

Seneca Waterways Council, BSA Rochester, New York CONSERVATION PLAN for Camp Babcock-Hovey Ovid, New York



SPRING 2016- SPRING 2021

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Version History

ID	Changes	Date Created	Author
1.0	First Draft.	3/20/2016	Matthew Crance/
			Hank Roenke
1.1	Edits from 2016 Conservation Meeting and	4/15/2016	Matthew Crance/
	updated project lists and conservation meeting		Hank Roenke
	minutes.		
1.2	Edits as recommended by Peter Collinge.	4/26/2016	Matthew Crance/
			Peter Collinge.
1.3	Final Document Signed	TBD	Matthew Crance

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Dhuaical Address i	7004 County Dd #400 Ouid NV 44504
Physical Address :	7294 County Rd #132, Ovid NY 14521
Latitude :	42.6661813°N
Longitude :	-76.8710695°W
Approx. Elevation :	554 feet (169 meters)
Size :	282 acres
Town :	Ovid
County :	Seneca
Predominant Forest	Native hardwoods, softwoods, and plantation softwoods.
Type :	
Predominant Soils :	Primarily silt loams derived from glacial till.
Predominant	Gently rolling hills and steeper gorges running perpendicular to the
Topography :	lake.

General Description of the Ecosystem

Property Background Information and Description

Overview

Camp Babcock-Hovey (Camp) is comprised of approximately 282 acres in the Town of Ovid, New York. The Camp is located in Seneca County in the Finger Lakes Region. The Camp is bordered on the south side by the NYSDEC Willard Wildlife Management Area and on the north side by the Bonavista NYS Park Golf Course. The west border terminates at Seneca Lake and the east border terminates at the old rail road bed.

Like Giant fingerprints of Ice glaciers, the Finger Lakes span all of Central New York. Water has chiseled magnificent attraction in this region, which Camp highlights and displays. Camp sits on Seneca Lake which is the deepest of the Finger Lakes and is best known for its magnificent wineries and productive fisheries.

The entire Camp is 282 acres, or which 210 acres are forested, 2 acres are ponds, 63 acres are fields, and the last 7 acres are buildings and open space. Good road frontage provides access to the property and allows for recreational pursuits and timber management. The topography is partially flat with patches of wet soil, moderately sloped areas, and some steep ravines.

The main scenic resource of the Camp is the vista of Seneca Lake. The grandeur of the lake, its waters, and the dramatic sunsets are the highlights of visual scenery from Camp. The panorama includes views far to the north and south as well as the lush western shore of the lake where the Keuka Lake outlet flows into Seneca Lake in Dresden.

Physical Resources

Geology

The bedrock consists entirely of the Ludlowville Formation, a sheet of shale with some limestone. The surficial geology, influenced by the Wisconsin Ice Sheet, consists of till deposited underneath the glaciers consisting of a poorly sorted sand-rich sediment of variable texture from boulders to silt consisting of a wide range of non-sorted to poorly sorted sand or larger size particles suspended in a mud mix (diamict).

Soils

Weathered stone is the parent material for the soils found throughout the area. The soils in the Camp are primarily silt loams derived from glacial till. A complete listing of the soil types found in the Camp, their characteristics and limitations is found in **Appendix D**. The majority of soils on the property are rated as good for timber productivity – Aurora silt loam 12-25% slope, Aurora and Farmington soils 25-70% slopes, Cazenovia silt loam 3-40% slope, Carien-Danley-Cazenoia silt loams 3-8% slope, Honeoye silt loam, 2-25% slopes, and Lima silt loam 0-8% slope which make up the six major soil types on the property.

Topography

The topography of the Camp is typical of the Finger Lakes region with gently rolling interlake hills and steeper gorges running perpendicular to the lake. There are dozens of gorges scattered throughout the landscape of the Finger Lakes. There are two smaller gorges, known locally as ravines, in the Camp, which have been carved by streams flowing East to West from the uplands to Camp. A good topographic map from the 1990's is included as **Appendix A.**

Steep Slopes

The New York State Department of Environmental Conservation's Stormwater Design Manual defines steep slopes as 15% or greater. The manual says that "development on slopes with a grade of 15% or more should be avoided, if possible," to minimize erosion, soil loss, degradation of surface water, and excessive storm water runoff. Basically, steep slope development can magnify the erosion and water quality problems posed by general development. The removal of vegetation during construction exposes the soil, leading to increased surface runoff and erosion. If not properly contained, the erosion and runoff can increase sedimentation in streams and lakes and thus reduce water quality.

Steep slopes in Seneca County provide vantage points for scenic views and are themselves scenic resources. Ravines between the slopes provide safe habitats and travel corridors for wildlife and act as natural boundaries between property uses. They also provide specialized growing conditions for ferns and many other plants.



Flora

Wildlife communities on the Camp property reflect those species commonly associated with northern hardwood and mixed hardwood/softwood forests that are typical of the Finger Lakes Region. Other habitat types include lakes, ponds, and streams. A complete list can be found in the **Appendix E** of this document. Add more info here at a later date.

Fauna

Wildlife species found on the Camp are generally similar to those found throughout the Finger Lakes. Mammals, fish, birds, reptiles, and amphibians found on the property can be found in the **Appendix E** of this document. Add more info here at a later date.



Water Resources

a) Lakes

The most prominent water feature of the Camp is Seneca Lake. The lake is 38 miles long, making it the second longest of the Finger Lakes. It has a surface area of 42,800 acres and a maximum depth of 618 feet. Seneca Lake is known to support a healthy fishery. The lake is classified AA(TS) by the DEC indicating that its waters are suitable as a source of drinking water and for swimming and fishing, and may be suitable for trout spawning. The Camp has approximately ½ of a mile of shoreline on the Seneca Lake.

Seneca Lake is home to the following species of fish- lake trout, brown trout, rainbow trout, landlocked salmon, largemouth bass, smallmouth bass, yellow perch, northern pike, chain pickerel, rock bass, crappie, sunfish, bullheads, bowfin, white suckers, channel catfish, lake sturgeon, carp, alewives and smelt. The state does an annual stocking of lake trout, brown trout and landlocked salmon. The lake's rainbow trout population is sustained entirely by natural reproduction in Catherine Creek and its tributaries. So catch and release of rainbow trout in Seneca Lake is greatly encouraged.

b) Streams

There are usually three (3) actively flowing streams located in Camp. One of these streams originate from the watershed in the uplands to the east of the Camp, and two originate in the uplands of the Camp. All three streams flow to Seneca Lake. In addition there are numerous other stream beds that only flow water during heavy rain events. Only the main stream that crosses the shotgun and rifle range and empties near the lakefront area is considered a "C" Classification from the Department of Environmental Conservation (DEC). The "C" classification designates streams where fishing can be recommended, although few fish have actually been observed in the steam, fishing is really good right off of the dock right after a major rain storm.

c) Ponds

There are two (2) ponds located at the Camp.

A 0.4 acre Nature Pond is located just off the main road as you enter Camp near the old Smith Family Farmhouse. Both the Owl Trail and the Raccoon Trail are located near the Nature Pond. Although fish still do exist in the Nature Pond it is fairly shallow throughout and is overfished by local wildlife like the Great Blue Heron. The Nature Pond was installed sometime between 1954 and 1963. There is no active stream filling the pond. Historic fish caught in the pond include largemouth bass, golden shiners, carp and brown bullhead.



A 1.6 acre fishing pond also known as Pooler's Pond is located on the uplands part of the property on the southeast portion of Camp. Pooler's Pond was installed in 2011 specifically as a fishing pond but did not fill completely until 2013 although it was slightly usable in 2012. It was stocked with bluegill, largemouth bass, and minnows in 2012. Three stone piles were added near the middle of the pond to act as fish habitat. A fishing dock, shelter and wind powered aerator were added in 2012 also. The aerator helps to circulate the water and keep the dissolved oxygen levels at suitable levels for the fish as there is not currently an active stream source leading into the pond. Pooler's Pond is easily accessible from the Raccoon Trail and the White Deer Trail. The best time to fish is at dusk and dawn. The fish like to

hang out around the stone piles, dock, and shoreline. A map of the layout of Pooler's Pond and a short description of the fish located in Pooler's Pond is included as **Appendix F.**

d) Waterfall

It isn't much, but it is the Camp Waterfall. It is about 16 feet tall from base to top. It has continuous flow year round and is scenic. It should be cleared of any tree and debris yearly.



e) Watersheds

The entire Camp is part of the Oswego River/Finger Lakes Watershed. This watershed is one of the largest in NYS and includes all of Seneca County and most of the Finger Lakes. This watershed includes 8,896 miles of rivers and streams and 76 significant freshwater lakes (including Seneca Lake) and covers 5,070 square miles of land area entirely in New York State. The watershed feeds the Oswego River and empties into Lake Ontario.

f) Wetlands

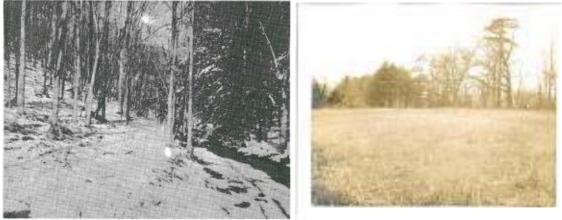
There are no DEC-regulated wetlands in the Camp. The federal National Wetlands Inventory (NWI) also does not identify any wetlands in the Camp. However as part of a USDA grant in 2014 an amphibian pond was install in the uplands portion of Camp just to the north of Pooler's Pond. Amphibian sightings throughout Camp have increased significantly since the installation of the amphibian pond.

Key Environmental Concerns:

- **Hemlock Woolly Adelgid** invasive species that is affecting hemlock trees in the Camp Ravines. Currently in a monitor only mode. Chemicals to treat are too costly for camp. Hoping that the state will release a beetle to counteract. Pilot testing a chemical on two trees in camp.
- Wild Parsnip Mowing shall be conducted each year on this invasive species affecting our Southern Back Field near Poolers Pond.
- Erosion from roads and trails Many of the roads could use regrading and have fabric and gravel placed down. The two of greatest concern are-
 - Lakefront Trail Road
 - Scoutcraft to Health Lodge Road
- Latrine at Lakefront Currently there is an old Pit latrine located near the Lakefront that is supplemented by a Port-a-John during the summer months. This should be looked at for replacement.
- Leach Field at North Shower House Probably one of the oldest current leach fields in camp. It should be upgraded when the south shower house is upgraded.
- Lack of Secondary Containment for Gas/Diesel Tanks although not required by law, camp should look at adding secondary containment to the Gas/Diesel Tanks near the Rangers House.

History of Camp Babcock-Hovey

Long before Europeans arrived on the continent, Native Americans were traveling throughout the Finger Lakes and along the shore of Lake Ontario by way of footpaths. It was a place where prehistoric people as early as perhaps 6000 B.C. made settlements, grew agricultural crops, hunted and fished. A later Iroquois (Cayuga) village, Kendaia existed just north of Camp. A historic marker along Route 96B is near the location. Native American settlements were destroyed by General George Washington's orders after they sided with the British during the Revolutionary War. The land that is now Camp was part of the land that was deeded to former soldiers in recompense for their service in that war.



The land was part of Military Tract #7 and in Ovid Military Township No. 16 These military lots were laid out and granted to officers and soldiers of the Revolutionary War as gratuity payment for military service. According to the record of Lot No. 7 in the Seneca County Clerk's Office it was granted to Jacob Van Gelder, a soldier in the New York Line. He may have been killed in the war or died soon afterward for he never occupied the land. For reference, see a deed by Reuben Van Gelder, Administrator and heir to the estate of Jacob Van Gelder to one Stephen Thorn date Sept. 13, 1791, filed in the County Clerk's Office in Liber F page 504, given to Jacob VanGelder, a Revolutionary War Soldier. The Property was not occupied before this time as, John Seeley was the first pioneer of Ovid Village, not coming until 1792.

The Property did not remain in the name of Stephen Thorn very long, because a very early owner was Jacob Smith and then it remained in the Smith family until 1859. Jacob Smith was the original Smith owner. Rachel Smith was his wife. In 1811, Peter Smith and Jeremiah deeded 19 acres to Jacob Smith. In 1828, the title was transferred to Peter Smith.

In 1832, the Sheriff took part of the farm from John W. Smith for owing \$300. On December 18, 1859, Alexander Smith (grandson of Peter Smith) sold the property (147 ³/₄ acres) to Stephen V.R. Johnson and Lawrence Van Dusen. The Smith Family Cemetery is located on the property on the Raccoon Trail. The remains of the last Smith to occupy the lands can be found there. John W. Smith's tombstone read that he died Feb 27, 1859 before it was removed in 1998. Other tombstones were unreadable as of 1998.



Seneca Waterways Council, BSA

Stephen V.R. Johnson was the owner for many years until at least 1890 as he sold a parcel to the Lehigh Valley Railroad for the construction of the railroad. At some point after this the property was foreclosed upon for taxes.

The property was deeded to the Boy Scouts by two deeds as follows:

1. The bulk of the property was deeded by The First National Bank of Ovid to Finger Lakes Council, Boy Scouts of America, Inc. on February 24, 1939, recorded in Liber 173 at page 475. The cost was reported as \$3,000. This parcel was comprised 177 ³/₄ acres of land. 2. Leonard S. Cole, Fannie L. Cole, his wife and Robert J. Cole and Myra J. Cole his wife to Finger Lakes Council, Boy Scouts of America, Inc. on June 10, 1939, recorded in Liber 173 at page 559 for the very reasonably fee of \$1. This parcel was .241 acres of land at the entrance on the Willard-Lodi highway.

At the time of the sale there was a cottage located in the ravine between Tuscarora Campsite (2012) and Sunday Night Campfire Area (2012). The stone walls can still be made out as you cross the bridge if you look to your east.

The Johnson family farm house was located just east of the small nature pond as you enter Camp, in what will hopefully soon become the rangers shop complex. As of 2012, one can still make out the basement foundation. At the entrance to the Raccoon trail (2012) near the pond if you look east you can still make out the old road. An aerial photograph from 1936 just prior to camp opening can be found in **Appendix A**. Historic Maps from through the years can also be found in **Appendix A**.

In 1944, there was a boundary line agreement to establish the southerly boundary of the Camp property. The agreement was between the Finger Lakes Council, Boy Scouts of America, Inc.; Hanns D. Kniepkamp, the owner to the South; and the State of New York as a purchaser of the property to the south. This agreement was dated April 7, 1944 and is recorded in Liber 188 at page 540.

April 4, 1955 - New Camping area was acquired by the Finger Lakes Council, BSA according to Camp Development Chairman Harry Weart, Seneca Falls, in his announcement to the council executive board at its meeting recently in Geneva. Nineteen acres of woodland Camping area adjoining Camp Babcock-Hovey to the south have been acquired from Willard State Hospital in a trade for 19 acres of pastureland to the east of Lehigh Railroad which was part of the Camp property. This exchange was authorized by the Council Board of Directors and New York State in 1954. This new area includes the Mohican Campsite (Sunday Night Campfire 2012) and enough wooded tableland to provide an additional Campsite when necessary.

Lastly, in March of 1962 Camp gained an additional 108 acres of acreage. The southern portion of the Camp was declared surplus farmland and bought in in 1962. This included the current Camporee Field (2012) and upper fields that Pooler's Pond (2012) was constructed on in 2012. This also gave Camp a second right-a-way along state land.

Specific Plans and Guidelines

FIRE PROTECTION PLAN:

The following is the fire suppression systems which is located on the property. The resources listed are for fire prevention and initial firefighting efforts. Camp plans to request the assistance of the local fire departments when necessary (Ovid Fire Department). The extinguishers are inspected yearly by Certified Fire Extinguisher Servicing Company and monthly during Camping season by the staff.

Fire Safety Plan

If a fire should occur

- 1) The Camp staff should be alerted, specifically the Campmaster, Camp Director or Ranger.
- 2) The Alarm will be sounded
- 3) Clear everyone away from the fire. Do not risk injury in order to fight the fire.
- 4) The Camp Staff will arrive to fight the fire if small.
- 5) The Fire Department will be alerted if the fire cannot be easily controlled.

Troops should be sure to use their Troop Fireguard Plan during Summer Camp.

Fire Fighting Resources

- Alarm to Outside Call Center at Eagle Lodge
- Alarm to Outside Call Center at Dining Hall/Annex
- Fire Siren with pull switch located at Penn Yan Lodge (Does not call out)
- Hydrant located in turnaround by Dining Hall
- Hydrant located near Health Lodge (Note this one needs to be turned on by underground valve, the "T" is kept on the western wall of the Health Lodge)
- Hydrant located near Archery
- Shovels, fire brooms and Indian sprayers located in the Fire Shed located by Penn Yan Lodge.

Note – The hydrant located by the ONSEYAWA building should not be used. It is meant as a drain for the Village of Ovid water main and will quickly loose pressure if used for fire purposes.

Note – In case of major fire and large water usage, the 6" Water Main located at the Meter House needs to be un-bypassed. The 6" Main is currently bypassed in order to regulate the flow and pressure into Camp. Tools are kept in the Meter House in order for this to be done quickly. These tools should not be removed from the meter house. Once the need for extra water is eliminated, the 6" main should again be bypassed. Detailed instructions are posted in the Meter House.

FOREST MANAGEMENT POLICY:

The Camp forests are management under a Forest Management Plan developed in 2011 by Brice June a NYSDEC Forester. The Camp contains native hardwoods, softwoods, and plantation softwoods. The majority of soils on the Camp are rated as good for timber productivity. The detailed plans can be found in **Appendix C**.

PESTICIDES MANAGEMENT POLICY:

The use of pesticides is limited on the Camp property. A certified pesticide technician will be utilized if pesticide use is required. This is normally only done for Poison Ivy patches and to maintain weeds around buildings and fence lines.

The use of pesticides or other chemicals for the control of undesirable species of animals or plants shall be discouraged except where such use is deemed essential by council officials for the health and safety of Camp users or the natural environment. Any use of such agents shall be in accordance with health and safety guidelines.

The use of pesticides can negatively impact fish and wildlife, including fisheries resources, threatened and endangered species, migratory birds and their habitats. Pesticides include products, such as insect repellants, weed killers, disinfectants and swimming pool chemicals, which are designed to prevent, destroy, repel or reduce pests such as insects, mice and other animals, weeds, fungi, bacteria and viruses. Pesticides are used in nearly every home, business, farm, school, hospital and park in the United States and are found almost everywhere in our environment. In fact, recent studies of major rivers and streams documented that 96% of all fish, 100% of all surface water samples and 33% of major aquifers contained one or more pesticides at detectable levels. Pesticides were identified as one of the 15 leading stream pollutants.

WILDLIFE ENCOUNTER PLAN:

Animal Bites and Scratches

In the event of a wild animal bite or scratch, notify the Health Lodge immediately during summer Camp and the Campmaster/Ranger during the off-season. This is especially important when raccoons, skunks, and bats are involved. Any contact with a wild animal should be reported, no matter how minor.

If you are bitten, get help immediately. Someone should try to watch the animal from a safe distance. After the Ranger arrives, an attempt will be made to capture the animal. The Seneca County Health Office will be notified immediately.

Please keep clear of all animals. Under no circumstances is the baiting of animals allowed. Any animal that is overly tame or aggressive will be suspect. Daytime activity is also an indication that an animal may be rabid. Notify the nearest staff member if you see any animal that you suspect is rabid.

Insects

Due to concerns of mosquito bites, individuals are encouraged to use DEET or other insect repellent in liquid or cream form. Use only as directed. NO AEROSOL CANS. We no longer keep #10 cans of water by every tent.

Wildlife Encounters

It is recognized that in a summer Camp facility there can be encounters with a variety of wildlife. Staff, leaders and all Campers should adhere to the following procedures. All wildlife that might be encountered (in Campsites, program areas, or on the road/trails) should be avoided. Campers should be removed from the area until the animal leaves or the Ranger dispatches the animal. (The exception would be merit badge classes where Scouts are working on observations: Environmental Science, Mammal Study, etc.). If an animal is acting strange (aggressive or friendly), contact the Ranger to remove the animal. In most cases if people leave the wild animal alone, it will leave them alone. This pertains to all mammals, especially bears, deer, raccoons, skunks, woodchucks, squirrels, bats, and wild cats and dogs. All avian species (birds) should be avoided also. This includes dead, dying and live animals and birds. No one (without authorization of the Ranger) should pick up a dead animal or bird. If anyone should come across a dead animal or bird contact the Ranger or the main office at Penn Yan Lodge.

General Guidelines For Animal Safety

Keep a clean Campsite Keep food and smellables out of your tent At night lock food and smellables up tight Never approach or follow wild animals Do not feed wild animals Do not mistake a passive animal as a sign of safety Never tease or attempt to pick up wildlife Leave young animals alone; a protective mother is usually nearby Notify Camp Ranger or Camp Director of strange animal behavior Never act aggressively toward wild animals

FISHING PROGRAM POLICY:

Fishing is allowed on all waterbodies located on Camp property. Pooler's Pond is the recommended fishing location for Scouts. Fishing can also be conduct off of the dock at the Lakefront area outside of the Summer Camp season. All New York State Fishing Regulation shall be followed.

<u>GRASSLANDS/BRUSHLANDS BIRD SANCTUARY MANGEMENT</u> <u>PLAN</u>

Best Management Practices for Grassland Birds

These Best management practices (BMPs) should be used to guide habitat management on grassland habitat or habitat to be converted into grassland. The management goal of these BMPs is to maintain the open, grassy conditions necessary for successful breeding by grassland birds and to avoid disturbance to nesting birds. Techniques to be used may include seeding, mowing, and removal of trees and shrubs. Typically, land should be managed for a minimum of 5 years to begin showing benefits for grassland birds.

Target Bird Species

The management recommendations in these BMPs are aimed towards grassland birds. Target birds are those listed as "probably" or "confirmed" breeding in the 2005 Breeding Bird Atlas (BBA) Block where the subject field is located. Birds registered in BBA blocks adjacent to the block where the field is located could colonize the subject field once the habitat becomes suitable for them.

Timing

1. Nesting Restrictions: Grasslands should not be disturbed by mowing, planting, harvesting, driving, or by any other mechanized means from 23 April to 15 August, inclusive (the nesting season).

2. Wintering Restrictions: Excessive disturbance such as frequent high speed snowmobile, ATV, or motorized vehicle operation or loud noises such as fireworks should be avoided from 1 November to 1 March, inclusive for the protection of wintering raptors.

3. Mowing window: All mowing must be done between 16 August and 1 October.

Preliminary Site Management

1. Between 16 August and 1 November of the first year of management, reduce fragmentation of the grassland by eliminating hedgerows, shrubs, and trees within the boundaries of the LIP field.

2. Between 16 August and 1 November and to the extent possible, eliminate woody vegetation, especially hedgerows within and bordering the field. Hedgerows split up habitat and function as predator corridors for coyote, foxes, cats, raccoons, etc; thereby degrading the overall quality of the site for breeding.

