developing characteristics of an old growth forest.

There are several structures on this property related to the former Syracuse State School which are all in poor condition. It is neither practical nor economical for the DEC to refurbish these structures. Their disposition is discussed further in this plan.

The area is administered locally by the Department of Environmental Conservation, Division of Lands and Forests Office, in Cortland which manages approximately 90,000 acres of public land in six Central New York counties. Additionally, DEC forestry staff provides forest stewardship assistance to 1.1 million acres of privately owned land and 146 communities in the region.

An integral part of the DEC planning process is *public participation*. Department natural resource professionals invited the public to provide ideas on the management of this property *before* the formal planning process began to help insure that the final plan best represents the desires of the public.

Management of the property will be guided by this public participation and the ability of the land resource to sustain various types of passive recreational use.

This plan strategically improves passive recreational opportunities for fishing,

hiking, birdwatching, bow hunting, and cross-country skiing. It will cost an estimated $128,900 to fully implement this plan over a ten (10) year period.

285 Year Old Tree (center of photo)

Vision Statement

The Camillus Forest Unique Area protects unique open space while providing outstanding passive recreational opportunities. Thus, the area improves the quality of life of Central New Yorkers.

This plan seeks to protect this unique open space while providing a place for relaxation, reflection, and enjoyment.

I. UNIT OVERVIEW

A. History of the Land Unit

Central New York is thought to have been originally settled by Algonkians shortly before the year 1000, and these people dominated the New York region for more than 300 years. The Iroquois, consisting of several tribes, invaded upstate New York about the year 1300 (Ellis et al). They were unusual in that they formed a confederation known for its strength. Founded about 1570, this organization known as the League of Five Nations preserved a delicate balance between central authority and tribal autonomy. Later American governments established by both the Articles of Confederation and the Constitution exhibit certain similarities to the League of Five Nations. New Yorkers can relate to the native American heritage of the state as reflected by the names of twelve counties and cities of the state. It is said that the Iroquois reached their most powerful status after the Dutch, French, and British came to the state in the seventeenth century.

The forests greatly influenced the life and customs of Native Americans. Forests provided materials for building longhouses, and provided food such as maple sugar, nuts, grapes, and wild fruit. The Iroquois call

themselves Haudenosaunee, meaning "people of the long house." The name Onondaga comes from the word Onundagaono or "people of the hills; place on the hill; people on the mountain; the keepers of the fire." Since agriculture provided most of the Iroquois diet, forests were cleared through girdling patches of trees, thereby providing sufficient light to grow cultivated crops such as tobacco, corn, squash, pumpkins, and beans. Early settlers learned a great deal from the Iroquois as they too initially cleared the land for agriculture, planted corn, and learned to tap sugar maple trees.

Following the Revolutionary War, most of the Iroquois homeland was surrendered to New York land speculators in a series of treaties. The Onondaga tribe sold much of their reservation to New York in 1822. In 1782 the State legislature designated military tracts within New York State. These tracts were then divided into 600 acre lots and set aside for veterans of the Revolutionary War as compensation for service to their nation. The majority of the Camillus Forest Unique area is located within lot 67 of the Onondaga Military Tract, which today comprises all or portions of Onondaga, Oswego, Cayuga, Cortland, Seneca, Steuben, and Wayne Counties. Farm lots one and two of the former Onondaga Reservation, which were annexed to the Town in 1834, comprise a minor portion of the property. The first settler to arrive in Camillus was Captain Isaac Lindsey and his brothers, William and Elijah, in 1790. Interestingly, the intial settlement of the Town was spurred by the discovery of the first plaster beds in the United States that were found accidentally in 1792 by William. Remarkably, a home built by Captain Lindsey in 1795 still stands today in the village of Camillus. Onondaga County was formally established in 1794, and in 1799 the Town of Camillus proper, which was number five in the original surveys of the military tract, was set off into a Town by itself. The first town meeting was held in what is now the Village of Elbridge. In 1829, the township was divided into three towns, namely Camillus, Elbridge, and Van Buren. Camillus was named for Marcus Furius Camillus, a Roman general and dictator 400-365 B.C. (as written in Mary Ellis Maxwell's Among the Hills of Camillus).

As agriculture became dominant, markets expanded for local wool and grain, especially after the establishment of the Erie Canal in 1825. Vast forested areas were cleared for cropland and pasture for sheep. As

one might expect, the first homes in the area were built out of logs cut by hand. Early pioneers found a forest that contained deciduous northern hardwoods mixed with large eastern white pine and eastern hemlock. Nathan Paddock, an early Camillus settler, reported in his journal, "Tall thick trees as I have never seen before, waving their high heads over us and we often feared that they might fall and crush us." Settlers cleared this immense growth with their own labor, hand tools, oxen and fire. Literature suggests that clearing an acre of land could take as little as 10 days, or as long as one month, and a lifetime to clear a 600-acre military tract.

Joseph Collucci writes in his *Early History of Camillus* that "clearing the land was difficult because the forest was made of giant trees, some as high as 230 feet." Additionally, he writes, "Lumber soon became an important product as settlers arrived to build homes and stores. The oak and maple trees were transported to a sawmill along Nine Mile Creek." Many water-powered mills were established along the creek as the demand for flour and lumber grew. As such, there were 29 mills on the creek by 1823; land ownership maps from 1852 show two sawmills within a mile of the property, with one located at the base of the parcel along Nine Mile Creek.

The *Gazetteer of New York* describes the town in 1810 as a community of four or five grain houses, seven sawmills, and two clothiers, with an extensive gypsum mine that produced 100 tons annually (Spafford, 1813). Agricultural statistics from 1850 report that 128,785 pounds of maple sugar were produced in the town. Crops grown at that time include winter wheat, oats, corn, barley, tobacco, and potatoes. Statistics describe the Camillus Forest Unique Area as cropland, pasture, meadow, and improved land. Sheep and swine were the dominant livestock, and the sheep produced large quantities of wool. "In 1835 the town of Camillus raised 22,936 head of sheep, and three years later they raised about two and one-half times as much or 55,205 head of sheep" (*Maxwell, 1952)*. The land encompassing the Camillus Forest Unique Area has been owned by both individuals and state government over the past 200 hundred years. Sarah and John E. Vacher are listed as the first owners in 1796, followed by James Parker in 1808, and Nathan Hopkins in 1810. Members of the Hopkins family retained ownership of the land for 105 years until 1915. Nathan and Samuel Hopkins first arrived in Camillus about 1807, were former members of

the New York State militia at Salem, Washington County, and were considered Revolutionary War Soldiers (as described in an article published in the *Camillus Advocate* by *Ralph Sim*s in February 1996). Samuel's son, Robert, built a home on what is now Warners Road (NYS Route 173) about 1840. Interestingly, Robert served as Camillus town justice for 24 years, and, together with his wife, Prudence, was a founding member of the Amboy Presbyterian church.

In 1915, the Hopkins farm was sold to Margaret Amos. The Amos family expanded farm operations and managed the property for 11 years. It was considered "the splendid summer estate of Carol Amos of Amos Rice Coal Company of Syracuse" (*Camillus Advocate*, February 3, 1976, in an article entitled *Fairmount Division of State School has Long and Proud History* by *Mary Jo Allen).* In 1926 Margaret Amos sold the property to the State of New York to be developed as the Antrim and Amos farm colonies for young disabled males. The former Hopkins farm was the last property acquired by the Fairmount Division of the State School for such purposes. State School farms raised livestock, produced eggs, milk, and grains. Items produced supplied other state facilities including state prisons. Residents of the farms received training, exercise and a sense of accomplishment, thereby helping to become self-sufficient.

As time progressed and as educational philosophies changed, farm vocational training through farm work became less acceptable. Rising labor costs coupled with a shortage of skilled labor were additional factors that led to the end of the farm colony system at the Syracuse State School. Further, the Antrim colony was dealt an additional setback when a fire destroyed three large barns in 1966. Subsequently, in 1971 the last crops were planted by the State School Amos and Antrim colonies; however, some of the land was rented for agricultural purposes through 1996.

In March of 1997, Governor George E. Pataki initiated a transfer of jurisdiction of most of the former State School to the New York State Department of Environmental Conservation (DEC) Division of Lands and Forests. Due to the outstanding natural character of this property as well as its recreational and educational value, the DEC classified this property as a "Unique Area.". Following the transfer, DEC held four public outreach meetings to seek input regarding future public use of the area. An interim land

use policy and forest stewardship trail were developed to protect the land resource while facilitating passive recreational use. *All future development will be guided by this document.*

B. Location and Accessibility

The Camillus Forest Unique Area is located approximately 8 miles from the center of downtown Syracuse and is easily accessible via Route 5, Interstate 690, and the New York State Thruway. Interstate Route 81 and the Thruway intersect approximately 6 miles northeast of the site in the town of Salina. Local access to the site is provided by State Route 173 and Thompson Road. Additionally, Syracuse's Hancock International Airport and Regional Transportation Center are easily accessible from Camillus. As such, the site readily provides valuable open space recreation opportunities to approximately one-half million residents of metropolitan Syracuse and the surrounding region. Seasonal parking is currently limited to approximately 15 cars in a lot in the northeast corner of the parcel adjacent to a wood frame house formerly utilized by the Syracuse State School. No disabled or vehicle access is currently available on the property. Access to the interior of the property is limited to informal paths and two abandoned farm roads. Therefore, the interior of the parcel is currently accessible only by foot. Future efforts will be made to improve public recreational access, particularly parking, as available resources permit.

C. Description of Natural Resources

1). Physical Resources

a). Climate

The Camillus Forest Unique Area is located in a climate that is classified as humid continental. Air masses that influence weather in the region typically originate in the continental United States and Canada. However, the Gulf of Mexico and Atlantic Ocean contribute significant moisture at times, thereby contributing to the maritime characteristics of the climate. Average annual precipitation is 35 to 40 inches per year and is evenly distributed throughout the year (about 3 inches per month). The frost free growing season is between 165 and 175 days. Lake Ontario influences the local climate by providing substantial lake effect snow and rain showers. Average snowfall for the area is between 100 and 130 inches per season (USDA Soil Survey of Onondaga County, 1977). Storm events are convectional, frontal, or cyclonic in nature. Thus, moisture is generally available for woody and herbaceous plant establishment and growth. The southwestern corner of the property has the

highest elevation of the parcel and is exposed to strong winter winds. Wooded hedgerows help buffer winter winds, but open fields on the highest elevations of the property are subject to strong northwesterly winds, particularly during the winter months.

b). Geology and Soils

Onondaga County is divided into two distinct physiographic regions by the Onondaga Limestone Escarpment. The northern most portion of the county is relatively flat with elevations between 370 and 400 feet. Naturally occurring forests found in this part of the county include trees typically found in warmer portions of the state, such as black tupelo and sassafras. Dominant tree species are red maple, green ash, and elm.

As one proceeds south along route Interstate Route 81 from Syracuse, elevation increases substantially as this portion of the county is considered to be part of the "Appalachian Highlands" ecozone. The Camillus Forest Unique Area lies between these two zones, with elevations ranging between 400 feet along Nine Mile Creek to 700 feet (above sea level) at the old forest area in the southwestern corner of the parcel.

Thus, the unique area is situated in a transitional hill and valley zone between the low, rolling Erie-Ontario Plain and rugged Allegheny Plateau (Syracuse-Onondaga Planning Agency, 1986). Bedrock from which the soil material in Onondaga County is derived is mostly limestone, siltstone, and shale that formed from materials deposited at the bottom of the sea during Silurian and Devonian geologic periods some 400 to 500 million years ago.

