

Natural Resource Inventory Report and Recommendations Sherman, Connecticut 2018

A collage of various natural resource images from Sherman, Connecticut. The images include: a large lake with mountains in the background; a close-up of a deer; a forest scene with a stream; a red barn and a large white silo; a field of tall grass; a waterfall cascading over rocks; a wooden boardwalk winding through a field; a woodpecker on a tree trunk; and two raccoons. The collage is arranged in a grid-like fashion, with some images overlapping others. The title 'Natural Resource Inventory Report and Recommendations Sherman, Connecticut 2018' is prominently displayed at the top in a green, serif font.



Natural Resource Inventory Report and Recommendations Town of Sherman, Connecticut 2018

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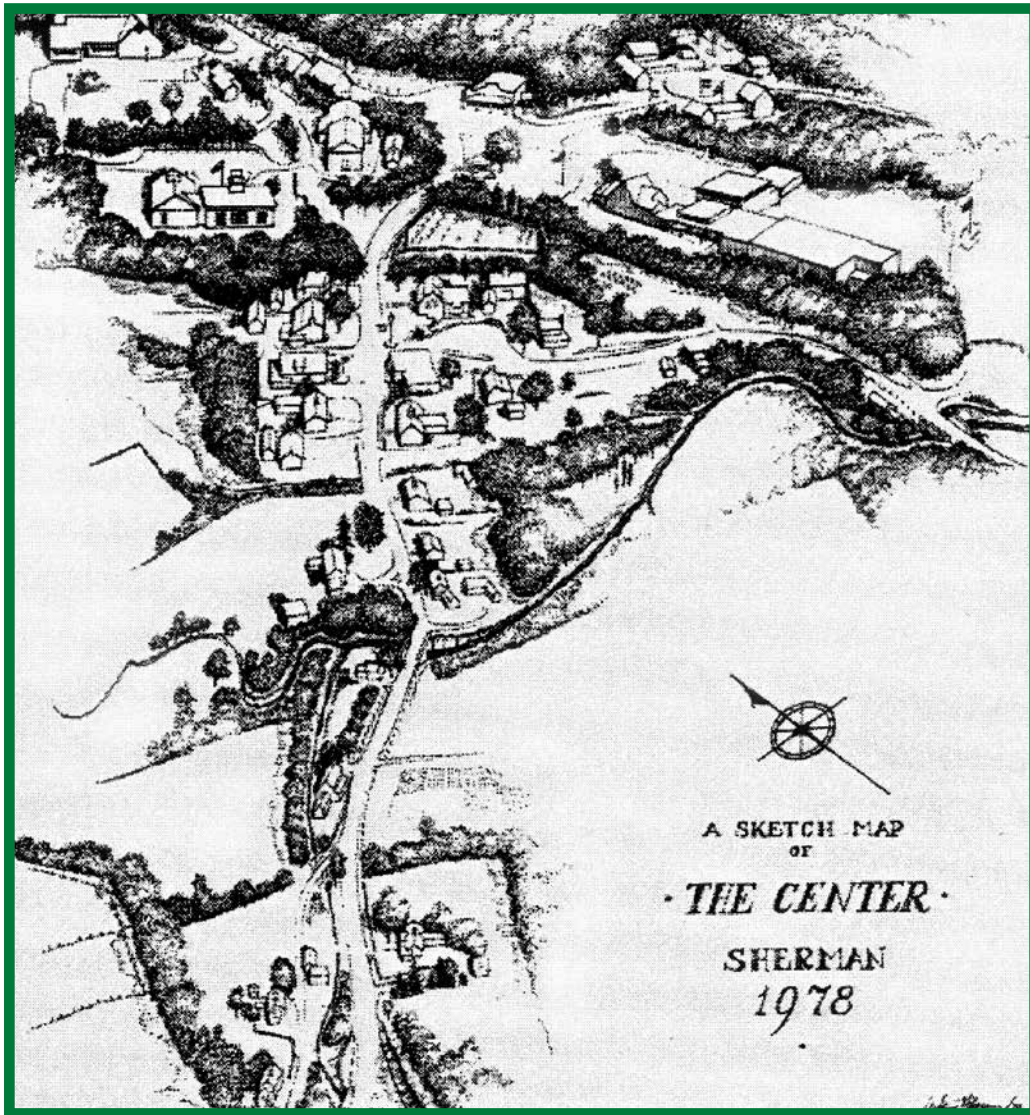


TABLE OF CONTENTS

Table of Contents	1
Acknowledgements.....	2
Introduction.....	3
Chapter 1: Natural History and Geology / Main Author: Colette Shulman.....	5
Chapter 2: Soils / Main Author: William McCann	9
Chapter 3: Aquatic Resources / Main Author: Chad Seewagen	13
Chapter 4: Agricultural Resources / Main Author: Colette Shulman	19
Chapter 5: Terrestrial Habitats / Main Author: William McCann	25
Chapter 6: Wildlife and Critical Habitats / Main Author: Chad Seewagen	29
Chapter 7: Open Space / Main Author: Colette Shulman	33
Chapter 8: Recreational & Scenic Resources / Main Author: Joanna Wozniak Brown...	37
Chapter 9: Recommendations	41
Notable Trees	45
Appendices	
• Birds	47
• Fish, Amphibians and Reptiles	51
• Butterflies	52
• Mammals	54
• Trees	55
• Flowering Plants	56
Maps	59
Sources.....	72

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In addition, we would like to thank the individuals and organizations that assisted in the publication of this report. Their contributions of photographs, knowledge, time, talents, enthusiasm and support were essential and are greatly appreciated.

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INTRODUCTION

The Conservation Commission presents this update to our Town's first Natural Resource Inventory Report and Recommendations published in 2005. A Natural Resource Inventory (NRI) is not a static document. As time goes on, changes in weather patterns, population growth and natural events can have an impact on our natural assets. Moreover, human understanding has deepened on the critical importance of these resources to our health, to animal and plant life with which we share this environment and to the well-being of planet Earth itself. Our goal was to build on the extensive work done by a previous commission and create a current report on the state of our resources, their history, what we have now and the threats to these resources.

Naturally speaking, Sherman is beautiful. The areas of forestland, rolling farm fields, lakes, rivers, ponds and streams have attracted residents to Sherman for generations. The citizens of Sherman have shown time and again that we treasure these resources and want to protect and retain our rural character. As a community we have made it clear that we realize it is our responsibility to preserve them for future residents.

There are recommendations following this report. We have focussed on what the Conservation Commission members felt were high priority items relating to our natural resources. We hope that this report will help to guide our Town Commissions in making appropriate decisions on the uses of Sherman's land and natural resources and the overall conservation of our environment into the future.

This report was adopted by the Sherman Conservation Commission in a meeting on August 8th, 2018.

The Sherman Conservation Commission, 2018



If the geologic history of Sherman over a billion years could be portrayed on screen, the chaos and drama of it would be mind-boggling. Himalayan-sized peaks thrusting up where the relatively low Appalachians are now; the entire Connecticut Highlands facing south on the edge of an ocean, with a tropical climate and sandy beaches (no palms or people at that time); continents joining into supercontinents and being torn apart, oceans forming and disappearing. And all this long before the dinosaurs came.

There are two great actors in this drama. The first is the crust of the earth, which is the top part of large segments or plates that move around the outer part of the planet. Plates are made of different kinds of rocks and in some places where plates meet each other, there can also be magma (molten rock). At the surface of the crust sediments form, and some contain evidence for past life in the oceans and on the continents.

The crust and the sediments were subjected to extreme heat and pressure (metamorphosed) when plates collided with such tremendous force as to compress, fold and push the existing landscape into new configurations, and create fault lines vulnerable to earthquakes. Over 700 million years there were four big tectonic plate collisions affecting eastern North America and in one, the eastern part of Connecticut was almost ripped off. The movements of the earth's crust are a continuing drama in our era.

Sherman has some of the oldest bedrock on our planet, augen gneiss and hornblend gneiss (also called Danbury gneiss). Gneiss is very metamorphosed rock, that is, rock that has been changed a lot from what it started as. Metamorphic rocks dominate and shape the landscape of the whole Western Connecticut Highlands, but because they have been so altered by tectonic collisions, it is hard to distinguish them from younger rock. This bedrock, usually less than 20 feet below the surface, is visible in outcroppings and ledges throughout our town.



A map of Sherman's substructure shows the presence of Stockbridge Marble in the town's northeast and along the Housatonic River, white to gray and interlayered with schist, phyllite, and metamorphosed siltstone or sandstone. Marble is metamorphosed limestone -- a legacy of our having been by the ocean, with coral reefs rich in the minerals calcite and dolomite. The reefs got buried under other rocks, and with heat and pressure the limestone, including the coral reefs, slowly became marble. There is a town not far north of Sherman called Lime Rock.

The pressure from these collisions over the millennia had a mostly east-west orientation, resulting in Connecticut valleys that tend to run north-south, as do the two main ones in Sherman along Routes 37 and 39.

Some three to five million years ago the climate gradually turned cold enough for the appearance of the second great actor in the shaping of our landscape -- the glaciers, great sheets of ice that advanced and retreated. Slowly, they moved south into North America. In the Eastern United States the Wisconsin Glacier, the last of four major glacial periods starting some 75,000 years ago, is estimated to have been a mile deep at the latitude of Hartford, Connecticut.

The moving ice scoured out river valleys and pushed, carried and deposited mixtures of sand, gravel, silt, clay, stones and boulders called glacial till. They left scrape marks, striations, on ledges that can be seen to this day. They have been compared to gigantic bulldozers, scraping, leveling off and filling in the low areas of bedrock with this glacial till. Our landscape today is essentially the work of the last glacial period after which trees and ground cover could grow and not be destroyed by yet another onslaught of ice.

In southern Sherman and northern New Fairfield there are at least three outstanding ravines of glacial origin. One starts in the wetlands alongside Route 37 near Chapel Hill Road and becomes deep and steep-sided, not hospitable to humans but a home and passageway for our wildlife. It borders Route 37 all the way down to Leach Hollow Road, ending in a home backyard, its stream continuing on into Squantz Pond. Further down Route 37 is the Quaker Brook ravine with its spectacular falls, and still further just over the line into New Fairfield and New York State are the ravines of the Great Hollow Nature Preserve with their waterfalls.

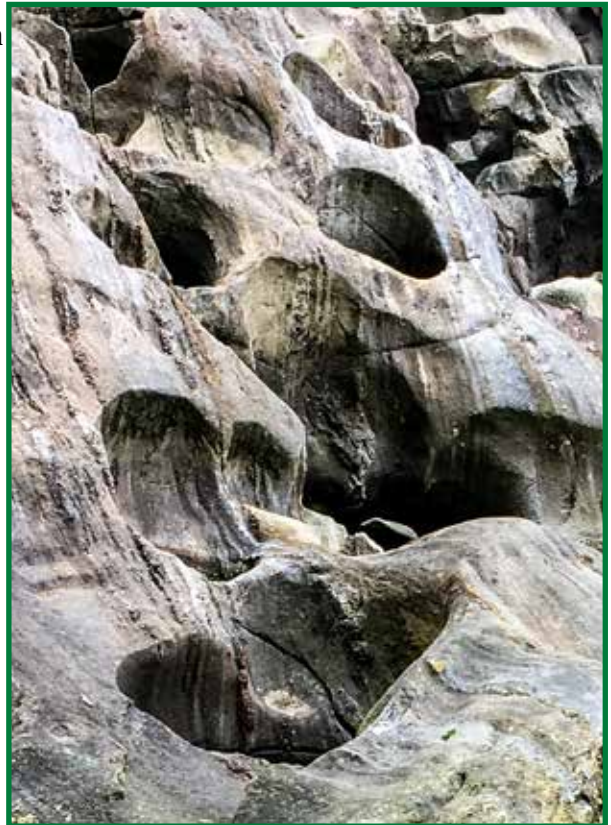
In the 1920s, a Yale geologist found evidence in the Connecticut landscape that the glacier here, once it stopped advancing, melted in place, its till debris damming the flow of melting ice, thereby creating many more swamps and lakes than exist now. His evidence points to the possibility that in the same place there was a natural lake considerably longer and larger than the man-made Candlewood Lake of today. It is not hard to imagine this when you stand above Sherman's Green Pond and look down the towering steep rock wall bordering Candlewood Lake. Green Pond itself is a glacial creation.

The glaciers picked up large chunks of bedrock and deposited them, for example, in the middle of what is today a meadow. These erratics, as they are called, are eye-catching -- you wonder “what is that huge boulder doing there, all by itself.” There is one on Happy Acres Farm in Sherman that you can see from Route 39. Erratics are made of different rock than the bedrock under them. They had to come from somewhere else ferried by moving streams of glacial ice.

Very recent in geologic time are the potholes in the river rock of the Housatonic, easily visible from Bull’s Bridge. These rock bowls were carved by pebbles and sand that got caught in a crevice and have been whirling around for perhaps only a century or two.

Overall, our geologic drama created both high steep slopes with brooks bordering the narrow valley of Route 37, and more rounded gentle hills along the broader valley of Route 39, as well as some striking rock and land formations and vistas on the side roads. This diversity contributes to the beauty of Sherman’s landscapes.

Human beings have been on this planet a very brief time, yet already our impact is major, literally earthshaking. Examples abound, such as the earthquakes induced from concentrated fracking for gas when fluids injected into wastewater wells build up the pressure on deep geologic faults.



Our planet and its biosphere of life will go on changing as in the cataclysms and slow evolution of eons past, continents and oceans getting reshaped, species becoming extinct and new ones emerging. The question is, will our human species make the wise hard choices enabling us to adapt to earth’s changes, thereby maybe, hopefully, preserving ourselves and the achievements of our civilization?



Soil is often looked upon as just plain dirt, to be asphalted, grassed over, disappeared from sight. If we really understood that the lowly “dirt” under our feet sustains all life on earth including ours, we might build a monument to it or better still take care of it as a precious finite resource.

Referred to as the “Skin of the Earth”, soil forms very slowly, essentially from weathered rock. Soil is made up of organic matter, minerals, water and gasses. It is also a habitat for many organisms, stores and purifies water, and is a medium for natural and agricultural vegetation. Soil is always changing. It interacts with air, water, bedrock and life forms and is constantly modified by this interaction.