Management Schedule

General: The landowner or land manager should mow as early within the mowing window as circumstances and conditions allow to prevent the maturation and release of seeds from forbs, especially the species listed below. At least 1/3 of mowed vegetation should be chopped up and left on site after each mowing. Thatch will provide nesting habitat for birds as well as attracting moles and voles which are prey for raptors and owls.

Invasive or Undesirable Species: The following species, if present, may require spotmowing after August 15th of any year to control their encroachment into the field: spotted or brown knapweed, pale swallow-wort, burdock, or goldenrods.

Years One through Five:

1. Conduct Preliminary Site Management as described above.

2. Divide the field into 1/3s (approximately) if total acreage is 30 acres or more, or into 1/2s if field is less than 30 acres. Mow the first 1/2 or 1/3 of the grassland to a height no shorter than 6 inches (8 inches is preferred). Rotate the portion mown every year.

Additional Recommendations

Prevent disturbance of nesting birds by feral or outdoor cats, dogs, fireworks, recreational vehicles or ATVs, etc.

Grassland Bird Habitat and Ecology

Grassland birds thrive on large, open, previously-agricultural grasslands as these habitats provide the wide open treeless spaces they need to nest and reproduce. Providing the correct mix of grass height, plant species, and thatch depth is a bit of a balancing act. Whereas upland sandpipers require very short grasses, Henslow's sparrows require taller vegetation with a mix of forbs. Bobolinks and savannah sparrows, two fairly common grassland birds, have less stringent habitat requirements. For this reason, grasslands are typically managed on a three-year mowing rotation which provides a variety of grass heights and composition.

Although trees and shrubs benefit wildlife in other habitats, they generally decrease nesting opportunity and productivity in grasslands, especially when forming thickets or hedgerows. In addition, many of the woody plants that colonize grasslands are aggressive invasive species, such as European buckthorn, multiflora rose, Russian olive, and black locust. Removal or thinning of hedgerows is one of the best actions a landowner can take to improve conditions for grassland birds. By removing hedgerows, like the one seen below, landowners can dramatically increase the size of the grasslands.

Thatch, the litter left over after grasses have been mowed, is used by grassland birds to build their nests. Three or four inches are ideal. Thatch also provides cover for voles and moles and is thus beneficial for grassland raptors, such as the state-endangered shorteared owl and the state-threatened northern harrier, which survive the winter by preying on these small mammals. Thatch returns nutrients to the soil, but excessive amounts of thatch can smother the growth of new grasses.

Invasive species can present a management challenge in grasslands. Ample light and productive soils provide good growing conditions for pioneer species.

NEED TO ADD MORE INFO ABOUT BRUSHLAND BIRDS AT A LATER DATE

CULTURAL RESOURCE PRESERVATION POLICY:

There are not currently any known Cultural Resources on the Camp property that are being actively preserved outside of the Smith Family Cemetery.

In the northeast corner of the Camp property are the remains of the Smith Family Farmhouse. There are currently no plans to preserve the foundation remains and a new shop area is currently planned for the area. The Smith Family Cemetery is found just off of the Raccoon Trail. The tombstones were removed and are currently stored by Seneca County. The Cemetery is currently roped off.

A run down hermit cabin also existed in the ravine by Tuscarora Campsite off of the access road for the Village Pump House. The brick wall for the ravine can still be made out today. Although active efforts to preserve them are not being conducted, active removal is not being implemented either.



SOLID WASTE MANAGEMENT POLICY:

Waste generated from the program areas, Campsite and Dining Hall facility are sorted into 3 basic waste profiles; **Recyclables, Compostable, and Garbage**. Every Campsite and program area has a garbage can and recycling bin located in their shelter or shed. It is the responsibility of the units and program staff to bring the waste to the centralized dumpster's area by the dining hall. The garbage and recycling bins are kept in the sheds to keep out of the reach of the wildlife. The Dining Hall separates compostable waste and disposes them at the compost bin located at the landing area by the winter cabins. This compost is used in the spring to fertilize various plants around Camp.

The garbage is collect by an outside agency about two times a week during the summer and on call during non-summer months. Items that should not be included in the garbage include but are not limited to: insecticides, pesticides, paints, solvents, thinners, gasoline, motor oil, explosives, batteries, fluorescent or CFL bulbs, human and animal remains. These items are collected in designated areas in the shop for proper disposal.

Camp discourages, but does not ban, the use of disposable plates, cups, bowls, and plasticware. Camp highly recommends the use of a reusable water bottle. One can be conveniently picked up at the Camp Trading Post. Camp no longer regularly supplies plastic cups at water coolers.

Camp has run an active pop bottle collection program for the last 10 years that has brought over \$4,000 into Camp from 2006-2016.

LEAD MANAGEMENT POLICY:

Seneca Waterways Council, and in part Camp, have not currently adopted a lead free policy for the shooting sports ranges. Current understanding is that the rifle range and shotgun range are most likely currently contaminated with lead and that any increased costs of possible remediation efforts at their end use is minimum in comparison to the additional costs of lead free ammo. The rifle range has historical operated in its current location since the opening of Camp. The shotgun range has operated at two other historic locations in Camp. One location was the Camporee Field near the current PF shed. The other location was between the Chapel and Native American Culture Area. These two previous locations have not been delineated and or remediated to date. It is of a slight concern than the shotgun activities and rifle activities take place over the largest stream at Camp that drains into our lakefront area, however yearly testing by the Ranger and Nature staff with portable test kits, has not detect any elevated levels of lead in the stream downstream of the rifle and shotgun ranges. The costs to move these activities far exceeds the current resources of the council. Scouts are required to wash their hands when leaving the rifle range and shotgun range.

FUEL/CHEMICAL/LIQUID WASTE MANAGEMENT POLICY:

Diesel and Gasoline:

A 125-gallon gas tank, and a 125-gallon diesel tank are located near the ranger's house. The tanks should be fully contained in case of a spill but are currently not. The tanks do not legally need to have secondary containment, but as a good steward of the environment Camp should investigate adding secondary containment so that if a tank is ruptured all the contents will be contained in the reservoir. Griffith Energy is our gas supplier and they would then be called to pump out the reservoir. The Ranger staff will determine if the authorities need to be notified.

Propane:

The Camp has approximately 8 large propane tanks on the property. AmeriGas is our propane supplier and service company. If a leak is detected all personnel should be evacuated from the area and AmeriGas shall be notified.

Steps to be taken in case Material is released or spilled

Small spill: Eliminate all sources of ignition such as flares, flames, including pilot lights, and electrical sparks. Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and get in a well-ventilated area.

Large spill: Eliminate all sources of ignition such as flares, flames, including pilot lights, and electrical sparks. Persons not wearing P.P.E. equipment should be excluded from the area of the spill until clean-up is complete. Stop the spill at the source, dike area of the spill to prevent spreading, pump liquid to salvage tank. Remaining liquid should be absorbed by paper, vermiculite, floor absorbent, or other absorbent material and placed in a well ventilated area and stored in containers.

Waste disposal method: allow volatile portion to evaporate. Allow sufficient time for vapors to completely clear. Dispose of remaining material in accordance with applicable regulations and authorities.

Phone Numbers:

•	Griffith Energy	607-582-6707
•	AmeriGas	315-343-7517
•	Department of Health	315-539-1925
•	D.E.C. Haz Mat	800-457-7362
•	Ovid Fire Department	911

ROAD MANAGEMENT POLICY:

<u>History</u>

The roads in Camp are the biggest source of sediment and erosion leaving Camp. In 2006, Camp along with the help of Mark of Mark's Pizzeria, laid down a gravel roadway and added ditches and culverts as needed to the main access road of Camp. Plans are currently underway to gravel the remainder of the main Camp roads as money becomes available. Additionally, the installation of sheds in each Campsite to store Camp owned tents, mattresses, and cots in a central location has significantly reduced the amount of vehicular traffic to and from the Campsite in late spring and early fall.

Vehicle Access Policy

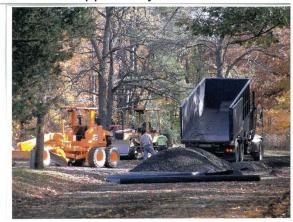
Only vehicles approved by the Camp ranger are allowed onto secondary roads. Gates and barricades have been installed to limit traffic, especially during the muddy season of late fall and early spring. During Summer Camp, each Unit is allowed to take one vehicle to their campsite to unload the vehicle on check-in and reload on check-out. The vehicles shall not remain in the site and shall return to the parking lot. Troop trailers are permitted to be parked near a Units campsite. This policy can be changed by the Camp Ranger as needed depending on current Camp conditions.

Recommended Road Construction Policy

One of the biggest things to consider is that whenever a gravel roadway is put down geotextile fabric must be used in order to keep the gravel from disappearing into the silty loam commonly found throughout Camp. A minimum thickness of 6" of gravel shall be laid down with a preferred thickness of 12". Ditches and culverts shall be added as needed. It is important to slope the road so water flows away from the road to the nearest ravine. Best management practices for erosion control shall be followed during road construction to minimize soil erosion during road construction.

Areas of Greatest Concern

The road extending from Scoutcraft to the Health Lodge is of greatest concern in addition to the road heading to lakefront. Both of these roads should have fabric placed and graveled at the earliest opportunity.





TRAIL MANAGEMENT POLICY:

There are well over 5 miles of trails at Camp. The trails are mostly maintained by volunteers and ranger staff. The starts of the trails are marked with metal signs, and trees are blazed various colors as indicated below. Trails are designed not to transverse through Campsite but around Campsites. All of the trails are mark on the Camp Map in **Appendix A**.

In addition to the trails on Camp property Scouts have access to the Sampson Lakeshore Trail **(Appendix F)** and trails located in the Finger Lakes National Forest. A New York State Master Trail Plan shows a trail extended from Geneva to Ithaca near Camp in the future. The proposed path of this trail might follow the old railroad bed just east of camp.

Management Policy-

Because most of the trail routes are old, they were not necessarily built using modern sustainable trail practices (see below). There are some trails that have fairly steep grades for short sections, which can result in erosion especially given the silty loam soil common at Camp. A few trail reroutes have been done in past years to make trail grades more gradual and reduce erosion risk. There are opportunities for more reroutes of steep sections as labor becomes available. Also, benching of side-hill trails so that they slope slightly out from horizontal side-to-side to allow water drainage off the trail should be done where possible.

Short Description of Trails in Camp-

Owl Trail 9 (Light Green) – The Owl Trail is a self-guided nature trail that starts at the Native American Culture Area (Current Footsteps of Hiawatha Area, first year Camper program) and loops around the northeastern quadrant of the property including the Nature Pond. The trail includes several different types of habitats and enough variety trees to be used for the Forestry Merit Badge requirements. There are two special station on this trail. One shows cast animal footprints and the other station shows fake scat samples. It can get really wet during the spring time. There are two bridges on the section running from Seneca Campsite to the Chapel and one installed staircase that goes up the ravine near the chapel area. Maps are available from the Camp Office or Nature Staff.

Turkey Trail (Orange) – The Turkey Trail spurs off of the Owl Trail near Seneca Campsite via a small trail. It can also be accessed from the back of Seneca Campsite for mowing purposes. It runs along the northern property boundary down to lakefront and offers a nice vista of the Boat House and Lakefront Area. The hill right behind lakefront should not be used to reach the lakefront. There is a well-marked switchback about 50 yards (east) back up the Turkey Trail that will deliver visitors right to the Camp Waterfalls. From this location Scouts cross the shallow creek bed and are brought down to the lakefront. There are two old trails that go from the base of the waterfalls to just east and west of Cayuga Campsite. These spurs are closed and should not be used but are still used by many Scouts. Barricading this path should be a priority as using these old spurs is a safety hazard. Scouts should not attempt to cross the creek path of the waterfalls during early spring or after large rain events.

Beaver Trail (Red) – The Beaver Trail starts at Tuscarora Campsite and follows the upper cliff edge over to the a few hundred yards north of the southern property line. At that point it turns 90 degrees east until it reached the Main Camporee Field at the southwest corner.

Several bridges or switchbacks should be added to this trail. The Beaver Trail offers many nice vistas of Seneca Lake.

Lakefront Trail (Not Marked) – The Lakefront Trail starts at the Boathouse/Lakefront Area and follows the Lakefront down to the southern property line. Through a small gully Scouts can access the end of the Outpost Trail and or the Beaver Trail. Better signage needs to be worked on at this three way intersection. The Lakefront Trail can be driven with a vehicle from the Lakefront Boathouse Area all the way south to the Village Pump House. From there southward the trail narrows significantly and is basically only a walking trail. The trail should be cleaned of rubbish and trash on a yearly basis.

Outpost Trail (Blue) – The Outpost Trail starts at the intersection of the Lakefront Trail and Beaver Trail. It follows the southern property line eastward and passes through the Dan Beard Outpost Campsite, Baden Powell Outpost Campsite and James E. West JLT Area. White Deer Trail. There is one bridge on a spur of the Outpost Trail that crosses the creek near the Dan Beard Outpost Trail. This is one of the more rugged Trails in Camp.

Turtle Trail (Dark Green) – The Turtle Trail is a short trail that runs parallel to the main exit road for the Camporee field. It runs from Scoutcraft to the James E. West JLT Area with a small spur to Pedersen Lodge.

White Deer Trail (White) – The White Deer Trail is another short trail that starts at that Ernest T Seton Outpost Campsite and heads east to Poolers Pond and Loops around Pooler's Pond. It was names in Honor of the Tschipey Achtu Lodge who provided funds for the shelter, dock, and aerator at Pooler's Pond. A culvert should be added just east pf the intersection with the Turtle Trail. At Poolers Pond Scouts could also view parts of the Grasslands Birds Bird Sanctuary.

Raccoon Trail (Dark Orange) – The Raccoon Trail start at the Scoutcraft Area and travels eastward to Pooler's Pond. At Poolers Pond it crosses the southern ravine towards the Amphibian Pond. It continues east for a short period before crossing the Brushland Birds Sanctuary at a diagonal. From this point it crosses the Northern Ravine and passes the Smith Family Cemetery. It meanders its way out of the woods to the Nature Pond and meets up with the Owl Trail. Where the trail crosses the ravines it need to be marked better and the trail better defined.

Five Mile Trail (Yellow) – The Five Mile Trail uses parts of all of the trails listed above to add up to a length of five miles. It manages not to loop back on itself at any location. It technically starts and ends at the Scoutcraft Area but since it is essentially a loop, one can start at any location and loop around the trail until they get back to their starting location. Maps are available from the Camp Office and from Scoutcraft Staff. A Copy is provided in **Appendix F.**

(see <u>http://www.scouting.org/filestore/designdevelop/doc/sustainabletrails.doc</u>). Sustainable Trails: doing it right the first time

By John Favro, Trails Consultant and American Trails Board Chair

I grew up in a trail culture that said "do the clearing, fill in the holes and ruts, and, if you have erosion, throw in some log water bars." During my first years of doing trail maintenance, that is exactly what I did. Going back and looking at some of my early trail work, I have come to the conclusion that most of the early work I did was not sustainable nor was it good for the trail, the users and the environment. Why is that?



Water flow and drainage are the key factors in sustainable trails

The biggest issue with all trails (yes, even desert trails!) is how the trail affects water flow and how the trail is affected by water. Trails can affect water flow diverting drainages, collecting sheet runoff, and collecting water in low areas. Water can affect trails through wet areas (bogs), sheet runoff, or drainages.

Trails deal with water flow in different ways: by design, by structures, by location.

Poor location

The philosophy I have come to use when building or rebuilding trails is that it is always better to put trails or reroutes in the proper location. I will discuss proper trail location later in this article. When you construct or reroute a trail, you are putting a structure on the landscape that will be there, in good or bad condition, for 100 years or more in most places. So why not do it right?

Many trails managers balk at the thought of spending extra money up front to properly locate and build a trail. These managers will cringe at a high onetime reconstruction or construction cost but end up paying high maintenance costs for 100 years or more!

Which is cheaper, a moderate or high onetime cost or a smaller cost that ends up recurring 100 times or more? The math is obvious, it is almost always cheaper to opt for the onetime higher cost for new construction or reroutes than to have to pay crews to construct structures and do heavy maintenance for the next 100 years. We all know how hard it is to get trail maintenance funding. In these times of low trail budgets mangers may not maintain a trail for a long time and, when it becomes impassable, spend money for a reroute or a new trail. The result of this will be two scars on the landscape or the need to spend even more



money to rehabilitate the old trail. To me it is always best to follow the old saying: "Do it right the first time."

A good trail crosses the sideslope with a curvilinear alignment

So, let's get down to basics on reconstructing or rerouting a trail. There are three basic rules I have for when I begin laying out a trail:

- 1. Find what the sustainable grade should be.
- 2. Locate the trail on a sideslope, never on flat ground.
- 3. Follow a curvilinear alignment.

Grade

Some people will tell you that a sustainable grade will always be less than a specific number, say 10% or 20%. They base this grade number on their past experience for an area and may even be correct some of the time. The reality is that every trail is different. Trails may have different uses, vegetation, and soils, even in the same area.

It is much better to determine a sustainable grade for the specific trail you are going to build by looking at the existing trail or, if you are building a new trail, find a trail that has matching characteristics. Then you need to become a trail detective and look at segments of the existing or similar trails and determine, using your clinometer, at what grade the trail begins to erode. Look for where water runs down the trail; any place where there is or has been soil movement on the tread where small ruts are visible. Next determine the grade where that this is occurring at. What I usually do is then deduct from 2% to 4% from that grade and that becomes my sustainable grade for that trail.

What that means is that, unless the soil, runoff or vegetation changes dramatically, I should not have any grade greater than that sustainable grade. This is a key to building a



the trail instead, causing erosion.

sustainable trail - never on flat ground

Sideslope

The out slope is the percent of slope measured along the width of the trail across (or 90 degrees to) the trail direction of travel. Every trail, unless it is perfectly flat with no side hill or grade, will have sheet runoff hitting it from above. If this sheet runoff is not allowed to cross the trail and continue down the slope, it will turn and go down

The way to prevent this is to provide adequate trail out slope. So what is adequate out slope for a trail? I used to believe that 1% or 2% is adequate. I have since discovered that this is not adequate for most trails. Trail Managers, more in the know than I, now say that the out slope must be greater than the grade of the trail.

When you think of this using physics, it makes sense. Water will always take the steeper, easier route downhill and so, if a trail has a 10% grade with an 8% out slope, a good portion of the sheet runoff will turn and go down the trail which will cause erosion issues.

Trail Location

Often you see a trail traversing completely flat terrain. This is usually done because it is easier to build a trail on flat ground than on a side hill where the builder must cut a bench into the hill. Flat terrain is not the place to build a trail. Water will collect in the lowest places



and will cause wet areas or erosion leading to these low areas. Both of these events will cause your trail to deteriorate. The place to locate a trail is on a side hill. Sure it may take a little more work but, in the long run, you will have a much more sustainable trail that allows the water to sheet across the trail and will require minimal maintenance.

Avoid using waterbars unless absolutely the last resort

Good sidehill, curvilinear construction

Another thing that should be considered when building a new trail or reroute, is to follow a curvilinear route that matches the terrain. Where there are drainages the trail should dip into them and out of them so that the drainage will flow across the trail and not turn and follow the trail. This is obvious but often trails are built on a straight grade of a certain percent (like some roads). This is contrary to the lay of the land and will result in the trail becoming a route for water instead of the existing drainages.

Structures

Avoid using waterbars unless absolutely the last resort. A well-built, well located trail will not have need for very many structures except, of course, bridges or retaining walls. Every time a structure is built, the trail manager is taking on a maintenance expense for the life of the trail so it is important to minimize the number of structures you construct. It is especially important to limit the number of drainage structures. Drainage dips or grade reversals are, for the most part, self-sustaining and require minimal maintenance. Drainage dips are my first choice if I must put in a drainage structure.

My second choice is usually installing rock waterbars. If rock waterbars are installed properly, they will last a long time but will require more maintenance than a drainage dip. My last choice (which used to be my first choice in the "old days") is to install a log waterbar. I would only do this if I am not able to properly locate and build the trail and there are no rocks available (this may be the case because of management or environmental restrictions). These conditions will be very rare. Log waterbars (even using treated logs) are hard to maintain and will eventually rot requiring many replacements at great expense over a 100 year trail life. They are also more prone to being kicked out of place or failing. So remember! Do it right the first time!

WATER SUPPLY MANAGEMENT POLICY:

<u>History</u>

Camp is lucky, in that the Village of Ovid supplies the Camp with potable water. The Village is responsible for filtering the water and the chlorination of the water. There are four known wells on the Camp property, none are currently in use.

- 1) One is located behind the Old Hermit Cabin location near the current village pumping station.
- 2) One is located near the old Smith Family Farmhouse.
- One is located behind the Dining Hall and was install soon after 1937 by Gould's Pumps.
- 4) One located in the basement of the Rangers House.

Water Use Policy

Whenever possible, low flow water fixture shall be used throughout Camp. No water shall be drawn from the onsite water wells. Only treated water from the Village shall be used in Camp.

Village Raw Waterline Description

The Village of Ovid raw water supply line starts at the Village Pump House located by Tuscarora Campsite. It heads eastward and follows the Main Road. A hydrant for draining the line is located by the ONSEYAWA Building. There also is a 2" drain line that that is located in the ravine by the Pool Filter House. Lastly, there is an additional drainage valve line in the Rifle Range backstop that drains into the northern ravine. The raw water supply line leaves Camp property just south of the Main Entrance Gateway.

Camp Waterline Description

The Camp supply water line enters camp near the Camp Gateway. It enters the Meter House located by the Ranger's House. The Meter House is heated year round to prevent the line from freezing. From the Meter House the 6" Main follows the main road to the fire road intersection right behind the Native American Culture area. From here it splits into 2 separate lines. The first follows the fire road down to Mohawk Campsite and then heads towards the Dining Hall traffic circle and terminates with the fire hydrant located there. From that location water is supplied further down line to the Eagle Lodge via a 2" line. A 2" line also services the Memorial Lodge from the Mohawk campsite split. The 6" line that split back up at the Nature American Culture area heads toward the COPE area and cross under the northern ravine. There is a fire hydrant located across from Archery. From the COPE area the line turns and heads west to the South Shower House and terminates at a hydrant located by the South Shower House. A 2" line continues south to service the southern campsites. The remainder of Camp is serviced by several smaller service lines. Additional details can be found on the Utility Service Map and the Ranger's Water System Manual.

WASTEWATER MANAGEMENT POLICY:

History-

Most of the septic systems located on Camp property are in good shape and have been upgraded recently with a few exceptions. Camp was lucky in the investments made in Camp in the 1990's that installed 21 vaulted latrines with leach fields throughout Camp. Below is a list of septic systems located on the Camp property. Most of the leach fields in Camp are barricaded with a vegetative buffer to prevent vehicle traffic. Tanks are emptied as needed by Brewer's Septic Service in Ovid, NY. An aerator is rotated around to the various septic tanks to promote aerobic degradation of the waste as opposed to anaerobic degradation.