Soils on the parcel are identified by the USDA Natural Resource Conservation Service as productive Camillus, Ontario, and Hilton loams. All of these soils formed in rich calcareous, glacial till deposits of water-sorted clay, silt, sand, and gravel. They are generally medium to high in natural lime content, thereby providing outstanding base environmental conditions for establishment of a vast array of trees and herbaceous plants. Most of the upland soils have good moisture availability throughout the year. Portions of the open fields appear to have eroded over the years, especially in areas that exceed 10% slope. Topography of the unique area has been heavily influenced by glaciers, as evidenced by the hilly topography. Small "upside-down spoon-shaped hills" found in a narrow 30-mile belt between Syracuse and Buffalo are called drumlins; one such drumlin can be found on the property. The drumlin "fields" of Central New York are some of the best examples of

this type of landform in the entire world.

c). Water Resources

The Camillus Forest Unique Area lies within the Onondaga Basin, which includes Nine Mile Creek, Harbor Brook, and Onondaga Lake. A portion of the property along Nine Mile Creek lies within the confines of the Nine Mile Creek Corridor Critical Environmental Area (CEA).

This designation of the Nine Mile Creek Corridor acknowledges the ecological and economical significance of the creek and surrounding watershed. All management activities on the Camillus Forest Unique Area will strive to protect or enhance this resource. Rain and snow that falls within the confines of the unique area flows over the land into two intermittent stream channels that originate on the property. These two channels merge and form a small perennial stream that flows nearly year round. This small stream crosses Thompson Road and then enters Nine Mile Creek, a significant fishery and recreational resource. Areas in close proximity to the small stream channels on the property contribute to stream flow and overall water quality downstream. These areas are often referred to by forest hydrologists as variable source areas.

With the exception of rapid snowmelt or heavy rain events, the majority of precipitation does not reach the stream channels by flowing over the land (overland flow). Rather, precipitation from storm events is absorbed into the soil profile as subsurface water and flows into the variable source areas in close proximity to the stream channels. This water (also referred to as base flow) sustains flow in the lower stream channel near Thompson Road for several months of the year.

It is thought that base flow is the sole component of stream flow between storm and snowmelt periods. In the Eastern United States as a whole, about 70% of total stream flow is base flow, and only 30% is storm flow (Hewlett, 1982).

Historically, the Syracuse State School utilized water resources on the property for recreational swimming, as illustrated by the remnants of a dam and shallow swimming pool. Thus, it is reasonable to expect that sufficient base flow of good quality exists to sustain a fish/wildlife pond on the property. Management activities conducted under the auspices of this plan will protect and in some instances enhance variable source areas and riparian zones - *critical environmental areas where land meets water.*

Nine Mile Creek adds to the landscape, wildlife, and ecosystem diversity of the entire parcel. The creek and associated riparian zones provide habitat for fish and amphibians, thereby providing additional environmental education opportunities.

2). Biological Resources

a). Vegetation

Due to the excellent soil resources and moderate climate, more than 100 different herbaceous and woody plants can be found within the confines of the property. *Figure 1* illustrates the locations of eight different major land cover types. Each land cover type can then be further divided into 23 land management units, each with distinctive characteristics based on available natural resources and physical location on the landscape. The eight major land cover types and associated acreage found at the Camillus Forest Unique area are as follows:

1. Old sugar maple and American beech climax forest, 40 acres.
2. Mature northern hardwood forest - sugar maple, American beech, bitternut hickory, and butternut, 18 acres.
3. Moderately aged forest - sugar maple, American beech, white ash, and American basswood, 9 acres.
4. Old apple orchards, 5 acres.
5. Cropland, 18 acres.
6. Immature trees and shrubs, 96 acres.
7. Open “old” fields, 148 acres.
8. Riparian (land meets water) zone, 21 acres.

Old Maple with Fluted Bark at Sunset

Of particular interest is the 40-acre old forest which is between 150 and 160 years of age as determined by tree coring. The forest was evaluated in June of 1996 and February of 1997 by DEC foresters and faculty from the SUNY College of Environmental Science and Forestry. Situated on the highest elevation on the property with outstanding views to the north and east, this unit is best described as a mature, old-aged northern hardwoods stand.

No evidence of major harvesting can be found, thereby suggesting that the stand has not been harvested since the State acquired the property in 1926. Forest analysis was conducted in May of 1996 to evaluate forest density, tree species composition, and overall forest health using the *Northeast Decision Model* (NED/SIPS) computer program developed by the United States USDA Forest Service. At that time, the forest was dominated by sugar maple (83%) and American beech (13%) which together comprised 96% of the forest by density. Tree size ranges from saplings to 42 inches in diameter at breast height (d.b.h.). Since 1996, the forest has been subjected to several significant natural wind disturbance events. The most significant event occurred early Labor Day morning, 1998. A severe thunderstorm generated straight line winds equivalent to an "F2" tornado, with winds exceeding 115 miles per hour. These storms are often referred to by meteorologists as derechoes (straight-line windstorms). This event represented the largest scale windstorm to affect the Onondaga County metropolitan region since November 1950. As

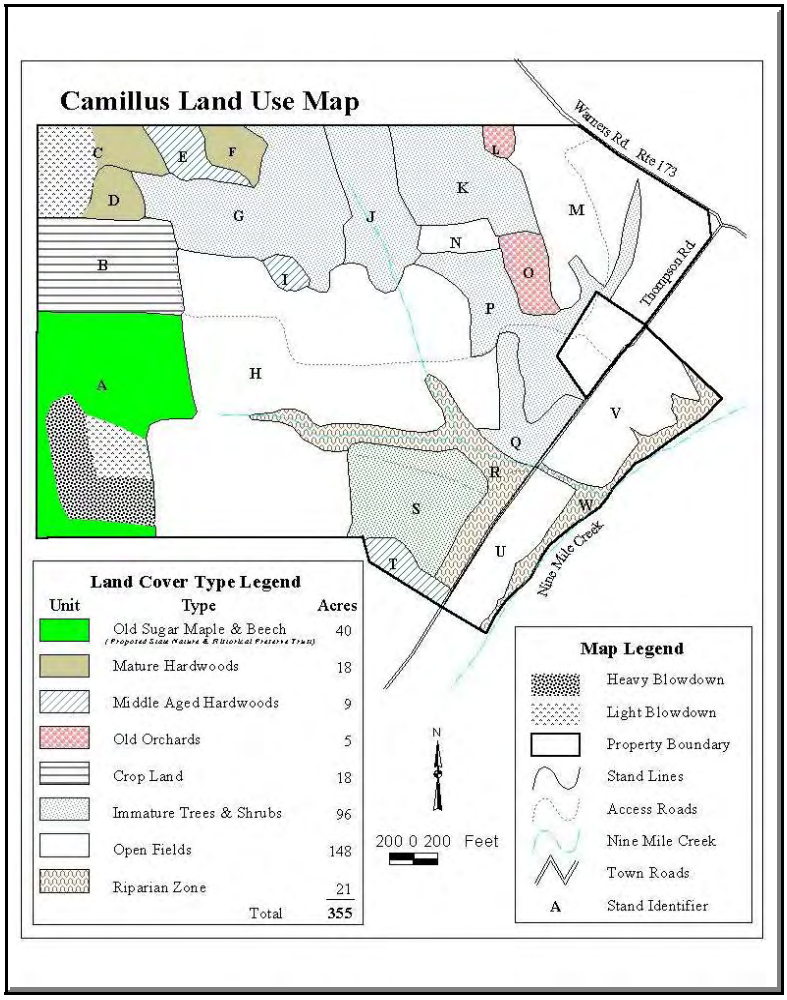


Figure 1 - CFUA Land Use Map

a result, existing scattered openings in the forest canopy of unit A (see attached map) were transformed into one very large opening, effectively eliminating the forest overstory on 12 of the 40 acres that comprise this old forest area. The interim forest stewardship/education trail was made impassible at that time.

Recent research suggests that catastrophic wind events such as this occur on the order of every 1,300 years within individual forests in the northern United States. Thus, events of this magnitude are nature's way of renewing forests. The large opening has provided substantial light to the forest floor which will ultimately result in the reestablishment of a new age class of trees. It is expected that trees that do not tolerate shade such as black cherry, white ash, and tulip poplar, will become established in portions of the opening.

Thus, from a long term forest sustainability standpoint, the storm was actually a positive event. The new generation of trees will enhance vegetation diversity, forest structure, and wildlife habitat. Coarse woody debris left on the forest floor will provide nutrients to the newly established trees. Additionally, the wind-created opening will provide additional environmental education and research opportunities.

Interestingly, the species composition of this forest supports claims that this area was once developed as a sugar bush. This may explain the dominance of sugar maple and lack of other species associated with climax forests. The process of developing a sugar bush includes the removal of species other than maple. The presence of beech is not surprising since it was a common practice to leave beech in sugar bushes to later be used as fuel for boiling the sap to make syrup.

Many remaining old trees in this forest provide cavities for wildlife such as squirrels and raccoons. Hawks have been observed nesting in larger trees in the forest, and turkey frequent the site for hard mast (beech nuts) produced by American beech, as well as herbaceous plants such as leeks. A team of graduate students led by Dr. Don Leopold of the SUNY College of Environmental Science and Forestry conducted a herbaceous plant survey in May, June, and July of 1997. A listing of the plants recorded during the survey is included in the appendix of this plan. The most common herbaceous plants in the forests of the unique area are waterleaf, blue cohosh, touch-me-not, and Christmas fern.

No threatened or endangered plants have been noted, reported, or listed on the New York State Natural Heritage database.

Due to the excellent soil resources and no immediate past history of timber cutting, this forest is an exceptional natural resource. The area will effectively be utilized as a "living classroom" and will illustrate how older forests respond to natural disturbance and eventually develop into "old growth."

The remaining northern hardwood forests are classified as mature and moderately aged. Analysis indicates that these forests are also dominantly sugar maple (approximately 90% by density). Associated tree species include American beech (15%), bitternut hickory (5%), and lesser components of butternut, white ash, American basswood, and tulip poplar.

In addition to forest resources, the property has substantial open space in the form of open fields, immature trees and shrubs, old apple orchards, and streamside/riparian zones. The mixture of land cover types in close proximity to the suburbs and City of Syracuse makes the unique area a wonderful recreational and educational resource for present and future generations.

b). Fish and Wildlife Resources

Given the diversity of land cover types, it is not surprising that the Camillus Forest Unique Area has a diverse population of fish and wildlife. *Table 1* summarizes the species of fish and wildlife commonly associated with the many land cover types found at the unique area.

Turkey, white-tailed deer, ring-necked pheasant, and a multitude of songbirds are found on the property. The DEC is working with SUNY ESF to study wood thrush in and around the old forest area. The abundance of large dead trees provides habitat for cavity nesting birds such as the eastern screech owl, barred owl, downy woodpecker, hairy woodpecker, pileated woodpecker, and northern flicker. Woodpeckers routinely visit the old forest area. Tall trees on the area provide nesting habitat for the red-tailed hawk and great horned owl.

Developing Coarse Woody Debris in the Old Forest

Fisheries/Aquatic Resources of Nine Mile Creek

by Les Wedge, DEC Fisheries Manager

Nine Mile Creek is a very high quality and important fishery resource in Central New York.

Wild brown trout are the dominant game fish in the section from Marcellus to Amboy with wild yearling populations estimated to be 217 per acre in this section in August 1996 by DEC. The stream is also stocked with hatchery brown, brook and rainbow trout by the Carpenter's Brook Fish Hatchery, operated by Onondaga County.

Ground water entering the stream in the vicinity of Marcellus Falls dramatically increases stream flow and reduces summer water temperature resulting in conditions very favorable for trout.

The combination of exceptional stream habitat, water quality and abundant trout generates an exceptional trout fishery which receives intense fishing pressure (estimated at 2400 angling hours per acre in 1977-80 in the Marcellus to Camillus section). The remainder of the stream above Marcellus receives an estimated 300 angler hours per acre, still considered high by New York standards (Engstrom-Heg and Hulbert, 1982). In 1996, Nine Mile Creek received an estimated 53,770 angler days of effort (NYS DEC 1997).