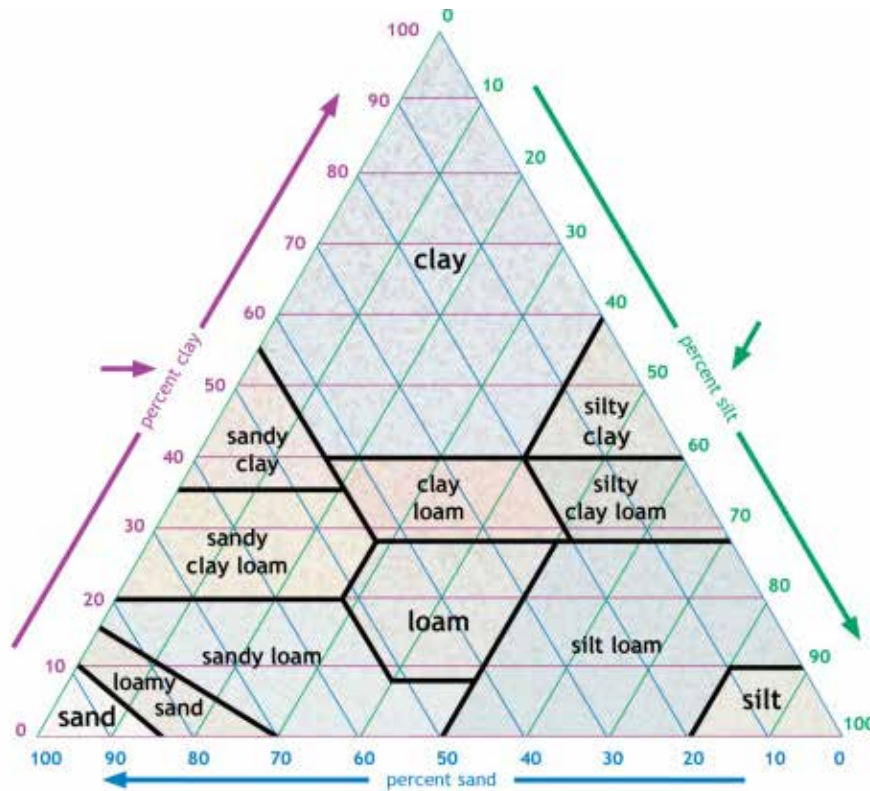
The soils covering Sherman today are fairly typical for our region. They were formed and radically altered during the last glacial period starting about 75,000 years ago. The advancing and retreating thick sheets of ice



dug up and pushed forward worn-down rock and other materials and deposited them in flood plain areas as the ice melted.

Most of our town is covered by glacial till. Glacial till is formed when a glacier carries materials such as boulders, gravel, sand and clay from one area and deposits them in another area. These sediments are unstratified or mixed. When the sediments are deposited in flood plains by the glacial melt water the material is often better organized by size and weight (stratified) and is called Glacio-fluvial sediments. The larger Glacio-fluvial deposits occur in northern Sherman along the Ten Mile and Housatonic Rivers as well as the Wimisink and Naromiyocknowhusunkatankshunk Brooks.

There are many types of soil that differ in composition. Every soil type is a mixture of sand, silt, clay, and organic matter or humus. Sand is the largest of these particles, being more than .05 mm in diameter and has very poor water retention. Sand can be fine, medium, coarse and very coarse. Silt is smaller than sand (between .002 to .05 mm) and derives mainly from quartz or feldspar. It is easily transported by water and is found deposited along watercourses and retains water well. Clay is the smallest of the three soil



particles (less than .002 mm) and also tends to hold water. The different soil textures are determined by the percentage of each of these particles present along with varying amounts of humus. Loam is the term that describes soils that are made up of roughly equal amounts of all three particles and is considered ideal for plant growth.

Farmland Soils is a classification that includes land that is defined as prime, unique, or farmlands of statewide or local importance based on soil type, in accordance with the Code of Federal Regulations. It identifies the location and extent of the most suitable land for producing food, feed, fiber, forage, and oilseed crops and is available for these uses. In Sherman, farmland soils make up about 25% of our soil area. It is no accident that many of our current farms have a significant amount of their property made up of these soils. Farmland soils are found on Happy Acres, McGoldrick Farm, White Silo Farm & Winery, Bloomingfields and the former Strawberry Fields Farm.

As in most towns in our area, a good amount of our farmland soils have been lost to development. A few towns in the state, including Washington and neighboring Kent, have established a soil-based zoning system. This assures that future development will be done on lands that have the most appropriate soils for residential and commercial purposes while protecting properties best suited for agriculture. Considering the amount of land no longer available for farming and in light of the current movement that recognizes the importance of locally produced food, Sherman may well benefit from adopting soil-based zoning and should research how effective these regulations have proven in other area towns.

According to the EPA, wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the

year, including during the growing season. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils. Hydric soils are often found in low lying areas and are typically rich in organic material although some mineral soil types (including sandy ones) can also be classified as hydric.

Hydric soils and the wetlands they are found in play an important role in our environment. Wetlands can trap floodwaters caused by heavy rains or melting snow thereby protecting downstream areas from flood damage. Rich in resources they provide critical habitat for many life forms including rare and endangered flora and fauna. Our wetlands also aid in water purification as many excessive nutrients and pollutants are filtered out of the water that is passing through. We are really just beginning to understand the importance of these areas, as it was not that long ago that humans perceived these “swamps” as an area to be dried out so they would prove more useful to us.

Sherman’s wetlands are found throughout the town in many of our valleys and along our streambeds. Some of the larger hydric soils areas can be found in the Quipy Swamp off of Hubbell Mountain Road on the New Milford border, near Spring Lake along the Naromiyocknowhusunkatankshunk and Saw Mill Brooks and around the northern Wimisink Brook along Routes 55 and 39 North.



Lakes and Ponds

The largest and most significant water body in Sherman is of course Candlewood Lake. The history of this enormous human-made lake begins with a decision on July 15, 1926 by the Connecticut Light and Power Board of Directors to fill an existing valley with water pumped from the Housatonic River, Rocky River, and its tributaries to create a new source of electricity for the area - and Connecticut's largest body of fresh water. The pumping began on February 28, 1928 and it took only 26 months to turn the valley into today's iconic lake. On September 29, 1928, the water reached an elevation of 429 feet above sea level and Candlewood Lake was complete. The lake ultimately got its name from New Milford's Candlewood Mountain, itself named for the local candlewood trees whose branches were used as candles by Native Americans and the early European settlers.

In the time since, Candlewood Lake has come to largely define the character of Sherman and the four other towns that surround it by making the area a summer destination for city-dwellers and recreators from all over Connecticut and nearby states. The economic and recreational importance of the lake to its surrounding communities cannot be overstated. Ecologically, however, the lake suffers from intensive human activity, noise and light pollution, shoreline development and erosion, eutrophication and algal blooms, chemical pollution from motorized watercraft, runoff, atmospheric deposition and invasive species. The fish and wildlife community of the lake is characteristic of a degraded lacustrine system, although many native species, including some of conservation concern (such as the bald eagle), are still supported. As recreational and development pressure on Candlewood Lake continues to rise in the coming years and decades, the ability of the lake to provide suitable aquatic and riparian habitat to many species of fish and wildlife other than disturbance-tolerant generalists will be further challenged.

Today, there are twice as many introduced species of fish living in the lake as there are native ones. This is but one indicator of how truly human-modified the Candlewood Lake ecosystem is. The most recently introduced species is the grass carp, which was stocked to control the spread of another non-native species, Eurasian milfoil. The majority of the other introduced fish are recreationally important species, including smallmouth and largemouth bass. These fish have either become established in Candlewood Lake or are stocked annually by the State, making the lake a major fishing destination and the site of more fishing tournaments than any other lake in New England.

Few species of aquatic birds can be found on and along the edges of Candlewood Lake, primarily due to the heavy levels of motorized watercraft activity. Perhaps the most common and familiar to people is the great blue heron, which can often be seen flying low along shorelines, loafing on docks and bulkheads, and stalking fish in the shallows.



Beyond Candlewood Lake, Sherman features many smaller lakes and ponds that are also human-made, including Spring Lake, Timber Lake, Valley Pond, Deer Pond, Schimpf Pond, Mill Pond, Pepper Pond, and Lake Mauweehoo. The latter two surface waters drain into Glenn Brook and ultimately Squantz Pond, which is one of only two natural lakes or ponds occurring in Sherman. The other is Green Pond. Squantz Pond got its name from the chief of the Schaghticoke Indians, who lived in this area through the 18th century. Some years ago, the remains of a very large Native American canoe, 22 feet long and 5 1/2 feet wide, were raised from the bottom



Spring Lake

of Squantz Pond. The unusually large size of this canoe suggests that 200 or more years ago, Squantz Pond may have been considerably larger than it is today.

Green Pond is a spring-fed, glacial lake of about 25 acres. The area around the pond was developed for seasonal residences

beginning in the early twentieth century. In 1810, William Leach and Cornelius McMahon tunneled through 30 feet of granite bedrock on the northwest side of Green Pond Mountain, while roughly 3/4 of a mile away and 180 feet lower, Leach also created a 14 acre storage reservoir. Then named Haviland Mill Pond after the last owner of the mill, Henry Tudor Haviland, who died in 1902, it is now known simply as Mill Pond.

Rivers and Streams

The water courses of Sherman are a charming characteristic of the town and are typical of a forested New England landscape. The largest river in town, the Housatonic (along with the Ten Mile River), creates the northern border of Sherman. Starting in Massachusetts and flowing all the way to the Long Island Sound, the

Housatonic has been a vital resource for the people of Sherman from the earliest Native Americans to today's residents.

Proceeding south through Sherman are the following named rivers, brooks and streams: Wimisink Brook, Naromiyocknowhusunkatankshunk Brook, Great Brook, Tollgate Brook, Greenwoods Brook, Sawmill Brook, Glen Brook, Quaker Brook and Babbling Brook. Six of Sherman's stream systems – Quaker Brook, Glen Brook, Sawmill/Greenwood/Tollgate Brooks, Naromiyocknowhusunkatankshunk Brook, Wimisink Brook, and an unnamed tributary to Candlewood Lake - support reproducing, native (non-stocked) brook trout, which are an indicator of water quality and overall stream health. Unfortunately, however, the brook trout populations in these streams appear to be in a state of gradual decline, likely as a result of stream warming, sedimentation, and/or runoff pollution and may not persist long into the future if more care is not taken to protect our streams and the trend is not reversed.



Housatonic River

There are many additional species of fish occurring in Sherman's streams, some native and some introduced. The majority of introduced species are now naturally reproducing and are those that tolerate warm water temperatures and other degraded conditions. The decline of a cold-water, disturbance-sensitive species like the brook trout along with the concomitant establishment of disturbance-tolerant and warm-water, introduced species like the fathead minnow, is a signal that habitat quality in Sherman's streams is declining. This is consistent with trends throughout most of the northeast, caused by local-scale factors like development and runoff pollution and global forces like climate change and acid rain.

Watersheds

One of Sherman's most distinctive hydrological features is invisible. It is the town's location within two major drainage basins. Most of the town is part of the Housatonic River Watershed, with a smaller but significant area in the southwest belonging to the Hudson River Watershed. Regional basins, including the Ten Mile River, Housatonic Main Stem, Candlewood Lake and the Croton Reservoir System (supplying New York City drinking water), further divide the town. Subregional watersheds include Duell Hollow Brook, Ten Mile River, Morissey Brook (officially

changed by the state to Naromiyocknowhusunkatankshunk Brook), Housatonic River, Candlewood Lake, Sawmill Brook and Quaker Brook. Unlike some areas of Fairfield County, Sherman has abundant supplies of surface and groundwater. Being in multiple major watersheds, the land use decisions and behaviors of Sherman residents have the potential to influence water quality far beyond the town's borders.

Wetlands

According to the University of Connecticut's Center for Land Use Education and Research, 350 acres of Sherman was wetland as of 2006 – a decrease of 15 acres since 1985. This is based upon satellite imagery rather than on-the-ground delineations, however, and so true wetland boundaries and acreages are likely to differ slightly. The figure also does not appear to include Candlewood Lake or other lakes, ponds, and possibly streams, which are all regulated as wetlands. Aside from these surface waters, the vast majority of the wetlands in Sherman are classified by the National Wetlands Inventory as "freshwater forested/shrub wetlands." These are defined as palustrine, non-tidal wetlands that are flooded or saturated for the majority of the growing season, and dominated by deciduous trees, shrubs, or other emergent vegetation that is woody and greater than 6 meters high. The remainder of Sherman's wetlands are primarily "freshwater emergent wetlands," which the National Wetlands Inventory defines as palustrine, non-tidal wetlands that are dominated by emergent, rooted, herbaceous hydrophytes (excluding mosses and lichens) or woody shrubs less than 6 meters high, and have standing water or saturated substrates for the majority of the growing season. The most substantial, contiguous wetlands in town are those that are associated with Naromiyocknowhusunkatankshunk Brook, to the east of Spring Lake Drive, and Wimisink Brook, near the northern terminus of Route 39. Smaller



wetlands abound throughout town, often also adjacent to streams.

Vernal Pools

Vernal pools are ephemeral wetlands that are created by the seasonal flooding of shallow depressions in the forest floor. They are usually filled by precipitation, rising groundwater, and runoff from snowmelt in the early spring, and then eventually dry out by autumn. This provides a unique type of aquatic habitat on which many species of amphibians and invertebrates are reliant in order to complete their life cycle. The periodic drying of vernal pools prohibits fish from becoming established and in so doing, offers an escape from predation that amphibians normally have to face in other aquatic systems.

There are 281 vernal pools that have been documented and mapped in Sherman, but many of these only loosely meet the definition of a vernal pool and are unlikely to function as such ecologically. There are others, however, that support a rich diversity of life, including multiple vernal pool obligate species. Good examples are the two pools at the top of Towner Hill, which are used for breeding by wood frogs and multiple species of salamanders. The life cycle of most of these amphibians consists of mating and egg laying in vernal pools in the early spring, development of the larvae into juveniles over the course of the summer, and then migration from the pools into the surrounding forest in autumn, where they burrow and remain below the frost line until the following spring.

Vernal pools are regulated as wetlands in Connecticut. Wetland regulations afford protection to the wetland itself as well as a 50-foot upland adjacent area bordering the wetland. As a result, the forest surrounding a vernal pool is commonly allowed to be developed to within 50 feet of the pool's edges. This level of protection is insufficient for amphibians that breed in vernal pools because it fails to protect the upland habitat used by these species during the non-breeding seasons. Pool-breeding amphibians typically migrate distances of several hundred feet from the pool for winter, meaning that development to within 50 feet of a pool eliminates the overwintering habitat of the amphibians associated with that pool. As small-bodied, slow-moving animals that are also vulnerable to desiccation, they are not readily able to cross roads, lawns, or other developed areas in search of alternative overwintering habitat. They are therefore cut off from suitable non-breeding habitat and unable to complete their life cycle. Protection of the surrounding forest for a distance of 500-1000 feet in at least two or three directions is critical to maintaining the ecological viability of a vernal pool. Voluntary adherence by Sherman residents to this best management practice that goes beyond the minimal regulatory requirements is encouraged in order to ensure that the town's vernal pools can remain viable ecosystems for the many amphibians and other critters that are dependent upon these unique habitats.



Courtesy Naromi Land Trust



A present day car bumper sticker reads: “No farms, No food.”

The early Sherman settlers would have understood that -- the human bond with the land was clear to everyone. Every family had a farm and all its members participated in keeping the enterprise going. If you didn’t grow your own food, you had either to buy it or exchange services or other products for food.

With hard work even our stony Sherman earth was productive, a good harvest gave surpluses, some of which was preserved in a root cellar and the rest maybe sold to wholesalers. Hay, flax, potatoes, butter and cheese were among the crops and products of high value. Farm machinery consisted of scythes, handrakes and pitchforks, beautiful examples of which are on display at the Sloane-Stanley Museum in Kent. You got through the winter in home sewn heavy scratchy underwear. Most clothing, and so many other things were handmade – soap, candles, feather beds and pillows, furniture, even the forms of recreation and entertainment were self-created, mostly as “sociables,” in one another’s houses.