Policy-

All vacuumed out waste is to be transported off of council property and be disposed of properly.

Locations-

Dining Hall #1 with Grease Trap (Emptied every other year) - drains to the parade field. The southern handwashing station drains into the tank. The grease trap is on the east side of the Dining Hall by the single cedar tree.

Annex – tank is located under the northern hand washing station on the parade field, the leach field drains to the northwest side of the Eagle Lodge.

Eagle Lodge- septic tank is located to the southwest of Eagle lodge with the leach field draining to the Southwest of that location.

Memorial Lodge – tank sits under Memorial Lodge with the leach field to the northwest. **North Shower House** – tank sits west of the pools shower house with the leach lines west of the tank. This leach field is in poor condition and is suffering from encroachment of the forest.

South Shower House – tanks sit to the west of the shower house and the leach field drains into the sitting area of the stage location.

Health Lodge – Tank is due south of bedroom window on south side of the junipers with the leach field extending to the south of the tank near the leach field of the south shower house. **Ranger House -** The tank sits to the east of the Ranger's House with the leach field much farther east near the old shop complex area.

18 Two Stage Latrines with Leach Fields – In general the tank baffle prevents solids from entering the water only tank. From there the tank drains to a pea stone pit with a 10 foot pipe. This is generally on the handicapped side except for Delaware and Mohican which are 180 degrees the opposite direction. Diapers and feminine hygiene product routinely clog up the pipes.

3 Single Stage Latrines – Have pump out chambers and are designed to be pumped as needed. Located at Memorial Lodge, Rifle Range, and James E. West JLT Area.

2 Gray Water Collection Tanks - at Pedersen Lodge and Winter Cabins. They are historic Latrines and have historic leach fields attached

1 Pit Latrine - near Pooler's Pond

1 Old Pit Latrine – at the Lakefront area. It is supplemented by a Port-a-John during the summer months and should be looked at for upgrading.

ELECTRICAL SUPPLY MANAGEMENT POLICY:

<u>History-</u>

Camp has had a utility owned power line running through Camp since the installation of the Village Pump House and waterline. There are several meters on Camp property.

- 1) Ranger's House
- 2) Archery
- 3) Pool
- 4) Trading Post
- 5) Dining Hall

Add more info here at a later date.

Energy Efficiency Policy -

Every attempt shall be made to use energy efficient fixtures and appliances in camp. Currently every light bulb in camp is either an LED bulb or fluorescent bulb. There are several older refrigerators and air conditioners located in Camp and should be looked at for replacement. Insulation and weatherization upgrades should be conducted at buildings that actively are heated or air conditioned. This includes the Health Lodge, Trading Post, Penn Yan Lodge, and the Dining Hall.

Aesthetics Policy-

Every attempt shall be made to bury or hide the electrical services. This is especially important for around the vista of Seneca Lake. The grandeur of the lake, its waters, and the dramatic sunsets are the highlights of visual scenery from Camp. Specifically the electric line running from Tuscarora to Cayuga and the Lakefront should be replaced. Current plans have this line being replaced from the Memorial Lodge to Cayuga campsite underground.

Energy Production Policy-

Camp fully supports the Green Energy Movement. Every attempt shall be made to invest in Green Energy at Camp. Specifically Camp would like to invest in a small scale example of each Mainstream technologies to show case as part of the Nature Area and Sci-Tech Area. Specifically-

- Hydropower
- Solar Power
- Wind Power
- Geothermal Energy

MANAGEMENT ZONE POLICY:

Aesthetic Management Approach

Management Zones

Camp shall be divided into six (6) management zones as soon as practical following completion of the resource inventory and an analysis of the management needs of the area. The management zones are intended to provide over-all direction for the best use of each zone. It is understood, however, that unforeseen, natural and man-caused events may necessitate these zones or portions thereof be altered.

The seven management zones include:

1. Administrative Areas Zone

a) Description: Includes maintenance, storage and ranger residence areas, paved or improved roads (primarily for vehicular traffic) and their buffer areas, and other areas designated as "administrative".
b) Directive: Modification of the area to facilitate the area's administrative purpose is permitted. Care should be exercised to keep negative environmental impact to the minimum necessary during development activities and operational use.

c) Monitoring Recommendations: A process of continuous monitoring of environmental impact within administration areas shall be implemented to assure the timely identification of problems or potential problems and rapid action to correct or mitigate the impact.

d) Management Recommendations:

Administrative areas shall be managed to create and or maintain:

- (1) A safe environment for users
- (2) A functional environment commensurate with the administrative functions.
- (3) To the extent possible, an appearance that blends with the natural environment.

2. Developed Camp Zone

a) Description: Includes the areas used for developed Camping including adjacent program areas and other support areas.

b) Directive: Modification of the environment required to support the Camp mission and assure Camper safety is permitted. Care shall be exercised to keep negative environmental impact to a minimum during development activities and operational use.

c) Monitoring Recommendations: A process of continuous monitoring of environmental impact shall be implemented to assure the timely identification of problems or potential problems and rapid action during periods of active Camp use to correct or mitigate the impact on safety to Camp users.

d) Management Recommendations: Developed Camp areas shall be managed to assure:

(1) A safe environment for users

- (2) A functional environment commensurate with this program's function assigned to the site.
- (3) To the extent possible, an appearance that blends with the natural environment.

3. Backcountry Program Zone

a) Description: Includes backcountry trails and their corridors, backcountry outposts, and backcountry program areas and their buffer areas.

b) Directive: Modification of the natural environment for backcountry trails, outposts and program areas is permitted only to the extent necessary to facilitate their designated use and the safety of their users. Any development within this zone must blend with the natural environment and cause minimum negative impact on the environment and visual character of the area.

c) Monitoring Recommendations: A process of periodic monitoring shall be implemented to assure identification of problems or potential problems and actions to correct or mitigate the impact.

d) Management Recommendations: Backcountry program areas will be managed to create or maintain:

(1) A safe environment for users

(2) A functional environment commensurate with the program functions assigned.

(3) An appearance that blends with the natural environment.

4. Resource Zone

a) Description: Includes those areas of the Reservation that are designated for wildlife or forest management activities such as hunting, trapping, timber and non-timber forest products harvesting, and similar extractive activities.

b) Directive: Modification commensurate with the resource management objectives of the activity is permitted. Care will be exercised to assure minimum negative impact during resource management activities.

c) Monitoring Recommendations: A process of periodic monitoring shall be established to gain and maintain an understanding of the ecological situation within the area and any developing problems in need of action.

d) Management Recommendations: The resource zone shall be managed to:

(1) Maximize wildlife and forest values within the context of natural ecological capacity.

(2) Create and maintain a safe environment for users.

5. Backcountry Conservation Zone

a) Description: Includes those areas of the Reservation exhibiting a natural regime that are not a part of any other zone and where only latent evidence of human use remains.

b) Directive: Only ecological changes are permitted. Activity use is restricted to those of a "Leave No Trace" nature.

c) Monitoring Recommendations: A process of periodic monitoring shall be established to gain and maintain an understanding of the ecological situation and any problems in need of action.

d) Management Recommendations: Management within the backcountry conservation zones shall be oriented to the maintenance of natural processes. Overt management activities shall be restricted to those deemed essential to:

(1) Maintain/enhance habitat for a threatened, rare or endangered species.

(2) Recreate an historic ecosystem that was native to the area.

6. Riparian Zone

a) Description: Includes the permanent and primary wet intermittent streams, and springs and their terrestrial buffers.

b) Directive: Care shall be taken to assure the maintenance and enhancement of high quality water within the streams and the maintenance of their aquatic integrity; stream buffer areas shall adhere to DOF Guidelines or exceed such guidelines when conditions require.

c) Monitoring Recommendations:

A process of periodic monitoring shall be established to gain and maintain an understanding of the ecological situation and problems in need of action.

d) Management Recommendations: The Reparian Zone shall be managed to:

(1) Maintain high water quality within the riparian streams.

(2) Maintain vegetated corridors along streams.

(3) Maintain protected stream crossings for trails and roads to assure bank and stream bottom stabilization.

(4) Provide and maintain stream bank stabilization in highly erodible areas.

CONSERVATION AND OUTDOOR ETHICS POLICY:

Policy: Whenever possible the Outdoor Code, Leave No Trace principles, and Tread Lightly! Principles shall be adhered to.

Conservation and Outdoor Ethics

The CCC has as a component of its primary mission the responsibility to promote conservation and outdoor ethics among the council's Cub Scouts, Boy Scouts, Venturers, and Scouters. The council's outdoor ethics advocate should be an active member of the CCC. All Scouting participants should have the opportunity to receive the Leave No Trace Awareness Award and be versed in the BSA Outdoor Code. All council programs and activities should adhere to Leave No Trace guidelines, the BSA Wilderness Use Policy, and the Outdoor Code. Conservation and outdoor ethics should be emphasized in all council training.

Outdoor Ethics

For a century, Scouting has relied on outdoor Camping experiences as a method for delivering the aims of Scouting. Scouting units participate in a variety of outdoor activities, including front country Camping, backcountry Camping, backpacking, canoeing, horseback riding, cycling, and myriad other programs. Even though outdoor recreation is growing in popularity in the non-Scouting world, Scouting still accounts for the majority of users in our nation's outdoor recreational areas.

Leave No Trace

Outdoor activities are essential to Scouting and are personally rewarding, but an unintended consequence of being in the outdoors is that we can adversely impact our outdoor recreational areas. Our public lands and many of our local council Camp program areas, Camp sites, trails, and backcountry areas show signs of destruction caused by overuse, inappropriate use, and carelessness. Many Scout Camping areas have become compacted, contaminated, and littered with Campfire remains. Some Scout Camp areas have been used, for better or worse, for generations. It is not difficult to recognize the need for remembering the principles of Leave No Trace on our Scout Camp program.

Leave No Trace is a national educational effort consisting of seven principles dedicated to enhancing our outdoor ethics by increasing our awareness of the impacts that we produce while enjoying the outdoors. These principles are based on respect for nature and other users and a desire to sustain our outdoor areas in a pristine condition for future generations. The seven principles of Leave No Trace can be applied to any outdoor area, from city parks and residential backyards to large wilderness areas, national parks, and national forests. The seven principles of Leave No Trace are:

- Plan ahead and prepare.
- Travel and Camp on durable surfaces.
- Dispose of waste properly.
- Leave what you find.
- Minimize Campfire impacts.
- Respect wildlife.
- Be considerate of other visitors.

As a supporter of the national Leave No Trace Center for Outdoor Ethics, the BSA is dedicated to promoting the seven principles in all aspects of the Scouting program. In fact, standard 72 of the National Standards for Cub Scout/Boy Scout/Venturing Resident Camps states, "At least one staff member has been trained as a Leave No Trace Trainer (two-day course) or Leave No Trace Master Trainer. A Leave No Trace awareness workshop is offered to leaders and Campers."

The role of the council conservation committee is to ensure that the council's Scouting units are introduced to and abide by the principles of Leave No Trace and that all activities conducted on council properties adhere to the principles as well.

Council conservation committees should consider having at least one member who is a Leave No Trace Trainer or, preferably, a Leave No Trace Master Educator. These individuals can guide the conservation committee and direct the council's Leave No Trace awareness program, including conducting training and awareness sessions at local unit meetings, summer Camp, roundtables, Wood Badge courses, Powder Horn programs, Camporees, and other venues where the Leave No Trace principles can be presented.

Each council property's conservation plan should incorporate the Leave No Trace principles. Conservation projects and Campsite improvement projects for units and merit badge classes can and should be designed around a Leave No Trace theme. For example, projects could include the rehabilitation or dismantling of Campfire rings (minimize Campfire impacts) or the improvement and stabilization of hiking trails and high-impact Camp areas (travel and Camp on durable surfaces). The council conservation committee should provide the leadership role in the council in promoting Leave No Trace. It will not be easy to change the way people think and act in the outdoors, and it may take time before "Leave No Trace Camping" and "Scout Camping" are synonymous. However, with dedication to promoting and adhering to the principles and ethics of Leave No Trace, council conservation committees can make a difference. Through leadership, Scouting can ensure that our Scout Camps and our nation's outdoor classrooms are sustained for future generations.

For more information about Leave No Trace, visit <u>www.LNT.org</u>.

The Tread Lightly! Principles for Responsible Recreation

Like Leave No Trace, Tread Lightly! Inc. is a national nonprofit organization dedicated to protecting outdoor recreational access and opportunities through education and stewardship. The principles of Tread Lightly! incorporate an ethical standard for the use of motorized and mechanized recreational vehicles and equipment on the land and water. As a conservation organization, the BSA stresses that Scouts should abide by the Tread Lightly! principles when operating watercraft and motorized vehicles on council properties and other public and private lands. By following the principles of Tread Lightly!, Scout Campers can help to maintain and protect our recreational trails and waterways by minimizing the impacts of our outdoor recreation.

The principles of Tread Lightly! are:

T—Travel and recreate with minimum impact. Travel on designated routes only. Travel only in areas that are open to your type of recreation. Don't create new routes or expand existing trails. Avoid sensitive habitats like wetlands, meadows, and tundra. Cross streams only at fords where the road or trail intersects the stream.

R—Respect the environment and the rights of others. Respect and be considerate of other users so that all can enjoy a quality experience in the outdoors. When driving, yield to horses, hikers, and bikers. In a personal watercraft, be cautious around canoes, kayaks, and other boats. Respect wildlife. Be sensitive to their life-sustaining needs by keeping your distance. Comply with signage. Always obtain permission to cross private land.

E—Educate yourself, plan, and prepare before you go. Know local laws and regulations. Have the right information, maps, and equipment to make your trip safe, and know how to use them. If driving, be sure your vehicle is compatible with road and trail conditions. Know which areas and routes are open for your type of recreation.

A—Allow for future use of the outdoors; leave it better than you found it. Take out what you bring in. Properly dispose of waste. Leave what you find. Minimize use of fire. Restore degraded areas. Avoid the spread of noxious weeds by washing your gear after every trip.

D—Discover the rewards of responsible recreation. Do all you can to help preserve the beauty and inspiring attributes of our lands and waters for yourself and future generations.Council conservation

committees should require that these principles are followed on council properties, on Scout outings, and in Scouting's boating programs. Vehicle impacts should be minimized in our Campsites and program areas. Responsible recreation will allow for future enjoyable use of the outdoors. Tread Lightly!

For additional information, visit <u>www.treadlightly.org</u>.

The Outdoor Code

As an American, I will do my best to ...

Be clean in my outdoor manners.

- I will treat the outdoors as a heritage.
- I will take care of it for myself and others.

• I will keep my trash and garbage out of lakes, streams, fields, woods, and roadways.

Be careful with fire.

- I will prevent wildfire.
- I will build my fires only where they are allowed and appropriate.
- When I have finished using a fire, I will make sure it is cold-out.
- I will leave a clean fire ring, or remove all evidence of my fire.

Be considerate in the outdoors.

- I will treat public and private property with respect.
- I will follow the principles of Leave No Trace for all outdoor activities.

Be conservation-minded.

- I will learn how to practice good conservation of soil, waters, forests, minerals, grasslands, wildlife, and energy.
- I will urge others to do the same.

The Outdoor Code and the principles of Leave No Trace and Tread Lightly!, are the ethical standards by which we should conduct our outdoor Scouting activities. To become a Scout, one must understand and agree to live by the Outdoor Code. The council conservation committee should work to ensure that Scouts and Scouters are continually exposed to the Outdoor Code in the troop setting or at Camp. For example, the Outdoor Code could be recited, along with the Scout Oath and Scout Law, at troop meetings as a part of the meeting opening or flag ceremony. Scout Campers should be reminded to abide by the Outdoor Code, and the council conservation committee should ensure that the Outdoor Code is posted and referenced both in the Scout Camp and throughout the council outdoor program in Camp areas like the trading post, the dining hall, and Campsite bulletin boards.

Camp commissioners can be valuable resources for promoting the Outdoor Code during Campsite visitations and inspections at resident Camp. It is the responsibility of the council conservation committee with the assistance of the Camp director, Camp ranger, and other Camp staff members to ensure that we live by the Outdoor Code in our council Camping program. The council conservation committee should always set the appropriate example and follow the Outdoor Code in all of the committee's actions.

CAMPSITE MANAGEMENT POLICY:

Policy -

Campsites use shall be rotated and rested on as needed basis as determined by the Camp Conservation Committee. When shut down for resting, specific care shall be taken for improving the following items in each campsite: the drainage of the campsite; improving the grass in high traffic areas; improving the tree canopy; improving the layout of the campsite. If steep slopes are present consideration shall be taken to adding a snake rail cedar fence.

History -

In recent history, Mohawk Campsite was rested from 2012-2013. Onondaga Campsite is currently being rested from 2013-2017. Algonquin shall be the next campsite to be rested. Old Staff Site (east of the Health Lodge) was started to be rested in 2015. It shall be rested for a few years. The idea is to thin out the woods and put in some nice cabins in this area in the future.

CONSERVATION PROGRAM POLICY (SUMMER CAMP & UNIT):

Policy: The camp conservation committee should take an active interest in the conservation education programs at Summer Camp and Unit Camping Season. This might include pursuing funding sources of needed tools and equipment to support conservation training, or helping to fund the training of conservation staff members at the conservation section of a National Camping School. The committee can also help train conservation staff members. At the very least, the committee should establish contact with the Camp's conservation director and offer to provide support and assistance for Camp conservation education.

Summer Camp: The nature staff is the key organization during this program activity. The camp conservation committee should provide:

- Conservation education materials
- · Conservation contacts that can provide expert advice
- Guidance on conservation and environmental education

• Conservation projects for the completion of nature merit badges and advancement requirements

- Nature trails
- Nature library

Unit Camping Season: The camp conservation committee should provide conservation and environmental educational materials and opportunities, including:

- Nature trails
- Nature library
- Nature activities
- Age specific Conservation Projects.

Special Events: If a special event planned for a council Camp property has a conservation or environmental component, the council conservation committee should be part of or lead the planning committee. The committee's contacts in the natural resource and environmental community can be instrumental in planning and gaining support for the event.

Summer Camp Program Support:

Support of summer camp nature study and environmental and conservation programs and activities is also an important responsibility. The provision of accurate and comprehensive instruction by camp staff is essential to maintain a quality program. Camp staff assigned to teach nature, environmental, and conservation merit badges or other programs must be thoroughly prepared to teach their assignments effectively. This may require the camp conservation committee to work with the camp director and the nature director to assist in pre-camp preparation of the staff to teach in their assigned areas. In addition, the camp conservation committee might prepare camp staff lesson plans for teaching assignments to ensure appropriate instruction during camp. The camp conservation committee should also ensure that adequate educational materials are available to support the program, including merit badge pamphlets, field equipment, identification guides, reference books, and other items required in the lesson plans. Summer camp staff shall provide feedback at the end of summer camp for additional needs and thoughts for the following year and a complete list of conservation projects completed during summer camp.

PHYSICAL STRUCTURE MANAGEMENT POLICY:

Policy: Actions speak louder than words. Camp should be a showplace for wise conservation practices led by a camp conservation committee. Thus, the buildings and properties at Camp should reflect the conservation of resources theme. This thought extends to the location of buildings and types of materials.

The following are examples of conservation ideas that can be implemented.

• Clustering properly designed buildings together will make the Camp seem larger than if they are spread out all over the property.

• Select appropriate paint colors. Browns, tans, and greens have a tendency to blend into the landscape for a more subtle look. Colors outride of this color scheme shall be talked about well in advance before implementation. For example – The Health Lodge is painted an eye popping red to draw attention to this building in case of emergency. The Boathouse was selected to be a blue with white trim to reflect the lake and whitecaps.

• If trails are intelligently designed and properly maintained, people will use them. This concentrates traffic on the trails and reduces foot traffic on areas without trails.

• Vegetation can be planted or encouraged to grow in locations that will provide visual barriers between activity areas.

• No matter how careful we are, the use of our facilities places stress on the environment. There should be a documented, approved plan for the rotation or rehabilitation of campsites and trails. Note: On some soil types, Campsite rotation is not effective and rehabilitation only is preferred.

• If exterior lighting is used, full cutoff light fixtures reduce light pollution and can save energy by focusing the light where you want it.

• Rustic looking fences shall be used whenever possible. A good example is the snake rail fence that was installed in Mohawk Campsite



INVASIVE SPECIES MANAGEMENT POLICY (RP-752-1):

Policy: Camp Babcock Hovey has many invasive species introduced in the United State or specifically, on the camp property. The management of this species shall be as follows-

A. TERRESTRIAL PLANTS –

Honeysuckle – remove by manual means, per Timber Stand Improvement Plan (TSI)

Multi-Flora Rose – remove by manual means, per TSI

Japanese Barberry – remove by manual means, per TSI

Wild Parsnip - (phototoxic) is Biennial mow so doesn't go to seed year two (currently a problem in the southern upper field, is repopulate from Willard Wildlife Management Area)

Garlic Mustard – Remove by pulling and disposing of in trash **Giant Hogweed** - Monitor for and if here call government (NOT Currently on Property)

B. AQUATIC PLANTS-

Hydria – Monitor boats for exposure, **Blue Green Algae** – Monitor for at Lakefront

C. AQUATIC ANIMALS -

Quahog and Zebra Mussels (Seneca Lake) – Monitor for in ponds. <u>Note boats</u> being used in the ponds shall be rinsed thoroughly before being removed from lakefront and shall be air dried for 48 hours before being used in the ponds.

D. FUNGUS

Geosmithia morbida - Monitor for fungus attacking Black Walnut limbs (not here yet)

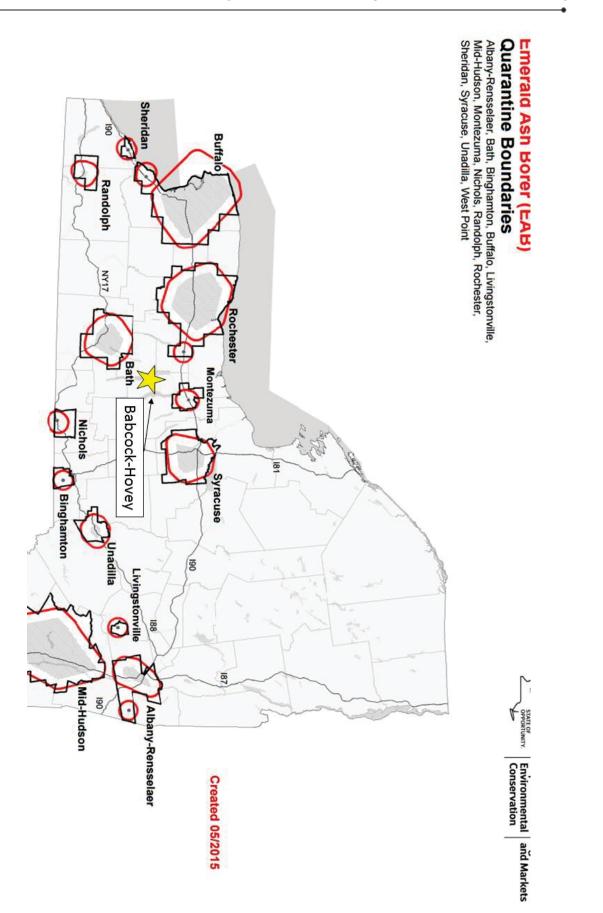
Armillaria mellea - Monitor for fungus attacking oak roots (fairly new in NYS)

E. INSECTS -

Woolly Adelgid - Monitor level of Hemlock Woolly Adelgid we have in Hemlocks (Cornell introducing insects to control). Hemlocks are the most major tree type found in the ravines.