The quality of Nine Mile Creek led to research being conducted by the SUNY College of Environmental Science and Forestry to attempt to estimate the stream's potential for producing Atlantic salmon smolts (the life stage when this species emigrates from the stream nursery environment to a lake environment). Potential smolt production was estimated to be approximately 6,000 smolts annually (Ringler et al, 1996)

Water quality, as indicated by macroinvertebrate populations, was assessed in Nine Mile Creek in 1973 and 1989. The stream was rated as "moderately impacted" and unchanged at Amboy between those dates. "Moderately impacted" streams have fair water quality, and the macroinvertebrate communities are slightly but significantly altered from pristine conditions. Species richness is lower than that found at nonimpacted streams (Bode et al, 1993). Possibly contributing to the impacts are: golf courses, municipal/industrial discharges, and the influence of the dam at Amboy.

Nine Mile Creek provides some of the best trout fishing in the county. The Nine Mile Creek Conservation Council (NMCCC) partners with county parks and DEC Fisheries to provide stewardship to the creek through

environmental education and fish stocking.

The NMCCC has also partnered with the Town of Camillus and DEC to provide a canoe launch and fishing access site on the property. *Table 1* clearly illustrates the diversity of fish and wildlife at the Camillus Forest Unique Area. Land stewardship activities and development of stewardship partners will further enhance fish and wildlife habitat by maintaining a diverse landscape of fields, forests, and early successional cover.

Table 1 - Fish and Wildlife Associated with Land Cover Types of the Camillus Forest Unique Area

Note (1): Species of wildlife that have been observed by DEC or SUNY ESF faculty and students on the site are listed in italics.
*Note (2): Breeding birds are indicated by an asterisk **(*)**and a **P** (probable breeding) or a **C** (confirmed breeding). Thanks go to Mr. David Muir for providing 2001 breeding bird atlas data.*

Common Name	Description
American Crow	Bird
American Red Start	Bird * (P)
American Kestrel	Bird
American Goldfinch	Bird * (P)
American Robin	Bird
Baltimore Oriole	Bird * (C)
Barn Swallow	Bird
Barred Owl	Bird
Beaver	Mammal
Big Brown Bat	Mammal
Black-capped Chickadee	Bird *(P)
Blue Jay	Bird * (P)
Blue-winged Warbler	Bird * (P)
Bluebird	Bird
Bobolink	Bird * (P)
Brown Thrasher	Bird

Brown Trout	*Fish*
Brown-headed Cowbird	Bird
Bullfrog	Amphibian
Carolina Wren	Bird * (C)
Cedar Waxwing	Bird
Cerulean Warbler	Bird * (P)
Chestnut-sided Warbler	Bird * (P)
Common Nighthawk	Bird
Common Raven	Bird
Common Snapping Turtle	Amphibian
Common Yellowthroat	Bird * (C)
Cooper's Hawk	Bird
Cottontail Hare	Mammal
Coyote	Mammal
Crappie	*Fish*
Dark-Eyed Junco	Bird
Deer Mouse	Mammal
Downy Woodpecker	*Bird * (P)*
Eastern Kingbird	Bird * (P)
E. Screech Owl	Bird
Eastern Wood-Pewee	Bird * (P)
Eastern Painted Turtle	Amphibian

Eastern Box Turtle	Amphibian
Eastern Garter Snake	Reptile
Eastern Milk Snake	Reptile
European Starling	Bird
Fisher	Mammal
Gray Catbird	Bird * (P)
Gray Squirrel	*Mammal*
Gray Fox	Mammal
Great Crested Flycatcher	Bird * (P)
Great Horned Owl	Bird * (P)
Great Blue Heron	Bird
Hairy Woodpecker	*Bird * (C)*
Hooded Warbler	Bird * (C)
Indigo Bunting	Bird * (C)
Kingfisher	*Bird*
Largemouth Bass	Fish
Least Flycatcher	Bird
Mallard Duck	Bird
Mourning Warbler	Bird * (P)
Northern Cardinal	*Bird * (P)*
Northern Flicker	*Bird * (P)*
Northern Saw-whet Owl	Bird
Northern Oriole	Bird
Northern Spring Peeper	Amphibian
Opossum	Mammal
Ovenbird	Bird

Pickerel Frog	Amphibian
Pileated Woodpecker	Bird * (P)
Purple Finch	Bird
Raccoon	Mammal
Red Squirrel	Mammal
Red Bat	Mammal
Red-bellied Woodpecker	Bird * (C)
Red Fox	Mammal
Red-breasted Nuthatch	Bird
Red-eyed Vireo	Bird * (P)
Red-shouldered Hawk	Bird
Red-spotted Newt	Amphibian
Red-tailed Hawk	Bird * (P)
Red-winged Blackbird	Bird * (C)
Ring-necked Pheasant	Bird * (P)
Rose-breasted Grosbeak	Bird * (C)
Ruby-throated Hummingbird	Bird
Ruffed Grouse	Bird
Rufous-sided Towhee	*Bird*
Savannah Sparrow	*Bird * (P)*
Scarlet Tanager	*Bird * (P)*

Shrew	Mammal
Snowy Owl	Mammal
Song Sparrow	Bird * (C)
Striped Skunk	Bird
Tufted Titmouse	Bird * (C)
Veery	Bird
Water Snake	*Reptile*
White-breasted Nuthatch	Bird * (C)
White-footed Mouse	Mammal
White-tailed Deer	Mammal
White-throated Sparrow	Bird
Wild Turkey	*Bird * (C)*
Wood Duck	Bird
Wood Frog	Amphibian
Wood Thrush	Bird * (C)
Woodchuck	Mammal
Woodcock	Bird
Yellow -bellied Sapsucker	Bird * (C)
Yellow Warbler	Bird * (C)

3). Visual Resources

The Camillus Forest Unique area provides outstanding views to the northeast, east, and southeast. On a clear day the panoramic view includes part of the City of Syracuse, Onondaga Lake, Mattydale, Liverpool, and the tops of hills and higher ground in Oswego and Madison counties. The large area of greenspace associated with the area can readily be viewed from Onondaga Lake Park in Liverpool, northwestern parts of the City of Syracuse and suburban neighborhoods in the Towns of Geddes, Salina, and Camillus. The forests provide vivid fall color and wonderful displays of wildflowers, grasses, and forbs that attract a variety of butterflies. Outstanding opportunities exist to view wildlife, particularly during the spring and summer. Establishment of a fall and winter parking facility as recommended in this plan will provide additional winter snowshoeing and cross-country skiing opportunities. The property is one of the largest pieces of publicly-owned open space in the western portion of the county.

4). Mineral Resources

The Camillus Forest Unique Area has no existing gravel or shale pits. Additionally, the area does not have any existing oil or gas wells. The DEC Division of Lands and Forests has determined that extracting large amounts of gravel or drilling for oil and gas on the surface of the property are not compatible uses. The limited acreage of the property, combined with its close proximity to residential areas (and their respective view-sheds) and the Nine Mile Creek Critical Environmental Area (CEA) were the chief factors in making this determination.

II. Management Opportunities for the Future

A. Management Goals and Objectives

1). The Camillus Forest Unique Area will be managed by an *ecosystem management approach* with the goal of promoting biodiversity. Using this philosophy, it is desirable to encourage and maintain a diverse landscape consisting of mature forests, moderately aged forests, young early successional forests, meadows, fields, wetlands, and streamside (riparian) zones. The goal is to maintain a diversity of *sustainable* habitats in the landscape so that acceptable conditions are available for many forms of life, such as birds, mammals, fish, reptiles, trees, shrubs, mosses, insects, and fungi, while providing continued opportunities for recreational use, environmental education, and

research. In this fashion, wildlife diversity is maximized while critical soil and water resources are protected. Additionally, some existing nonforested open spaces will be maintained, thereby maintaining components of the current viewshed and wildlife benefits.

2). The Camillus Forest Unique Area property as a whole is very diverse. Almost every stage of forest succession is present. This diversity provides a unique outdoor educational "classroom" and almost unlimited opportunities for research. The SUNY College of Environmental Science and Forestry has already started several research projects on the property. The DEC will encourage appropriate educational and research projects in partnership with the college. Temporary revocable permits (TRP) will be utilized in the future to guide education and research projects.

Part D of this section will further describe in detail management options proposed by DEC

Old Sugar Maple with Lightning Strike

B. Limitations and Issues Affecting the Planning Area

1). Limitations

As previously described, the parcel has limited recreational access and limited seasonal parking facilities. Additionally, limited access makes routine maintenance and additional law enforcement patrol activities challenging for DEC staff. As such, additional resources are needed for patrol and maintenance activities.

The elevation changes from 410 feet above mean sea level to 700 feet in the southwest corner of the property, with slopes varying from approximately 2% to 10% along the existing 2-mile forest stewardship trail. This makes the trail a challenge for the very young, very old, and those with medical conditions. The elevation change also challenges the use of this trail for novice cross-country skiers.

2). Issues and Concerns

Public outreach meetings held in the spring of 1997 and 1998 gave DEC Division of Lands and Forests staff an opportunity to meet stakeholders, while sharing ideas, issues, and concerns relating to management of the parcel. Issues and concerns expressed during these productive meetings were diverse. As one might expect, many stakeholders expressed similar ideas, issues and concerns to DEC staff at the meeting in person, by phone, and in writing. Most issues and concerns related to minimizing management costs and impact on the land resource while maximizing public use opportunities. Additionally, the Department was made aware of neighboring landowners' concerns regarding intentional and accidental trespass from public to private land. Citizens were concerned that management costs not be passed on to local government. Many people stated that the area should provide multiple recreational opportunities such as hiking, birdwatching, environmental interpretation, hunting, fishing, cross-country skiing, mountain biking, and dog training. Some noted the potential to integrate natural resource education with local history, particularly relating to agriculture and the Erie Canal.

Significant interest was expressed in developing an arboretum as well. Given this diverse list, it is not surprising that some people opposed some activities while supporting others, depending on their individual backgrounds and interests. Given the available land resource, it is the intention of the Department to manage for as many *environmentally sustainable* uses as possible with available financial resources, while minimizing conflicts between recreational users and neighboring landowners. Additional passive recreational opportunities are available on DEC managed state forests, wildlife management areas, and unique areas throughout Region 7.

C. Existing Facilities Assessment

Currently, eight wood-frame structures exist within the confines of the Camillus Forest Unique Area. Additional existing facilities include both "gray" and "green" infrastructure, such as recreational trail access, former farm roads, driveways, gates, etc. *Table 2* and *Figure 2* describe each existing facility, its general location, condition, and potential use.