Allie Hungerford Giddings, related to most of the old families here, gives a vivid informative account in her History of Sherman of daily life on the farm in the 1800s and early 1900s. She cites a charming practice relating to many of the old homes in town: wedding couples planted his and her marriage maple trees in front of the house.

The most energetic of those first early settlers gradually acquired more land so sons could start their own enterprises, many of which eventually became small-to-medium dairy farms whose family names are familiar to us – Rogers, Osborn, McGoldrick, Hapanowich, and Rhodes. Western Connecticut and neighboring Hudson Valley were at one time the most dense dairy farming area in the entire United States, until the economic advantage shifted to big dairies farther west.



The building of roads in the early 1900s, the coming of autos and trucks, enabling people to drive to day jobs elsewhere, the exposure of rural boys to the wider world in two major wars – by the 1970s, fewer farm sons wanted to continue in their fathers’ footsteps. Tony Hapanowich was an exception; he stayed and shifted from dairy to beef cattle. The Jones family in southern Sherman began in the 1960s to breed Arabian horses. Farmland was sold to



build houses, at one time way back, for as little as \$10 an acre. Some got preserved as Open Space, thanks to generous environmentalists, the Naromi Land Trust, and more recently our Town itself. Today, that same bumper sticker brings forth images of huge commercial farms and factory-like food processing plants supplying our supermarkets with milk, eggs, packaged meats and canned goods. A century of phenomenal progress has reduced hard labor, cut food costs, brought variety, enabled Americans to help feed hungry people abroad, but it has come at heavy cost. We now live in a toxic world. Because more of us now live in cities and suburbs, many of our children never set foot on a farm.

Already in 1975, Michael Bell wrote in *The Face of Connecticut*, “Most of us are thus isolated from the land by which we live and so are in danger of losing contact with a fundamental part of our humanity. In addition, this isolation breeds misunderstanding of land, which can lead to mismanagement of our resources.”



In 1970 a young biologist from Canton, CT named Mel Bristol, who wanted to make farming his life, settled in the Wimisink end of Sherman. He started a landscape nursery, planted a family orchard, kept flocks of sheep and chickens and geese, and has grown organic vegetables ever since. By 1990 the times were right for starting farmers markets, and he became the first market master at nearby

New Milford. A new consciousness about the nature of food was beginning to take root.

The public understanding of what has gone wrong with how we produce our food was yet to emerge. Most of us were unaware of how the emphasis on a few large-scale annual crops and the repeated plowings they require was leading to erosion and depletion of precious topsoil. As one observer dramatically put it, “We are eating our planet away to the bare bedrock bones.” Most of us were ignorant then and many still are of the extent to which antibiotics and synthetic hormones, pesticides, herbicides and other chemicals are in our foods and affecting our health, especially the health of children, and fertilizers are poisoning our waterways.

By now more and more Americans are seeking and demanding healthy food from their markets, and the big ones are responding with larger offerings of certified organic fruits and vegetables. Only as our citizens become aware and take action will the food industry giants that serve us continue to modify their practices, diminishing and eventually ceasing the use of chemicals and hormones in livestock and crop production. And our farmers will have to shift more to perennial crops grown in ways that restore the soil and prevent erosion, to what is called “Permaculture.”



Courtesy Naromi Land Trust

One way of restoring degraded soil is to promote plant life to return carbon to the soil that was there in the first place before our destructive agricultural practices brought about its release into the atmosphere. “Putting carbon back in soil is not only mitigating climate change, but also improving human health, productivity, food security, nutrition security, water quality, air quality – everything.” says Rattan Lal, the director of the Carbon Management and Sequestration Center at Ohio State. “It’s a win-win-win option.” This has to happen worldwide for our planet and its people to have a healthy future.

Because farmers are the stewards of their land, what they do has great conservation value, such as:

- Retaining soil for plant growth.
- Improving water and air quality by filtering.
- Providing fish and wildlife habitat.
- Absorbing and sequestering carbon.

Farming has many additional values, among them:

- Using less town services than housing developments and paying more in taxes than they use in services, unlike housing developments.
- Supporting other businesses such as garden centers, farm supply stores, machine repair shops, wholesale fuel suppliers, and veterinarians.
- Agricultural Tourism is one of the fastest growing segments of CT's tourism industry.
- Many farmers allow public access for recreation – walking, cross-country skiing, horseback riding, hunting and fishing.

When in 2006 the Sherman Conservation Commission organized a day of visiting our town farms, two busloads of families visited seven farms, raising pigs, cattle, sheep, horses, poultry, daylilies, vegetables and berries, including a developing winery. It was an impressive array for a small town. In 2018 although the winery thrives we have seen a decline in local

agriculture. Several of our well established farms have ceased operations, the daylily farm is slowing down and Happy Acres now belongs to the Town, its tenant farmers still raising beef cattle and struggling to find additional needed means means of survival.



But farming is still an important resource in town as evidenced in the long line of farming tractors, some of them antiques, that take part in our annual Memorial Day Parade. Naromi Land Trust has protected some of our farmlands in perpetuity and leases them out to local farmers. Private parcel owners also lease their open meadows to farmers who plant and harvest crops like corn and hay in several areas of town. In the Sherman Community Gardens, some dozen families have plots and raise produce. Throughout town there are households with small backyard vegetable gardens or raising a few chickens and other poultry – no one knows how many.

Farming is physically taxing and brings in low income. That it can be a satisfying way of life, close to nature, growing healthy food and protecting the environment, is what draws some of the young generation to this

occupation. Few aspiring farmers inherit a farm or the money to buy one. They lease from a Town or a land trust or from wealthy property owners who have the interests of young farmers at heart. Once farming they often need the ongoing substantive help of family and friends, and the generous support of the Town and community.

Even under the best of circumstances, making a decent living means taking on agriculturally related activities, such as adding a kitchen for canning or making food products, and holding harvest festivals and other events. It can mean supplementing incomes with non-farm activities such as bed-and-breakfasts. This broad definition translates into appropriately flexible regulations that steer clear of outside micromanagement impeding farm operations. Our citizens understand this; they voiced support for our one and only farm winery when it was under threat from over-regulation.

Sherman's elected officials – its three Selectmen and the members of the Planning and Zoning Commission, now recognize that fostering farming in our town means adopting an all-encompassing definition of agriculture, one that “incorporates retail and value-added processing and helps provide flexibility for farm businesses to adapt to future markets and trends.”

Although Connecticut is a Right to Farm state, enacting a similar local ordinance as neighboring towns have done, would remind our residents that this is so. Everything we have said in surveys and official statements testifies that in addition to being a Right to Farm town – we want to be a Farm Friendly and Supportive community,





Terrestrial habitats are ones that are found on land and include forests, woodlands, shrublands, grasslands and meadows. The majority of Sherman is forested. According to UCONN's Center for Land Use Education and Research (CLEAR) more than 69% of the town is covered in trees. Since this research is done by satellite this number also includes scrub areas characterized by patches of dense woody vegetation. That is over 10,000 acres, and even more so than our agricultural lands, this forested cover gives Sherman its rural character. Our percentage of forest cover is higher than the state's average of approximately 58.8% and surpasses all of the other towns surrounding Candlewood Lake.

Forest cover, however, can change quickly and dramatically as it has for the last few hundred years. Prior to the arrival of European settlers in the 17th century, Native Americans opened small clearings in the forest and burned sections to eliminate tangled underbrush in order to enhance the habitat to attract their preferred game. These were minor encroachments on what was otherwise vast, unbroken stretches of dense old growth forest covering nearly 95% of the area.

Like many of the surrounding towns, much of the old growth forests of Sherman had been cut down in the early colonial times. As the settler's population grew, much of the forested land was cleared for agriculture and lumber. By the 1820s only 25% of Connecticut was still forest covered. With the building of the Erie Canal and the discovery of much more productive farmlands to our west, many of the smaller, stony New England farms were abandoned. This allowed some recovery but there were additional threats as well. Over the next 100 years forest cover came under pressure due to forest fires, increased lumber and charcoal production and wide spread disease. In the early 1900s the chestnut blight wiped out one of the most dominant hardwood species, radically changing the composition of our forests. However farming continued to decline, charcoal was replaced with coal and new governmental legislation helped to reverse the trend. Oak, hickory and other hardwoods soon took the place of the chestnut and our forests started to rebound reaching nearly 70% of mostly second and third-growth forest coverage in Connecticut by the 1950s.

CLEAR's Changing Landscape study divides forest cover into 3 categories, Deciduous, Coniferous and Wetland Forests. By far, the largest type found in Sherman is Deciduous Forests which are made up of Upland Oak, Northern

Hardwood and Mixed Hardwood Forests depending on the most dominant tree species. Common trees found in these include white, red, chestnut and scarlet oaks, red and sugar maples, yellow and black birch, pignut and shagbark hickory, beech, white ash and tulip. Almost 61% of the town is covered by deciduous while 5.9% is coniferous and 2.3% are forested wetlands where the dominant species is red maple. The largest areas of coniferous forests, which are dominated by white pines or eastern hemlocks, are found in the northern section of town near the Ten Mile and Housatonic Rivers.



The forest classification also includes areas of successional habitat or young forests. These are lands that experienced some type of disturbance like fire, flooding or clear cutting and include abandoned agricultural lands. Woody vegetation takes hold of the meadow or cleared areas, followed by sun loving pioneer trees like white birch, cedar, aspen and cherry.

Our forests help to purify our air, protect our soils and watersheds and provide habitat for a wide diversity of plants and wildlife including our largest mammals like deer, black bear, fishers, coyotes and bobcats. Many species of flora and fauna require large areas of unfragmented or core forests to flourish. Forest fragmentation is the breaking up of forests into smaller and smaller areas due to development and has detrimental impact on the health of our natural resources. Sherman is fortunate to still have a fair amount of core forests spread throughout the town. The center of town running from north to south has small core forests (<250 acres) along the Route 39 North corridor. Larger core forests (between 250 to 500 acres and >500 acres) can be found in the lower western part of town, west of Spring Lake Road, east of Church Road and north of Route 55.

Not all of our terrestrial habitats are forested. Grasslands and farmlands cover approximately 13.6 percent of our town. The majority of these (1,260 acres or 8.5%) are categorized as Agricultural Fields, which includes areas that are under agricultural uses such as crop production and/or active pasture. This description may also include some abandoned agricultural areas that have not yet converted to woody vegetation or early succession forests.

Grasslands are defined as areas in which grasses contribute more than 50% of the herbaceous cover. The other species that might be found in grasslands are plants called forbs: broadleaved, herbaceous plants such as milkweeds, asters and goldenrods. Few,



if any, trees and shrubs are present. Most of the grasslands in Sherman are classified by the CLEAR report as maintained grasslands mostly associated with development and include the golf course, airport, parks, cemeteries and residential areas. There are some examples of wild meadows in town as well such as Munch Meadow on Route 37. Along with the early successional habitats these grasslands and fields provide the necessary environment for animals like cottontails, woodcocks, bluebirds,

field sparrows as well as pollinators such as honeybees and butterflies. The open lands also create edge habitat with our forests that are important to many species of birds, white tail deer, turkey and a multitude of plant species.

Our terrestrial habitats do face some significant threats, the greatest of which is forest fragmentation due to development. Several species of birds, mammals and plants require core forest habitat in order to survive and prosper. Although Sherman still has a significant amount of core forests covering the land, they are in decline. Since 1985 we have lost approximately 800 acres of core forest. Of that, just under 300 acres has become non-forested developed land. The other 500 acres were converted to patch forest which are small forested areas surrounded by non-forested land and perforated forest which are small clearings within a forested landscape. This is not a unique situation to our town as the entire State of Connecticut has lost a similar percentage of core forests in the same time period.

Several towns throughout the state have passed cluster-zoning regulations. Cluster-zoning, also known as conservation development or conservation design, allows for smaller building lots than typically permitted in a zone when a significant percentage of the subdivision is left in permanent open space. This zoning tool permits the municipality to better preserve unique natural resources and ecologically sensitive areas including core forests.

Invasive species continue to be a growing threat to our local habitats. The United States has already seen the loss of billions of American chestnuts and tens of millions of American elm trees due to accidentally released fungi from foreign shores. Today many of our tree species are under attack by several invasive insects. Our eastern hemlock population has been drastically reduced by the woolly adelgid, a small aphidlike insect originally from Asia. European gypsy moths can defoliate oak and several other species in a short period of time and have been doing so for nearly a century. Yellow Ash Disease

and currently the Emerald Ash Borer are devastating our ash population while the Asian Longhorned Beetle poses a threat to our maples and birches.

The plant list of invasive species is just as concerning. These plants have been imported to this continent from their native lands where they are kept in check by other plants and animals in a natural balance. When introduced into our habitats that do not contain the predators and competitors of their homeland, some species have the ability to spread quickly and out grow local plants making them a threat to our indigenous species. In some areas our forest understories are being choked by winged euonymus, Japanese barberry and oriental bittersweet. Plants like multiflora rose and Japanese knotweed can invade open meadows and virtually wipe out important native plants while purple loosestrife and common reed (phragmite), can do the same to our wetlands.

Education and legislation are our best weapons to control invasives. The more we know about what these invaders look like, what impact they have on our habitats and how they spread, the better prepared we will be to stem their invasion. We also need to assure that our laws and regulations prohibit known invasive species from being available for purchase and that any introduction of new species is properly researched for its impact prior to its introduction.



As the least developed of the five towns surrounding Candlewood Lake, Sherman has large tracts of contiguous and nearly contiguous mature forest mixed with a variety of other habitat types that together support rich and diverse communities of wildlife. These large forests provide interior habitat for area-sensitive species that are intolerant of the fragmentation caused by the higher density of roads and development in neighboring towns to the east and south. Sherman indeed marks a transition zone from the more heavily populated and suburban towns of Fairfield County to the more rural and pastoral lands of Litchfield County to the north.

Sherman's connection to this least developed region of Connecticut allows for many species with large area requirements and home ranges, such as the black bear and fisher, to be increasingly common in our town. As a part of this extensively forested landscape, Sherman is also home to nearly fifty species of woodland breeding birds as well as scores of woodland reptiles and amphibians. Maintaining this corridor to the Northwest Highlands and limiting future development in our area will be important for combating the effects of climate change, as species attempt to shift their ranges north in response to warming temperatures and poleward-advancing plant communities.

While Connecticut lies within one of the most heavily forested biomes on Earth and its forests are the foundation of our natural heritage, habitat heterogeneity is critical for sustaining diverse assemblages of native wildlife species. Mature forest is the dominant land cover type in Sherman, but other habitats for wildlife include emergent wetlands, meadows and agricultural fields, shrublands, and early successional forests. We also have many streams and ponds that provide aquatic and riparian habitats, and many of our town's woodlands are full of vernal pools on which several species of amphibians are dependent in order to breed.