Japanese Cedar Longhorn Beetle (JCLB) – monitor for – not here, in area, but in lower NY City area. Control by removing affected limbs in April/May before adult and BURN limbs. Will attach both Red Cedar and White Cedar.

Emerald Ash Borer (EAB) - Monitor for Emerald Ash Borer (EAB). We do not have, as of Spring 2015. <u>Control it by not allowing outside firewood into camp.</u> Not transporting firewood into Seneca County is currently the law. Seneca County now is quarantined area so no firewood out, either. Looking at doing an Ash Tree harvest during next logging before EAB is found at Camp.



CONSERVATION PROJECTS PROGRAM POLICY:

Policy: Available conservation projects are to be updated and documented on a yearly basis.

A list of conservation projects that can be done by a den, patrol, pack, squad, troop, team, or crew while in Camp. The list is posted. Staff are available who can instruct in conservation practice and how the project advances the conservation goals for the Camp. Available conservation projects are to be updated on a yearly basis. The projects shall advance the goals of the conservation plan, are meaningful, and assist the units in understanding conservation as it relates to the Camp.

- _____ 2016 Conservation Projects
- _____ 2016 Conservation Projects Completed
- _____ 2017 Conservation Projects
- _____ 2017 Conservation Projects Completed
- _____ 2018 Conservation Projects
- _____ 2018 Conservation Projects Completed
- _____ 2019 Conservation Projects
- _____ 2019 Conservation Projects Completed
- _____ 2020 Conservation Projects
- _____ 2020 Conservation Projects Completed
- _____ 2021 Conservation Projects (To be placed in new plan)
- _____ 2021 Conservation Projects Completed (To be placed in new plan)

Conservation Projects Completed-Babcock-Hovey

April 15, 2015 – December 15, 2015

- A. Soil Management:
 - 1. May/June cleaned culverts, main road & edge (stone) Hank
 - 2. August restore parking area (Penn Yan to Bridge) with quad rails so care not impending soil wear at edge of gorge
- B. Vegetation:
 - 1. July removed shoreline/ Eurasian milfoil (by summer camp Scouts)
 - November cleaned up tree debris- Onondaga- in preparation of seeding site
- C. Trail Management: 1. June/July (OA) cleared lakefront trail (summer camp scouts), cleaned Turkey Trail & Beaver Trail
- D. Forestry:
 - 1. July: Scribed Pine Trees (Lamoko) and treated Hank
 - July/ August: cleaned debris and pruned trees (bridge to Penn Yan) behind shop area -Hank
 - 3. November: TSI cut wild rose/wild grape between parking lot and nature.
 - 4. Planted non-preferred deer browse plants Waterford Spirea and Barberry at leach fields, shower houses, PF latrine and COPE latrine.

April 2016 – December 2016

Conservation Management Projects

- A. All Boy Scout Projects
- B. Selected Cub Scout Projects (C.S.)

SOIL MANAGEMENT

- 1. Clean culverts out.
- 2. Water Bars on trails, as needed.

WATER MANAGEMENT

- 1. Continue monitoring DO, in Pooler Pond.
- 2. Remove 50% cattails, east end of entrance pond (upper pond).
- 3. Remover Black Willow, fallen in pond and on bank; prune back (upper pond).
- 4. Remove debris 2 gorges/lakefront (C.S.).
- 5. Clean out debris at <u>16' falls</u> north ravine.

VEGETATION MANAGEMENT

- 1. Continue to remove invasive species (honeysuckle, barberry, multi-flora rose and cut grape per T.S. improvement packet.
- 2. Continue planting (weather permitting) "Traffic Control" rooted plants throughout camp.
- 3. Seed banks, as necessary, by Lake Front and pump station.
- 4. Seed Onondaga Camp Site with Matt Crance.

TRAIL MANAGEMENT

- 1. Continue to cut back vegetative growth, all trails and blaze, as needed.
- 2. Create corduroy bridges, as needed, on wet areas of all trails, especially Owl, north of Winter Cabins.

WILDLIFE MANAGEMENT

- Create windrows/shelters with blowdowns/cuttings for wildlife; outpost/JLT/off Owl Trail.
- 2. Plantings for wild turkey, in conjunction with local Turkey Federations.
- 3. Begin field cuts, east end, for song bird grasses.
- 4. Cut up limbs of white pine and cedar blowdowns by Trading Post.

FISHERIES MANAGEMENT

- 1. Clean last years weed growth out of ponds.
- 2. If moving aquatics (boats, canoes, etc.) to Pooler-sterilize/inspect first.

ENVIRONMENTAL MANAGEMENT

- 1. Monitor Ash trees for Emerald Ash Borer.
- 2. Continue to clean up trash, all campsites, dumpster area and trading post area. (C.S.)
- 3. Prep, crib, cloth, stone for dumpster (new area) and (rake, clean out site for parking equipment).
- 4. Re-route Health Lodge road and cloth/stone where designated.

FORESTRY

- 1. Scribe wounded specimen trees by cleaning bruised/wounded (hatchet marks) trunks/bark.
- 2. Prune road canopies back to open up for air flow/sun access (chapel road to Cayuga-Tuscarora).
- 3. Cut wild grape in live trees, main camp (high and low).
- 4. Nature-cut up cedar debris-crowns in gorge/cut up.

CONSERVATION MEETING MANAGEMENT POLICY:

Policy: A yearly conservation meeting shall be conducted, preferably in the spring. It shall be attended by member of the camp conservation committee and other conservation experts and those with an outside interest of Camp. Minutes shall be taken and attached here-in.

Insert yearly conservation minutes here.

2016
2017
2018
2019
2020
2021 (To be placed in new plan)

Camp Babcock-Hovey

Conservation Advisory Committee

April 15, 2016

Welcome-Hank Roenke

Hank has stated that he will retire after this year.

Packet includes last year's information and the minutes from March 27, 2015 meeting.

Hank	Sue
Peter	Bruce
Mike K	Hillary
Jack Wickham-Highway Supervisor	Scott Agnotti
Julie Hoister- Department of Health	
Bruce	
Marcus Rugland	
Don DeClerk	
Matt Crance	
Debbie Swift	
Chris Guarniere	
Jay Laitenberger	
Kyle Bunce	
Davis Lippitt	

Update on Camp-Facilities

- Pistol Are open for 14 and older.

- Can have Chalk Ball

- A lot of Blue Green Algae in the Finger Lakes that is toxic – glad for the pool.

- The old Staff area is the biggest problem area. The soil in that area has been abused.

- The area has been moved, new soil added, ran electric box behind tent. Tents run in two parallel rows to cut the cross traffic and abuse of the grounds.

- Work was also done on the Rangers house and the shop.

- Working on the cope/pf area. To be added this year: disc golf, mini golf, soccer, tough mutter, volley ball and to the water front an ice berg. Five yrs.' ago there was a trampoline add, it was a huge hit with the scouts. However we are not going for a water park theme.

- Updated Conservation Plan- policies we follow but never recorded. This will be an ongoing document for the next 5 years. Peter stated that the draft of the Conservation Plan is better than anything he has ever seen. GREAT JOB!

- Matt's work is outstanding, he will be a Silver Beaver recipient for 2016.

- Population of turkey is down. We use to have about 40.
- Deer population is about the same, no change seen there.
- No signs of any Fishers. A Bald Eagle has been seen flying over camp several times
- Number of raccoons are down, but no one is sure why. The number of skunks are up.
- Kyle spoke of the plot 10, need pooler pond to be cut and cleared.

Invasive Species:

- Sue-Advised make a plan of commercial treatment. Establish working land. Work a little bit every year.
- Make it one and done. Ask Amish if interested in lumber. In stand 1, 2, 3 trees need to be tended, mark trees that commercial does not want. In stand 2 trees should go away. GO thru and mark everything that you want removed. Keeping just want is wanted. Stand 3 needs opening, has to be harvested. Limit the removal of the ash trees, nothing under 12".
- Invasive is not the same as interfering. Vegetation needs to be removed, the grape vines and beach. Need to have a clean floor.
- State of NY is treating hemlock. We can apply for a grant, but the cut off was in November. They may still have some funds available.
- Lots 7, 8, & 9 is ready for some thinning and cleaning. We have lost 9/10 White Pines due to the strong winds over the winter months. In other camps they have been using pellets in the ground for invasive species, but this is very labor intensive.
- Educate scouts about the importance of invasive species, how to identify, how to handle.
- Bruce Gilman spoke about a Starry Stone Wart type of algae. We should be on the watch for it, it will grow up to 8', and it is very dense. It starts on the bottom of the lake as small star shaped tubers and will grow close to shore. It will change the fish population. Our lake front is the main concern.
- Blue Green algae: toxins are not in this area, but the Eastern area. Use common sense if algae is on top, don't go into the water. The algae is free floating and moves with the water and wind.
- Hillary offered to help teach the staff about the invasive species and in turn the staff will teach the scouts.
- Matt noted that Bloody Shrimp was found at Sampson, and asked if we should be concerned. Yes! Hillary will put Matt in touch with someone for help on this.

- Julie asked that we monitor for Blue Green algae. Don't let people or animals near the water if it is suspect.
- Zika virus, has not hit this area yet. Health department does not expect it to. But be aware, take care of areas that will breed mosquitos. Dump standing water.
- There was a raccoon and an Otter that tested positive for rabies recently in Seneca County.
- There was an outbreak of Hepatitis A, reminder to wash your hands. Keep on top of the scout for handwashing also.
- What is the outlook for fleas & ticks? Be aware and take precautions.

Trail Management:

- Work on signs and switch backs.

Water Management:

- It has been a good year. Receiving money for work to be done on the back road, stone & gravel. The Health Lodge will be worked on next year.
- Mike stated that the water system is done and the signs can come down this year.
- Purpose of flushing lines, gets the chlorine up. We could do chlorine boost but it the water sits in the lines it won't help. It is cheaper to flush the lines than to add chlorine.

Fisheries:

- The pond is holding up. No geese this year. Upper pond is spring fed, but not being used.

Camporee:

- If the numbers go above 2500 we will need places to park. They can loop around the field and have a 1 way drive.

Law Enforcement:

- Scott Agnotti offered to do some training ATV's riding and safety.
- Scott has been patrolling the property. He found a gentleman in his car sleeping with a loaded gun.
- Signs are needed for Archery & BB guns are ready and will be posted. Use of the range will be open to the public on the first Saturday of each month. We do not have to supervise this use. We will offer the open ranges for 5 years. We will add signs Air Guns Only. The ranges will not be open to the public during summer camp.

CONSERVATION COMMITTIE MEMBERS:

Hank Roenke, Chair Kyle Bunce, Camp Babcock-Hovey Ranger Peter Collinge, Council Executive Board Don DeClerck, Director of Camp Operations Jason Dunham, Trail Maintence Coordinator Mike Knittel, Camp Properties Chairman Matthew Crance, Babcock-Hovey Properties Committee Chairman

AUTHORIZATION:

Title	Names
Scout Executive:	Stephen Hoitt
President:	Robert Kessler
V.P. Camping	Daniel Bickel

Signatures

Signature of Scout Executive

Date

Signature of Council President

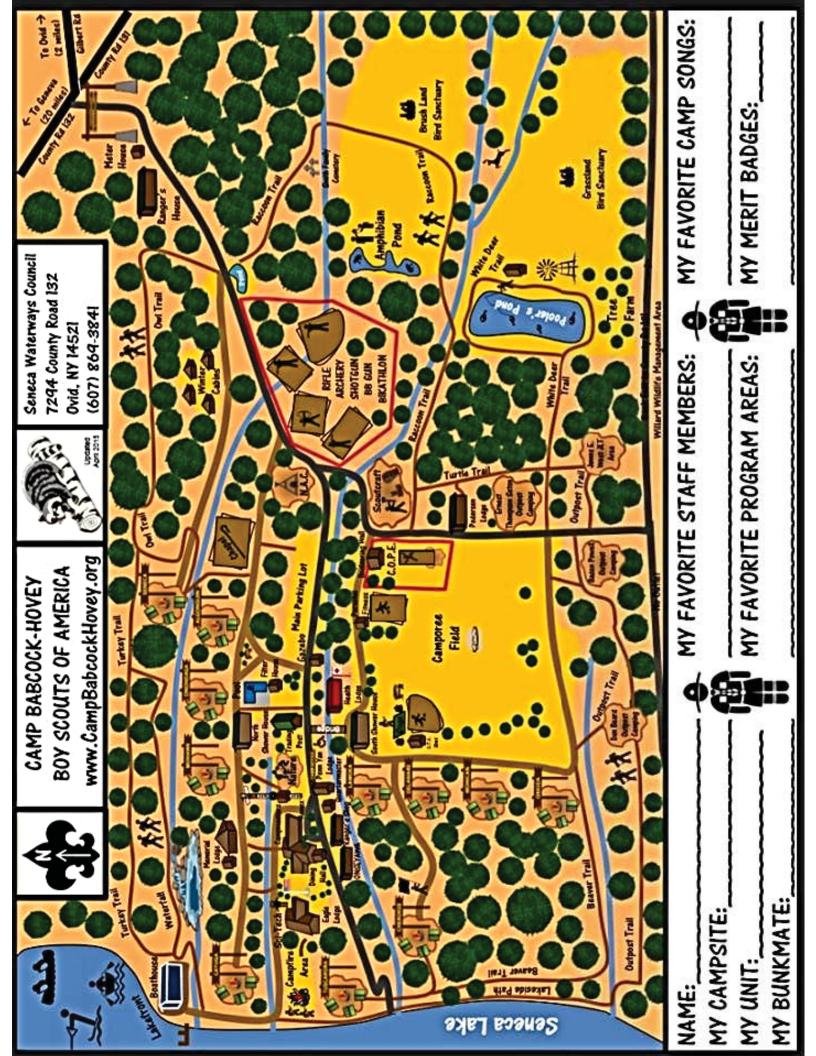
Date

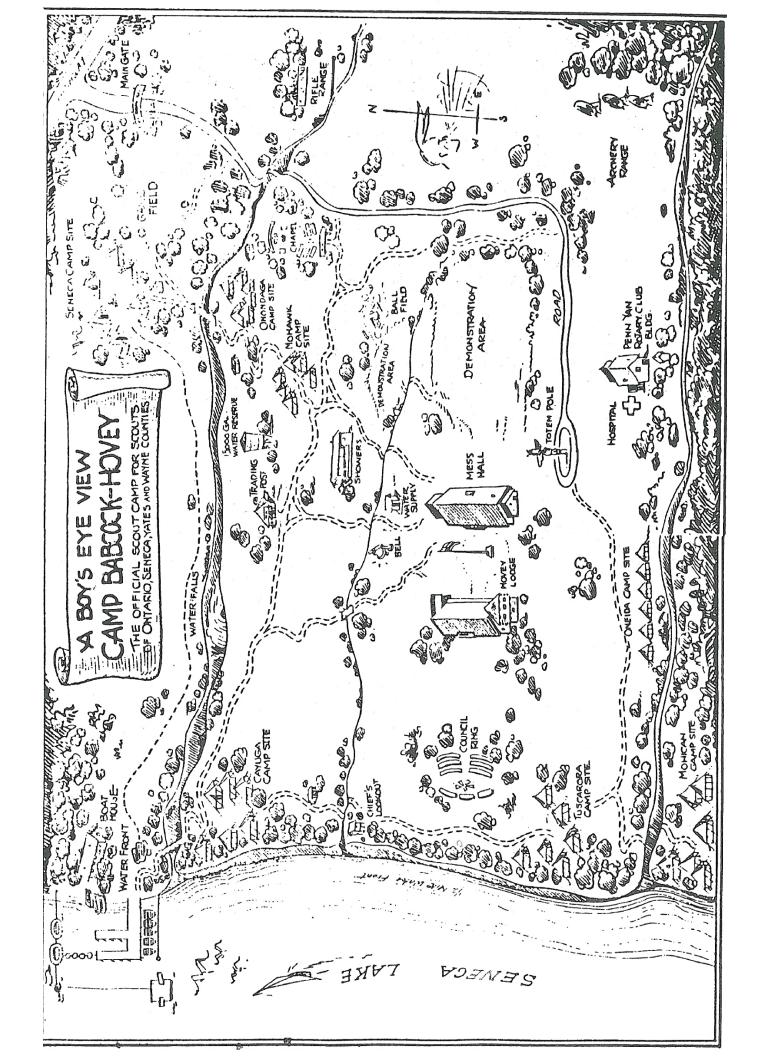
Signature of V.P. of Camping

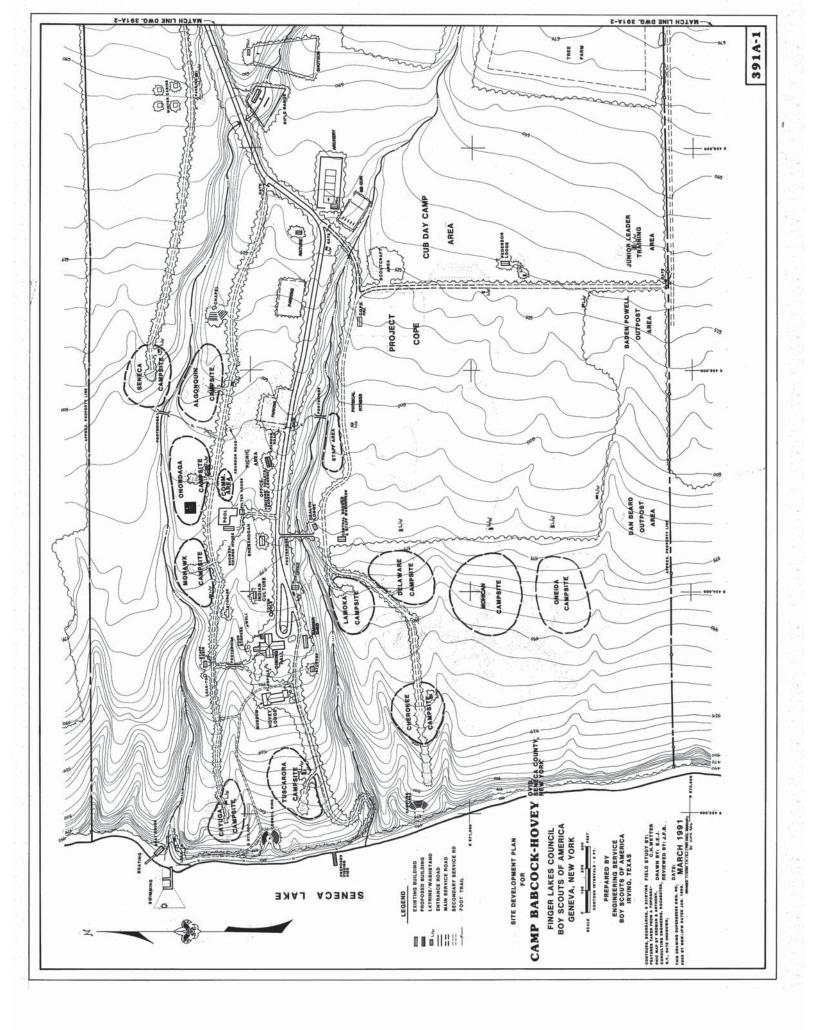
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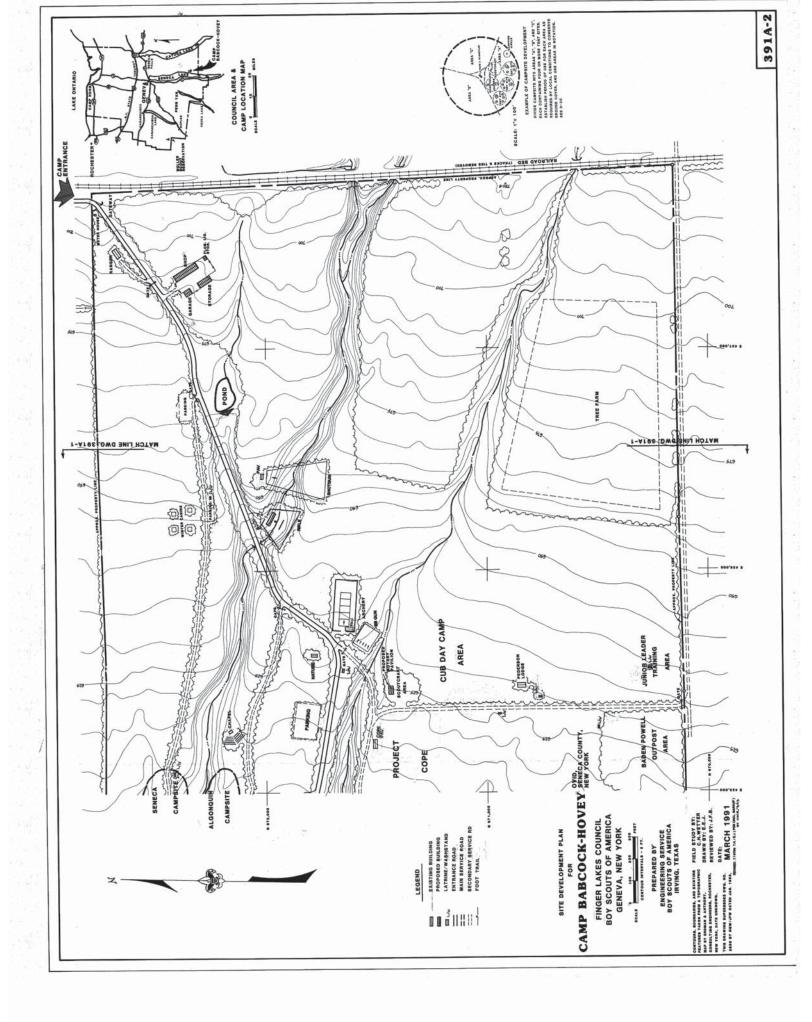
APPENDIX "A" MAPS

<u>Maps of the Property</u>: Current Camp Map Historical Camp Map (1950's) Historical Arial Photographs Historic Topographical Maps