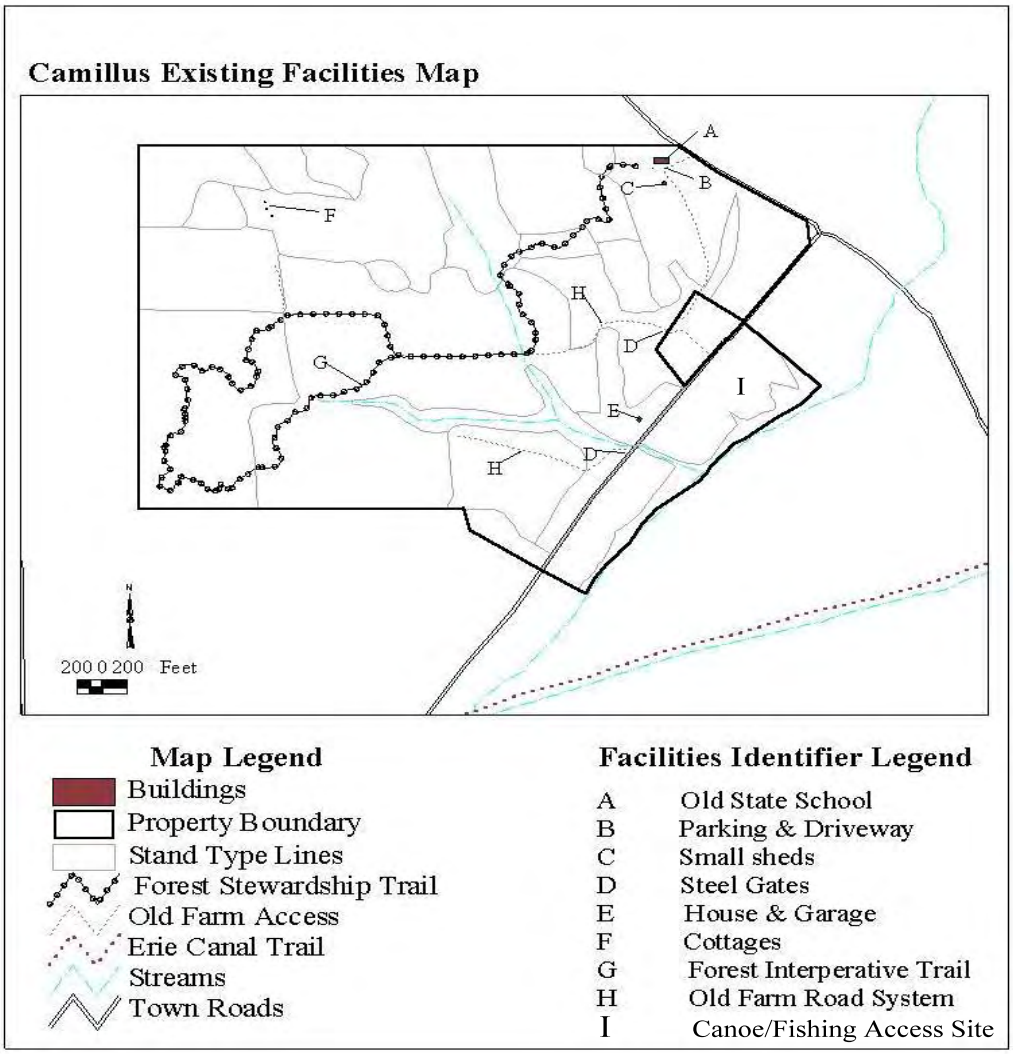


Figure 2- CFUA Existing Facilities Map

Table 2 ***Summary of Existing Facilities on the Camillus Forest Unique Area Site***

Facility Description(s)	Approximate Size	Location	Condition Assessment	Potential Future Use
Former state school main building - 3350 Warners Road - 2 story wood frame with basement (front of building former farmhouse (c. 1840). Also, concrete and steel-reinforced silo with attached shed (c. 1950).	1st floor - 2,227 sq. ft. 2nd floor - 2,227 sq. ft. Basement - 2,279 sq. ft. *Total - 6,733* Silo - 40' perimeter. Shed 102 sq. ft.	3350 Warners Rd. (NYS 173) Located south of intersection with Pottery Rd.	Structure is in poor condition; needs complete replacement of electric, heating, and plumbing; also needs *extensive* interior and exterior repair. Building lacks necessary accessibility for disabled persons.	Possibly could serve as an interpretive and/or historic center. However, repair and annual maintenance costs would be extensive. *Estimated rehabilitation costs will exceed $250,000.* Demolition costs estimated to be $25,000. ** Please see note at the end of this table.*
Gravel parking lot and driveway	Parking lot - 3,400 sq. ft. Driveway - 2,000 sq. ft.	3350 Warners Rd. (NYS 173)	Fair. Surface needs regrading and gravel.	Seasonal use parking area.
Small shed(s)	Shed 1 - 120 sq. ft. Shed 2 - 115 sq. ft.	Adjacent to main building at 3350 Warners Rd.	Both are in poor condition.	None. *Priority removal recommended.* Estimated demolition cost $1,000.
Steel access gates (2)	12' gates constructed by DEC Division of Operations	Western perimeter of Thompson Rd.	Placed to minimize unauthorized vehicle access.	Continued stewardship of property.
1½ story blue house with garage - Thompson Road	House - 782 sq. ft. Garage - 324 sq. ft.	West side of Thompson Rd., 4/10 of a mile south of NYS 173.	Both house and garage are in poor condition and need extensive repairs including complete replacement of heating, electric, and plumbing.	Condition and structure size limits future use. However, location is appropriate for additional parking area. *Priority removal recommended.* Estimated demolition cost is $10,000.
Small cottages	Unit 1 - 120 sq. ft. Unit 2 - 182 sq. ft. Unit 3 - 182 sq. ft.	NW Corner of Property	All are in poor condition.	None. *Priority removal recommended.* Estimated demolition cost $3,000.

Table 2 ***Summary of Existing Facilities on the Camillus Forest Unique Area Site***

Facility Description(s)	Approximate Size	Location	Condition Assessment	Potential Future Use
Forest Stewardship Trail Trail begins at former farm house on Warners Rd. and winds from fields to old forest area	Total distance to forest back to parking area is 2 miles. Woods trail portion is .75 miles.	Travels through "old field" areas to 38-acre old forest area, southwest corner of parcel.	Constructed as a temporary trail. Trail impacted by the Labor Day 1998 storm. Portions need to be reestablished with permanent interpretation signage.	Multiple use hiking, environmental education interpretation, and cross-country ski trail. Storm damaged area provides an additional site for interpretive uses.
Former farm road network	1.28 miles	Center of property	Fair. Needs water diversion maintenance.	Budget $2,500 for passive use maintenance, chiefly water diversion.
Canoe access site	Parking for 5 to 7 cars	Along Nine Mile Creek	Good.	Constructed and maintained by town of Camillus, Nine Creek Conservation Council, and DEC Bureau of Fisheries.

Table 2 illustrates that the small blue house with garage on Thompson Road and small sheds adjacent to the former State School house at 3350 Warners Road should be prioritized for removal due to poor condition. Removal will be coordinated by DEC Division of Operations staff.

Please note* - *The Town of Camillus Historical Society has submitted a plan to request the long term use of the structure for historic and environmental interpretation purposes (see appendix). After careful review of the current building design and required maintenance costs, DEC has determined that a new structure designed specifically for historical and environmental interpretation would best meet public needs and be more cost effective. The DEC does not plan on constructing a new facility on the site. Additionally, the historic value of the house has been significantly reduced due to several additions to the original structure.*

D. Passive Use Recreation Plan

The 355-acre Camillus Forest Unique Area is situated approximately 8 miles to the west of Syracuse and consists of approximately 135 acres of early successional trees and shrubs, 40 acres of old forest, 18 acres of mature sugar maple, American beech, and bitternut hickory, and 21 acres of streamside (riparian) zone. The southeastern portion of the parcel provides outstanding fishing and canoeing access to Nine Mile Creek, one of the most popular trout streams in Onondaga County. To protect the many environmental values of the creek, the Nine Mile Creek Conservation Council has provided leadership by promoting the establishment of a critical environmental area. A portion of this property is located within this critical environmental area (CEA).

Passive recreational use of the area is gradually increasing, particularly during the spring, summer and fall. Lack of suitable winter parking facilities significantly limits winter recreation opportunities such as snowshoeing and cross-country skiing. Long term it is expected that public use will increase as parking areas and trail systems are improved and residential development of the western suburbs gradually continues. An interim land use policy was established to facilitate public use and protect the natural resources of the site during the planning process.

1). Current Land Use Policy

The following uses are currently permitted: hiking, big game hunting (bow and arrow only) and small game hunting. Prohibited uses under the interim policy are target shooting, camping, fires, and motor vehicle use outside the designated parking area. The unique area closes one-half hour after sunset and reopens after sunrise. *Special use requests* for activities such as group or evening environmental interpretation programs require a temporary revocable permit (TRP) from the DEC Lands and Forests Office in Cortland, New York.

A series of five public meetings held in the spring of 1997 and 1998 gave DEC the opportunity to listen to public ideas and comments regarding the future management of the parcel. Included in the appendix of this plan is a summary of the many ideas, opinions, and desires of a diverse cross section of stakeholders. Additionally, DEC has had the opportunity to develop a "learning curve" regarding recreational use of the site, and can now better identify short and long term stewardship needs.

2). Future Passive Land Use Policy

The proposed future passive recreational land use policy outlined in this section carefully considers the many natural resource attributes of the site. The Department recognizes that certain types of recreational use are best suited to larger tracts of land. Thus, DEC strives to provide *quality* multiple use opportunities throughout the region on the land that it administers.

Some uses such as horseback riding, ATV's, mountain bikes, dog training, snowmobiling, and hunting with firearms are not sustainable for the long term on this site due to limited acreage and the potential for conflict. Several potential conflicts have been identified at public input sessions and in writing.

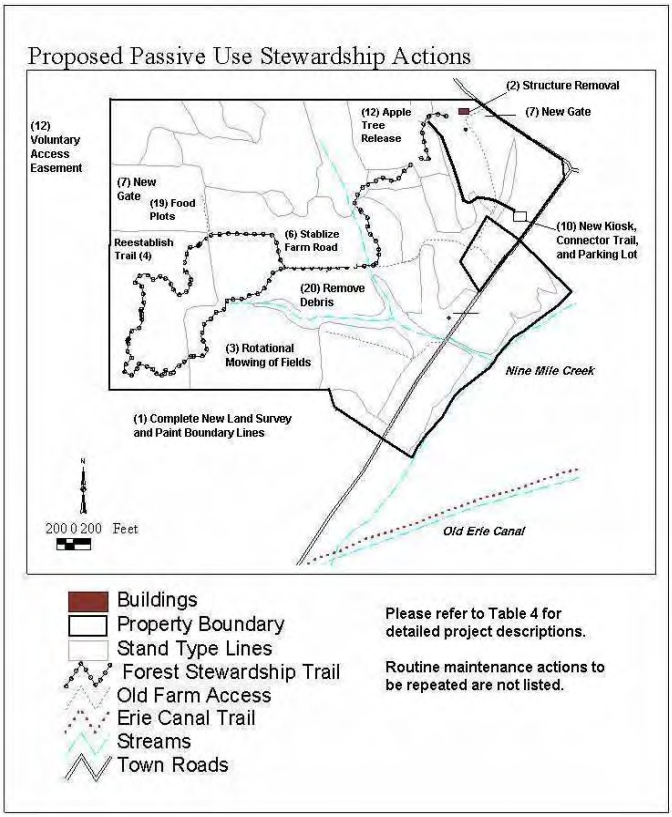
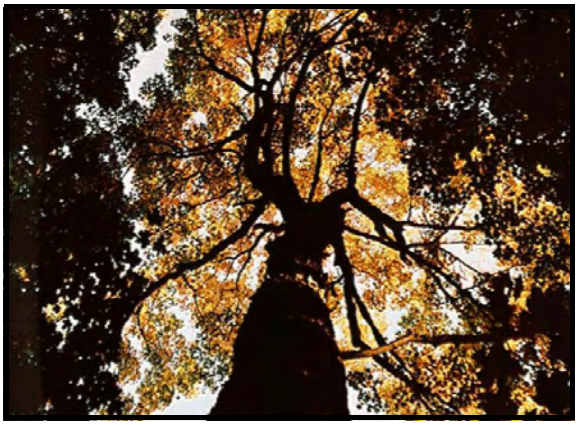


Figure 3 - Passive Use Stewardship Actions

However, approximately 200,000 acres of land administered by DEC Division of Lands and Forests within the nine Central New York counties of DEC Region 7 are available to meet recreational demands that cannot be met at the Camillus Forest Unique Area. *Included in the appendix of this plan is a summary of lands in Region 7 administered by DEC that are available for public use.*

The following tables summarize proposed recreational use and enhancement projects for the area. *Table 3* specifically outlines proposed *passive* recreational uses and *Figure 3* illustrates approximate locations; *Table 4* lists *proposed enhancement projects* by year, priority and estimated cost of implementation. Some of the proposed actions will require the *development of partnerships* through the DEC Adopt a Natural Resource Program or memorandums of understanding

with a variety of public and private sector organizations. Other proposed actions will be conducted by DEC as part of an annual maintenance and enhancement program as available staff and funding resources permit.