Our meadows and agricultural fields support declining grassland bird species, such as the bobolink, and its early successional habitats support species of conservation interest like the American woodcock, rose-breasted grosbeak, and possibly the New England cottontail rabbit. Many of Sherman's wildlife species would not be present without these other habitat types mixed throughout our mostly forested town.

Among the wildlife that is known or expected to occur in Sherman are several species that are listed as Endangered or Threatened at the federal

and/or State level. There are also many additional species that have experienced regional population declines and are listed by the state as Species of Special Concern. The Connecticut Department of Energy and Environmental Protection Natural Diversity Database's records of federally or state-listed vertebrate species in Sherman (as of 2015) include the American bittern (state-listed Endangered), timber rattlesnake (state-listed Endangered), bald eagle (state-listed Threatened), northern slimy salamander (state-listed Threatened), wood turtle (state-listed Species of Special Concern), eastern red bat (state-listed Species of Special Concern), hoary bat (state-listed Species of Special Concern), and silver-haired bat (state-listed Species of Special Concern).



Photo by Dennis Larkin

Three additional bat species that are federally and/or state protected, the little brown bat (state-listed Endangered), Indiana bat (federally and state-listed Endangered), and northern long-eared bat (federally listed Threatened and state-listed Endangered) have strong potential to occur in Sherman as well.

Populations of many wildlife species are declining not only in our region, but also throughout their entire range. The primary cause of their decline, in most cases, is habitat loss and habitat degradation. Habitat degradation generally refers to the reductions in habitat quality that are caused by fragmentation, noise and other human disturbances, non-native invasive species, light pollution, and chemical pollution. Development is therefore the greatest threat facing most species of wildlife in our area. Urban sprawl and human population growth, combined with poor land use decision-making and planning exert tremendous development pressures on our open spaces.

Sherman's small population, limited commercial activity, and low housing density has helped the town retain the large tracts of forest and other habitats that can sustain viable wildlife populations. Sherman's new four acre minimum zoning law for residential properties will limit the number of homes that can ever be built in town, but it is important to recognize that low-density residential development (known as "exurban development") can have many of the same impacts to wildlife as higher density urban and suburban development even though it gives the perception that it is more environmentally sound. Low-density residential development often causes significant changes in wildlife community composition, with human-tolerant generalist species (e.g., jays, crows, gray squirrels) increasing in abundance at the expense of more sensitive, forest interior species. These effects extend as far as 200 yards from the home into the surrounding forest, resulting in a very large footprint of disturbance from just one seemingly harmless house

tucked away in the woods. Sherman's four-acre minimum zoning law on its own will not ensure the protection of the large forests and the diverse wildlife communities that we have today, and it will take more to safeguard their future.

Beyond limiting future development, there are several steps that Sherman's residents can take to help protect wildlife and the habitats on which they depend. Perhaps the most direct action homeowners can take is to provide wildlife friendly habitat on their own property. This includes landscaping with native plants that offer food and cover for many native wildlife species, such as butterflies and other important pollinators, minimizing the size of your lawn and other manicured areas, avoiding the use of chemical fertilizers and pesticides, and providing a year-round water source. Non-native ornamental plants, such as Japanese barberry, spread uncontrollably and should never be planted.

Nest boxes are a great way to give a hand to declining species of cavity-nesting birds like tree swallows and bluebirds. Homeowners should also retain any standing dead trees on their property that are not a safety hazard. Snags, as they are known, provide nesting cavities for birds, an abundance of insects for woodpeckers, and roosting sites for bats. Outdoor lighting should be minimized to the greatest extent possible or avoided altogether. Light pollution affects the singing behavior of birds, circadian rhythms and mating behaviors of amphibians, foraging behavior of bats, and has many other negative effects on wildlife. Several guides for creating wildlife friendly backyards are available online and in print, and are great resources for any homeowner looking for more information on how to support native wildlife on their property.

Up to 1 billion birds in the U.S. die each year from colliding with windows, most of which occurs at residential homes. Birds collide with windows during the daytime when windows reflect images of vegetation or sky that birds cannot distinguish from the real thing. Raptor silhouette decals do not prevent or reduce window collisions, but there are several other window treatments that are effective. Applying narrow strips of opaque tape to window exteriors or dangling string in front of windows are a simple and effective solution, and keeping blinds, curtains, and shades closed can also help reduce collisions by weakening reflectivity. The American Bird Conservancy offers several helpful solutions for homeowners to prevent bird/window collisions.

Another source of wildlife mortality around homes is outdoor cats. It is estimated that outdoor cats kill up to 4 billion birds and 22 billion small mammals annually in the U.S. Most of these are never seen by cat-owners and no cat is safe for wildlife when left outdoors. In addition when our pet felines are allowed to roam alone in the outdoors, they are susceptible to becoming prey themselves by eastern coyotes, bobcats, raccoons or even some birds of prey. Cats present a substantial threat to our wildlife and Sherman residents should never leave their cats outdoors at any time.



We think of open space as whatever visibly surrounds us that remains in its natural state – the meadows and forests, the hills, mountains, wetlands, lakes and streams, the dunes and the oceans themselves.

Stand in one of Sherman's high places with a long clear view, and you will see forests on undulating hills far into the distance. About 60% of our state is forested, 6 out of every 10 acres, and in Litchfield County even more so, 70%.

Have you ever tried to imagine the variety and richness of the living world inside a big forest, from bobcats to beetles, from giant red oaks to new shoots of plants and trees reaching up for light and down for moisture, from the outflow point high up where a trickle becomes the stream or brook we see far below. Every part of this forest world is interconnected and a resource for the plants and animals therein, and for us humans who long ago also lived there, but have now built our own



world, all too often in conflict with nature's. A similarly complex picture would emerge of the ocean world, and we would be surprised at the variety of life inside a monotonous-looking desert landscape.

Americans who believe this conflict between humans and nature need not be have long worked to protect our natural environment, for example, in the creation of national parks, going back to President Teddy Roosevelt's time. Individual and group initiatives started to become a movement in the early 1960s with the publication of Rachel Carson's wake-up book *Silent Spring* on the dangers of the pesticide DDT. On April 22, 1970 the first Earth day was

celebrated on the streets of America, with teach-ins and protests signalling, as one writer put it, that “environmental issues had become political issues”.

Now, when its initial letters are capitalized, Open Space usually signifies land dedicated in perpetuity to protect the natural resources essential to life and good health. Open Space may be in public, private, or non-profit ownership, with public access or without.

Sherman was fortunate to have a group of local citizens with foresight to create the Naromi Land Trust as early as 1968. A private, not-for-profit corporation, Naromi’s mission is to “conserve and protect the natural resources of Sherman including wildlife habitats, water quality, agricultural lands and scenic vistas.” In 1986 Naromi devised an innovative purchase of the Osborn Farm, preserving both its agricultural land and its beautiful view to the distant hills, and financing the purchase by setting aside and selling nine out-of-sight lots for houses.



Courtesy Naromi Land Trust

As our town entered the 21st Century, many Sherman residents began to feel that even more could be done in order to protect key tracts of land and retain our small rural town appeal. In 2003 voters agreed by a 70/30 margin, and the Sherman Land Acquisition Fund and its Advisory Board were formed. Shortly afterward the Board carried out the town’s first on-line public opinion survey on Open Space conservation. Over 900 residents took part: 80% of respondents believed preserving additional open space in Sherman should be a high priority, and 66% were in favor of the Town buying open space even if it means raising taxes to do so.

The Acquisition Fund received very small portions of the municipal budget for two years, 2004 and 2005, enabling it to purchase Munch Meadow, a gateway to the town. Happy Acres Farm was purchased with bond money, and Towner Hill with a combination of federal and state grants, town and private monies brought together at the initiative of our Naromi Land Trust. As of 2017, 15% of Sherman’s 13,090 acres (excluding Candlewood Lake) is designated as permanently preserved Open Space. Naromi permanently protects 12% -- 1581 acres (1031 through purchase and private donations, and 550 in conservation easements), and some Sherman land is owned and protected by the Federal Government (the Appalachian Trail area), the State Government (Pootatuck State Forest) and the Town of Sherman.

Connecticut’s goal for land acquisition and permanent protection is 21% of the State’s land acreage by 2023. Northwest Connecticut having a concentration of valuable resources is

aiming for 30%, and Sherman with its long stretches of wildlife habitats should aim high too.

Ideally, every animal in the forest requires a certain amount of land from which to feed itself. If a tract of woodland is developed, with a house every four or more acres, asphalted driveways, maybe a tennis court or a swimming pool, and night lights illuminating the area, wildlife habitats are affected. Animals adapt, they find their way through and around, but at some point the woodland become fragmented, the connectivity is lost and their numbers diminish. This is happening to many species all over the world. In Sherman we seek to preserve the interconnected corridors along which our bobcats and bears, our turkeys and coyotes and deer and other animals migrate over the year.

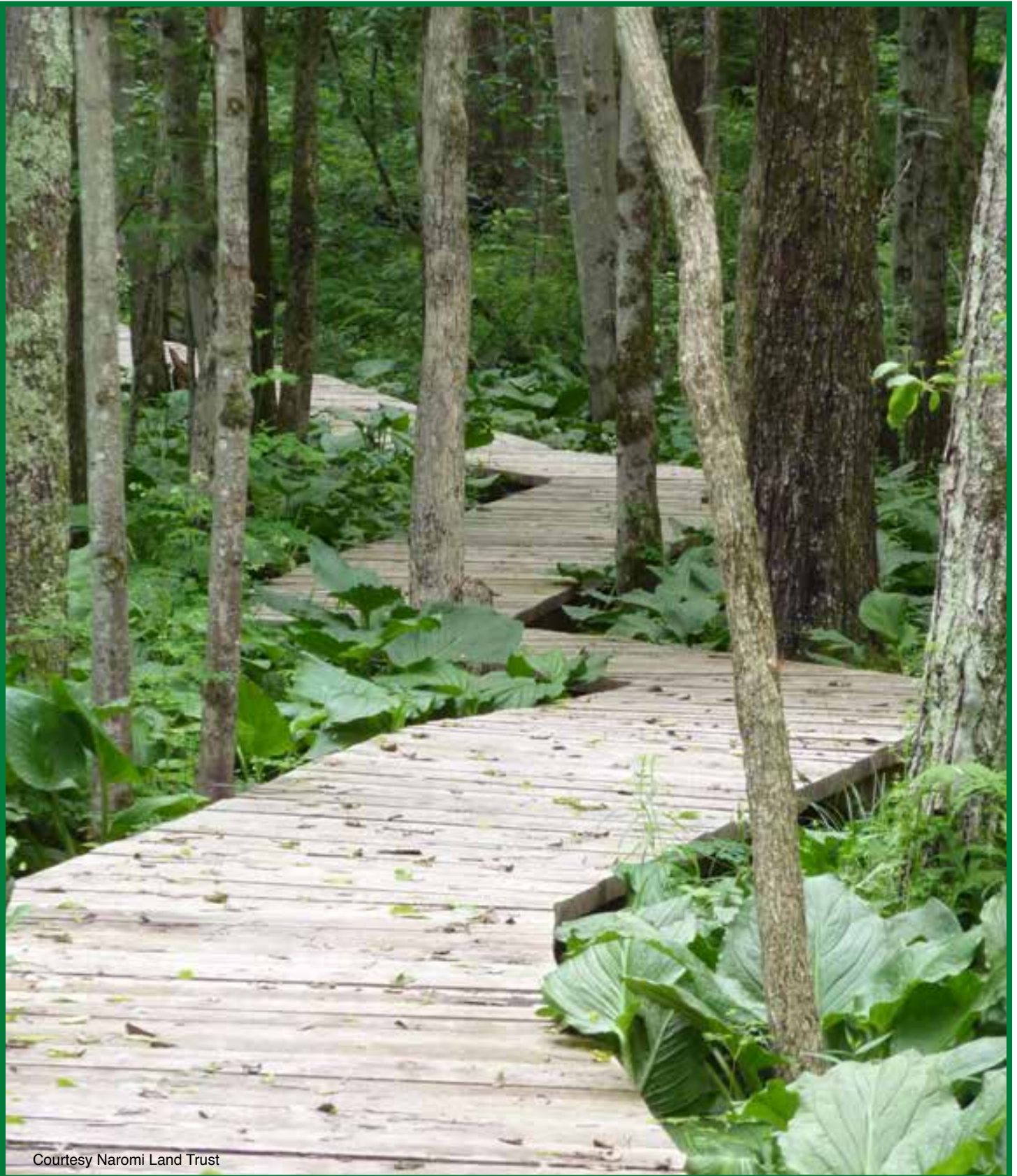
In the Open Space Plan drafted by the Fund's Advisory Board, protecting wildlife habitats is just one of our goals. We human beings are also part of nature's ecosystem. Although more of us now live in cities, we need to protect the air and water and soil that are central to human life and good health, to preserve and expand the farmland that can give us locally grown fresh food, if there is someone to farm it. We also seek to preserve the rural character of our Town, its esthetic appeal and the outdoor enjoyment of it.

The Open Space Plan is intended to guide the Town in land preservation, to ensure its policies and regulations are consistent with these efforts. It lists various strategies for implementing our goals, a challenge even in the best of times. What is called for now more than ever are multifaceted approaches of cooperation and coordination in both zoning regulations and financing. Patchy networks of open space are difficult to monitor and maintain and do not maximize ecological values. The principal long-term focus should be to expand permanently protected Open Space in a way that emphasizes preservation of farming, meadows, cleared land and forests, oriented along corridors, greenbelts, larger tracts and those containing important Natural Resources. With these objectives in mind, the Fund's Advisory Board developed a map of Sherman's areas of priority interest for protection.



Courtesy Naromi Land Trust

Yes, protecting open space is a fiscally responsible measure, however the central reason to do it is for the health and future of our planet and all who live on it – this breathtaking diversity of humans and animals and plants we see all around us, interconnected and depending on one another to survive and prosper.



Courtesy Naromi Land Trust

Despite its relatively small size, Sherman is blessed with an abundance of scenic and recreational resources. The unique topography lends itself to a variety of hills, valleys, and water-bodies. A combination of governmental, non-profit, and private landowners steward these resources for the enjoyment of residents and visitors alike. As this is a public inventory, it does not detail the scenic sites or recreational opportunities available through private organizations such as Timber Trails community, Lake Mauweehoo, or the private lake-front communities on Candlewood Lake.

Recreation

With a mixture of municipal property, state property, and local land trusts, Sherman offers diverse recreation opportunities. Hiking, bicycling, birding, cross-country skiing, paddling, swimming, boating, tennis, snowshoeing, fishing, hunting, horseback riding and golfing are only some of the outdoor activities available.

Municipal properties with recreation include:

- Veteran's Field (1/2 mile gravel track, playground, basketball court, gazebo, sports fields, and tennis courts)
- Colonial Park (sports fields and trails to Town Park and to the Jewish Community Center)
- Sherman Town Park (boat launch, boat slips, swimming beach on Candlewood Lake)
- Volunteer Field (short hiking trails, sports fields)



Naromi Land Trust, a Sherman-based land trust, boasts 15 miles of trails that allow passive recreation such as hiking, cross-country-skiing, birding, and nature study. The exact number of trails are too numerous to mention here and the Land Trust maintains hiking trails on their website. Some trails of note include the loop from the Sherman Town Green to the Sherman Historical Society Barn across from Sawmill Road, the Herrick Trail which connects to the Appalachian Trail, and trails on Towner Hill and Irene's Wood preserves that connect to White Silo Farm.