APPENDIX "B" KEY CONTACTS Key Contacts: DEC & Other

2016 Camp Babcock-Hovey Conservation Committee Guest List

Jack Wickham	Ron Vanacore	Mike Snyder	Scott Smith	Hank Roenke	Alex Peck	Hillary Mosher	Jay Laitenberger	Mike Knittel	Robert Kessler	Sue Keister	Brice June	Julie Hoster	Christopher Guarniere	Bruce Gilman	Bill Garman	John Foust	Jim Eckler	Jason Dunham	Don DeClerck	Matt Crance	Peter Collinge	Kyle Bunce	Melissa Brand	Dan Bickel	Scott Angotti
7299 S. Main Street		2117 Water Street	7291 Coon Rd.	24 Maplewood Dr.	5 Concord Park	300 Pultney Street	43 Fenton Dr.	423 Stottle Rd.	2 State Street, Suite 700	7025 Harpers Ferry Rd.	6274 E. Avon Lima Rd.	31 Thurber Drive	2320 Bright-Hen. TL Rd.	3325 Marvin Sands Dr.	358 William Street	3325 Marvin Sands Dr.	1385 Morgan Rd.	3782 Co. Rd. #5	7131 Gulick Rd.	119 C Kings Dr.	77 Tall Oak Lane	7294 Co. Rd. #132	31 Thurber Dr.	39 Whippletree Rd.	6274 E. Avon Lima Rd.
Ovid		Ovid	Bath	Geneva	Naples	Geneva	Rochester	Scottsville	Rochester	Wayland	Avon	Waterloo	Rochester	Canandaigua	Geneva	Canandaigua	Savannah	Stanley	Naples	Liverpool	Pittsford	Ovid	Waterloo	Fairport	Avon
NY		NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY
14521		14521	14810	14456	14512	14456	14624	14546	14614	14572	14414	13165	14623	14424	14456	14424	13146	14561	14512	13090	14534	14521	13165	14450	14414
Highway Spr. / T. of Ovid	USDA-NRCS	Water Dept. Spr. V. of Ovid	NYSDEC	Resources Mgmt. Chair	2014 Program Direct, BH	Finger Lakes Institute, HWS	Aquatics. Chair/BH Camp Dir.	Property Committee Chair	Woods Oviatt Gilman, LLP		Forester NYSDEC–Avon	Public Health Sanitation	Dir. Support Services	Prof. FLCC	315-719-8129	Asst. Prof/FLCC-Dept. Chair	Wildlife Biologist – NYSDEC	BH Trail Boss	Camp Operations Director	BH Properties Chair	SWC Exe. Board	BH Ranger		VP of Camping	ECO NYSDEC- Seneca Co.
<u>townofovidhighway@yahoo.com</u>	ronald.vancore@ny.usda.gov	<u>ovidy@fltg.net</u>		hroenke@verizon.net	alexanderpeck417@gmail.com	<u>mosher@hws.edu</u>	jlaitenberger@gmail.com	mknittel@bergmannpc.com	rkessler@woodsoviatt.com	<u>susanikeister@frontiernet.net</u>	brice.june@dec.ny.gov	jhoster@co.seneca.ny.us	christopher.guarniere@scouting.org	bruce.gilman@flcc.edu	wgarman@rochester.rr.com		jtecker@gw.dec.state.ny.us	Jason dunham@yahoo.com	ddeclerck@bsamail.org	matthewcrance@gmail.com	collinge@localnet.com	kyle.bunce@scouting.org	mbrand@co.seneca.ny.us	dbickel@frontiernet.net	sdangott@gw.dec.state.ny.us

APPENDIX "C" FORESTRY MANAGEMENT PLAN FORESTRY MANAGEMENT PLAN New York State Department of Environmental Conservation

2

Division of Lands and Forests, Region 8

6274 East Avon-Lima Road, Avon NY 14414 **Phone:** (585) 226-5330 • **Fax:** (585) 226- 6323 **Website:** www.dec.ny.gov



FOREST STEWARDSHIP PLAN

Forest stewardship is the wise management and use of forest resources to ensure their health and productivity for the future with regard for generations to come. It requires the understanding that human life spans are short and that we are the caretakers of something that future generations will need to use. The recommendations in this plan are made assuming that the owners have a decent land ethic for their property and are protecting it from damage that would reduce its capacity to produce the multiple benefits that forest lands provide to both to the owners and to society in general.

DATE: April 2011	TOWN: Ovid				
OWNER: Seneca Waterways Council BSA	COUNTY: Seneca				
ADDRESS: 7294 County Rd 132	AERIAL PHOTO: see satellite image				
Ovid, NY 14521	WATERSHED: Finger Lakes 04140201				
Email: hroenke@verizon.net					
PHONE NUMBER: Hank- 315-789 -1676	HOME ADDRESS: same				
	Stewardship Analysis Project (SAP)				
TOTAL ACRES: 282 acres	Ranking of land Potential H – 75 M - 121				
STEWARDSHIP ACRES: 210	L - 14				

LANDOWNER GOAL STATEMENT: To manage the land for multiple benefits including timber, wildlife, recreation, and aesthetics.

REPORT BY: Brice June Service Forester

- ADDRESS: NYS DEC 6274 East Avon-Lima Road Avon, New York 14414
- PHONE: 585.226.5330

PROPERTY DESCRIPTION

This parcel contains native hardwoods, softwoods, and plantation softwoods. The property is on the north side of DEC Wildlife property and south of the golf course. This property offers recreational opportunities, and a variety of wildlife habitat. The entire parcel is 282 acres, of which 210 acres are forested, 2 acres are ponds, 63 acres are fields, and the last 7 acres are buildings and open space. Good road frontage provides access to the property and allow for recreational pursuits and timber management. The topography is partially flat with patches of wet soil, moderately sloped areas, and some steep ravines. Due to some steep areas and proximity to Seneca Lake BMPs must be followed during timber harvesting activities. Logging has been done three or more times in the last 20 yrs, parts of the property are under even aged management and some areas are under uneven aged. Some problems noted on the property are vines and invasive plants such as Honeysuckle, Multiflora Rose, and Japanese Barberry. The managers have expressed an interest in forest management. For more detail, aerial maps are included.

SOILS

The majority of soils on the property are rated as good for timber productivity –Aurora silt loam 15- 25% slope, Aurora and Farmington soils 25 -70% slopes, Cazenovia silt loam 3 - 40% slope, Darien-Danley-Cazenovia silt loams 3 - 8% slope, Honeoye silt loam, 2- 25% slopes, and Lima silt loam 0 - 8% slope make up the six soil types on the property. There is also a Federal land classification of Stewardship Analysis Potential (SAP), they categorize by a 1-3 ranking system. For soil information see www.websoilsurvey.nrcs.usda.gov

STAND DESCRIPTIONS

The following is a description of the various forest stands found on the property. A stand is considered to be an area of the forest that is relatively uniform in species composition or age and can be managed as a single unit. At the top of each description the forest type is listed along with size class, level of stocking, site class and acreage. Please refer to the forest type map on the satellite image for stand delineations

Three size classes are recognized: (1) *Seedling-Sapling* [1"- 3"], (2) *Pole* [4"-11"] and (3) *Sawtimber* [12" and up]. Three categories are used for the level of stocking: (1)*Understocked*, (2) *Well-stocked*, and (3) *Overstocked*. An understocked stand would lose growth by not having enough stems to utilize the growing potential of the site adequately. An overstocked stand has too many stems in competition, and a corresponding reduction in the growth rate. A well-stocked stand represents a somewhat ideal density for realizing the growth potential on a site. Site class is a quality measure of the ability of the area to support tree growth. It is based on tree height at age 50 for natural stands and age 25 for plantations. Sites will be classified either *Poor, Good* or *Excellent*.

Timber Stand Improvement = (TSI)

Sample basal area points were taken in some of the stands with ocular estimates for species composition.

Stand 1.

Acres - 35; Poletimber stand; Site - good; well-stocked

This stand is a Transition Hardwoods type stand that was mostly Oak Hickory in the past but now is heading into Northern Hardwoods. Tree species consist of Sugar Maple, Hickory, Red Oak, Red Maple, Ironwood, Beech, White Ash, White Pine, and Black Walnut. The stand has gone to an uneven aged management schedule with mostly poletimber and scattered sawtimber large hickory, white pine, and a few oak. Stocking is variable due to some 20 year old harvesting. The large white pines are great roosting trees for turkeys and raptors. Some of the larger trees could be harvested in the next harvest. Some timber stand improvement would be beneficial to remove cull and undesirable trees such as ironwood. Reevaluate in 7-10 yrs after thinning.

Stand 2.

Acres - 15; Poletimber stand; Site - good; well-stocked

This stand is Transition Hardwood heading towards Northern Hardwoods. Tree species consist of mainly Sugar Maple, Red Oak, Hickory, White Oak, Basswood, Red Maple, Beech, White Pine, White Ash, and Ironwood. The trees are mostly poletimber with scattered Sawtimber remaining. Stocking is variable due to some long past harvesting. TSI could be done to remove cull and undesirable species. Reevaluate in 7-10 yrs after thinning.

Stand 3.

Acres - 27; Sawtimber stand; Site - good; well-stocked

This stand is Mixed Hardwoods Hemlock consisting of Hemlock, Red Oak, White Pine, Aspen, White Ash, Soft Maple, Hickory, Sugar Maple, Black Cherry, White Oak, Cedar, and ironwood. Some areas were harvested in the past, trees are mostly Sawtimber or Poletimber. The understory contains high levels of Multiflora rose, Honeysuckle, and vines in places and should be managed accordingly. TSI and herbicide spraying of invasive plants may be needed to encourage desirable regeneration along with cutting and treating vines. Some low grade logging could be done during next harvest. Reevaluate in 7-10 yrs after thinning.

Stand 4.

Acres - 5; Poletimber stand; Site - good; well-stocked

The stand is partially failed Softwood Plantation transitioning to Hardwoods with camp sites mixed in. Species consist of White Pine, White Ash, Black Walnut, and Sugar Maple. Larger Walnuts were harvested in the past. Reevaluate in 7-10 yrs.

Stand 5.

Acres - 57; Sawtimber stand; Site - good; well-stocked

This stand is Mixed Hardwoods Hemlock consisting of Hemlock, Red Oak, White Pine, Tulip, White Ash, Soft Maple, Hickory, Sugar Maple, Beech, White Oak, Basswood, and ironwood. A few trees were harvested in the past, but steep slopes create difficulties for management. Trees are mostly Larger Sawtimber with good form and great heights. The stand is mostly ravine corridor throughout the property. Some minimal logging could be done during next harvest. Reevaluate in 7-10 yrs after thinning.

Stand 6.

Acres - 11; Poletimber stand; Site - good; well-stocked

The stand is mixed Softwood Plantation transitioning to Hardwoods with openings mixed in. Species consist of White Pine, Red Pine, Red Cedar, White Ash, Black Walnut, Red Oak, Ironwood, and Sugar Maple. Scattered trees were harvested in the past. Some TSI could be done by removing cull and working on spacing. Reevaluate in 7-10 yrs.

Stand 7.

Acres - 11; Poletimber stand; Site - good; well-stocked

This stand is Mixed Hardwoods consisting of Red Oak, White Pine, Sugar Maple, White Ash, Soft Maple, Hickory, Black Cherry, Basswood, and ironwood. A few trees were harvested in the past, but mostly uniformly stocked. Trees are mostly larger poletimber and small sawtimber with good form and heights. Some TSI could be done to remove cull and work on crop tree release. Reevaluate in 7-10 yrs after thinning.

Stand 8.

Acres - 4; Poletimber stand; Site - good; well-stocked

The stand is partially Black Locust Plantation transitioning to mixed hardwoods consisting of Red Maple, Tulip, Red Oak, White Ash, and Black Walnut. Black locust would be a good source of posts and firewood if needed. Some crop tree release should be done along with cull removal. Reevaluate in 7-10 yrs.

Stand 9.

Acres - 36; Sawtimber stand; Site - good; over-stocked

The stand is a mixture of Softwood Plantations consisting of Norway Spruce, White Pine, Red Pine, Scotch Pine, Larch, White Ash, Aspen, Red Oak, Ironwood, and Sugar Maple. Some variation in size exists between sawtimber and poletimber. Some thinning should be done by removing every third row in stands where the rows are evident and every third tree in area where rows are not clear. Thinning might be able to be done commercially if local markets are found. Reevaluate in 7-10 yrs.

Stand 10.

Acres - 3; Poletimber stand; Site - good; well-stocked

This stand is Black Walnut type consisting mostly of Black Walnut. Trees are mostly large poletimber transitioning to sawtimber. No work is needed at this time. Reevaluate in 7-10 yrs.

Stand 11.

Acres - 3; Poletimber stand; Site - good; well-stocked

The stand is Softwood Plantation with openings mixed in. Species consist of Norway Spruce. No work is needed at this time. Reevaluate in 7-10 yrs.

Stand Young Plantation.

Acres - 3; Seedling sapling stand; Site - good; under-stocked

The stand is Softwood Plantation with openings mixed in. Species consist of Norway Spruce, White Spruce, Red Cedar, and White Pine. No work is needed at this time. Reevaluate in 7-10 yrs.

Fields: 63 acres

Buildings and open space: 7 acres

Environmental Quality Incentives Program (EQIP)

-4-

They are administered by the Natural Resource Conservation Service in Seneca County (315 568 6346 ex. 191) or see the national website at <u>http://www.nrcs.usda.gov/programs</u>

EQIP 666 - Thinning - some areas could benefit from TSI, and some with spraying.

EQIP 655 - Forest Trails and landing improvement - trails could have water bars added to reduce erosion.

RARE AND ENDANGERED SPECIES

A check of the Natural Heritage database found no threatened species to be present on the property.

ARCHEOLOGICAL SITES and HERITAGE AREAS

A search of the NYS Office of Parks, Recreation & Historic Preservation (OPRHP) database found 50% of archeological significance on the wooded part of the property. Typical forestry management operations are not likely to be curtailed within these designated areas. However, contacting the OPRHP prior to any substantial land use changes to ascertain their impact is advisable. The OPRHP general number is 518-237-8643 and their website

that contains an interactive map for archeological and historic sites is http://www.nysparks.state.ny.us/shpo/resources/index.htm

SOIL AND WATER PROTECTION

Generally, forest management activities are exempt from the Environmental Conservation Law that regulates fresh water wetlands. However, road building (placing fill in a wetland), drainage activities, clear cutting, or building dwellings in a wetland or within 100 feet of a wetland all require permits. Consult a DEC wetland specialist for wetland boundary delineation or when planning any major disturbance in a wetland. By applying the Timber Harvesting Guidelines for New York, and following Best Management Practices (BMP's), soil and water resources can be protected.

Research has shown that it is not the act of cutting trees or their absence that causes erosion. Studies made to date estimate that 90 to 95 percent of erosion results from exposed soil in roads and from concentrated water runoff on poorly drained soils.<u>http://www.dec.state.ny.us</u>

For wetlands information see <u>www.boquetriver.org</u>

Federal regulations are administered by the Army Core of Engineers see www.wetlands.com/regs/tlpgeola.htm For DEC regulations see <u>www.dec.state.ny.us</u>

WILDLIFE HABITAT

The potential for wildlife species is linked to the combination of environmental factors, such as food, water, cover, and their spatial distribution, that a given species needs to survive and reproduce in a given area. Each species has unique habitat requirements. Food sources include fruit and nuts, foliage, wood, insects and other animals. Cover includes hiding places that provide animals with protection from weather, predators, or other dangers. Specialized types of cover include breeding cover, escape cover, resting cover, and travel cover. Sources of water are streams, ponds, temporary pools and springs.

To increase species richness (the number of different species) in your forest, it is important to increase both horizontal and vertical diversity to provide as varied a habitat as possible. Horizontal diversity is the intermixing of plant communities across a large area. For example, a northern hardwoods community, a grass community, and a spruce/fir community located near each other creates a high degree of horizontal diversity. Vertical diversity occurs when there are many layers of plants. For example, moss on rocks, vines over logs, flowers and grasses, small bushes and tree seedlings, saplings and other small trees, and tall trees, all growing in a small area create many layers.

If you have a small area and you are interested in species richness, it is especially important to consider the surrounding area. The forest cover type on your property may be unique and by modifying it, you could decrease the overall richness of your neighborhood. Or, if your cover type is the same as your neighbors, changing it could increase the diversity considerably.

Proper forest management benefits many species of wildlife by creating more diverse habitat, increasing food producing plants and creating cover. The landowner can improve wildlife on the property by accomplishing one or more of the following projects:

1. Creating Brush Piles - These will serve as cover for small mammals, especially snowshoe hare, birds and reptiles and amphibians. Piles can be created from limbs and logging debris.

 Releasing and Caring for Apple and other Fruit Trees - These trees are an important source of food for many species of wildlife. By releasing them from competing, their wildlife value will be prolonged.
 Den and Cavity Tree Preservation - Many species of birds and mammals require cavities in dead or living trees for nesting or shelter. The number of these trees can be a limiting factor in the number of bird and wildlife species found on the property. Snag trees may already be present on the property or they can be created by girdling trees.

4. Nest boxes and other nesting structures installed by the landowner can provide additional cover.

5. Trees, shrubs and vines that have wildlife value can be planted as food sources. Seeds of herbaceous plants can be sown.

6. Creating and Maintaining Openings - These will serve to enhance both the horizontal and vertical diversity of the property. Openings are dominated by shrub and herbaceous plant growth. Openings can be created during harvesting activities or by cutting trees and leaving them. Downed trees provide additional cover for small mammals, reptiles and amphibians.

FISHERIES HABITAT

The management practices that occur on individual parcels have the potential to affect fisheries and water quality on other properties in the watershed. Utilization of Best Management Practices can prevent a negative watershed and fisheries impact. Further advice or guidance can be obtained by the DEC Fisheries Department at 226-5343. Every property does not contain fisheries habitat.

RECREATION AND AESTHETICS

The development of access roads and trails, which are important in managing for forest products, can also be used for hiking, skiing, nature interpretation, or other recreational pursuits. Seeding these trails and roads with native grasses can increase the aesthetics and be valuable to wildlife. Areas that have served as log landings, when properly located and seeded, can be effective food plots for wildlife and parking/turnaround areas for recreational use. Thinning, when timed properly, will allow the trees to grow at faster rates, becoming larger

and creating a more aesthetically pleasing woodlot. Retaining the services of a forester is highly recommended to ensure that the work be carried out with proper management and care to protect future recreation and aesthetic values. Recreational opportunities are as varied and diverse as the many individuals owning forest land; the landowner's objectives and goals will dictate the possible recreation and aesthetics scenarios.

FOREST HEALTH

A healthy forest is more likely to be compatible with forest stewardship plans than an unhealthy forest. Just like people, healthy forests are better able to resist damaging agents than unhealthy ones. Agents that cause damage to individual trees include insects, diseases and wildlife pests, along with adverse weather events and undesirable activities by people, such as wounding of trees and air pollution. Types of damage range from reduced visual quality, deformity, growth loss, or wood destruction, to dying back of branches or premature mortality. The extent of damage ranges from a few trees to whole forest stands. When a few trees are affected the forest remains healthy, but when most of the trees are damaged the forest is at risk.

Most insects, diseases, wildlife and weather events are part of a set of natural forces changing your forest. Some of these are beneficial or do not cause much damage. Others are extensive and cause severe damage (for example, insect outbreaks). Maintaining the health of the forest to help prevent serious damage is something to keep in mind. Preventive care will help ensure that the forest provides the desired benefits.

Maintaining the health of the forest is important to help prevent damaging problems from interfering with the benefits received from the forest. Consider the following general guidelines to maintain forest health:

- 1. Consider that some amount of damage from disease, wildlife pest, insects, and weather is normal and can be beneficial to the overall health of the forest.
- 2. Remove excessive numbers of over mature, weak or damaged trees that are most likely to be affected by damaging agents. However, consider that some of these trees are beneficial to certain wildlife species.
- 3. Encourage mixtures of tree species to minimize damage from problems that attack specific types trees.
- 4. Discourage tree species that are not well adapted for the climate and soil properties in the area.
- 5. Maintain a density of trees that provides them with adequate growing space.
- 6. Avoid wounding your trees and compacting the soil during treatments and recreational activities.
- 7. Prevent livestock from grazing in the woods.
- 8. Avoid implementing treatments during or soon after events like droughts or outbreaks of insects or diseases.
- 9. Stay informed of pest alerts and current problems.
- 10. Monitor the forest frequently for symptoms of damaging agents.
- 11. Consider utilizing pest suppression programs recommended by the state or county forestry agency.
- 12. Support regulations geared toward reducing the spread of non-native pests, and reducing levels of air pollution.
- 13. Follow quarantine regulations for specific pests and their host plants.
- 14. Salvage dead or damaged trees after a problem occurs.

American Tree Farm System - consider joining; for more information contact your DEC service forester or NYS Tree Farm 800-836-3566

New York Forest Owners Association - consider joining - see brochure enclosed with your management plan. **Conservation Reserve Program, Wetland Reserve Program, Wildlife Habitat Improvement Program** - these programs are available to landowners to assist them in undertaking projects on their property by providing technical advice and financial assistance. They are administered by the Natural Resource Conservation Service in Seneca County (315 568 6346 ex. 191) or see the national website at <u>http://www.nrcs.usda.gov/programs/</u>

As owner(s) I(we) agree that this stewardship plan reflects my(our) goals and objectives for management of this property.