160 Year Old Sugar Maple

Winter in the Old Forest

Looking West at the Fields and Old Forest

Table 3	***Passive Use Recreational Activities for the Camillus Forest Unique Area***	
Activity	Season(s)	Comments
Bow and Arrow Hunting	Fall ***(Please see note below)***	The Camillus Forest Unique Area provides public hunting opportunities in the town of Camillus, surrounding western suburbs and City of Syracuse. Appropriate hunting license required.
Canoeing	Spring, Summer, and Fall	Thanks to efforts of the Nine Mile Creek Conservation Council (NMCCC), Town of Camillus, and DEC Fisheries a parking lot and canoe launch are available on the east side of Thompson Rd.
Cross-Country Skiing	Winter	Will require construction of a new 20 car winter parking lot along Thompson Road and construction of a trail with reduced grades. This option can only be developed if local partners are available to help with parking lot snow removal and trail stewardship.
Dog Walking	All Year	Dogs must be on leash.
Environmental Interpretation	All Year	Opportunities exist to establish self-guided interpretive trails to provide information on fish, rural/community forestry, wildlife, soils, geology, and climate**.** Continued efforts will be made to create partnerships with local environmental agencies and organizations.
Fishing ***(Please see note below)***	Spring, Summer, and Fall	Nearly 2,600 feet of shoreline along the west side of Nine Mile Creek is available for public fishing. The creek provides outstanding fishing opportunities for brown trout. **Appropriate fishing license required.**
Hiking	All Year	Portions of the trail can be challenging due to slope.
Historic Interpretation	All Year	Include local history, particularly the establishment of the Erie Canal and Syracuse State School in self guided interpretation programs. Continued efforts will be made to partnership with local agencies and organizations, particularly the Town of Camillus Historical and Canal Societies.
Nature Study	All Year	The combination of fields and early successional and forested areas provides outstanding habitat for a variety of songbirds and other wildlife.
Photography	All Year	The area provides outstanding views to the north and east as well as a wide variety of plants and animals.
Picnicking	All Year	Recreational users must carry out what they carry in.
Snowmobiling	Winter	Construct a 1.25 mile corridor trail only if local residents and the town supervisor agree in writing. If approved, the snowmobile club must sign an Adopt-A-Natural Resource Agreement with the DEC Division of Lands and Forests located in Cortland, New York.

Note: *Please refer to DEC Hunting and Fishing Rules and Regulations available from DEC or your local licensing agent. Organized group tours or field trips that consist of 25 people or more require a temporary revocable permit (TRP) from the DEC Lands and Forests Office in Cortland.*

Table 4 ***Passive Use Stewardship Actions for the Camillus Forest Unique Area - Facility Enhancement Vision***

Note: Table 4 illustrates proposed stewardship management actions while serving as a benchmark to which future stewardship accomplishments can be measured. Shaded projects will be conducted through partnerships with other conservation organizations and/or volunteers when possible.

No.	Action	Description	Year(s)	Priority	Cost
1	Land Survey	Survey 13,344 feet of boundary, establish permanent corners where missing, and paint lines. Establish administrative boundary line around old maple-beech forest.	2004-2005	1	$15,000
2	Structure Removal	Remove former state school structures. *(Please refer to table 2 for detailed description).*	2004-2005	1	$45,000
3	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2004-2005	1	$2,700
4	Reestablish Forest Stewardship Trail	Reestablish forest stewardship trail damaged by Labor Day 1998 storm. Replace temporary markers with interpretive signs.	2005-2006	1	$5,000
5	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2005-2006	1	$2,700
6	Stabilization of Former Farm Road	Stabilize farm road with additional water diversion devices while allowing for foot traffic.	2006-2007	1	$4,500
7	Install Access Gates	Install access gate at bottom of the driveway at 3350 Warners Road to redirect parking at new lot on Thompson Road; install gate at the western end of the property to block vehicle access from Devoe Rd.	2006-2007	1	$5,000

Table 4 ***Passive Use Stewardship Actions for the Camillus Forest Unique Area - Facility Enhancement Vision***

Note: Table 4 illustrates proposed stewardship management actions while serving as a benchmark to which future stewardship accomplishments can be measured. Shaded projects will be conducted through partnerships with other conservation organizations and/or volunteers when possible.

No.	Action	Description	Year(s)	Priority	Cost
8	Introduce Warm Season Grasses	Seek technical and financial assistance through the USDA Natural Resource Conservation Service to reintroduce warm season grasses such as little bluestem, Indian grass, and switchgrass on 75 to 100 acres for upland grassland birds such as the bobolink, Henslow's sparrow, upland sandpiper, and eastern meadowlark.	2006-2007	2	$6,000
9	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2006-2007	1	$2,700
10	Interpretive Kiosk and New Parking Area	Install interpretive "sign in" kiosk to help ascertain use of the area and provide timely information on forest stewardship and the area. Construct 150' X 60' gravel surfaced parking lot for approximately 20 vehicles on the west side of Thompson Rd. approximately 1000 feet southwest of Route 173. Attractive stone will be used to define parking lot perimeter. Build 1500' of new 4' wide hiking trail "connector" to ADA standards.	2006-2007	1	$15,000
11	Snowmobile Corridor Trail	The Camillus Snowmobile Club approached DEC during the draft plan public comment meeting in June 2002. The club wants to construct a 1.25 mile corridor trail across the Unique Area. The trail will not be constructed without the written approval of the Camillus Town Supervisor and surrounding landowners. If approved, the club must agree to sign an Adopt-A-Natural Resource Program with DEC. An additional heavy duty steel gate between private and state land in unit B would be required	2006-2007	2	$1,500

Table 4 ***Passive Use Stewardship Actions for the Camillus Forest Unique Area - Facility Enhancement Vision***

Note: Table 4 illustrates proposed stewardship management actions while serving as a benchmark to which future stewardship accomplishments can be measured. Shaded projects will be conducted through partnerships with other conservation organizations and/or volunteers when possible.

No.	Action	Description	Year(s)	Priority	Cost
12	Negotiate and Purchase Administrative Access and/or Conservation Easement	Improved access to the western portion of this property is necessary to control illegal use, prevent negative impacts on the watershed, and reduce maintenance costs. Negotiate on a *voluntary basis* administrative access to the western portion of the property from Devoe Rd. Access would be for DEC Law Enforcement and administrative use only.	2008-2009	2	Established by negotiation. (Not available at this time.)
13	Negotiate and Purchase Conservation Easement(s)	Seek to negotiate on a *voluntary basis* and purchase up to a 300-foot conservation easement buffer along the west boundary to help prevent development immediately adjacent to the site. Additional voluntary acquisitions may occur as part of the DEC Camillus Valley/Nine Mile Creek open space project.	2008-2009	2	*Not available at this time.*
14	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2008-2009	1	$2,700
15	Wildlife Apple Tree Release	Release, prune and lightly fertilize 100 apple trees to benefit wildlife and aesthetics.	2010-2011	2	$1,500
16	Establish Community Tree Planting Area	Establish two one acre tree demonstration planting areas in Unit M in close proximity to recreation trail area. Plant tree species that demonstrate resistance to wind damage, insect, disease, and drought.	2010-2011	2	$1,700
17	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2010-2011	1	$2,700
18	Maintain Parking Facility	Maintain parking lot, trailhead, and interpretive kiosk as required.	2012-2013	1	$500

Table 4 ***Passive Use Stewardship Actions for the Camillus Forest Unique Area - Facility Enhancement Vision***

Note: Table 4 illustrates proposed stewardship management actions while serving as a benchmark to which future stewardship accomplishments can be measured. Shaded projects will be conducted through partnerships with other conservation organizations and/or volunteers when possible.

No.	Action	Description	Year(s)	Priority	Cost
19	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2012-2013	1	$2,700
20	Remove Debris from Riparian Area	Clean debris from portions of riparian area and old field (Units R and O).	2012-2013	1	$1,000
21	Establish Wildlife Food Demonstration Plots	In response to requests from area sportsmen's associations, establish two wildlife food plots in Unit H (2 acres each) for educational purposes. Plantings will consist of buckwheat and/or imperial white clover. These will benefit deer, turkey, rabbit and other naturally present populations.	2012-2013	2	$400
22	Construct Additional Trail	Construct an estimated 2,600 feet hiking trail through management Units C, E, F and G.	2012-2013	1	$4,000
23	Maintain Tree Planting	Maintain demonstration planting established in 2008-2009	2013-2014	2	$200
24	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2013-2014	1	$2,700
25	Maintain Parking Facility	Maintain parking lot, trailhead, and interpretive kiosk as required.	2014-2015	1	$500
26	Maintain Existing Trails	Maintain signs along existing recreational trails.	2014-2015	2	$500
27	Rotational Mowing of Fields	Mow approximately one-third of open acreage (approximately 45 acres) per year in August to prevent plant succession, maintain diverse landscape and habitat for rare and endangered upland bird species. Late mowing will limit impact on rare and endangered birds.	2014-2015	1	$2,700

Table 4 ***Passive Use Stewardship Actions for the Camillus Forest Unique Area - Facility Enhancement Vision***

Note: Table 4 illustrates proposed stewardship management actions while serving as a benchmark to which future stewardship accomplishments can be measured. Shaded projects will be conducted through partnerships with other conservation organizations and/or volunteers when possible.

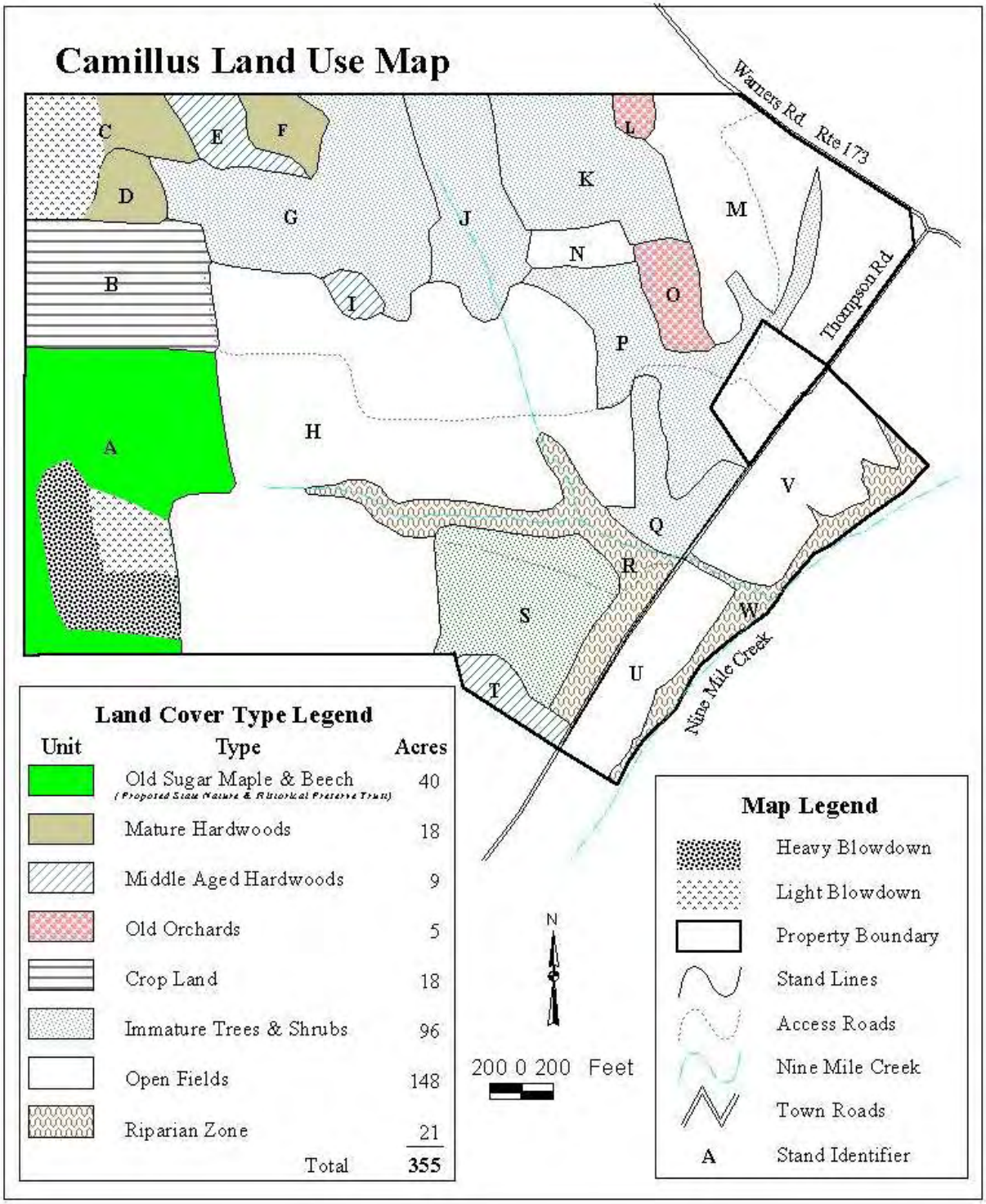
No.	Action	Description	Year(s)	Priority	Cost
28	Update Plan	Update management plan.	2014-2015	1	-
Total Estimated Cost of Implementation - Passive Recreation Plan (2004 dollars) *					**$128,900**