Recently, a large property in southern Sherman was donated by Kathryn Wriston to the Connecticut Audubon Society. This property features residential buildings, miles of hiking trails, small ponds, and unique ecological sites. This property abuts Mrs. Wriston's generous gift in New York State and Naromi Land Trust properties.

The preserve is called Deer Pond Farm and has recently opened up over of 10 miles of trails to the public.



Courtesy Naromi Land Trust

The Great Hollow Preserve encompasses over 800 acres, the majority of which are in the town of New Fairfield but there are approximately 80 acres in the southwest corner of Sherman. Great Hollow has a wonderful network of trails with some beautiful vistas and a waterfall.

The State of Connecticut owns and operates Pootatuck State Forest, which enters Sherman near its southern border with New Fairfield.

While there is a scenic view of

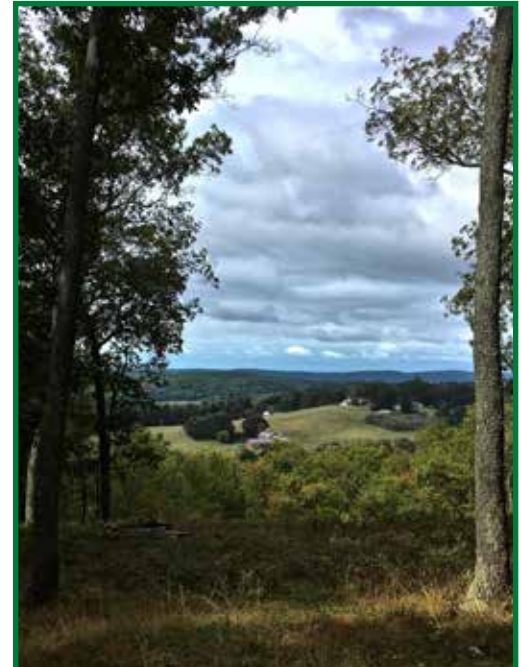
Squantz Pond and the forest from Leach Hollow Road, Squantz Pond State Park is not accessible from Sherman.

Scenic Locations

Due to the natural topography, there are a number of scenic vistas and views throughout the town. Notably, most of these are accessible by the public:

- Hadlow Fields (Cozier Hill Road)
- Briggs Hill Road
- Amy's Overlook and Housatonic Overlook, Herrick Trail Preserve (Naromi)
- White Silo Farm & Winery
- Irene's Woods Overlook (Naromi)
- Wimisink Preserve boardwalk over wetland
- Spring Lake Road
- Orange Pepper Road
- Cozier Hill Road
- Route 39 North

Over 100 historic barns are listed on the "Historic Barns of Connecticut", a website produced by the Connecticut Trust for Historic Preservation.



Important Cultural Sites

- Happy Acres Farm, Town of Sherman property (2 Taber Road)
- Sherman Historic District (Center of Town)
- Multiple cemeteries (Coburn Cemetery on Leach Hollow Road; North Cemetery on Route 39; Graves Cemetery on Charles Johnson farm, North Sherman at North Church, Center Cemetery at Sherman Center; Leach Cemetery at Leach Hollow near Creek Bridge, Graveyard Cemetery

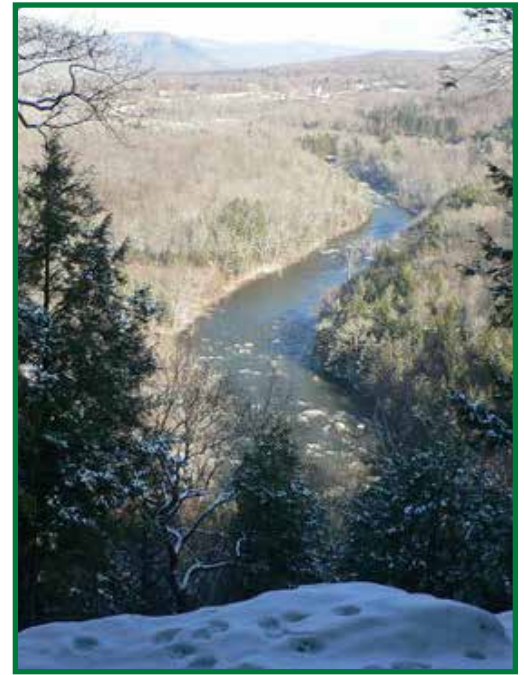
on Stevens Constable Farm on west side of Creek Pond; Wanzer Cemetery and Pepper Cemetery near Mauweehoo Lake; Briggs Cemetery on Mrs. Walsh's Farm, and Hungerford Cemetery on Irwin Atchinson Farm)

- Sherman Playhouse, Library, and Senior Center
- Several religious institutions

Throughout the year, many events highlight the wonderful community of Sherman such as open farm days at Happy Acres Farm, the Memorial Day Parade, the Veteran's Day Memorial Ceremony, Sherman Chamber Ensemble concerts, Historical Society's Annual Barn Sale, programs at the Jewish Community Center and Library, theatrical performances at the Sherman Playhouse and the annual Naromi picnic on Hadlow Fields.

In order to maintain these unique resources, Sherman must make a concerted effort to understand the many threats to the functioning of these properties and the quality of experience we have come to expect. Some of the challenges facing these resources include:

- Blue-green algae and milfoil in Candlewood Lake
- Potential construction along ridgelines
- Funding for the protection, maintenance, and continued public access on the government and non-profit properties
- Political changes in the direction of Town-owned properties



Courtesy Naromi Land Trust



Courtesy Naromi Land Trust

We recommend the following:

- Funding for the Land Acquisition Advisory Board
- Careful review of "perceived open space" and build-out analysis to prioritize land conservation
- Enhanced relationships between the town and the non-profit groups
- Concerted efforts to protect the natural resources upon which the vistas and recreational uses depend
- Improve access to information about local recreation opportunities, especially municipal properties
- That the Historic District complete a historic resource inventory to include barns, stone walls and farm houses as

tasked by the Planning & Zoning Commission in the 2013 Plan of Conservation & Development.

- Planning & Zoning should consider the Town of Kent Connecticut's use of horizon regulations for scenic views.
- Review of the 2005 Scenic Road Ordinance for adequacy



In order to maintain our Town's rural character, the protection and preservation of Sherman's natural resources is paramount. Our Planning and Zoning Commission recognize this and call for natural resource protection in the 2013 Plan of Conservation and Development. The chapter on Natural Resources opens with: "Preserving Sherman's rural character means above all protecting the natural resources that sustain life and good health- the water, air and soil, the plant and wildlife. We are the stewards of the land, maintaining and enjoying it, then passing it on to the next generation".

Our resources face threats that could seriously damage or deplete them. The following recommendations are made in order to address some of these threats.

Soils: We know that there are many different types of soil but for a rural community, lands suitable for agriculture are one of the most important. Sherman does not have a large percentage of prime farmland soil and a good portion has already been lost to development. Several towns in the state have adopted soil based zoning in order to preserve prime farmland soils.

- Recommendation: Research whether soil based zoning would be appropriate for Sherman in order to protect lands with agriculturally viable soils to help preserve local farming today and into the future.

Aquatic Resources: Our waterways and ground water are very susceptible to contamination by siltation and use of pesticides, fertilizers and salt. Recent examples are the exploding colonies of milfoil and blue green algae in our lakes and ponds and the salt contamination of wells in the center of town.

- Recommendation: Educate the public on the hazards of certain chemicals and encourage the use of organic pesticides and fertilizers for Town and private use.
- Recommendation: Require and incentivize the need for buffer zones along water's edge that Candlewood Lake Authority has long advocated.
- Recommendation: Increase the protected setback for vernal pools to maintain the viability of this critical habitat.

- Recommendation: If it proves successful, consider expanding the recently enacted septic monitoring program to include additional areas of Town.

Agricultural Resources: Historically, agriculture had been the center of Sherman's community but like so many of our neighbors in the northeast the number of farms have drastically declined over the last fifty years. Many factors contribute to this trend. The high value of land, large corporate farms to the west, transportation of food from just about anywhere and the long hours, marginal profits and hard work of farming itself are just some of the reasons for the decline. However, as our society has come to realize the importance of locally grown food we need to support our current farmers and encourage the development of new farms.

- Recommendation: Adopt a Right to Farm ordinance in Sherman. Although Connecticut has a Right to Farm law, by passing a local ordinance we would show additional support to our existing farmers while telling prospective farmers that our community supports agriculture. Many towns around the State have adopted a local Right to Farm ordinance including two of our neighbors, Kent and New Milford.
- Recommendation: Encourage regenerative farming practices that build soil, sequester carbon, create wildlife habitat, enhance biodiversity, purify air and water while growing healthy food for the local community.

Terrestrial Habitats: The preservation of core forestlands is essential to maintaining healthy terrestrial and critical habitats. Large tracts of contiguous forest are used as wildlife corridors and allow animals to travel between different types of habitats to reach food sources and breeding sites. Our four-acre zoning helps to control overall population density but as pointed out in this report does not prevent core forest fragmentation. Forest fragmentation creates a significant loss of habitat for flora and fauna dependent on core forests.

- Recommendation: Research whether Sherman should create Conservation Cluster Zoning where, when appropriate, homes may be allowed on smaller lots in order to permanently protect larger contiguous forested areas.
- Recommendation: Identify and map core forested areas and wildlife corridors in town for use when land development decisions are being made.
- Recommendation: Continue to educate the public on the problems caused by invasive plant and insect species as well as how to recognize and control the invaders.
- Recommendation: Enforce local ordinances that regulate the cutting of forests.
- Recommendation: Create a map of the location of endangered and threatened

species, vernal pools and archeological/historic sites to be available for Planning and Zoning when land development decisions are being made.

- Recommendation: Continue with the Weed Warrior Program to control invasives species on public lands.

Open Space, Recreational and Scenic Resources: Sherman has a wealth of protected Open Space thanks in large part to the early organization and success of the Naromi Land Trust. We also have a fair amount of Town Parks and Town owned Open Space for a village of our size. The resulting rural character enhances our recreational opportunities and scenic resources and helps to define our town. Below are a few recommendations aimed at helping us to continue careful planning to preserve these assets for future Shermanites to enjoy as well.

- Recommendation: Reinstate funding for the Land Acquisition Fund to allow the Town to be able to permanently protect key properties.
- Recommendation: Create a Stewardship Plan for all of Town owned Preserves to give guidance to future land use boards as to why these lands were preserved and how to manage them.
- Recommendation: Create a careful review of “perceived open space” and build-out analysis to prioritize land conservation.
- Recommendation: Enhance relationships between the Town and the non-profit conservation groups.
- Recommendation: Partner with the Naromi Land Trust to create a town-wide map of hiking trail systems.
- Recommendation: Periodically update the newly created Notable Trees of Sherman.



NOTABLE TREES

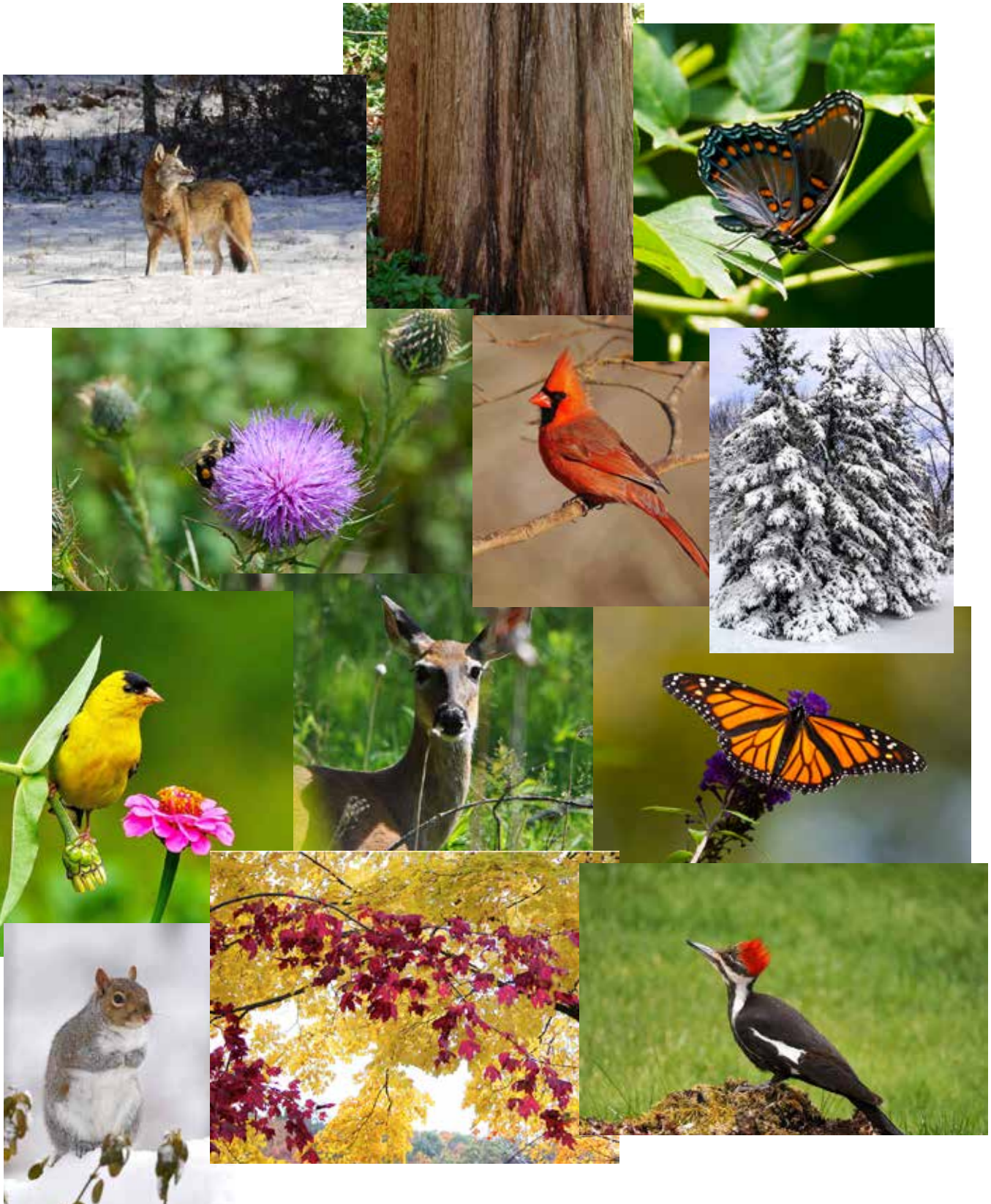


Throughout our history, humans have long had a fascination with trees. Many cultures around the world have honored, revered and even worshiped these magnificent plants. With their long lives and dominating stature, trees create a sense of place and symbolize our history and connection to the natural world.