Signature

Signature

8

New York State Department of Environmental Conservation FOREST STEWARDSHIP PLAN - ACTIVITY SCHEDULE 10 Years

Owner: BSA

Prepared by: <u>Brice June</u>

Date: April 2011

YEAR	STANDS	MANAGEMENT ACTIVITY	PRIORITY
2011-14	3,7	Invasive plant treatments, trail work, vine cutting.	High
2011-16	1, 3, 7, 8	TSI and or firewood harvest.	High
2011-15	6, 9	Consider commercial softwood sale to focus on row thinning.	High
2016-20	ALL	Work on any uncompleted work	Med
always	ALL	Continue to treat invasive plants and grapevine/Ivy to keep it in check	High
2020	ALL	Update management plan, reevaluate stands. Evaluate stands 1,3,5, 7 for low grade scrag sale.	High
20			
20			
20			
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APPENDIX "D" SOIL RESOURCE REPORT Soil Resource Report as provided by the USDA



United States Department of Agriculture

NRCS

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants Custom Soil Resource Report for Seneca County, New York



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http:// offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/? cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soillandscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Custom Soil Resource Report

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Map Unit Legend

Seneca County, New York (NY099)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AI	Alluvial land	1.5	0.5%
AzF	Aurora and Farmington soils, 25 to 70 percent slopes	44.9	14.9%
СеВ	Cazenovia silt loam, 3 to 8 percent slopes	41.5	13.8%
CeC3	Cazenovia silt loam, 8 to 15 percent slopes, eroded	12.1	4.0%
ChD	Cazenovia soils, 15 to 25 percent slopes	15.4	5.1%
ChE	Cazenovia soils, 25 to 40 percent slopes	3.2	1.1%
DdB	Darien-Danley-Cazenovia silt loams, 3 to 8 percent slopes	59.2	19.6%
HnB	Honeoye silt loam, 2 to 8 percent slopes	20.9	6.9%
HnC	Honeoye silt loam, 8 to 15 percent slopes	10.8	3.6%
HnD	Honeoye silt loam, 15 to 25 percent slopes	7.6	2.5%
LtA	Lima silt loam, 0 to 3 percent slopes	5.6	1.8%
LtB	Lima silt loam, 3 to 8 percent slopes	63.6	21.1%
OvA	Ovid silt loam, 0 to 3 percent slopes	0.1	0.0%
W	Water	15.2	5.0%
Totals for Area of Interest		301.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic

classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar

interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Seneca County, New York

Al—Alluvial land

Map Unit Setting

National map unit symbol: 9wmm Elevation: 100 to 3,000 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Not prime farmland

Map Unit Composition

Udifluvents and similar soils: 45 percent Fluvaquents and similar soils: 45 percent Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents

Setting

Landform: Flood plains Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Dip Down-slope shape: Concave Across-slope shape: Concave Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 5 inches: gravelly silt loam H2 - 5 to 70 inches: very gravelly sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: A/D

Description of Udifluvents

Setting

Landform: Flood plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Talf Down-slope shape: Concave Across-slope shape: Convex Parent material: Alluvium with a wide range of texture

Typical profile

H1 - 0 to 4 inches: very gravelly loam *H2 - 4 to 70 inches:* very gravelly sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 24 to 72 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: A

Minor Components

Wallkill

Percent of map unit: 5 percent Landform: Flood plains

Sloan

Percent of map unit: 5 percent Landform: Flood plains

AzF—Aurora and Farmington soils, 25 to 70 percent slopes

Map Unit Setting

National map unit symbol: 9wn2 Elevation: 100 to 1,300 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Not prime farmland

Map Unit Composition

Aurora and similar soils: 40 percent Farmington and similar soils: 40 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Farmington

Setting

Landform: Benches, ridges, till plains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till or congeliturbate derived from limestone, dolomite, shale, and sandstone, and in many places mixed with wind and water deposits

Typical profile

H1 - 0 to 3 inches: silt loam

H2 - 3 to 15 inches: silt loam

H3 - 15 to 19 inches: unweathered bedrock

Properties and qualities

Slope: 25 to 70 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Available water storage in profile: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7e Hydrologic Soil Group: D

Description of Aurora

Setting

Landform: Benches, ridges, till plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Side slope Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till derived mainly from calcareous shale, with some limestone and sandstone

Typical profile

H1 - 0 to 13 inches: silt loam
H2 - 13 to 32 inches: silty clay loam
H3 - 32 to 36 inches: weathered bedrock

Properties and qualities

Slope: 25 to 75 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None

Frequency of ponding: None *Calcium carbonate, maximum in profile:* 15 percent *Available water storage in profile:* Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7e Hydrologic Soil Group: D

Minor Components

Lansing Percent of map unit: 5 percent

Cazenovia Percent of map unit: 5 percent

Danley

Percent of map unit: 5 percent

Honeoye

Percent of map unit: 3 percent

Rock outcrop

Percent of map unit: 2 percent

CeB—Cazenovia silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wn5 Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: All areas are prime farmland

Map Unit Composition

Cazenovia and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cazenovia

Setting

Landform: Till plains, reworked lake plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till that contains limestone with an admixture of reddish lakelaid clays or reddish clay shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 31 inches: silty clay loam

H3 - 31 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C

Minor Components

Unnamed soils

Percent of map unit: 5 percent

Ovid

Percent of map unit: 5 percent

Romulus

Percent of map unit: 5 percent *Landform:* Depressions

CeC3—Cazenovia silt loam, 8 to 15 percent slopes, eroded

Map Unit Setting

National map unit symbol: 9wn8 Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Not prime farmland

Map Unit Composition

Cazenovia and similar soils: 70 percent Minor components: 30 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cazenovia

Setting

Landform: Till plains, reworked lake plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till that contains limestone with an admixture of reddish lakelaid clays or reddish clay shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 31 inches: silty clay loam

H3 - 31 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4e Hydrologic Soil Group: C

Minor Components

Ovid

Percent of map unit: 5 percent

Romulus

Percent of map unit: 5 percent *Landform:* Depressions

Schoharie

Percent of map unit: 4 percent

Danley

Percent of map unit: 4 percent

Honeoye

Percent of map unit: 4 percent

Ontario

Percent of map unit: 4 percent

Aurora

Percent of map unit: 4 percent

ChD—Cazenovia soils, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 9wn9 Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Not prime farmland

Map Unit Composition

Cazenovia and similar soils: 80 percent Minor components: 20 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cazenovia

Setting

Landform: Till plains, reworked lake plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Side slope Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till that contains limestone with an admixture of reddish lakelaid clays or reddish clay shale

Typical profile

H1 - 0 to 8 inches: silt loam

- H2 8 to 31 inches: silty clay loam
- H3 31 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4e Hydrologic Soil Group: C

Minor Components

Danley

Percent of map unit: 4 percent

Aurora

Percent of map unit: 4 percent

Ontario

Percent of map unit: 4 percent

Ovid

Percent of map unit: 4 percent

Honeoye

Percent of map unit: 4 percent

ChE—Cazenovia soils, 25 to 40 percent slopes

Map Unit Setting

National map unit symbol: 9wnb Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Not prime farmland

Map Unit Composition

Cazenovia and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cazenovia

Setting

Landform: Till plains, reworked lake plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Side slope Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till that contains limestone with an admixture of reddish lakelaid clays or reddish clay shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 31 inches: silty clay loam

H3 - 31 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 25 to 40 percent *Depth to restrictive feature:* More than 80 inches *Natural drainage class:* Moderately well drained Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr) Depth to water table: About 24 to 48 inches Frequency of flooding: None Frequency of ponding: None Calcium carbonate, maximum in profile: 15 percent Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 6e Hydrologic Soil Group: C

Minor Components

Danley

Percent of map unit: 5 percent

Aurora

Percent of map unit: 5 percent

Honeoye

Percent of map unit: 5 percent

DdB—Darien-Danley-Cazenovia silt loams, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wnr Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: All areas are prime farmland

Map Unit Composition

Darien and similar soils: 35 percent Danley and similar soils: 30 percent Cazenovia and similar soils: 25 percent Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Darien

Setting

Landform: Hills, till plains, drumlinoid ridges Landform position (two-dimensional): Summit, footslope Landform position (three-dimensional): Base slope Down-slope shape: Concave Across-slope shape: Linear Parent material: Loamy till derived predominantly from calcareous gray shale

Typical profile

H1 - 0 to 10 inches: silt loam

H2 - 10 to 24 inches: silty clay loam

H3 - 24 to 29 inches: gravelly silty clay loam

H4 - 29 to 60 inches: channery silty clay loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3w Hydrologic Soil Group: C/D

Description of Danley

Setting

Landform: Hills, till plains, drumlinoid ridges Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till derived predominantly from calcareous gray shale

Typical profile

H1 - 0 to 8 inches: silt loam H2 - 8 to 11 inches: silt loam H3 - 11 to 24 inches: silty clay loam H4 - 24 to 60 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent Available water storage in profile: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C/D

Description of Cazenovia

Setting

Landform: Till plains, reworked lake plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Loamy till that contains limestone with an admixture of reddish lakelaid clays or reddish clay shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 31 inches: silty clay loam

H3 - 31 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C

Minor Components

llion

Percent of map unit: 5 percent Landform: Depressions

Unnamed soils

Percent of map unit: 5 percent

HnB—Honeoye silt loam, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wp8 Elevation: 400 to 1,300 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: All areas are prime farmland

Map Unit Composition

Honeoye and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Honeoye

Setting

Landform: Drumlins, till plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy till derived from limestone, dolomite, and calcareous shale, and from lesser amounts of sandstone and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam H2 - 8 to 26 inches: silt loam

H3 - 26 to 60 inches: gravelly loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C

Minor Components

Unnamed soils

Percent of map unit: 5 percent

Lima

Percent of map unit: 5 percent

Appleton

Percent of map unit: 5 percent

HnC—Honeoye silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9wp9 Elevation: 400 to 1,300 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Farmland of statewide importance

Map Unit Composition

Honeoye and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Honeoye

Setting

Landform: Drumlins, till plains Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy till derived from limestone, dolomite, and calcareous shale, and from lesser amounts of sandstone and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 26 inches: silt loam

H3 - 26 to 60 inches: gravelly loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3e Hydrologic Soil Group: C

Minor Components

Lima

Percent of map unit: 5 percent

Appleton

Percent of map unit: 5 percent

Unnamed soils

Percent of map unit: 5 percent

HnD—Honeoye silt loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 9wpb Elevation: 400 to 1,300 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Not prime farmland

Map Unit Composition

Honeoye and similar soils: 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Honeoye

Setting

Landform: Drumlins, till plains Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope Down-slope shape: Convex Across-slope shape: Convex Parent material: Loamy till derived from limestone, dolomite, and calcareous shale, and from lesser amounts of sandstone and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 26 inches: silt loam
H3 - 26 to 60 inches: gravelly loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent *Available water storage in profile:* Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 4e Hydrologic Soil Group: C

Minor Components

Unnamed soils

Percent of map unit: 5 percent

Appleton

Percent of map unit: 5 percent

Lima

Percent of map unit: 5 percent

LtA—Lima silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9wpx Elevation: 250 to 1,500 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: All areas are prime farmland

Map Unit Composition

Lima and similar soils: 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Lima

Setting

Landform: Drumlins, till plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till derived mainly from limestone and calcareous shale

Typical profile

H1 - 0 to 11 inches: silt loam H2 - 11 to 21 inches: silt loam H3 - 21 to 60 inches: gravelly loam

Properties and qualities

Slope: 0 to 3 percent *Depth to restrictive feature:* More than 80 inches

Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2w Hydrologic Soil Group: C/D

Minor Components

Unnamed soils

Percent of map unit: 5 percent

Honeoye

Percent of map unit: 5 percent

Appleton

Percent of map unit: 5 percent

LtB—Lima silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9wpy Elevation: 250 to 1,500 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: All areas are prime farmland

Map Unit Composition

Lima and similar soils: 85 percent *Minor components:* 15 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Description of Lima

Setting

Landform: Drumlins, till plains Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest Down-slope shape: Concave Across-slope shape: Convex Parent material: Loamy till derived mainly from limestone and calcareous shale

Typical profile

H1 - 0 to 11 inches: silt loam

H2 - 11 to 21 inches: silt loam H3 - 21 to 60 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 2e Hydrologic Soil Group: C/D

Minor Components

Honeoye

Percent of map unit: 5 percent

Unnamed soils Percent of map unit: 5 percent

Appleton

Percent of map unit: 5 percent

OvA—Ovid silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9wqg Elevation: 250 to 1,000 feet Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Prime farmland if drained

Map Unit Composition

Ovid and similar soils: 85 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ovid

Setting

Landform: Till plains, reworked lake plains Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy till with a significant component of reddish shale or reddish glaciolacustrine clays, mixed with limestone and some sandstone

Typical profile

H1 - 0 to 12 inches: silt loam H2 - 12 to 24 inches: silty clay loam H3 - 24 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3w Hydrologic Soil Group: C/D

Minor Components

Romulus

Percent of map unit: 5 percent Landform: Depressions

Cazenovia

Percent of map unit: 5 percent

Unnamed soils

Percent of map unit: 5 percent

W—Water

Map Unit Setting

National map unit symbol: 9wr0 Mean annual precipitation: 32 to 36 inches Mean annual air temperature: 45 to 48 degrees F Frost-free period: 145 to 185 days Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent *Estimates are based on observations, descriptions, and transects of the mapunit.*

Custom Soil Resource Report

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/soils/?cid=nrcs142p2 054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/ detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/ nrcs/detail/soils/scientists/?cid=nrcs142p2 054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/? cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX "E" COMPLIED BIOLOGICAL SURVEY'S Inventory of Natural Assets

ANIMAL INVENTORY

These lists are not complete. They are only preliminary (over one year of study) and should be expanded on over the next five years.

- I. <u>Fishes</u>
 - 1. Mirror Carp Cyprinus carpo
 - 2. Golden Shiner Notemigonus cryseleucos
 - 3. Emerald Shiner Notropis atherinoides
 - 4. Brown Bullhead Ictalurus nebulosus
 - 5. Largemouth Bass Micropterus salmoides
 - 6. Redsided Dace Clinostomus elongatus
- II. <u>Aquatic Invertebrates</u>
 - 1. Crayfish Cambarus bartoni
 - 2. May flies Emphemeroptera (family)
 - 3. Dragon flies Odonata (family)
 - 4. Water Boatmen Arctocorixa interrupta
 - 5. Giant Water Bug Lethocedrus americanus
 - 6. Predacious Diving Beetle Dytiscus marginalis
 - 7. Caddis flies Trichoptera (family)
 - 8. Mosquito Calex pipens
 - 9. Black Flies Simalium (family)
 - 10. Freshwater Clams Sphaerium (family)

III. Reptiles and Amphibians

- 1. Midland Painted Turtle Chrysemys picta
- 2. Northern Water Snake Natrix sipedon
- 3. Northern Brown Snake Stareria dekayi
- 4. Eastern Gartern Snake Thamnophis sirtalis

Reptiles and Amphibians - continued

- 5. Red Bellied Snake Storeria occipitomoculata
- 6. Blue Spotted Salamander Ambystoma laterale
- 7. Red-Spotted Newt Notoph thalmus
- 8. American Toad Bufo americanus
- 9. Spring Peeper Hyla crucifer
- 10. Gray Tree Frog Hyla versicolor
- 11. Green Frog Rana clamitans
- 12. Wood Frog Rana sylavatica

IV. <u>Mammals</u>

- 1. Little Brown Bat Myotis lucifuqus
- 2. Raccoon Procyon lotor
- 3. Striped Skunk Mephitis mephitis
- 4. Red Fox Vulpes fulva
- 5. Gray Fox Urocyon cinereoargenteus
- 6. Woodchuck Marmota monax
- 7. Eastern Chipmunk Tamias striatus
- 8. Eastern Gray Squirrel Sciurus carolinensis
- 9. White footed Mouse Peromyscus lencopus
- 10. Muskrat Ondatra zibethica
- 11. Eastern Cottontail Rabbit Sylvilague floridanus
- 12. White-tailed Deer Odocoileus virginianus

V. Birds

- 1. Great Blue Heron Ardea herodias
- 2. Mallard Anas platyrhynchos
- 3. Wood Duck Aix sponsa
- 4. Turkey Vulture Cathartes aura

5

Birds - continued

5. Red-tailed Hawk - Buteo jamaicensis

6. Ruffed Grouse - Bonasa umbellus

7. Wild Turkey - Meleagris gallopavo

8. Ring-necked Pheasant - Phasianus colchicus

9. Killdeer - Charadrius vociferus

10. American Woodcock - Scolepax minor

11. Herring Gull - Larus argentatus

12. Ring-billed Gull - Lorus delawarensis

13. Mourning Dove - Zenaidura macroura

14. Screech Owl - Otus asio

15. Great Horned Owl - Bubo Virginianus

16. Barred Owl - Strix varia

17. Common Flicker - Colaptes auratus

18. Red-bellied Woodpecker - Centurus carolinus

19. Yellow bellied Sapsucker - Sphrapicus varius

20. Pileated Woodpecker - Dryocopus pileatus

21. Eastern Kingbird -- Tyrannus tyrannus

22. Black-capped Chickadee - Parus atricapillus

23. Tree Swallow - Iridoprocne bicolor

24. Blue Jay - Cyanocitta cristate

25. Robin - <u>Turdus migratorius</u>

26. Wood Thrush - Hylocichla mustelina

27. Eastern Bluebird - Sialia sialis

28. Cedar Waxwing - Bombycilla cedrorum

29. Cardinal - <u>Richmondera</u> cardinalis

30. American Goldfinch - Spinus tristis

Birds - continued

- 31. Dark-eyed Junco Junco hyemalis
- 32. Tree Sparrow Spizella arborea
- 33. Chipping Sparrow Spizella passerina

CAMP BABCOCK-HOVEY

BIRD LIST

Black-Capped Chickadee Cardina1 Gold Finch Blue Jay Turkey Great Blue Heron Mourning Dove House Sparrow Grackle Starling Slate-colored Junco Red-winged Blackbird Belted Kingfisher Mockingbird White-breasted Nuthatch Red-breasted Nuthatch Red-bellied Woodpecker Pileated Woodpecker Eastern Bluebird Robin Pheasant (ring-necked) Eastern Meadowlark Ruffed Grouse Eastern Phoebe Crow Red-tailed Hawk Bald Eagle

Loon Green Heron Cananda Goose Mallard Wood Duck Turkey Vulture Bob White Barred Owl Snowy Owl Great Horned Owl Screech Owl Downy Woodpecker Tufted Titmouse House Wren Catbird Tree Swallow Evening Grosbeck Purple Finch A. Goldeneye Coot Killdeer

Purple Martin House Finch Wood Thrush Cowbird Pine Sishin



Loon, Common . Heron, Great Blue Goose, Canada Duck, Wood Duck, Am. Black Mallard 01dsquaw Merganser, Common Vulture, Turkey Hawk, Cooper's Hawk, Red-Tailed Kestral, American Pheasant, Ring-necked Killdeer Sandpiper, Spotter Gull, Ring-billed Gull, Herring Tern, Black Dove, Rock Dove, Morning Cuckoo, Black-billed Screech-owl, Eastern Owl, Barred Swift, Chimney Kingfisher, Bellied Woodpecker, Red-bellied Sapsucker, Yellow-bellied Woodpecker, Downy Woodpecker, Hairy Flicker, Northern Woodpecker, Pileated Wood-Pewee, Eastern Flycatcher, Yellow-bellied Flycatcher, Least Phoebe, Eastern

FIELD REPORT OF BIRDS AT BABCOCK HOVEY Spring 1990

Flycatcher, Great Cr. Kingbird, Eastern Lark, Horned Martin, Purple Swallow, Tree Swallow, N. Rough-wing Swallow, Bark Swallow, Barn Jay, Blue Crow, American Chickadee, Black-capped Titmouse, Tufted Nuthatch, White-breasted Wren, Carolina Wren, House Wren, Winter Bluebird, Eastern Verry Thrush, Wood Robin, American Catbird, Gray Mockingbird, Northern Waxwing, Cedar Starling, European Vireo, Yellow-throated Vireo, Warbling Vireo, Red-eyed Vireo, Nashville Warbler, Yellow Warbler, Chestnut-sided Warbler, Yellow-rumped Redstart, American Ovenbird Waterthrush, Louisana Yellow Throat, Common

Tanager, Scarlet Cardinal, Northern Grosbeak, Rose-breasted Bunting, Indigo Towhee, Rufous-sided Sparrow, Chipping Sparrow, Field Sparrow, Song Junco, Dark-eyed Bobolink Blackbird, Red-winged Meadowlark, Eastern Grackle, Common Cowbird, Brown-headed Oriole, Northern Finch, House Goldfinch, American Sparrow, House

I. Trees

White Oak - Quercus alba Red Oak - <u>Quercus</u> rubra American Beech - Fagus grandifolia Gray Birch - Betula populifolia Slippery Elm - Ulmus rubra Siberian Elm - Ulmus pumila American Elm - <u>Ulmus</u> <u>americana</u> Eastern Red Cedar - Juniperus virginiana Northern White Cedar - Thuja occidentalis White Spruce - Picea glauca Red Pine - Pinus resinosa Eastern White Pine - Pinus strobus Scotch Pine - Pinus sylvestris Hemlock - <u>Tsuga</u> canadensis Norway Spruce - Picea abies Trembling Aspen - Populus tremuloides Black Willow - Salix nigra Pignut Hickory - Carya glabra Shagbark Hickory - Carya ovata Black Walnut - Juglans nigra Witch Hazel - Hamamelis virginiana Hawthorn Thorn Apple - Crataegus sp. Wild Apple - <u>Malus</u> <u>pumila</u> Black Cherry - Prunus serotina



Loon, Common . Heron, Great Blue Goose, Canada Duck, Wood Duck, Am. Black Mallard 01dsquaw Merganser, Common Vulture, Turkey Hawk, Cooper's Hawk, Red-Tailed Kestral, American Pheasant, Ring-necked Killdeer Sandpiper, Spotter Gull, Ring-billed Gull, Herring Tern, Black Dove, Rock Dove, Morning Cuckoo, Black-billed Screech-owl, Eastern Owl, Barred Swift, Chimney Kingfisher, Bellied Woodpecker, Red-bellied Sapsucker, Yellow-bellied Woodpecker, Downy Woodpecker, Hairy Flicker, Northern Woodpecker, Pileated Wood-Pewee, Eastern Flycatcher, Yellow-bellied Flycatcher, Least Phoebe, Eastern

FIELD REPORT OF BIRDS AT BABCOCK HOVEY Spring 1990

Flycatcher, Great Cr. Kingbird, Eastern Lark, Horned Martin, Purple Swallow, Tree Swallow, N. Rough-wing Swallow, Bark Swallow, Barn Jay, Blue Crow, American Chickadee, Black-capped Titmouse, Tufted Nuthatch, White-breasted Wren, Carolina Wren, House Wren, Winter Bluebird, Eastern Verry Thrush, Wood Robin, American Catbird, Gray Mockingbird, Northern Waxwing, Cedar Starling, European Vireo, Yellow-throated Vireo, Warbling Vireo, Red-eyed Vireo, Nashville Warbler, Yellow Warbler, Chestnut-sided Warbler, Yellow-rumped Redstart, American Ovenbird Waterthrush, Louisana Yellow Throat, Common

Tanager, Scarlet Cardinal, Northern Grosbeak, Rose-breasted Bunting, Indigo Towhee, Rufous-sided Sparrow, Chipping Sparrow, Field Sparrow, Song Junco, Dark-eyed Bobolink Blackbird, Red-winged Meadowlark, Eastern Grackle, Common Cowbird, Brown-headed Oriole, Northern Finch, House Goldfinch, American Sparrow, House

Trees - continued

Choke Cherry - <u>Prunus virginiana</u> Black Locust - <u>Robinia pseudo-acacia</u> Smooth Sumac - <u>Rhus glabra</u> Staghorn Sumac - <u>Rhus typhina</u> Silver Maple - <u>Acer saccharinum</u> Red Maple - <u>Acer rubrum</u> Sugar Maple - <u>Acer saccharum</u> Basswood - <u>Tilia americana</u> Blue Beech (Musclewood) - <u>Carpinus carolinana</u> Hop Hornbeam (Ironwood) - <u>Ostrya virginiana</u> Sassasfras - <u>Sassafras albidum</u>