Table 4 proposes a total of 28 projects over the 10-year planning period, 20 of which are Priority 1 projects. Nine (9) projects will require establishment of partnerships with stakeholders such as the town of Camillus, State University College of Environmental Science and Forestry (SUNY ESF) faculty and students, as well as a variety of volunteer nonprofit conservation organizations. Proposed projects are listed in *order of priority* based on assessment of natural resource conservation and public needs on a scale of 1 to 2, with 1 being the highest priority. In summary, a total of 20 projects (69%) are classified as Priority 1, and 9 projects (31%) are classified as Priority 2. *Additional funding will be required to achieve all of the high priority projects within the ten-year planning period.*

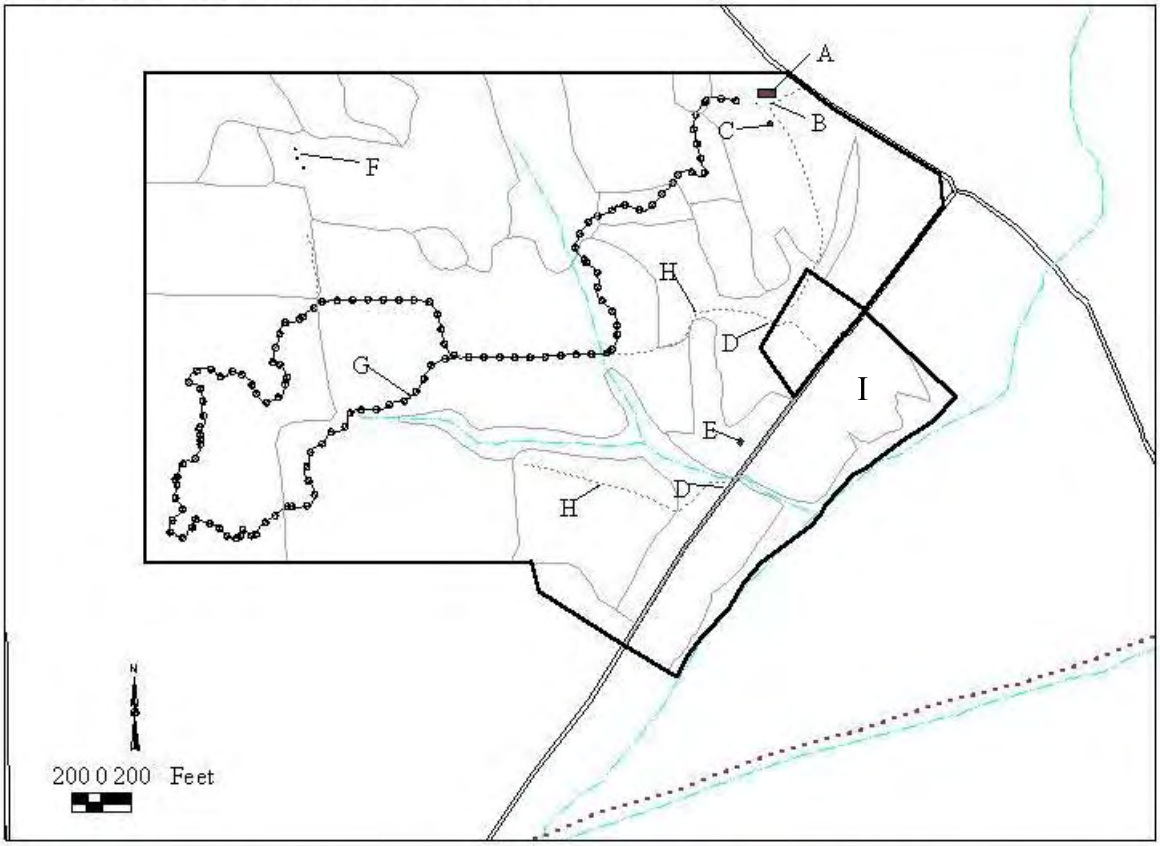
** Please Note: Estimated cost of implementation does not include costs of agency, town, university or conservation organization management or technical staff. Additionally, costs for acquisition of conservation and/or administrative easements cannot be accurately estimated at this time.*

Woodthrush are Common in the Old Forest Area

Appendix I - Camillus Forest Unique Area Maps



Camillus Existing Facilities Map



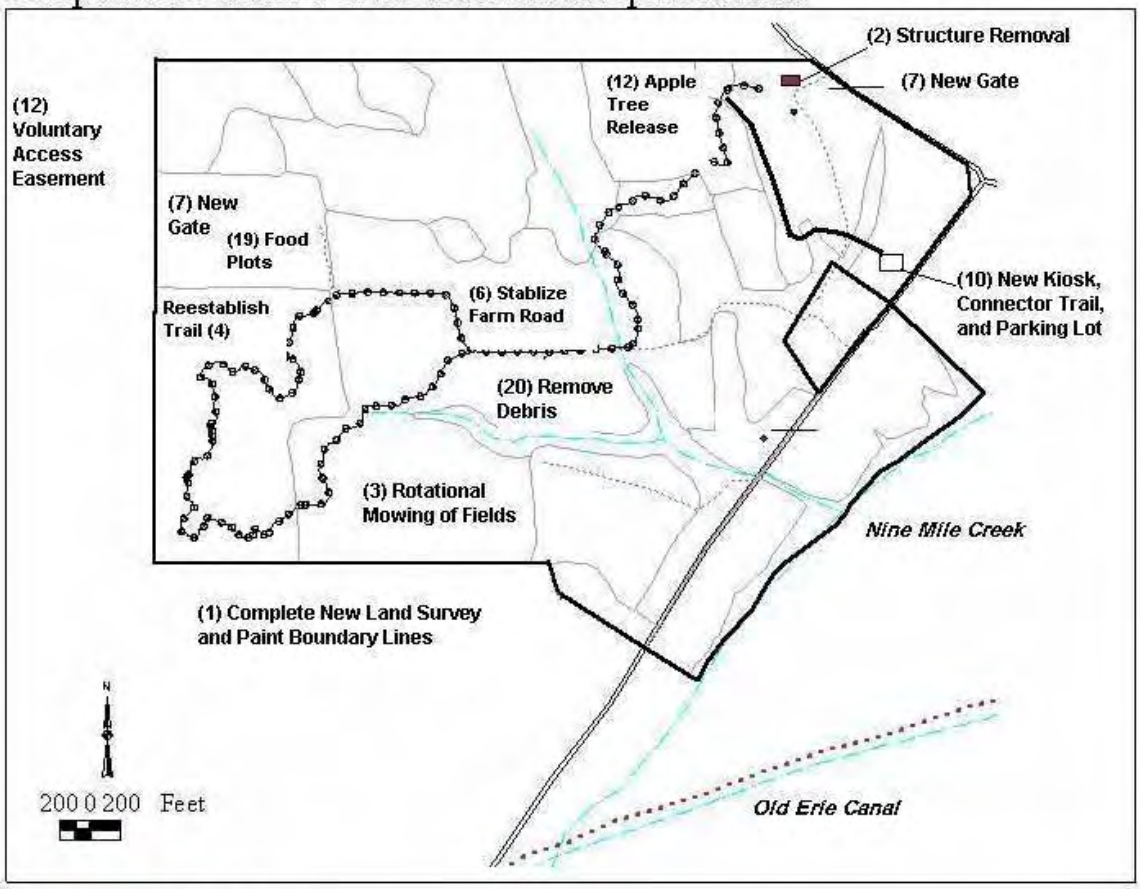
Map Legend

- Buildings
- Property Boundary
- Stand Type Lines
- Forest Stewardship Trail
- Old Farm Access
- Erie Canal Trail
- Streams
- Town Roads

Facilities Identifier Legend

A	Old State School
B	Parking & Driveway
C	Small sheds
D	Steel Gates
E	House & Garage
F	Cottages
G	Forest Interperative Trail
H	Old Farm Road System
I	Canoe/Fishing Access Site

Proposed Passive Use Stewardship Actions



Buildings
Property Boundary
Stand Type Lines
Forest Stewardship Trail
Old Farm Access
Erie Canal Trail
Streams
Town Roads

Please refer to Table 4 for detailed project descriptions.

Routine maintenance actions to be repeated are not listed.

Appendix II - Fish Species Found in Nine Mile Creek

FISH SPECIES COLLECTED IN 1996 BY DEC

(* indicates species was collected at Amboy)

Trout and salmon
Atlantic salmon *
Brook trout
Brown trout*
Rainbow trout

Pikes
Chain pickerel
Tiger musky*

Minnows
Blacknose dace
Bluntnose minnow
Carp*
Common shiner
Creek chub*
Cutlips minnow*
Fathead minnow
Longnose dace*
Satinfin shiner
Spottail shiner
Stoneroller

Suckers
Northern hog sucker*
White sucker*

Freshwater catfishes
Yellow bullhead*

Sunfishes
Black crappie*
Bluegill*
Largemouth bass*
Pumpkinseed*
Rock bass
Smallmouth bass
White crappie