Connecticut established the Notable Tree Project in 1985 and has collected information on some of the State's largest and most historic trees. As part of our Natural Resource Inventory, we wanted to find some of the largest and oldest specimens around town. Shermanites do love their trees and we received invitations from many of our residents eager to show off their giants. We also found many trees along roadsides, town parks and properties as well as in Naromi forestlands.

We looked at over 100 trees and measured nearly 60. The list below represents the 25 largest of different species. Following the guidelines of the Connecticut Notable Tree Project, we measured the height, canopy spread and girth of the trunk. We listed both native and introduced as well as naturally occurring and planted. In some cases a species is listed more than once, as the largest in girth is not always the tallest or widest spread. The list is shown in descending order starting with the largest circumference. This is not a comprehensive listing of all of the trees in Sherman that should be noted. Even if it was complete, the list would need to be maintained as the old giants fall and younger trees develop. Our goal is to continue to add to this list over time and hope that future Commissions will continue this work in the future.

Property Address	Common Name	Scientific Name	Height	Spread	Circumference
Route 39 North	Red Oak	Quercus rubra	98'	83'	247"
Spring Lake Road	Sugar Maple	Acer saccharum	95'9"	77'	210"
Church Road	Sycamore	Platanus occidentalis	114'2"	100'5"	197"
Town Center	White Pine	Pinus strobus	91'	64.5'	176"
Church Road	Sugar Maple	Acer saccharum	108'	75'6"	172'
Church Road	White Pine	Pinus strobus	127'11"	72'	171"
Cozier Hill Road	Copper Beech	Fagus sylvatica Atropunicea	72'9"	80'8"	169"
Spring Lake Road	Black Oak	Quercus velutina	85'9"	96.5'	165.5"
Timber Trail	Red Oak	Quercus rubra	85'	104'8"	154"
Anderson Road	Silver Maple	Acer saccharinum	96'	77'	153"
Mauweehoo Hill	Tulip	Liriodendron tulipifera	111'6"	79'	149"
Route 39 North	White Oak	Quercus alba			149"
Leach Hollow Road	Black Walnut	Juglans Nigra	87'	112'6"	143"
Taber Road	Black Locust	Robinia pseudoacacia	90'	54.5'	140"
Spring Lake Road	Pignut Hicory	Carya glabra	101'5"	81.5'	137.5"
Taber Road	Norway Spruce	Picea abies	111'	42'	136"
NW Sherman	White Oak	Quercus alba	62'6"	55'	136"
Route 39 South	White Oak	Quercus alba	86'10"	66'8"	133"
1 Sherman Center	American Elm	Ulmus americana	69'	82.5'	130"
Veteran's Park	Cottonwood	Populus deltoides	90'	55'6"	129"
Taber Road	White Ash	Fraxinus americana	72'	76.5'	125"
Mauweehoo Hill	Dawn Redwood	Metasequoia glyptostroboides	90'	57'	121.5"
Taber Road	Shagbark Hickory	Carya ovata	78'	69'	117"
Route 55	Swamp White Oak	Quercus bicolor	92'	71.25'	117.5"
Wakeman Hill Road	Black Cherry	Prunus serotina	99'	76'	101"



APPENDICES

A

Birds

Birds Seen or Heard

Spring Summer Fall Winter

Snow Goose #			X	
Canada Goose**	X	X	X	X
Mute Swan **	X	X	X	X
Wood Duck *	X	X	X	X
Gadwall				X
American Wigeon #				X
American Black Duck	X		X	X
Mallard **	X	X	X	X
Ring-necked Duck	X	X	X	X
Lesser Scaup #	X			X
Bufflehead	X		X	X
Common Goldeneye	X			X
Hooded Merganser **	X	X	X	X
Common Merganser *	X	X	X	X
Ruddy Duck		X	X	
Ring-necked Pheasant *	X	X	X	X
Ruffed Grouse **	X	X	X	X
Wild Turkey **	X	X	X	X
Common Loon	X	X		
Pied-billed Grebe *	X			X
Double-crested Cormorant	X	X		X
American Bittern **	X	X		
Great Blue Heron **	X	X	X	X
Great Egret #		X	X	
Little Blue Heron #		X		
Green Heron **	X	X		
Black Vulture	X	X	X	X
Turkey Vulture **	X	X	X	X
Osprey	X	X	X	
Bald Eagle	X		X	
Northern Harrier	X		X	X
Sharp-shinned Hawk*	X	X	X	X
Cooper's Hawk *	X	X	X	X
Northern Goshawk #	X			
Red-shouldered Hawk**	X	X	X	X
Broad-winged Hawk **	X	X	X	
Red-tailed Hawk **	X	X	X	X
Rough-legged Hawk #				X



Birds Seen or Heard	Spring	Summer	Fall	Winter
Virginia Rail **		X		
American Coot			X	X
Killdeer **	X	X	X	
Solitary Sandpiper #	X	X		
Wilson's Snipe	X			
American Woodcock *	X	X		
Ring-billed Gull	X	X	X	X
Herring Gull	X	X	X	X
Great Black-backed Gull	X	X	X	X
Rock Pigeon * *	X	X	X	X
Mourning Dove * *	X	X	X	X
Yellow-billed Cuckoo	X	X		
Black-billed Cuckoo	X	X		
Eastern Screech Owl **	X	X	X	X
Great Horned Owl **	X	X	X	X
Barred Owl **	X	X	X	X
Northern Saw-whet Owl				X
Common Nighthawk	X		X	
Chimney Swift **	X	X		
Ruby-throated Hummingbird **	X	X	X	
Belted Kingfisher **	X	X	X	X
Red-bellied Woodpecker * *	X	X	X	X
Yellow-bellied Sapsucker **	X	X	X	X
Downy Woodpecker **	X	X	X	X
Hairy Woodpecker **	X	X	X	X
Northern Flicker **	X	X	X	X
Pileated Woodpecker **	X	X	X	X
American Kestrel *	X	X	X	
Merlin	X		X	X
Eastern Wood-Pee wee **	X	X		
Alder Flycatcher *		X		
Willow flycatcher **	X	X		
Least Flycatcher **		X	X	
Eastern Phoebe **	X	X	X	
Great Crested Flycatcher **	X	X		
Eastern Kingbird **	X	X		
Northern Shrike #				X
White-eyed Vireo **	X	X		
Yellow-throated Vireo **	X	X		
Blue-headed Vireo *	X	X	X	
Warbling Vireo **	X	X		
Red-eyed Vireo **	X	X		
Blue Jay **	X	X	X	X
American Crow **	X	X	X	X
Fish Crow	X	X	X	X
Common Raven	X	X	X	X
Tree Swallow **	X	X		



Birds Seen or Heard	Spring	Summer	Fall	Winter
Northern Rough-winged Swallow **	x	x		
Bank Swallow	x	x		
Cliff Swallow **	x	x		
Barn Swallow **	x	x		
Black-capped Chickadee **	x	x	x	x
Tufted Titmouse **	x	x	x	
Red-breasted Nuthatch			x	x
White-breasted Nuthatch **	x	x	x	x
Brown Creeper **	x	x	x	x
House Wren * *	x	x		
Winter Wren *	x	x	x	x
Marsh Wren *	x	x		
Carolina Wren **	x	x	x	x
Blue-gray Gnatcatcher **	x	x		
Golden-crowned Kinglet			x	x
Ruby-crowned Kinglet	x		x	x
Eastern Bluebird **	x	x	x	x
Veery **	x	x		
Swainson's Thrush #	x			
Hermit Thrush *	x	x	x	x
Wood Thrush **	x	x	x	
American Robin **	x	x	x	x
Gray Catbird * *	x	x	x	x
Northern Mockingbird **	x	x	x	x
Brown Thrasher **	x		x	
European Starling **	x	x	x	x
Cedar Waxwing **	x	x	x	x
Ovenbird **	x	x		
Worm-eating Warbler **	x	x		
Louisiana Waterthrush **	x	x		
Northern Waterthrush *	x	x		
Golden-winged Warbler **	x	x		
Blue-winged Warbler **	x	x		
Black-and-white Warbler **	x	x	x	
Tennessee Warbler	x		x	
Nashville Warbler #	x		x	
Common Yellowthroat *	x	x	x	
Hooded Warbler **	x	x		
American Redstart **	x	x	x	
Northern Parula	x	x		
Magnolia Warbler	x	x	x	
Bay-breasted Warbler	x			
Blackburnian Warbler	x		x	
Yellow Warbler **	x	x	x	
Chestnut-sided Warbler **	x	x	x	
Blackpoll Warbler	x		x	
Black-throated Blue Warbler		x	x	x
Palm Warbler	x			



Birds Seen or Heard	Spring	Summer	Fall	Winter
Pine Warbler	x	x	x	
Yellow-rumped Warbler	x	x	x	x
Prairie Warbler *	x	x	x	
Black-throated Green Warbler **	x	x	x	
Canada Warbler	x		x	
Wilson's Warbler	x			
Eastern Towhee **	x	x	x	x
American Tree Sparrow			x	x
Chipping Sparrow *	x	x	x	x
Field Sparrow *	x	x	x	x
Savannah Sparrow	x	x	x	
Fox Sparrow	x		x	x
Song Sparrow **	x	x	x	x
Swamp Sparrow **	x	x	x	x
White-throated Sparrow	x		x	x
White-crowned Sparrow			x	x
Dark-eyed Junco	x			x
Scarlet Tanager **	x	x	x	
Northern Cardinal **	x	x	x	x
Rose-breasted Grosbeak **	x	x	x	
Indigo Bunting **	x	x	x	
Bobolink **	x	x		
Red-winged Blackbird **	x	x	x	x
Eastern Meadowlark **	x	x	x	
Rusty Blackbird	x		x	
Common Grackle **	x	x	x	x
Brown-headed Cowbird **	x	x	x	x
Orchard Oriole **	x	x	x	
Baltimore Oriole **	x	x	x	
Purple Finch **	x	x	x	x
House Finch * *	x	x	x	x
Common Redpoll #				x
Pine Siskin				x
American Goldfinch **	x	x	x	x
Evening Grosbeak #			x	x
House Sparrow **	x	x	x	x



** Confirmed Nester; * Probable Nester; # Uncommon/Rare

Spring = March-May; Summer = June-August; Fall = Sept-Nov; Winter = Dec-Feb

Note: Birds seen or heard over several years by Dave Rosgen, Angela Dimmitt and others. Additional source: "The Atlas of Breeding Birds of CT" 1994. Note new AOU names and sequence of species (taxonomic order), September 2013, updated 1/30/2015 per the COA.

List submitted by Angela Dimmitt who alone is responsible for errors, omissions etc.

February 2015

Bird Photos by Dennis Larkin

Fish

Gamefish

Largemouth Bass
Smallmouth Bass
Brook Trout
Brown Trout
Rainbow Trout
Chain Pickerel
Walleye
White Catfish



Panfish

Green Sunfish
Bluegill
Black Crappie
White Perch
Yellow Perch
Brown Bullhead
Yellow Bullhead
Black Bullhead
Rock Bass
Pumpkinseed
Redbreast



Other

Tessellated Darter
Common Carp
Golden Shiner
Spottail Shiner
Bluntnose Minnow
Banded Killifish
Alewife
White Sucker
Black Nose Dace
Horn Dace
Longnose Dace
Fallfish
Creek Chub
American Eel



Photo by Paul J. Fusco,
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Amphibians & Reptiles

Salamanders

Marbled Salamander
Northern Dusky Salamander
Two-lined Salamander
Redback Salamander
Northern Slimy Salamander
Red-spotted Newt
Spotted Salamander
Jefferson Salamander

Frogs and Toads

Eastern American Toad
Fowler's Toad
Northern Spring Peepers
Green Frog
Pickerel Frog
Wood Frog
American Bullfrog
Pickerel Frog
Northern Leopard Frog
Eastern Spadefoot Toad

Turtles

Common Snapping Turtle
Eastern Painted Turtle
Spotted Turtle
Eastern Box Turtle
Common Musk Turtle
Wood Turtle

Snakes

Smooth Greensnake
Northern Black Racer Snake
Northern Ringneck Snake
Black Rat Snake
Eastern Hognose Snake
Eastern Milk Snake
Northern Water Snake
DeKays Brownsnake
Eastern Garter Snake
Northern Copperhead Snake
Northern Ringsnake
Timber Rattlesnake
Eastern Ribbonsnake
Red-bellied Snake

Other Reptile & Amphibian Photos by John Foley

Butterflies

American Copper

American Lady

Painted Lady

Eastern Comma

Common Ringlet

Juvenal's Dusky wing

Wild Indigo Dusky Wing

Eastern Tailed-Blue

Black Swallowtail

Eastern Tiger Swallowtail

Giant Swallowtail

Spicebush Swallowtail

Great Spangled Fritillary

Meadow Fritillary

Variegated Fritillary

Monarch

Red Admiral

Common Wood-Nymph

Little Wood-Satyr

Northern Pearly-eyed

Pearl Crescent

Clouded Sulphur

Orange Sulphur

Compton Tortoiseshell

European Skipper

Least Skipper

Little Glassywing Skipper

Long Dash Skipper



Northern Broken Dash Skipper

Pecks Skipper

Silver-spotted Skipper

Tawny-edged Skipper

Mourning Cloak

Appalachian Brown

Banded Hairstreak

Gray Hairstreak

Oak Hairstreak

Spring Azure

Summer Azure

Question Mark

Red Spotted Purple

Buckeye

Cabbage White

Viceroy



Butterfly Photos and List by Dennis Larkin

Mammals

Opossum

Shrew

Eastern Mole

Little Brown Bat

Big Brown Bat

Eastern Cottontail

New England Cottontail

Eastern Chipmunk

Woodchuck

Eastern Gray Squirrel

Southern Flying Squirrel

Red Squirrel

Beaver

Rat

White-footed Mouse

House Mouse

Kangaroo Mouse

Voies

Muskrat

Eastern Coyote

Red Fox

Gray Fox

Black Bear

Raccoon

Weasel

Mink

Striped Skunk

River Otter

Bobcat

White-tailed Deer

North American Porcupine



Trees

Alder
Crabapple
White Ash
American Beech
Black Birch
Paper Birch
Yellow Birch
Gray Birch
Black Cherry
Choke Cherry
Eastern Red Cedar
American Dogwood
American Elm
Eastern Hemlock
Pignut Hickory
Shagbark Hickory
Eastern Hop Hornbeam
American Hornbeam (Musclewood)
Black Locust
Honey Locust
Black Maple
Red Maple (Swamp Maple)
Silver Maple
Striped Maple (Moosewood)
Sugar Maple
Black Oak
Chestnut Oak
Red Oak
White Oak
Eastern White Pine
Black Spruce
Red Spruce
American Sycamore
Black Walnut
Butternut (White Walnut)
Weeping Willow