II. <u>Shrubs/Wildflowers/Fungi/Ferns</u>

Wild Ginger - Asarum canadense Curly Dock - Rumex crispus Redleaf Barberry - Berberis thunbergii Green Barberry - Berberis vulgaris May Apple - Podophyllum peltatum Bloodroot - Sanguinaria canadensis Artrist's Fungi - Ganoderma applanatum Sensitive Fern - Onoclea sensibilis Christmas Fern - Polystichum acrostichoides New York Fern - Thelypteris noveboracensis Maidenhair Fern - Adiantum pedatum Narrow Leaved Cattail - Typha angustifolia Orchard Grass - Dactylis glomerata Jack-In-The-Pulpit - Arisaema atrorubens Trout Lily - Erythgronium americanum White Trillium - Trillium grandiflorum Field Strawberry - Fragania virginiana Black Raspberry - Rubus occidentalis Poison Ivy - Rhus toxidodendron Winterberry - <u>Ilex</u> verticillata Virginia Creeper - Parthenocissus vitacea Wild Grape - Vitis sp. Common Blue Violet - Viola papilionacea Wild Carrot - Daucus carota Red Panicled Dogwood - Cornus racemosa Red Osier Dogwood - Cornus stolonifera Common Lilac - Syringa vulgaris Common Milkwood - Ascelepias syriaca Wild Mint - Mentna arvensis Deadly Nightshade - Solanum dulcamara Butter & Eggs - Linaria vulgaris Broad Leaved Plantain - Plantago major Tartarian Honeysuckle - Lonicera tatanica Common Burdock - Arctium minus New England Aster - Aster novae-angliae Chicory - Cichorium intybus Canada Goldenrod - Solidago canadensis Dandelion - Taraxacum officanale Colt's Foot - Tussilago farfara

Preliminary Plant Inventory - Camp Babcock Hovey

Information Collected During Conservation Field Camp

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• May 1990

by

*- N.Y.S. Protected Specie-

Bruce Gilman Christopher White

Trees

Acer platanoides Acer rubrum Acer saccharum Amelanchier sp. Carpinus caroliniana Carya cordiformis Carya glabra Carya ovata ¥ Cornus florida Crataegus sp. Fagus grandifolia Fraxinus americana Gleditsia triacanthos Juglans cinerea Juglans nigra Juniperus virginiana Liriodendron tulipifera Malus pumila Morus rubra Ostrya virginiana Picea abies Picea glauca Picea pungens Pinus resinosa Pinus strobus Pinus sylvestris Populus deltoides Populus grandidentata Populus tremuloides Prunus avium Prunus pensylvanica Prunus serotina Pyrus communis Quercus alba Quercus rubra Quercus velutina Salix nigra Sassafras albidum Sorbus aucuparia Tilia americana Tsuga canadensis Ulmus americana

Norway maple Red maple Sugar maple Shadbush Musclewood Bitternut hickory Pignut hickory Shagbark hickory Flowering dogwood Hawthorn Beech White ash Honey locust Butternut Black walnut Eastern red cedar Tulip tree Wild apple Red mulberry Eastern hophornbeam Norway spruce White spruce Blue spruce Red pine Eastern white pine Scotch pine Eastern cottonwood Big-tooth aspen Quaking aspen Sweet cherry Pin cherry Black cherry Wild pear White oak Red oak Black oak Black willow Sassafras European mountain ash Basswood Eastern hemlock American elm

Shrubs and Vines

Celastrus scandens Cornus foemina Elaeagnus umbellata Ligustrum vulgare Lonicera tatarica Parthenocissus quinquefolia Rosa blanda Rosa multiflora Rubus allegheniensis Rubus occidentalis Solanum dulcamara Toxicodendron radicans Viburnum trilobum Vitis riparia Zanthoxylum americanum

Ferns and Allies

💥 Adiantum pedatum

- Athyrium asplenioides
- ✗ Botrychium virginianum Equisetum arvense Equisetum hyemale
- Gymnocarpium dryopteris
- Phegopteris hexagonoptera
 Polystichum acrostichoides
 Pteridium aquilinum
- *Thelypteris noveboracensis

Herbaceous Plants Achillea millefolium Acorus calamus

Acorus calamus Actaea pachypoda Agrimonia gryposepala Ajuga reptans Alliaria petiolata Amphicarpa bracteata Anemonella thalictroides Aquilegia canadensis Arctium minus 💥 Arisaema triphyllum Asarum canadense Aster sp. Barbarea vulgaris Caulophyllum thalictricoides Dactylis glomerata Daucus carota Dipsacus fullonum Eupatorium rugosum Euthamia graminifolia Fragaria vesca Fragaria virginiana Geranium maculatum Glechoma hederacea Hieracium caespitosum Impatiens capensis Lepidium campestre

Bittersweet Gray dogwood Autumn olive Privet Tartarian honeysuckle Virginia creeper Pasture rose Multiflora rose Northern blackberry. Black raspberry Bittersweet nightshade Poison ivy Highbush cranberry Frost grape Prickly ash Witch Storel

Maidenhair fern Lady fern Rattlesnake fern Field horsetail Scouring rush Oak fern Broad beech fern Christmas fern Bracken fern New York fern

Yarrow Sweet flag White baneberry Agrimony Blue bugleweed Garlic mustard Hog peanut Rue anemone Wild columbine Common burdock Jack-in-the-pulpit Wild ginger Aster Yellow rocket Blue cohosh Orchard grass Queen Anne's lace Common teasel White snakeroot Flat-top goldenrod Woodland strawberry Field strawberry Wild geranium Gill-over-the-ground King devil Spotted jewelweed Field peppergrass

Leucanthemum vulgare Luzula campestris Mentha spicata Mitella diphylla Myriophyllum spicatum Nepeta cataria Oxalis acetosella Oxalis stricta Plantago lanceolata Plantago major . Polygala senega Polygonatum biflorum Potentilla recta Potentilla simplex Ranunculus repens Rumex acetosa Rumex crispus Saxifraga virginiensis Silene latifolia Sisyrinchium angustifolium Smilacina racemosa Solidago caesia Solidago canadensis Solidago flexicaulis Solidago sp. Taraxacum officinale Thalictrum dioicum Trifolium pratense 🖌 Trillium erectum 🕻 Trillium grandiflorum Verbascum thapsus Vicia cracca Viola pubescens Viola sp. Viola rostrata Waldsteinia fragarioides Zizia aurea

Ox-eye daisy Field woodrush Spearmint True miterwort Eurasian milfoil Catnip Common wood-sorrel Lady's-sorrel English plantain Broad-leaved plantain Seneca snakeroot . Small Solomon's seal Rough-fruited cinquefoil Old-field cinquefoil Creeping buttercup Sheep sorrel Curly dock Early saxifrage White campion Blue-eyed grass Spikenard Blue-stem goldenrod Canada goldenrod Zig-zag goldenrod Goldnerod Common dandelion Early meadowrue Red clover Red trillium Large-flowered white trillium Common mullein Cow vetch Downy yellow violet Violet Long-spurred violet Barren strawberry Golden alexanders

Groundcover

Bryum argenteum Fontinalis sp. Leucobryum glaucum Marchantia polymorpha Polytrichum sp.

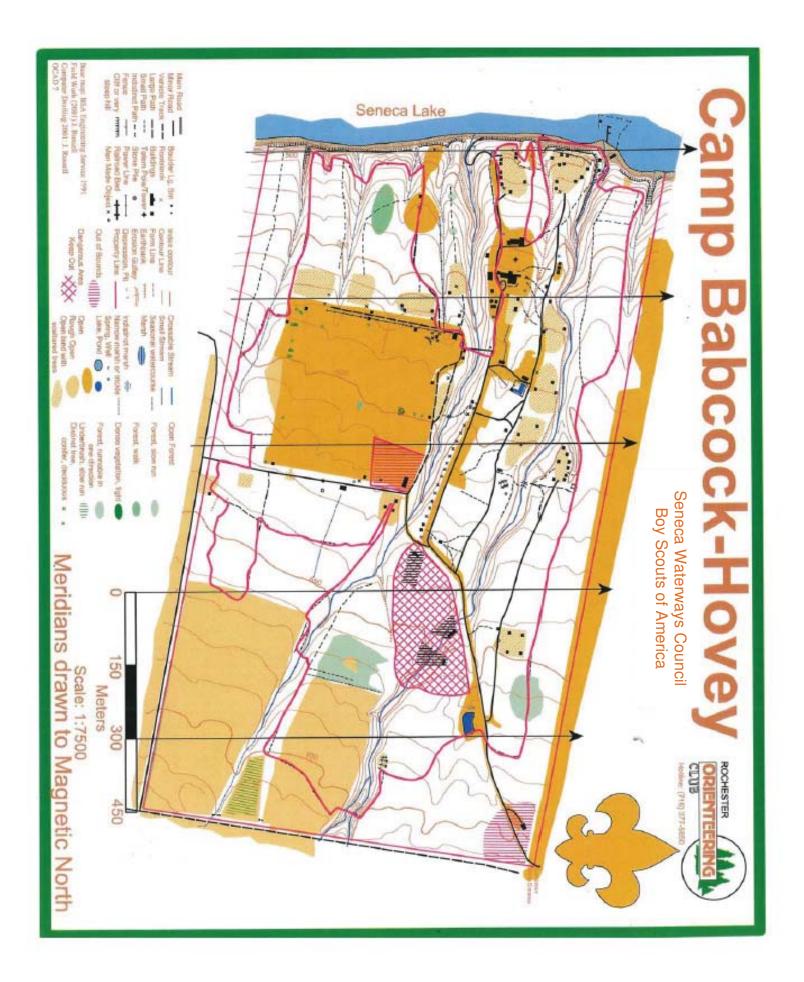
Silvery bryum Water moss Silvery pincushion moss Liverwort Hair-cap moss

Nomenclature for vascular plants based on:

Mitchell, R.S. 1986. A Checklist of New York State Plants. Bulletin No. 458. New York State Museum. Albany, New York. 272 pages.

APPENDIX "F" CONSERVATION PROGRAM HANDOUTS Information to be handed out by Summer and Unit Weekend Camping

5 Mile Hike Map Birds at Camp Babcock-Hovey Amphibian Pond at Camp Babcock-Hovey Self-Guided Nature Trail – Owl Trail Invasive Species – Plants at Camp Babcock-Hovey Poolers Pond Map for Fishing Fish in Pooler's Pond Sampson Lake Shore Trail Firewood Regulations



Snecies of Birds		Recorded at		Camp		Rahcarb_Howey			Updated 2013						ł				2	Eastern Bluebird	The State Bird of New York State	Example- Thurbook (Trustation)	rmushes (Turauae) – Common Grouping (Scientific Family)	Eastern Bluebird (Sialia sialis) (2013)	Common Name (Genus, Species) (Year last seen)
Scarlet Tanager (Piranga olicacea) (2012)	<u>Towhees, Buntings, Sparrows, & Allies</u> (Emberizidae)	Chipping Sparrow (Spizella passerina) (2013) Dark-eyed Junco (Junco hyemalis) (2013)	Eastern Towhee (Pipilo erythrophthalmus) (2013) Eield Snarrow (Snizella nusilla) (2013)	Grasshopper Sparrow (Ammodramus	savannarum) (2013) House Sparrow (Passer domesticus) (2013)	Savannah Sparrow (Passerculus sandwichensis)	Song Sparrow (Melospiza melodia) (2013)	Vesper Sparrow (Pooecetes gramineus) (2013) White-crowned Sparrow (Zonotrichia leucophrys)	(2000)		Blackbirds (Icteridae)	Baltimore Oriole (Icterus galbula) (2013)	Brown-headed Cowbird (Molothrus ater) (2013)	Common Grackle (Quiscalus quiscula) (2013)	Eastern Meadowlark (Sturnella magna) (2013)	Red-winged Blackbird (Agelaius phoeniceus)	(2013)	Finches (Fringillidae)	American finch (Carduelis tristis) (2013) Arctic redwoll (Carduelis bornemanni) (2000)		Evening Grosbeak (Coccothraustes vespertinus)	House Finch (Carpodacus mexicanus) (2013) Pine Siskin (Carduelis pinus) (1991)	Purple Finch (Haemorhous purpureus) (1991)	Ord Mortal Constraints (Bassachus)	<u>UIA WORIA Sparrows (Passeriaae)</u> House Sparrow (Passer domesticus) (2013)
(2000)	s)		(2013)		(1)	lialds		ae)	1	3)						13)		(2013)						013)	

Nuthatches (Sittidae) Bed-Breasted Nuthatch

Red-Breasted Nuthatch (Sitta Canadensis) (200 White-breasted Nuthatch (Sitta carolinensis) (2013)

Wrens (Troglodytidae)

Carolina Wren (Thryothorus ludovicianus) (201. House Wren (Troglodytes aedon) (1991)

Thrushes (Turdidae)

American Robin (Turdus migratorius) (2013) Eastern Bluebird (Sialia sialis) (2013) -Bluebird boxes installed around fields Wood Thrush (Hylocichla mustelina) (2013)

Mockingbirds, Thrashers, & Allies (Mimidae

Brown Thrasher (Toxostoma rufum) (2013) Gray Catbird (Dumetella carolinensis) (2013) Northern Mockingbird (Mimus polyglottos) (2013)

Starlings & Allies (Sturnidae)

European Starling (Sturnus vulgaris) (2013)

Waxwings (Bombycillidae)

Cedar Waxwing (Bombycilla cedrorum) (2013)

Wood Warblers (Parulidae)

Common Yellowthroat (Geothlypis trichas) (2013) Ovenbird (Seiurus aurocapilla) (2013) Yellow Warbler (Dendroica petechia) (2013)

<u>Tanagers (Thraupidae)</u>

Scarlet Tanager (Piranga olivacea) (2013)

Cardinals (Cardinalidae)

Indigo Bunting (Passerina cyanea) (2000) Northern Cardinal (Cardinalis cardinalis) (2013 Rose-breasted Grosbeak (Pheucticus Iudovicianus) (2000)

<u>Swans, Geese, & Ducks (Anatidae)</u> Blue-winged Teal (Anas Discors) (2000) Bufflehead (Bucephala albeola) (1991) Canada Goose (Branta canadencis) (2013)	<u>Caracaras & Falcons (Flaconidae)</u> American Kestrel (Falco sparverius) (2000) Osprey (Pandion haliaetus) (2000)	<u>Woodpeckers & Allies (Picidae)</u> Downy Woodpecker (Picoides pubescens) (2013) Hairy Woodpecker (Picoides villosus) (2000) Pileated Woodbecker (Drvocomus pileatu) (1991)
Common Goldeneye (Bucephala clangula) (1991) Common Merganser (Mergus merganser) (2013) Mallard (Anas platyrhynchos) (2013)	<mark>Rails, Gallinules, & Coots (Rallidae)</mark> American Coot (Fulica Americana) (1991)	Northern Flicker (Colaptes auratus) (2013) Red-bellied Woodpecker (Melanerpes carolinus) (2000)
Redhead (Aythya americana) (2000) Snow Goose (Chen caerulescens) (2000) Wood Duck (Aix sponsa) (1991)	<mark>Plovers & Lapwings (Charidriidae)</mark> Killdeer (Charadrius vociferous) (1991)	Red-headed Woodpecker (Melanerpes erythrocephalus) (2000)
Dartridaas Gronsa & Turkavs (Dhasianidaa)	Pigeons & Doves (Columbidae) Mountaing Dove (Zenaida marroura) (2013)	Tyrant Flycatchers (Tyrannidae) Eastern Kinchird (Tyrcannus tyrannus) (2013)
Ring-necked Pheasant (Phasianus colchicus)		Eastern Phoebe (Sayornis phoebe) (2013)
(2013) Ruffed Grouse (Bonasa umbellus) (2013) Wild Turkov (Melococic collococio) (2013)	Barn Owls (Tytonidae) Barn Owl (Tyto alba) (1991)	Least Flycatcher (Empidonax minimus) (2013) Willow Flycatcher (Empidonax traillii) (2013)
wind I ai Ney (mercagins gamphavo) (2013)	Typical Owls (Strigidae)	Vireos (Vireonidae)
Northern Rohwhite (Colinus virginianus) (2000)	Barred Owl (Strix varia) (1991) Fastern Screech Owl (Megascons asio) (1991)	Red-eyed Vireo (Vireo olivaceus) (2013)
	Great Horned Owl (Bubo virginianus) (1991)	<u>Jays, Magpies, & Crows (Corvidae)</u>
<u>Loons (Gaviidae)</u> Great Northern (Common) I oon (Gavia immer)	Snowy Owl (Bubo scandiacus) (1991)	American Crow (Corvus brachyrhynchos) (2013) Blue Iav (Cvanocitta cristata) (2013)
(1991)	<u>Swifts (Apodidae)</u>	
	Chimney Swift (Chaetura pelagica) (2013)	Larks (Alaudidae)
Bitterns, Herons, & Allies (Ardeidae)		Chipping Sparrow (Spizella passerina) (2013)
Great Blue Heron (Ardea herodias) (2013) -Can be found at Ponds and Lakefront	<u>Hummingbirds (Trochilidae)</u> Ruby-throated Hummingbird (Archilochus	Horned Lark (Eremophila alpestris) (2013)
Green Heron (Butorides virescens) (2000)	colubris) (2013)	Swallows (Hirundinidae)
Vultures (Cathartidae)	Kingfishers (Alcedinidae)	Bank Swallow (Riparia riparia) (2013) Barn Swallow (Hirundo rustica) (2013)
Turkey Vulture (Cathartes aura) (2013)	Belted Kingfisher (Megaceryle alcyon) (2000)	Purple Martin (Progne subis) (1991) Tree Swallow (Tachycineta bicolor) (2013)
Kites, Eagles, Hawks, & Allies (Accipitridae) Bald Eagle (Haliaeetus leucocephalus) (2013) -Occasionally observed at lakefront Broad-winged Hawk (Buteo platypterus) (2000) Cooper's Hawk (Accipiter cooperii) (2000) Red-tailed Hawk (Buteo jamaicensis) (2013)		Chickadees & Titmice (Paridae) Black-capped Chickadee (Poecile atricapillus) (2013) Tufted Titmouse (Baeolophus bicolor) (2013)

Amphibian Pond

New to Camp Babcock-Hovey in 2014

What is an Amphibian Pond?

An amphibian pool is a pond with a special purpose, to provide shelter and breeding areas for salamanders and frogs. It is constructed as a shallow depression allowing water to collect and remain for extended periods. Amphibian ponds are fishfree ponds. Fish are natural predators of amphibians and their eggs. Amphibian Ponds are designed to periodically go dry.

Why Babcock-Hovey added an Amphibian Pond?



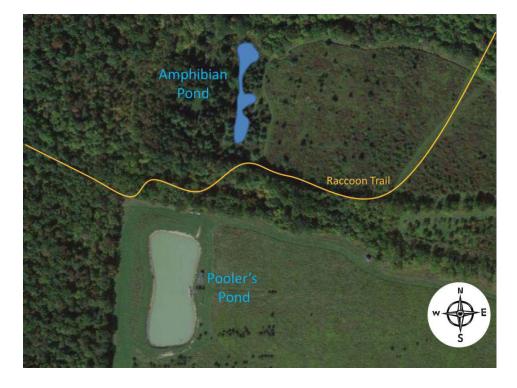
Amphibians include frogs, toads, and salamanders. They are unique animals that use lungs, gills, and their skin for breathing. The majority of amphibians live a part of their lives in water or depend on moist environments for breeding, egg laying, and survival. However, due to habitat losses and degradation, along with increased air and water pollution, 25% of these species are currently in various levels of decline.

Amphibians are an important link in the food chain and depend on a variety of foods including: crayfish, earthworms, snails, insects and their larvae, and algae. Many amphibians depend on temporary pools for breeding, egg-laying or the juvenile stage of development. Some may only breed in forest pools within mature hardwood forest. By creating an amphibian pond we are helping to provide amphibians a home!



Where is it Located?

The Amphibian Pond is located just off of the Raccoon Trail just past Pooler's Pond.

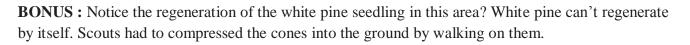


Babcock-Hovey "OWL" Nature Trail Guide

Follow the Green Blaze Markers From just outside the Native American Culture Area (NAC) to each station. Watch out there is plenty of poison ivy!!

1. <u>Sugar Maple (*Acer saccharum*)</u> the New York State Tree. Sugar maple is best known for its bright fall foliage and for being the primary source of maple syrup.

HINT : The leaf on the Canadian Flag is a Maple Leaf.



2. <u>Flowering Dogwood (*Cornus florida*)</u> (This tree is on the western side of the main road). Very "showy" tree, usually found in a dense wooded area. Leaves have parallel veination.

3. <u>Stream by Rifle (North side)</u> First check out the animal footprint display; Secondly check out the stream for footprints, see the deer trail on the other side of the stream, deer routinely cross the stream in this area. Can you find birds (the orange shotgun variety that is)? They follow the meandering stream down from shotgun all the way to lakefront.

4. <u>White Cedars (*Thuja occidentalis*)</u> have fan-like branches and scaly leaves. The bark is red-brown, furrowed and peels in narrow, longitudinal strips. The cones are slender, yellow-green ripening brown. (South side of road by Rifle sign)

5. <u>Black Walnut (*Juglans nigra*)</u> is one of the Northeast's most important lumber trees for furniture. The fruit, with "smelly" flesh, is eaten by chipmunks and squirrels. The wood is cinnamon red and the leaves are compound. The black walnut nutmeats are used as an ingredient in food, while the hard black walnut shell is used commercially in abrasive cleaning, cosmetics, and oil well drilling and water filtration. Black Walnut trees will slowly make the soil acidic and thus driving away other trees.

6. <u>Black Willow (*Salix Nigra*)</u> (Pond Loop) contains salicylic acid (aspirin can be derived from this) Taste it by chewing the new twigs, it's bitter! Indians used this chewing for medicinal purposes. The fruit is a small capsule which splits open when mature to release the numerous minute, down-covered seeds. The leaves turn a lemon yellow in the fall. It is typically found along streams and in swamps.

7. <u>Cattails (*Typha latifolia*)</u> (Pond Loop) indicate wet areas. The plant is edible at different times of the year. The seed heads can be used for holding material, when they are over mature.

WILDLIFE ALERT - Look closely for signs of life around the pond. Commonly seen are Great Blue Heron, Midland Painted turtle and Black Water Snake. Look for feathers, footprints and snake skins.

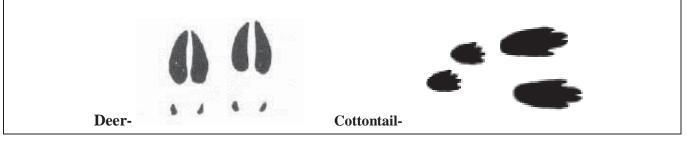
8. <u>Apple Tree (*Malus*)</u> (Pond Loop) this apple tree is the offspring of apple trees that were remnant of an old farm orchard in this area. The fruit is eaten be deer.

9. <u>Scat Station</u> (Pond Loop) Check out the Scat (poo) from several animals in the area. Keep an eye out for it during the rest of the hike to see if you can ID some more animals.