Perches
Log perch*
Tessellated darter*
Yellow perch*

Appendix III - Recreational Facilities on State Forests and Unique Areas

Recreational Facilities on State Forests in DEC Region 7 (Central New York)											
County & State Forest	Forest Name	Acres	Hike	Ski	Horse	Snow-mobile	Mtn. Bike	Camp-sites	Disable Access	Trail-head	Other Facilities
Bro-Chenango-1	Beaver Flow	1,028			3	3	3				
Broome - 1	Triangle	661									
Broome - 2	Melondy Hill	1,987									
Broome - 3	Hawkins Pond	539			2.4		2.4				
Broome - 4	Marsh Pond	893			1.5	1.5		2			
Broome - 8	Whittacker Swamp	812			2	2	2				
Cayuga-1 & 4	Bear Swamp	3315									
Cayuga-2	Summerhill	4355									
Cayuga-3	Frozen Ocean	754									
Chen-Mad-1 & 2	Mariposa	3,002			0.6	0.6	0.6				
Chenango-1 & 11	McDonough	6,772	*3	3		11	3		1.4	1	
Chenango-2 & 25	Beaver Meadow	5,809			1.7	1.7			1.6		
Chenango-3	South Hill	1,314			4		4				
Chenango-4	Basswood	938									
Chenango-5 & 24	New Michigan	9,069	*1.5		3	3	3				
Chenango-6	Ludlow Creek	3,197							1.3		
Chenango-7	Wiley Brook	1,240									
Chenango-9 &15	Melondy Hill	3,469			3.5	3.5	3.5				
Chenango-10 & 30	Bobell Hill	2,156			3	3	3				
Chen-18 & 23	Lincklaen	4,630			0.4	0.4	0.4				
Chenango-20	Buck's Brook	2,178			0.5	0.5	0.5				
Chenango-21	Otselic	1,043						lean-to			
Chenango-22	Perkins Pond	1,870			0.3						
Chenango-26	Geneganslet	3,181						lean-to			
Chenango-29	Lyon Brook	528				1					
Chenango-31	Whaupaunaucau	1,093					10				
Chenango-34	Balsam Swamp	915	1							1	
Chenango-35	Long Pond	3,254						*4,1			* boat launch
Cort-Ono	Labrador Hollow UA	1483									
Cort-Ono-4 & 1	Morgan Hill	5253	15	15	15		15			2	
Cortland-1	Hewitt	937									
Cortland-3N	Kennedy	3227								1	
Cortland-5	Kettlebail	597									
Cortland-9	Tuller Hill	1484								1	
Cortland-10	Tuller Hill	952								1	
Mad-Oneida-1	Gorton Lake	501			1	1					
Madison-1 & 4	Charles E. Baker	9,414			3.5	3.5	36	*4			
Madison-2	Earlville	633			0.3	0.3					
Madison-5	Muller Hill	3,090			0.5	0.5	0.5				
Madison-6	Brookfield Railroad	848			0.2	0.2	4				
Madison-11 & 12	Beaver Creek	3,430			1.1	1.1	19				
Madison-13	Stoney Pond	1,469					10				
Madison-14	Nelson Swamp UA	831	*1.3							1	
Onondaga	Camillus Forest UA	350	2								fishing/canoeing
Onondaga	Split Rock UA	29									

County & State Forest	Forest Name	Acres	Hike	Ski	Horse	Snow-mobile	Mtn. Bike	Camp-sites	Disable Access	Trail-head	Other Facilities
Oswego	Sandy Island Beach UA	126									
Oswego	Sandy Pond Beach UA	50									
Oswego	Salmon River Falls UA	129									
Oswego	Salmon River EL	372									
Oswego-1	Kasoag	909									
Oswego-3	Amboy	867									
Oswego-4 & 5	Chateaugay	3465						lean-to			
Oswego-6	Altmar	959									
Oswego-8	Salmon River	2033						3 to 4,*1			
Oswego-9	O'Hara	1014									
Oswego-10	Hall Island	1384						12 to 15			
Oswego-13	Stone Hill	866									
Tioga-2	Oakley Corners	1042						3,*1			
Tioga-3	Robinson Hollow	1937						2 to 3			
Tioga-4	Anderson Hill	554									
Tioga-6	Ketchumville	500									
Tioga-7	Jenksville	1349									
Tomp-Sch-1	Cliffside	973				3					
Tompkins-2	Hammond Hill	3618									
Tompkins-3	Shindagin Hollow	5266	15	15			15			2	
Tompkins-4	Potato Hill	915									
Tompkins-5	Yellow Barn	1275				0.2					
Tompkins-6	Newfield	1552				1.5					

* Disabled access recreational facilities.

Appendix IV - Rare, Threatened, and Endangered Plant Evaluation

State University of New York
COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

June 16, 1997

John Clancy
New York State Department of Conservation Region 7
Land and Forest Office
1285 Fisher Ave.
Cortland, NY 13045-1090

John:

Enclosed are two copies of the list of plant species found in the understory of the old sugar maple stand in Camillus during our May and June surveys. I would appreciate your forwarding one copy to Dave Forness. Feel free to contact me with any questions or comments you or Dave may have. I can be reached at the Adirondack Ecological Center in Newcomb at (518)582-4551, or via e-mail at kmbargho@mailbox.syr.edu.

Karen

Karen Barghoorn

cc: Don Leopold

One Forestry Drive ■ Syracuse, New York 13210-2778 ■ http://www.esf.edu/

State University of New York
COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

August 7, 1997

John Clancy
New York State Department of Conservation Region 7
Land and Forest Office
1285 Fisher Ave.
Cortland, NY 13045-1090

John:

Enclosed are two copies of the updated list of plant species for the Camillus stand; I've highlighted species seen for the first time in the August survey. Again, I would appreciate your forwarding one copy to Dave Forness. Should you or Dave have any comments, I can be reached via e-mail at kmbargho@mailbox.syr.edu.

I'd also like to remind you of my offer to help with your timber cruise and other surveys later in the year, as well as your offer to send me a copy of the interpretive booklet when it's done; I'm very interested in what you're doing with the property. My mailing address at ESF is 350 Illick Hall. Thanks!

Karen

Karen Barghoorn

cc: Don Leopold

One Forestry Drive ■ Syracuse, New York 13210-2778 ■ http://www.esf.edu/

Understory vascular plant species found in Camillus sugar maple stand
Survey dates: May 7, June 9, July 8, August 7, 1997.

Species[1]	Common name	Abundance[2]	NY legal status[3]	Native?
Actaea alba	doll's eyes	2	N	Y
Adiantum pedatum	**maidenhair fern**	**2**	**V**	**Y**
Alliaria petiolata	garlic mustard	2	N	N
Allium tricoccum	wild leek	5	N	Y
Amphicarpaea bracteata	hog peanut	2	N	Y
Arctium sp.	burdock	2	N	N
Arisaema triphyllum	jack-in-the-pulpit	3	N	Y
Asarum canadense	wild ginger	2	N	Y
Asplenium platyneuron	**ebony spleenwort**	**2**	**V**	**Y**
Athyrium filix-femina	**lady fern**	**2**	**V**	**Y**
Athyrium pycnocarpon	**glade fern**	**2**	**V**	**Y**
Athyrium thelypteroides	**silvery glade fern**	**2**	**V**	**Y**
Berberis vulgaris	barberry	2	N	N
Cardamine concatenata	five-parted toothwort	5	N	Y
Cardamine diphylla	broad-leaved toothwort	4	N	Y
Carex plantaginea	sedge	2	N	Y
Caulophyllum thalictroides	blue cohosh	3	N	Y
Chelidonium majus	celandine	2	N	N
Circaea lutetiana	enchanter's nightshade	2	N	Y
Claytonia caroliniana	Carolina spring beauty	4	N	Y
Cornus alternifolia	Pagoda dogwood	2	N	Y
Dicentra canadensis	squirrel corn	5	N	Y
Dicentra cucullaria	Dutchman's breeches	5	N	Y
Dryopteris goldiana	**Goldie's wood fern**	**2**	**V**	**Y**
Dryopteris intermedia	**fancy wood fern**	**3**	**V**	**Y**
Dryopteris marginalis	**marginal wood fern**	**3**	**V**	**Y**
Epifagus virginiana	beechdrops	2	N	Y
Epipactus helleborine	helleborine	2	N	N
Erythronium americanum	trout lily	4	N	Y
Euthamia sp.	flat-topped goldenrod	2		
Galium aparine	cleavers	2	N	Y
Galium triflorum	sweet-scented bedstraw	3	N	Y
Geranium robertianum	herb-Robert	2	N	N
Geum sp.	avens	3		
Glyceria sp.	mannagrass	2		
Hepatica acutiloba	sharp-lobed hepatica	3	N	Y
Hydrophyllum canadense	maple-leaved waterleaf	5	N	Y
Hydrophyllum virginianum	eastern waterleaf	5	N	Y
Impatiens pallida	pale touch-me-not	5	N	Y
Laportea canadensis	nettle	2	N	Y
Leonurus cardiaca	motherwort	2	N	N
Onoclea sensibilis	sensitive fern	2	N	Y
Oxalis stricta	yellow wood-sorrel	1	N	Y
Parthenocissus quinquefolia	Virginia creeper	3	N	Y
Pilea pumila	clearweed	2	N	Y

Polygonatum pubescens	Solomon's seal	3	N	Y
Polystichum acrostichoides	**Christmas fern**	**3**	**V**	**Y**
Ranunculus arborvitus	small-flowered crowfoot	2	N	Y
Ribes cynosbati	dogberry	2	N	Y
Ribes lacustre	spiny swamp-currant	2	N	Y
Rosa multiflora	multiflora rose	2	N	N
Rubus occidentalis	black raspberry	2	N	Y
Sambucus racemosa	red-berried elder	2	N	Y
Sanguinaria canadensis	**bloodroot**	**2**	**V**	**Y**
Silene latifolia	white campion	2	N	N
Smilacina racemosa	false Solomon's seal	3	N	Y
Solanum dulcamara	bittersweet	2	N	N
Solidago canadensis	common goldenrod	2	N	Y
Soldidago sp.	goldenrod	3		
Staphylea trifolia	bladder-nut	2	N	Y
Streptopus amplexifolius	twisted stalk	2	N	Y
Tiarella cordifolia	foamflower	2	N	Y
Toxicodendron radicans	poison-ivy	1	N	Y
Trilllium erectum	**purple trillium**	**2**	**V**	**Y**
Trilllium erectum forma luteum*	**purple trillium (yellow form)**	**1**	**V**	**Y**
Trillium grandiflorum	**white trillium**	**3**	**V**	**Y**
Uvularia grandiflora	large-flowered bellwort	3	N	Y
Viola canadensis	tall white violet	3	N	Y
Viola sororia	dooryard violet	2	N	Y
Viola pubescens	yellow forest violet	3	N	Y
Vitis sp.	grape	2		

Notes:

1. Nomenclature follows: Gleason, H.A. and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. New York Botanical Garden, Bronx, New York.
   * Nomenclature follows: Fernald, M. L. 1987. Gray's Manual of Botany. Dioscorides Press, Portland, Oregon.

2. Abundance is estimated at time of full bloom, and is ranked as follows:
   1 = rare (1-2 individuals per stand)
   2 = infrequent (2-20)
   3 = frequent (20-50)
   4 = common (50-100)
   5 = abundant (100+)

3. New York State legal status according to: New York Rare Plant Status List, New York Natural Heritage Program, March 1997. Symbols are as follows:
   E = endangered
   T = threatened
   R = rare
   V = exploitably vulnerable
   U = unprotected
   N = not listed
   Endangered, threatened, rare, or exploitably vulnerable species are in bold.