Flowering Plants

SPRING

White Flowers

Anemone (*Anemone quinquefolia*)
Wild Strawberry (*Fragaria virginiana*)
Star of Bethlehem (*Ornithogalum umbellatum*)
Northern Bedstraw (*Galium boreale*)
Mayapple (*Podophyllum petatum*)
Cut-leaved Toothwort (*Dentaria laciniata*)
Smooth Solomon's Seal (*Polygonatum biflorum*)
False Solomon's Seal (*Smilacina racemosa*)
Japanese Honeysuckle (*Lonicera japonica*)
Canada Mayflower (*Mainanthemum canadense*)
Bloodroot (*Sanguinaria canadensis*)
Crinkleroot (*Dentaria diphylla*)
Rue Anemone (*Anemonella thalictroides*)

Brown Flowers

Skunk Cabbage (*Symplocarpus foetidus*)

Yellow Flowers

Yellow Hawkweed; King Devil (*Hieracium pratense*)
Golden Alexanders (*Zizia aurea*)
Gold Ragwort (*Senecio aureus*)
Yellow Goatsbeard (*Tragopogon dubius*)
Common Dandelion (*Taraxacum officinalis*)
Coltsfoot (*Tussilago farfara*)
Common Barberry (*Berberis vulgaris*)
Yellow Rocket; Winter Cress (*Barbarea vulgaris*)
Meadow Parsnip (*Thaspium trifoliatum*)
Wild Parsnip (*Pastinaca sativa*)
Trout Lily (*Erythronium americanum*)
Marsh Marigold; Cowslip (*Caltha palustris*)

Green Flowers

Jack-in-the-pulpit (*Arisaema triphillum*)
Stinging Nettle (*Urtica dioica*)

Blue Flowers

Bluets (*Houstonia caerulea*)
Blue Flag (*Iris versicolor*)
Blue-eyed Grass (*Sisyrinchium angustifolium*)

Pink Flowers

Round-lobed Hepatica (*Hepatica americana*)

Wild Geranium (*Geranium maculatum*)
Phlox (*Phlox paniculata*)
Pink Lady's Slipper (*Cypripedium acaule*)
Cheeseplant (*Malva neglecta*)

Red Flowers

Wood Betony (*Pedicularis canadensis*)
Red Trillium (*Trillium erectum*)
Wild Columbine (*Aquilegia canadensis*)

Purple Flowers

Violet (*Viola papilionacea*)
Gill-over-the-ground (*Glechoma hederacea*)

SUMMER

White Flowers

Mountain Laurel (*Kolmia latifolia*)
White Sweet Clover (*Melilotus alba*)
White Clover (*Trifolium repens*)
Wild Onion (*Allium cernuum*)
Indian Pipe (*Monotropa uniflora*)
Pokeweed (*Phytolacca americana*)
Shinleaf (*Pyrola elliptica*)
Spotted Wintergreen (*Chimaphila maculata*)
Thimbleweed (*Anemone virginiana*)
New Jersey Tea (*Ceanothus americanus*)
Grass-of-Parnassus (*Parnassia glauca*)
Turtlehead (*Chelone glabra*)
Culver's Root (*Veronicastrum virginicum*)
Arrowhead (*Sagittaria latifolia*)
White Wood Aster (*Aster divaricatus*)
Jimsonweed (*Datura stramonium*)
Cow Parsnip (*Heracleum lanatum*)
Queen Anne's Lace (*Daucus carota*)
Dwarf Ginseng (*Penes trifolium*)
Yarrow (*Achillea millefolium*)
Common Ragweed (*Ambrosia artemisiifolia*)
Ox-eye Daisy (*Chrysanthemum leucanthemum*)
Daisy Fleabane (*Erigeron annuus*)
Boneset (*Eupatorium perfoliatum*)
Bladder Campion (*Silene cucubalus*)
Soapwort (*Saponaria officinalis*)
Stany Campion (*Silene stellata*)
Bindweed (*Convolvulus sepium*)

Brown Flowers

Groundnut (*Apios americana*)
Curly Dock (*Rumex crispus*)
Common Cattail (*Typha latifolia*)

Yellow Flowers

Yellow Flag (*Iris pseudacorus*)
Pond Lily (*Nuphar variegatum*)
Celandine Poppy (*Chelidonium majus*)
Whorled Loosestrife (*Lysimachia quadrifolia*)
Common Buttercup (*Ranunculus acris*)
Dwarf Cinquefoil (*Potentilla canaensis*)
Rough-fruited-Cinquefoil (*Potentilla recta*)
Butter-and-eggs (*Linaria vulgaris*)
Common Mullein (*Verbascum thapsus*)
Evening Primrose (*Oenothera biennis*)
Birdsfoot Trefoil (*Lotus corniculatus*)
Velvetleaf (*Abutilon theophrasti*)
Sunflower (*Helianthus annuus*)
Mouse-ear Hawkweed (*Hieracium pilosella*)
Pale-touch-me-not (*Impatiens palida*)
Wild Lettuce (*Lactuca canadensis*)
Black-eyed Susan (*Rudbeckia hirta*)
Lance-leaved Goldenrod (*Solidago graminifolia*)
Showy Goldenrod (*Solidago speciosa*)
Hope Clover (*Trifolium agrarium*)
St. Johns-wort (*Hypericum perforatum*)

Blue Flowers

Forget-me-not (*Myosotis scorpioides*)
Harebell (*Campanula rotundifolia*)
Chicory (*Cichorium intybus*)
Monkeyflower (*Mimulus ringens*)
Asiatic Dayflower (*Commelina communis*)
Great Lobellia (*Lobelia siphilitica*)
Pickerelweed (*Pontederia cordata*)
Cow Vetch (*Vicia cracca*)

Pink Flowers

Deptford Pink (*Dianthus armeria*)
Spotted Knapweed (*Centaurea maculosa*)
Common Fleabane
(*Erigeron philadelphicus*)
Marsh St. Johns-wort (*Hypericum virginicum*)
Ragged Robin (*Lychnis flos-cuculi*)
Wild Bergamot (*Monarda fistulosa*)
Rabbit-foot Clover (*Trifolium arvense*)
Red Clover (*Trifolium pratense*)

Swamp Smartweed (*Polygonum coccineum*)
Lady's Thumb (*Polygonum persicaria*)
Common Milkweed (*Asclepias syriaca*)
Motherwort (*Leonurus cardiaca*)
Purple-flowering Raspberry (*Rubus odoratus*)
Joe-Pye Weed (*Eupatorium maculatum*)
Crown Vetch (*Coronilla varia*)
Wild Mint (*Mentha arvensis*)
Wild Basil (*Satureja vulgaris*)

Red Flowers

Cardinal Flower (*Lobelia cardinalis*)

Purple Flowers

Heal-all; Seltbeal (*Prunella vulgaris*)
Bittersweet Nightshade (*Solanum dulcamara*)
Bull Thistle (*Cirsium vulgare*)
Common Burdock (*Arctium minus*)
Purple Loosestrife (*Lythrum salicaria*)
Skullcap (*Scutellaria integrifolia*)

Orange Flowers

Day Lily (*Hemerocallis fulva*)
Canada Lily (*Lilium canadense*)
Turk's cap Lily (*Lilium superbum*)
Trumpet Honeysuckle (*Lonicera sempervirens*)
Jewelweed (*Impatiens capensis*)
Butterflyweed (*Asclepias tuberosa*)

AUTUMN

White Flowers

Small-flowered white Aster (*Aster vimineus*)

Yellow Flowers

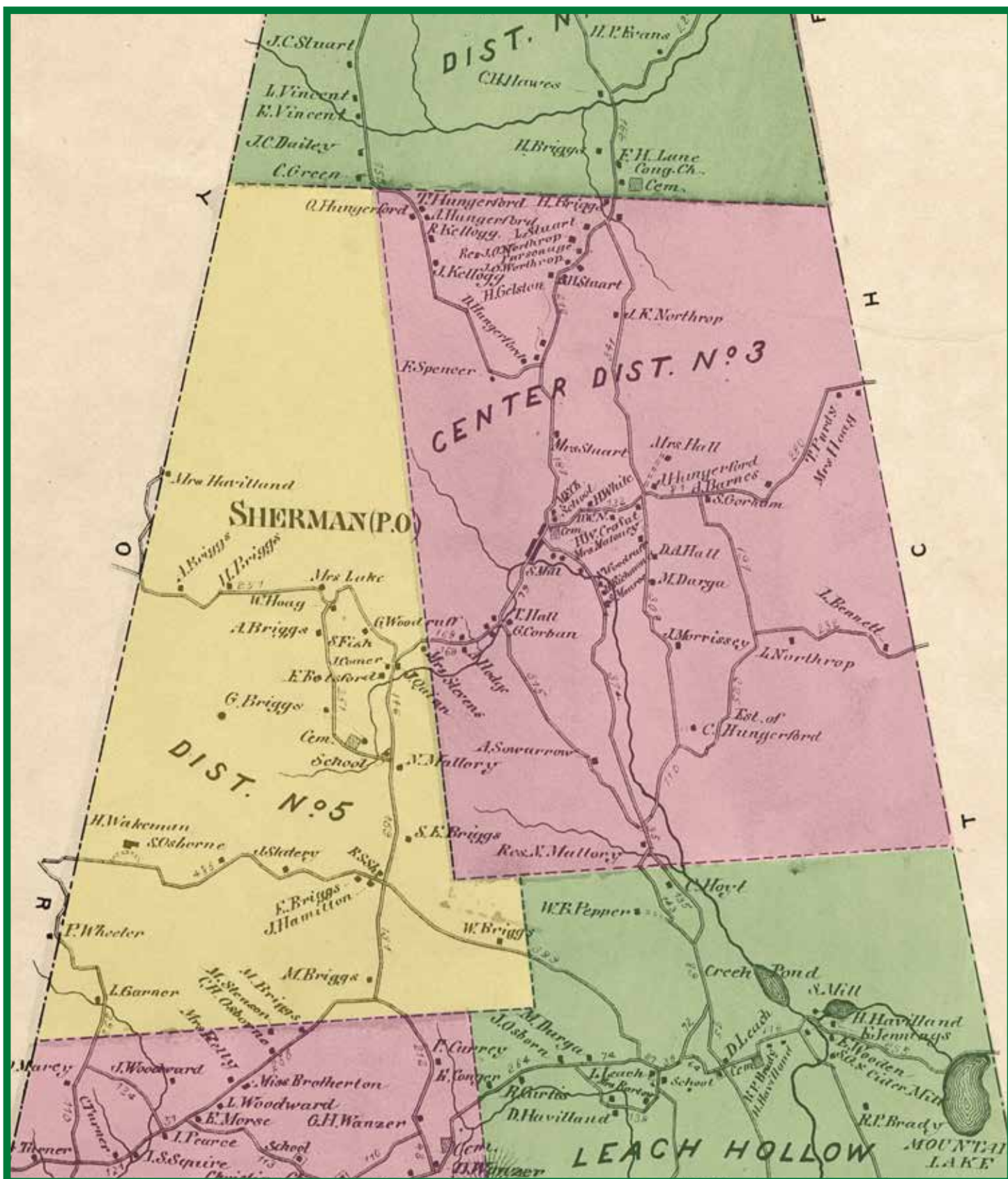
Witch Hazel (*Hamamelis virginiana*)

Blue Flower

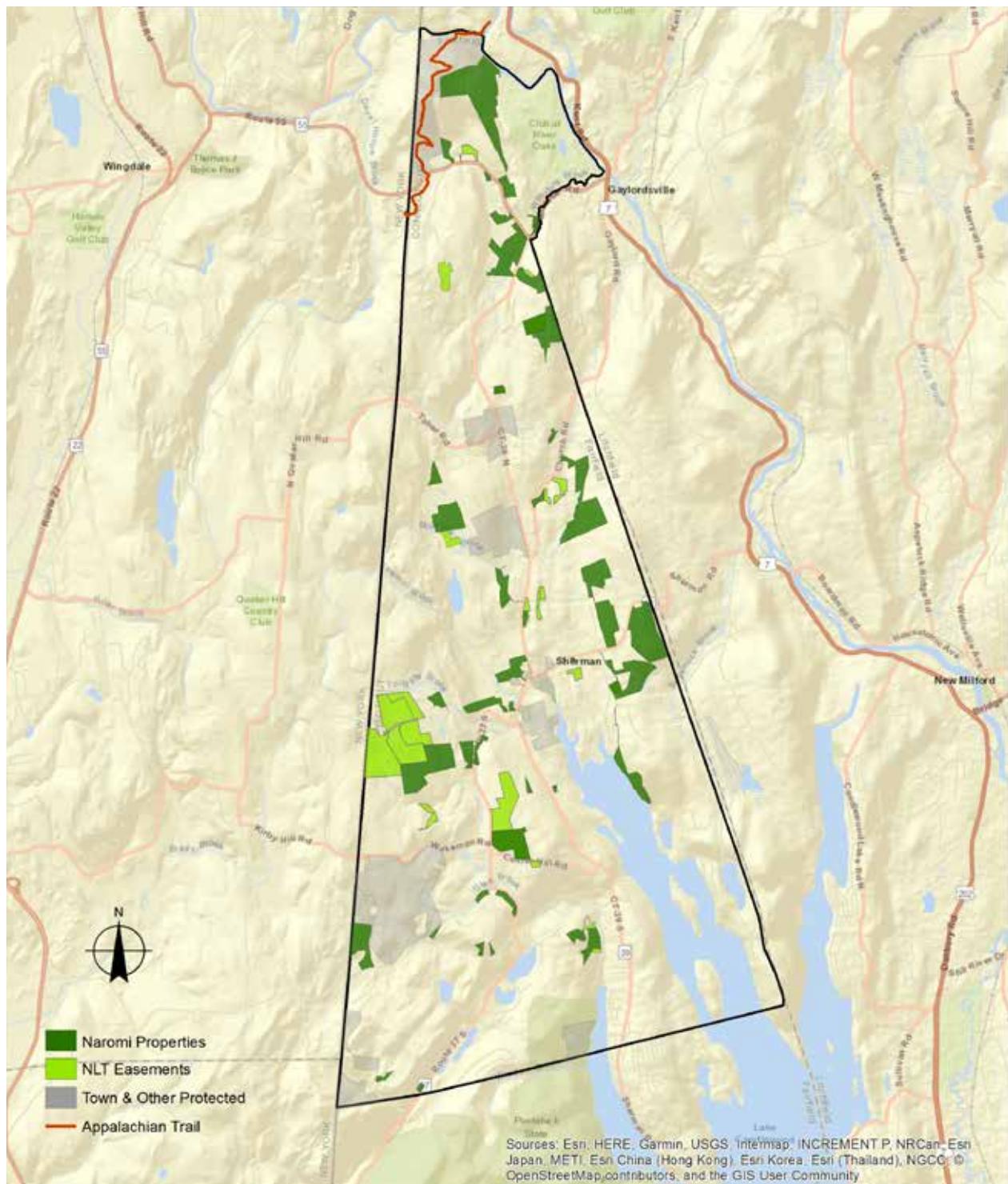
Fringed Gentian (*Gentiana crinita*)
Closed Gentian (*Gentiana andrewsii*)

Purple Flowers

New England Aster (*Aster novae-angliae*)