10. <u>**Red Cedar.** (*Junipernus virginiana*) with Grape Vine (*Vitis*) leaves are prickly as compared to the White Cedar. Red Cedar will be eaten by deer/rabbit in winter starvation intervals. The bark is excellent for starting fires. The bark is reddish-brown, fibrous, and peels off in narrow strips. The seed cones are long, berry-like with fleshy scales, dark purple-blue with a white wax cover giving an overall sky-blue color The Grape Vine is an excellent food source for birds and animals but will eventually kill trees that it climbs up. With the cedars in this area we have no air flow and poor drainage.</u>

11. <u>Multi Flora Rose (*Rosa multiflora*)</u> is a scrambling shrub that will climb over other plants. The flowers are white or pink and borne in early summer. Multi Flora Rose is actually an invasive species. The rose hip, or the fruit of the rose plant, can be used to make a tea.

WILDLIFE ALERT - Look for signs of wildlife in the upcoming wet areas. Look closely for trails, footprints, and scat of white-tailed deer (*Odocoileus viringianus*) and eastern cottontail (*Sylvilagus floridanus*). Both mammals actively work this area for shelter and food.



12. <u>**Poison Ivy.** (*Rhus radicans*)</u> Look for 3 leaves. It can grow as a shrub, vine or ground cover. It has red berries in winter. **Never burn it!** You can get a rash from it year round.

WILDLIFE ALERT - At the base of the upcoming conifers you will find the casings from "pine cones". The cones have been shucked to get at the seeds (especially on spruce, pine, etc.) by mammals.

13. <u>White Pine (*Pinus strobus*)</u> is a prime saw timber tree. It has 5 needles (conifer) to a bundle that are blue-green in color and soft and flexible. Hint the word WHITE also has 5 letters in it.

14. <u>Scotch Pine (*Pinus sylvestris*)</u> has orange, flaky bark with 2 needles/bundle – don't mistake it for red pine! Red pine is a fairly consistent grey and red bark color from stump to the top. Mature Scotch Pine will have a distinct change in bark color about 2/3 of the way up, changing from reddish grey to the distinctive relatively bright orange. Red Pine Needles (4-6") are also normally twice the length of Scotch Pine (1.5-3"). **QUIZ - What type of tree is between #13 and #14?**

QUIZ ANWSER - Scotch Pine

WILDLIFE ALERT - (Old electric line right-of-way to old pump house). This open area creates an opening to the forest floor and creates excellent shelter for rodents. See if you can find any evidence.

15. <u>White Ash (*Fraxinus americana*)</u> is one of the most used trees for everyday purposes. The wood is white and quite dense. It is the timber of choice for production of baseball bats and tool handles. The wood is also favorable for furniture and flooring.

INVASIVE SPECIES ALERT - The Emerald Ash Borer (EAB), *Agrilus planipennis*, is a green beetle native to Asia. It is highly destructive to ash trees. Since its accidental introduction in the 1990s, it has spread to 14 states and adjacent parts of Canada. It has killed at least 50 to 100 million ash trees so far and threatens to kill most of the 7.5 billion ash trees throughout North America. As of May 2013, the EAB has not been found in Camp

Babcock-Hovey or Seneca County. To help stop the spread of EAB currently no firewood outside of Seneca County is allowed to be brought into Seneca County.

16. <u>**Quaking Aspen** (*Populus tremuloides*)</u> make a sharp right off the road and you are in a grove of aspens. This is a fast growing pioneer species with very poor firewood characteristics.

17. <u>Shagbark Hickory (*Carya ovata*)</u> shagbarks are easy to recognize because, as their name implies, they have shaggy bark. This characteristic is, however, only found on mature trees; young specimens have smooth bark. The shagbark hickory's nut is edible and has a very sweet taste.

18. <u>Eastern Hemlock (*Tsuga Canadensis*)</u> can serve as an excellent shelter for birds, even turkeys! Tea can be made to drink from the needles.

19. <u>**Red Oaks** (*Quercus rubra*)</u> is easy to recognize by its bark, which feature bark ridges that appear to have shiny stripes down the center. Red oaks commonly have darker bark, and lobed leaves that come to a point. The red oak is one of the most important oaks for timber production in North America. Quality red oak is of high value as lumber and veneer, defective logs are used as firewood.

20. <u>White Oaks (*Quercus Alba*)</u> often have lighter colored bark and leaves with rounded off lobes. Check out the base of the trees for acorns. Turkeys in particular love to eat the fallen acorn crop in the fall.

HINT – to remember the difference in Oaks. "The Redman used pointed arrows while the Whiteman used rounded bullets." Red Oaks have pointed tips, while White Oaks have rounded tips.



White Oak

Red Oak

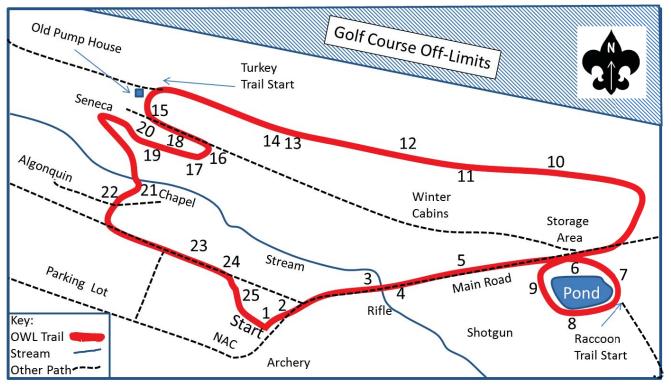
21. <u>Ferns</u> The camp has an abundance of ferns especially in the gorge areas.

22. <u>Eastern Hophornbeam, (*Ostrya virginiana*) (aka. Ironwood)-</u> heavy wood, bark shaggy, grows on dry soils, like the edges of our gorges. Look behind you and you will see <u>American Hornbeam,</u> (<u>Carpinus caroliniana</u>) (aka. <u>Musclewood</u>), blue-grey muscle looking wood, likes moist rich soils near streams.

23. <u>Red Pine (*Pinus resinosa*)</u> Red pines don't like moist areas so you will usually only find them in drier areas. Red pine needles are 4 to 6 inches long and in bundles of two. The dark green needles are soft and flexible. When bent sharply they snap or break cleanly rather than just folding over as do the needles of other pines. The bark is thick and gray-brown at the base of the tree, but thin, flaky and bright red in the upper crown.

24. <u>Black Cherry (*Prinus serotina*)</u> (It is on the north side of the road). This hardwood is an excellent lumber species for furniture. A mature black cherry can easily be identified in a forest by its very broken, dark grey to black bark, which has the appearance of very thick, burnt cornflakes (an easy way to remember this is burnt cornflakes = black cherry). However, for about the first decade or so of its life, the bark resembles that of a birch, and is thin and striped.

25. <u>Mayapple (*Podephyllum pelatun*)</u> A type of wild flower. This and others should not be trampled or picked as the spring wild flowers are very fragile. Though the common name is Mayapple, it is the flower that appears in early May, not the "apple". The fruit or apple isn't produced until early summer.



A Project of the Camp Babcock-Hovey Alumni Association www.BHalum.org



REMOVE – Cut Grape vine at ground level at 5 feet above the ground. If able to pull down from tree do so. Cut ANY Vines (even if not grape) if growing on trees





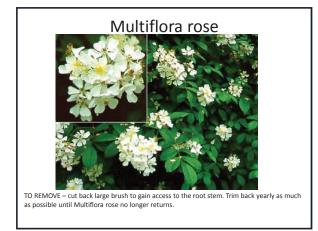
Is important to get the entire root system. The key is to pull when the soil is damp and loose. Young plants can be dug up individually using a hoe or shovel. Hand pulling and using a shovel to remove plants up to about 3 ft high is effective if the root system is loosened up around the primary tap root first before digging out the whole plant.

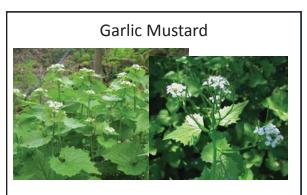
Honeysuckle – Invasive Species



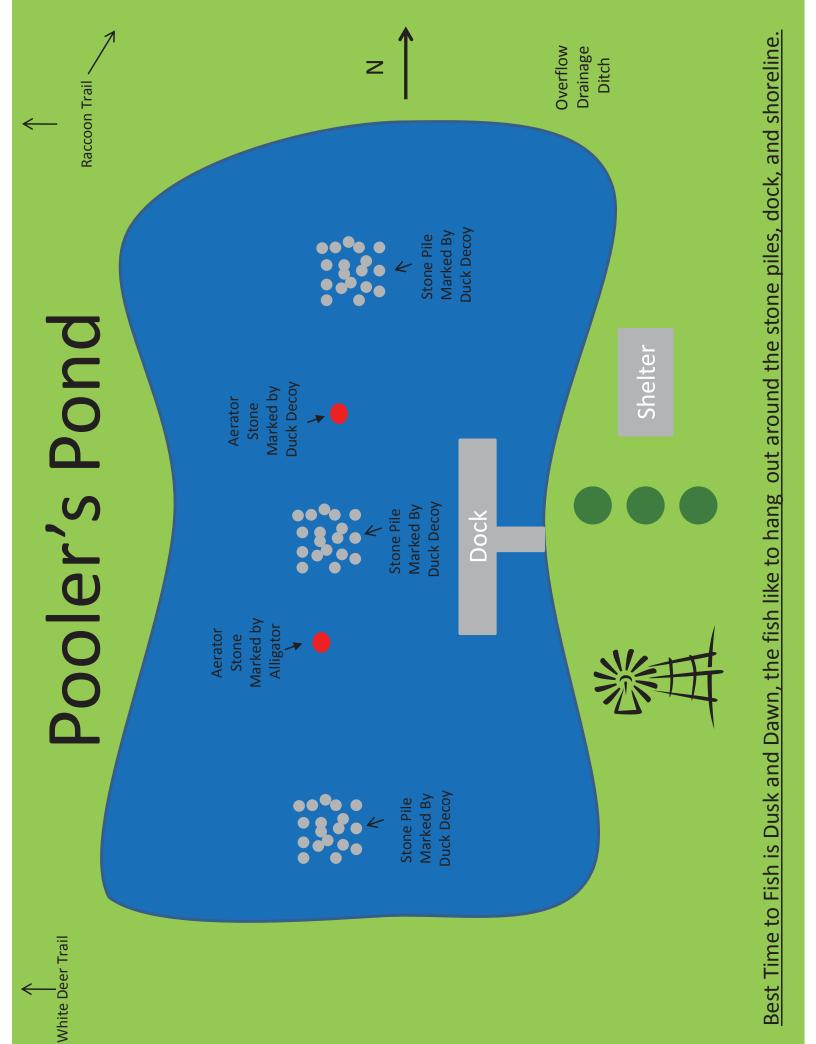


TO REMOVE – cut back large brush to gain access to the root stem. It is a must to pull the root stem out of the ground.

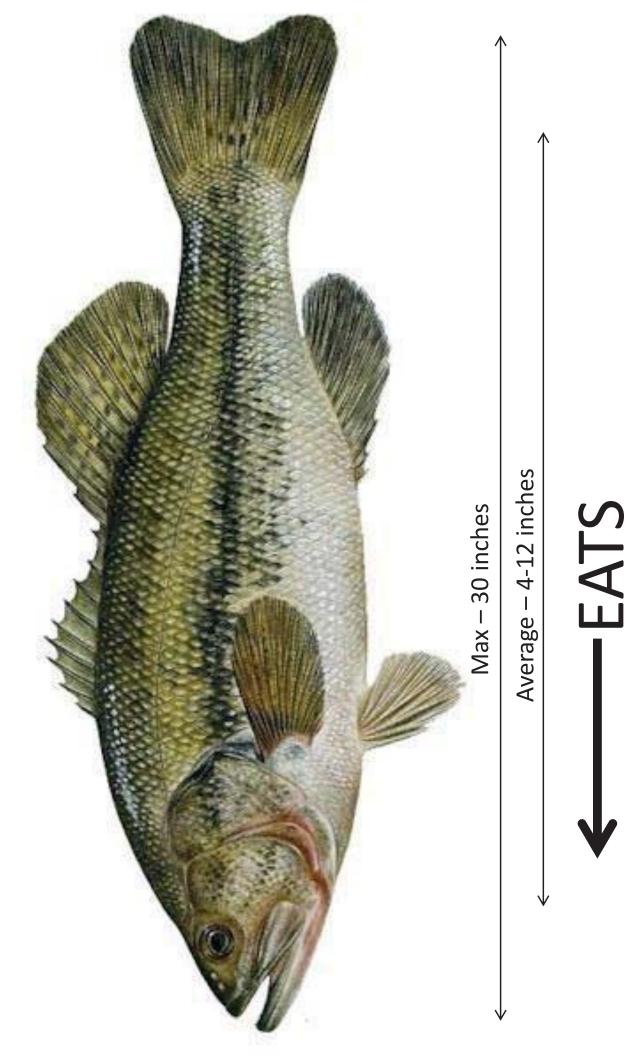




TO REMOVE - Remove by pulling and disposing of in trash. Pulled plants can still go to seed.







The largemouth bass (Micropterus salmoides) is a freshwater gamefish in the sunfish family, a species of black bass native to North America.

maximum recorded overall length of 29.5 in and a maximum unofficial weight of 25 pounds 1 ounce. The fish blotches forming a jagged horizontal stripe along each flank. The upper jaw (maxilla) of a largemouth bass extends beyond the rear margin of the orbit. The largemouth is the largest of the black basses, reaching a Physical Description - The largemouth is an olive green fish, marked by a series of dark, sometimes black, lives 16 years on average. Forage -The juvenile largemouth bass consumes mostly small bait fish, scuds, small shrimp, and insects. Adults water birds, mammals, and baby alligators. In larger lakes and reservoirs, adult bass occupy deeper water than walleye, white bass, striped bass, and even smaller black bass. Prey items can be as large as 25 to 50% of the consume smaller fish (bluegill), snails, crawfish (crayfish), frogs, snakes, salamanders, bats and even small shiners, and sunfish. It also consumes younger members of larger fish species, such as pike, catfish, trout, younger fish, and shift to a diet consisting almost entirely of smaller fish like shad, yellow perch, ciscoes, bass's body length.

as nightcrawlers, minnows, frogs, or crawfish can also be productive. Largemouth bass usually hang around big bass with lures such as plastic worms (and other plastic baits), jigs, crankbaits and spinnerbaits. Live bait, such The fish will often become airborne in their effort to throw the hook,. Anglers most often fish for largemouth Angling - Largemouth bass are keenly sought after by anglers and are noted for the excitement of their fight. patches of seaweed/cattails near shallow water.

Largemouth Bass may only be consumed if they are bigger than 12" to preserve the supply of Largemouth Bass in this pond.

Please catch and release if under 12".



the order Perciformes. Lepomis, in Greek, means "scaled gill cover" and macrochirus means large hand, which may be a The **Bluegill** (*Lepomis macrochirus*) is a species of freshwater fish and a member of the sunfish family Centrarchidae of reference to its body shape. A defining characteristic of the bluegill is the bright blue edging visible on its gill rakers.

of the dorsal fin. The sides of its head and chin are a dark shade of blue. It usually contains 5-9 vertical bars on the sides Physical Description - The bluegill is noted for the darkened spot that it has on the posterior edge of the gills and base of its body, but these stripes are not always distinct. It has a yellowish breast and abdomen, with the breast of the breeding male being a bright orange. The bluegill typically ranges in size from four to 12 inches, and reaches a maximum size just over 16 inches. The largest bluegill ever caught was 4 pounds, 12 ounces.

streams and small rivers. They prefer water with many aquatic plants, and hide within fallen logs or water weeds. They and water fleas. The adult diet consists of aquatic insect larvae (mayflies, caddisflies, dragonflies), but can also include can often be found around weed beds, where they search for food or spawn. Young bluegills' diet consists of rotifers crayfish, leeches, snails, and other small fish. Their diet can also include the waxworm and nightcrawler that can be provided for them by anglers. Most bluegills feed during daylight hours, with a feeding peak being observed in the Habitat and Ecology -Bluegill live in the shallow waters of many lakes and ponds, along with slow-moving areas of morning and evening. Bluegill are prey to many larger species like largemouth bass, and even larger bluegill.

orange, yellow, green, or red, chiefly at dawn and dusk. Some of the easiest baits to use for them are earthworms, live crickets and grasshoppers, white bread, cheese, or a corn kernel. Other efficient baits are redworms, waxworms, and Fishing -Bluegills are popular panfish, caught with live bait, flies, pieces of corn, small crankbaits, spinners, American other worms. They are noted for seeking out underwater vegetation for cover; their natural diet consists largely of cheese pushed around a hook, maggots, small frogs, or even a bare hook. They mostly bite on vibrant colors like small invertebrates and very small fish.

also be taken on tiny artificials such as jigs and spinnerbaits. They will rise to small poppers, sponge bugs and dry flies. Although the majority of bluegills are caught on live bait—particularly worms, leeches, grubs and crickets—they can

Any size Bluegill may be consumed if wanted. If you are not

going to consume please catch and release.





Insects and Plants •

EATS

Average – 2-4 inches

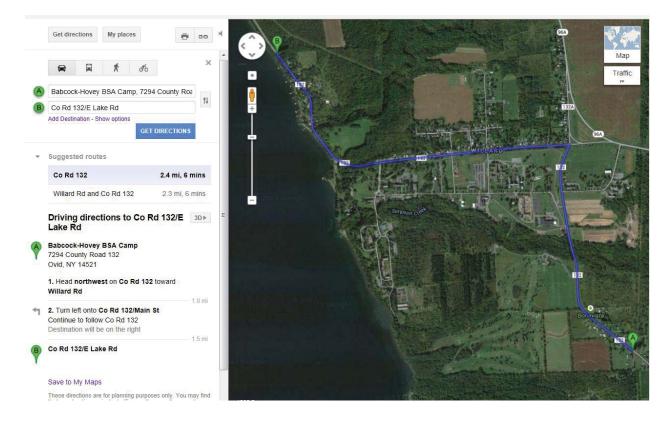
Max – 5 inches

	Minnow is a general term used to refer to small freshwater and saltwater fish, especially those used as bait fish or for fishing bait. More specifically, it refers to small freshwater fish of the carp family.	
	True minnows Smaller fish in the subfamily Leuciscinae are considered to be "true" minnows:	
Z ⊣ t ⊂ m	Bluntnose Minnow (Pimephales notatus): The Bluntnose minnow is a primary bait fish for Northern America (more specifically Ohio) and has a very high tolerance for variable water qualities, which helps its distribution throughout many regions. The snout of the Bluntnose minnow overhangs the mouth, giving it the bluntnose. There is a dark lateral line which stretches from the opercle to the base of the tail, where a large black spot is located. The average size of the adult is approximately 2 in.	
	Common Shiner (Notropis cornutus): These fish are one of the most common type of bait fish and are almost exclusively stream dwellers. The Common Shiner can be identified by the nine rays on its anal fin and terminal mouth. This minnow is typically bluish silver on the sides and greenish blue on the back, save for breeding season in which case the male gains a rose colored tail and anal fin. The Shiner grows about 2–4 in within one year and reach a size of 5 in at adulthood. Another common "shiner" bait fish is the young version of the European chub (Leuciscus cephalus or Squalius cephaloides) which is quite easy to catch.	
0 Z T D L D L D L D L D L D L D L D L D L D	Common Emerald Shiner (Notropis alterinoides alterinoides): Common Shiners are most abundant in the Great Lakes of North America, primarily Lake Erie. The name of the Emerald Shiner comes from the greenish emerald band that expands from the back of the gill cover to the tail. This type of minnow has a short, rounded snout, the only difference between the Common Emerald Shiner and the Silver Shiner is that the Silver Shiner has a longer snout and a larger eye. These fish grow to an average length of about 6 cm. This is one of the most common bait fish used in the Lake Erie region of Ohio and many fisherman hold it over all other bait.	
	Catching minnows for bait Using minnows as baits can be seen by many fishermen as one of the most effective methods for fishing. Bait minnows can usually be found in any bait shop, especially ones near a body of water, but many anglers prefer to capture their own. A method in which a fisherman finds a school of minnows and using a fine meshnet scoops through the school, bringing the net back out of the water in one motion. This method is primarily used on the shore near the bank of a stream or a shallow area of a lake or pond.	
	<u>See if you can catch a minnow with a net.</u>	

Sampson State Park is located south of Geneva, NY on the eastern shores of Seneca Lake in Town of Romulus. During World War II, this area was known as the **Sampson Naval Training Station**. During the Korean War the area became the **Sampson Air Force Base**. The area is located next door to the former Seneca Army Depot.

The area became a state park in 1960 and while most of the buildings were removed, there still remains some of the network of 38 miles of old roads and trails. This old network creates some great informal walks and hikes in the park as well as exploring with your bike. Some of the old roads were removed with the old buildings and some are becoming overgrown. It's still a neat area to explore and work on your gps skills.

The park has one "official" hiking trail, called the Lake Shore Trail, which is also known as Sampson Lake Trail. This trail is officially 1.7 miles and follows the old Lake Road toward the small hamlet of Willard. The trail runs parallel with the shore of Seneca Lake. The trail can be accessed from East Lake Road (aka County Route 132) in Willard off NY 96A, which includes a small parking area. There are four benches along the trail.

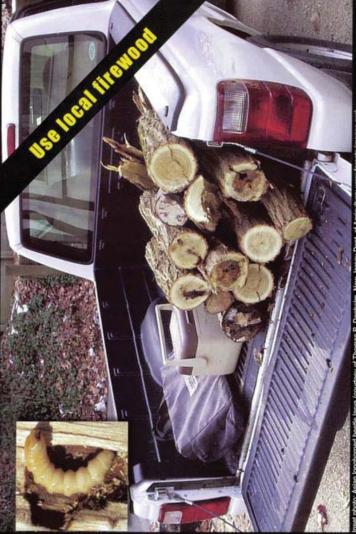




ONT NOVEREWOOD

Three recently introduced insects-emerald ash borer, Asian longhorned beetle, and Sirex woodwasp-are wood-infesting species that can be transported long distances in firewood. Once transported into new areas, these insects can become established and kill it of these insects and protect our forests and trees. Our forests are threatened by nonnative insects that can kill large numbers of trees local trees. We must STUP

- Leave firewood at home-do not transport it to campgrounds or parks.
 - Use firewood from local sources.
- firewood, burn all of it before leaving your campsite If you have moved



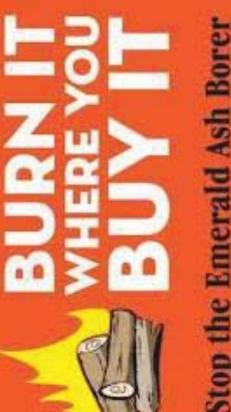
Te P STOP

For more information, visit the www.emeraldashborer.info www.na.fs.fed.us/fhp www.aphis.usda.gov/ppq/ep



USDA Forest Service Northeastern Area State and Private Forestry MA-PR-02-06 April 2006 www.na.fs.fed.us





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