New York State Breeding Bird Atlas
Breeding Species for Block Number(s):
3876 (A,B,C,D), 3976 (A,B,C,D)

Common Name	Scientific Name	Breeding Class	Year	New York Legal Status	Heritage State Rank
Pied-billed Grebe	Podilymbus podiceps	S2	81	Threatened	S3
Great Blue Heron	Ardea herodias	X1	83	Protected	S5
Green-backed Heron	Butorides striatus	S2	82	Protected	S5
Canada Goose	Branta canadensis	FL	81	Game Species	S5
Wood Duck	Aix sponsa	NE	81	Game Species	S5
American Black Duck	Anas rubripes	P2	81	Game Species	S4
Mallard	Anas platyrhynchos	FL	83	Game Species	S5
Turkey Vulture	Cathartes aura	P2	81	Protected	S4
Northern Harrier	Circus cyaneus	X1	81	Threatened	S3
Sharp-shinned Hawk	Accipiter striatus	X1	82	Protected-Special Concern	S4
Cooper's Hawk	Accipiter cooperii	X1	81	Protected-Special Concern	S4
Red-tailed Hawk	Buteo jamaicensis	NY	85	Protected	S5
American Kestrel	Falco sparverius	NY	81	Protected	S5
Ring-necked Pheasant	Phasianus colchicus	NE	81	Game Species	SE
Ruffed Grouse	Bonasa umbellus	FL	80	Game Species	S5
American Crow	Corvus brachyrhynchos	FY	81	Game Species	S5
Virginia Rail	Rallus limicola	FL	84	Game Species	S5
Killdeer	Charadrius vociferus	NE	82	Protected	S5
Spotted Sandpiper	Actitis macularia	FL	82	Protected	S5
Common Snipe	Gallinago gallinago	D2	82	Game Species	S5
American Woodcock	Scolopax minor	D2	82	Game Species	S5
Rock Dove	Columba livia	NE	84	Unprotected	SE
Mourning Dove	Zenaida macroura	NE	82	Protected	S5
Black-billed Cuckoo	Coccyzus erythropthalmus	S2	84	Protected	S5
Yellow-billed Cuckoo	Coccyzus americanus	X1	82	Protected	S5
Eastern Screech-Owl	Otus asio	T2	85	Protected	S5
Great Horned Owl	Bubo virginianus	NE	82	Protected	S5
Barred Owl	Strix varia	X1	80	Protected	S5
Common Nighthawk	Chordeiles minor	D2	82	Protected-Special Concern	S4
Chimney Swift	Chaetura pelagica	FL	85	Protected	S5
Ruby-throated Hummingbird	Archilochus colubris	FL	84	Protected	S5
Belted Kingfisher	Ceryle alcyon	FY	80	Protected	S5
Red-headed Woodpecker	Melanerpes erythrocephalus	NY	80	Protected-Special Concern	S4
Red-bellied Woodpecker	Melanerpes carolinus	NY	80	Protected	S5
Yellow-bellied Sapsucker	Sphyrapicus varius	D2	84	Protected	S5
Downy Woodpecker	Picoides pubescens	FY	83	Protected	S5
Hairy Woodpecker	Picoides villosus	FY	83	Protected	S5

Note: For reports covering multiple blocks, only the record containing the most recent year for the highest level of breeding recorded for each species is shown.

Common Name	Scientific Name	Breeding Class	Year	New York Legal Status	Heritage State Rank
Northern Flicker	Colaptes auratus	FY	80	Protected	S5
Pileated Woodpecker	Dryocopus pileatus	FL	84	Protected	S5
Eastern Wood-Pewee	Contopus virens	NE	81	Protected	S5
Alder Flycatcher	Empidonax alnorum	FY	84	Protected	S5
Willow Flycatcher	Empidonax traillii	FL	82	Protected	S5
Least Flycatcher	Empidonax minimus	FL	84	Protected	S5
Eastern Phoebe	Sayornis phoebe	NE	83	Protected	S5
Great Crested Flycatcher	Myiarchus crinitus	FL	83	Protected	S5
Eastern Kingbird	Tyrannus tyrannus	NY	81	Protected	S5
Horned Lark	Eremophila alpestris	FL	84	Protected-Special Concern	S5
Tree Swallow	Tachycineta bicolor	FY	84	Protected	S5
Northern Rough-winged Swallow	Stelgidopteryx serripennis	ON	83	Protected	S5
Bank Swallow	Riparia riparia	ON	82	Protected	S5
Barn Swallow	Hirundo rustica	NY	81	Protected	S5
Blue Jay	Cyanocitta cristata	FY	83	Protected	S5
Black-capped Chickadee	Parus atricapillus	FY	80	Protected	S5
Tufted Titmouse	Parus bicolor	FL	80	Protected	S5
Red-breasted Nuthatch	Sitta canadensis	X1	81	Protected	S5
White-breasted Nuthatch	Sitta carolinensis	NE	82	Protected	S5
Brown Creeper	Certhia americana	P2	80	Protected	S5
Carolina Wren	Thryothorus ludovicianus	S2	85	Protected	S5
House Wren	Troglodytes aedon	FY	83	Protected	S5
Winter Wren	Troglodytes troglodytes	X1	82	Protected	S5
Blue-gray Gnatcatcher	Polioptila caerulea	NE	80	Protected	S5
Eastern Bluebird	Sialia sialis	NE	83	Protected	S5
Veery	Catharus fuscescens	FY	80	Protected	S5
Wood Thrush	Hylocichla mustelina	FY	82	Protected	S5
American Robin	Turdus migratorius	NY	84	Protected	S5
Gray Catbird	Dumetella carolinensis	NE	80	Protected	S5
Northern Mockingbird	Mimus polyglottos	NE	83	Protected	S5
Brown Thrasher	Toxostoma rufum	FY	83	Protected	S5
Cedar Waxwing	Bombycilla cedrorum	NY	84	Protected	S5
European Starling	Sturnus vulgaris	NY	83	Unprotected	SE
Solitary Vireo	Vireo solitarius	X1	81	Protected	S5
Yellow-throated Vireo	Vireo flavifrons	T2	83	Protected	S5
Warbling Vireo	Vireo gilvus	NE	83	Protected	S5
Red-eyed Vireo	Vireo olivaceus	NE	81	Protected	S5
Blue-winged Warbler	Vermivora pinus	FY	80	Protected	S5
Golden-winged Warbler	Vermivora chrysoptera	FY	80	Protected-Special Concern	S4
Brewster's Warbler	Vermivora pinus x V. chrysoptera	D2	80	Protected	NR
Lawrence's Warbler	Vermivora chrysoptera x V. pinus	T2	84	Protected	NR
Nashville Warbler	Vermivora ruficapilla	X1	80	Protected	S5

Note: For reports covering multiple blocks, only the record containing the most recent year for the highest level of breeding recorded for each species is shown.

Common Name	Scientific Name	Breeding Class	Year	New York Legal Status	Heritage State Rank
Yellow Warbler	Dendroica petechia	NE	81	Protected	S5
Chestnut-sided Warbler	Dendroica pensylvanica	S2	81	Protected	S5
Yellow-rumped Warbler	Dendroica coronata	S2	81	Protected	S5
Black-throated Green Warbler	Dendroica virens	X1	81	Protected	S5
Cerulean Warbler	Dendroica cerulea	T2	85	Protected-Special Concern	S4
Black-and-white Warbler	Mniotilta varia	D2	80	Protected	S5
American Redstart	Setophaga ruticilla	FY	80	Protected	S5
Ovenbird	Seiurus aurocapillus	S2	81	Protected	S5
Northern Waterthrush	Seiurus noveboracensis	X1	80	Protected	S5
Mourning Warbler	Oporornis philadelphia	X1	81	Protected	S5
Common Yellowthroat	Geothlypis trichas	FY	81	Protected	S5
Hooded Warbler	Wilsonia citrina	X1	80	Protected	S5
Canada Warbler	Wilsonia canadensis	X1	80	Protected	S5
Yellow-breasted Chat	Icteria virens	NE	80	Protected-Special Concern	S3
Scarlet Tanager	Piranga olivacea	B2	82	Protected	S5
Northern Cardinal	Cardinalis cardinalis	FY	83	Protected	S5
Rose-breasted Grosbeak	Pheucticus ludovicianus	NY	80	Protected	S5
Indigo Bunting	Passerina cyanea	FY	84	Protected	S5
Rufous-sided Towhee	Pipilo erythrophthalmus	FY	81	Protected	S5
Chipping Sparrow	Spizella passerina	NE	82	Protected	S5
Field Sparrow	Spizella pusilla	FY	81	Protected	S5
Vesper Sparrow	Pooecetes gramineus	S2	82	Protected-Special Concern	S5
Savannah Sparrow	Passerculus sandwichensis	NE	84	Protected	S5
Grasshopper Sparrow	Ammodramus savannarum	T2	84	Protected-Special Concern	S4
Song Sparrow	Melospiza melodia	NE	81	Protected	S5
Swamp Sparrow	Melospiza georgiana	FL	80	Protected	S5
Dark-eyed Junco	Junco hyemalis	X1	81	Protected	S5
Bobolink	Dolichonyx oryzivorus	S2	84	Protected	S5
Red-winged Blackbird	Agelaius phoeniceus	NY	82	Protected	S5
Eastern Meadowlark	Sturnella magna	FY	81	Protected	S5
Common Grackle	Quiscalus quiscula	NY	84	Protected	S5
Brown-headed Cowbird	Molothrus ater	NY	80	Protected	S5
Orchard Oriole	Icterus spurius	NY	83	Protected	S4
Northern Oriole	Icterus galbula	NY	81	Protected	S5
Purple Finch	Carpodacus purpureus	FL	81	Protected	S5
House Finch	Carpodacus mexicanus	NE	82	Protected	SE
Pine Siskin	Carduelis pinus	X1	81	Protected	S5
American Goldfinch	Carduelis tristis	NE	82	Protected	S5
House Sparrow	Passer domesticus	NY	81	Unprotected	SE

Total Species 118

Note: For reports covering multiple blocks, only the record containing the most recent year for the highest level of breeding recorded for each species is shown.

Appendix VI - Estimate of Tree Age(s) in the Old Forest

State University of New York
COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY
Syracuse, New York 13210

FAX

Faculty of Environmental and Forest Biology
State University of New York
College of Environmental Science and Forestry
Syracuse, New York 13210-2778

FAX RETURN: (315) 470-6934

TO: Dave Forness, Susan Block, Fred Miller

FROM: Donald J. Leopold, Ph.D., Professor of Environmental and Forest Biology; email: dendro@mailbox.syr.edu; phone: 315-470-6784

DATE: December 6, 1996

MESSAGE: Here are the tree ages of the 11 overstory trees aged on Wednesday December 4. These trees are representative of the stand and include some of the largest in diameter and tallest. John Clancy's estimate of the stand age (about 150 years) in the Forest Stewardship Plan of June 19, 1996 is very close to the ages determined by tree coring. Only 1 tree in this sample is clearly over 200 years old and this tree is very close to the private land towards the southwestern boundary of the stand. Claims that trees in this stand are 300 years old or more are unfounded. Besides the greatly exaggerated age guesses I've been reading about, a few other erroneous statements need to be corrected. #1: There are at least 200,000 acres of old growth in the Adirondacks and 50,000 acres in the Catskills, plus 28 old growth sites in western New York that total about 1250 acres. There are about 1 million acres of old growth in the eastern US. This information is in some of the references I have listed below and the real old growth experts are very familiar with this literature. #2: I searched the stand for rare plants in mid-July and unfortunately found none. Searches at other times of the year should be conducted, but there is no evidence that this stand harbors rare plant species. In fact, few if any of the many rare species in New York are restricted to old growth. In summary, we can still strive for the protection of this beautiful stand because the trees are big, tall and collectively are entering the old growth stage.

Davis, M.B. 1993. Old Growth in the East., A Survey. Cenozoic Society, Inc., Richmond, VT, 150 p.
Dunwiddie, P.W., D.R. Foster, D.J. Leopold and R.T. Leverett. 1996. Old-growth forests of southern New England, New York, and Pennsylvania, pp. 126-143, In: *Eastern Old-growth Forests: Prospects for Rediscovery and Recovery*, Island Press, New York, NY.
Kershner, B., et al. 1995. Western New York Old Growth Forest Survey. (available from senior author.)

FAX PAGES (INCLUDING FACE): 2

SIZE AND AGE DATA FOR SUGAR MAPLE IN CAMILLUS STAND[1,2]

Donald J. Leopold
SUNY-CESF

Tree #	DBH (cm)	Height (ft.)	Core Age	Tree Age[3]	Notes
1	77.1	110	125	140	within <1" of center
2	72.5	114	147	165	within <1" of center
3	71.2	126	150+	<200	center badly degraded
4	44.3	105	110	120	within 1/4" of center
5	64.1	114	140	150	within 1/4" of center
6	89.2	110	120	175	core length 0.71 radius
7	71.0	-	115	130	within 1" of center
8	85.3	106	140	160	core length 0.88 radius
9	98.0	117	52	150	core length 0.37 radius
10	107.0	110	210	285	core length 0.74 radius
11	100.0	112	133	180	core length 0.76 radius

[1] Trees cored on Wednesday December 4, 1996

[2] Thanks to the five SUNY-CESF students and two NYS-DEC personnel for all the assistance with coring

[3] Best guess based on percentage of core obtained and giving tree 10 to 15 years to reach coring height (i.e. about 4 feet above ground)