Lands Protected by Naromi Land Trust 2018

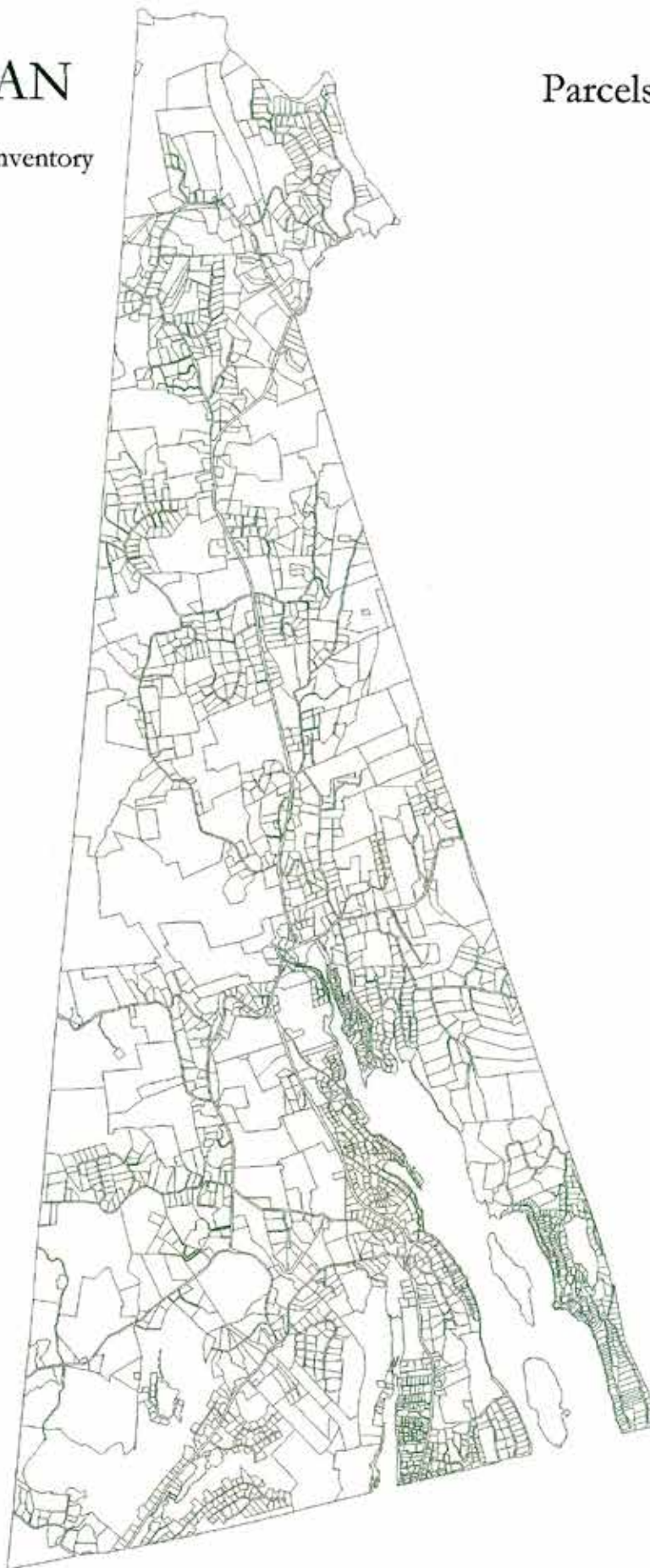


SHERMAN

Natural Resource Inventory

Parcels

September, 2004








SHERMAN

Natural Resource Inventory

Topography

LEGEND

-  Contour
-  Stream
-  Lake or Pond
-  Sherman Town Boundary
-  Road

January, 2006

SOURCE

Data obtained from the Map of Connecticut
Geographic Center, University of Connecticut
(available at <http://mapgis.gis.uconn.edu/>)

This map was produced by
The Northwest Connecticut District
1000 New London Street
New Britain, CT 06050
(860) 226-7222
or info@nwc.org

Digitized by E. Conigan

*This map is a generalization and is not
a substitute for a detailed map.

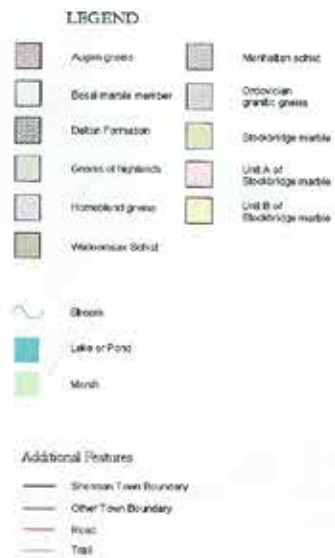
January, 2006



SHERMAN

Natural Resource Inventory

Geology



May, 2004

SOURCE

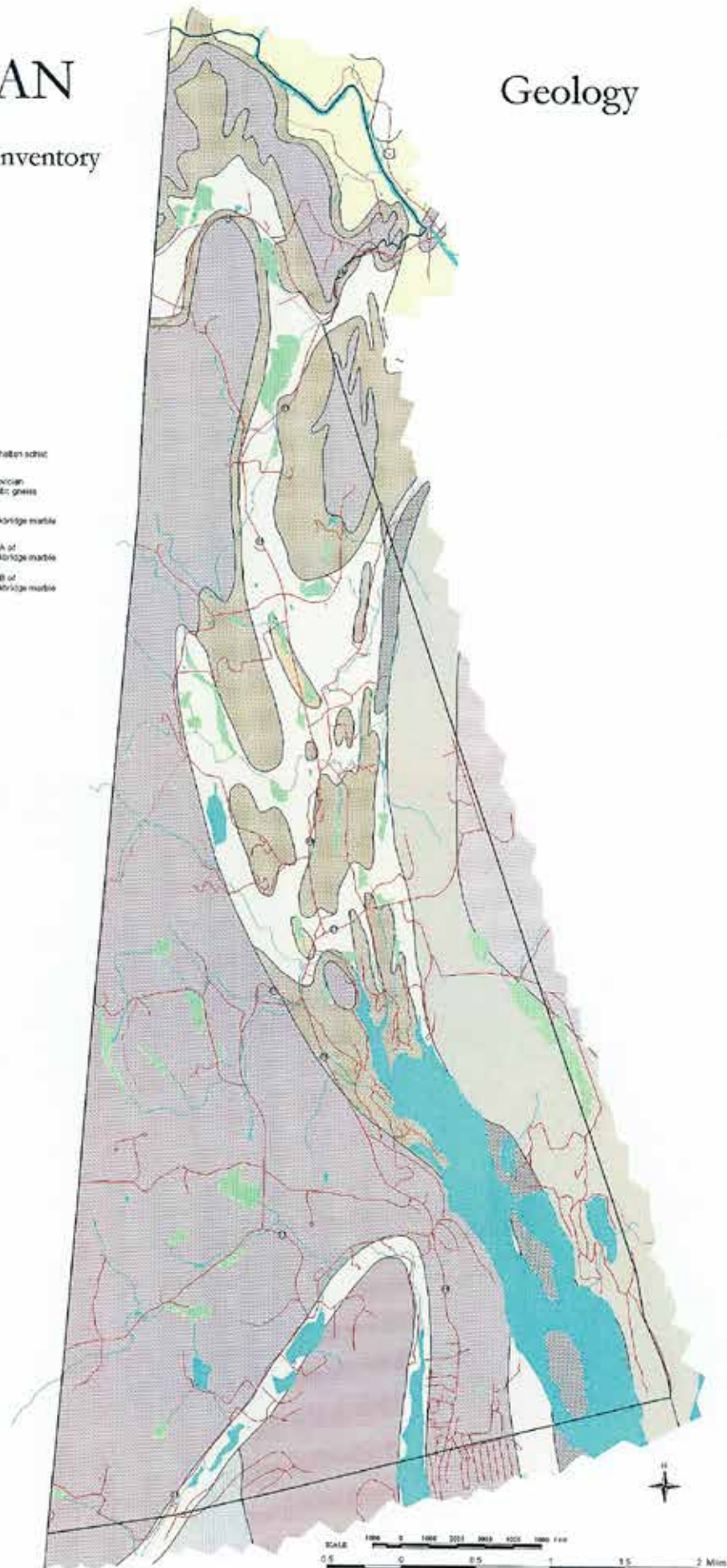
Data obtained from the Map and
Geography Center, University of Connecticut
(available at <http://geology.uconn.edu>)

This map was prepared by
The Wetland Center, LLC
1195 New London Road
Farmington, CT 06030
860-656-7222
www.wetlandcenter.com

Kurtis Reed, Chairman
Cartography by E. Compton

* Not to be used as an engineering or architectural drawing.

April, 2004



SHERMAN

Natural Resource Inventory


Surficial Materials

LEGEND

-  Alluvium
-  Alluvium / Sand & Gravel
-  Flats
-  Gravel
-  Sand & Gravel
-  Till
-  Thick Till

-  Open Water
-  Vegetated Wetland
-  Green

Additional Features

-  Sherman Town Boundary
-  Other Town Boundary
-  Road
-  Trail

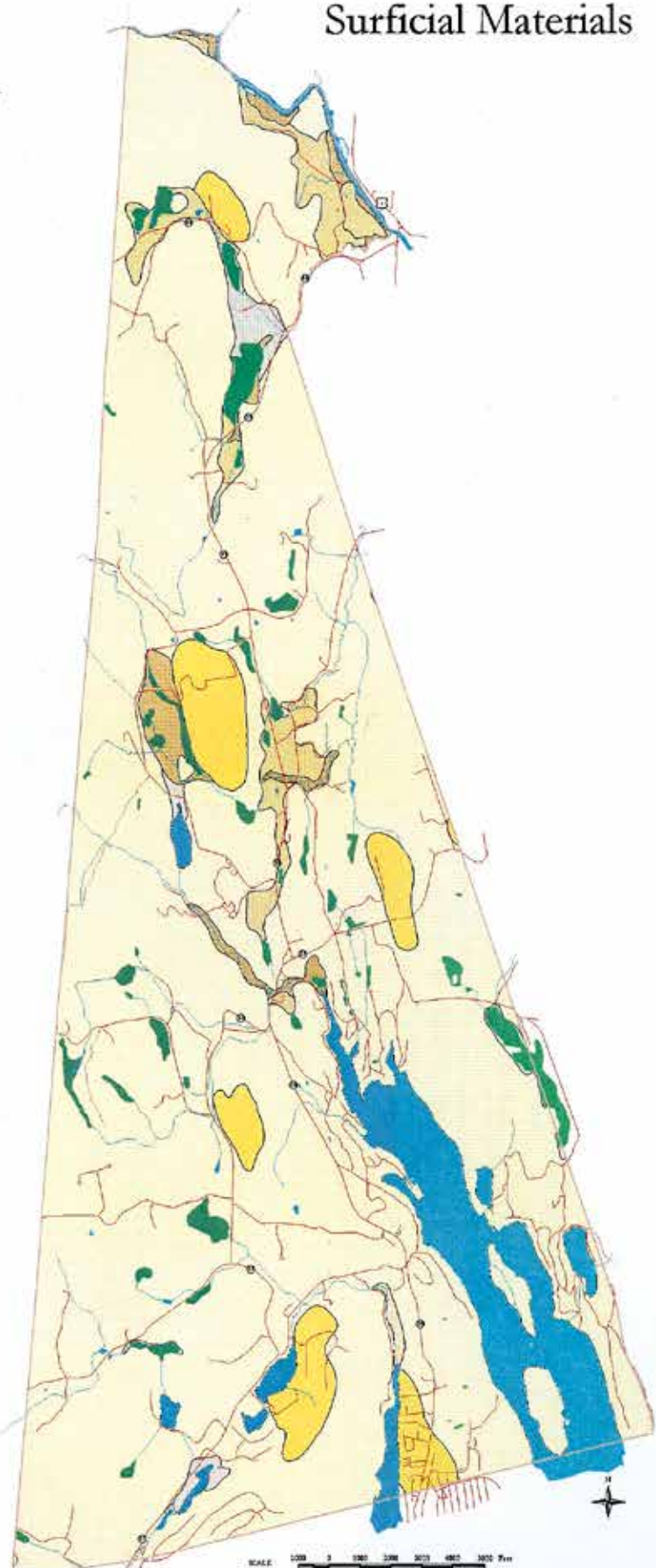
September, 2004

SOURCE

Data collected from the Map and Geographic Center, University of Connecticut
(available at <http://geog.rogers.uconn.edu>)

This map was produced by
The Northwest Connecticut District
1155 New London Street
Newtown, CT 06470
860-656-7327
ncd@nrcd.net

Curtis Reed, Chairman
Comptroller by E. C. Cramer



SHERMAN

Natural Resource Inventory

Slopes

LEGEND

Percent Slope

- 0 - 15 %
- 16 - 35 %
- 36+ %
- Stream
- Lake or Pond
- Marsh

Additional Features

- Sherman Town Boundary
- Other Town Boundary
- Road
- Trail

September, 2003

SOURCE

Data obtained from the Map and Geographic Center, University of Connecticut
(available at <http://mgc.gis.uconn.edu>)

This map was produced by
The National Commission on Data
1135 New London Road
Farmington, CT 06030
(860) 636-7222
ncd@uconn.edu

Curtis Reed, Chairman
Commission on Data

Data is used as an example only - it is not a substitute for field surveys

September, 2003



SHERMAN

Natural Resource Inventory

Prime Farmland Soils



Additional Features



September, 2003

SOURCE

Data obtained from the May and Geographic Center, University of Connecticut
(available at <http://mgislib.uconn.edu>)

This map was produced by
The Northwest Connecticut District
1105 New London Street
Yanville, CT 06390
860-626-7222
mnp@uconn.edu



Curtis Reed, Chairman
Cartography by E. Corrigan

Scale is used for approximate sizing only; it is not a substitute for GPS surveying.

Revised 10/03



SHERMAN

Natural Resource Inventory

Land Use / Land Cover

LEGEND

	Commercial & Industrial & Pavement		Exposed Soil / Cropland
	Residential & Commercial		Pasture & Hay / Exposed Soil
	Rural Residential		Exposed Ground, Soil & Sand
	Turf & Grass		Forest Clearcut
	Turf & Tree Complex		Coniferous Forested Wetland
	Coniferous Forest		Deciduous Forested Wetland
	Deciduous Forest		Deciduous Shrub W. Wetland
	Mixed Forest		Nonforested Wetland
	Deciduous Forest & Mt Laurel		Shallow Water & Mudflats
	Scrub & Shrub		Lake or Pond
	Forest Clearcut		Marsh
	Nursery Stock		Stream
	Pasture, Hay & Grass		

Additional Features

	Sherman Town Boundary
	Other Town Boundary
	Road
	Trail

September, 2003

SOURCE

Data obtained from the Map and Geographic Center, University of Connecticut (available at <http://www.gis.uconn.edu>)

This map was produced by:
The Northeastern Connecticut District
1155 New Litchfield Street
Torrington, CT 06790
860-456-7022
www.necdc.net

Outlet Road, Cheshire
Cartography by E. G. Grogan

Note: This map does not show the natural gas and water distribution systems.

For the best of an accurate map, it is a collection of just images.

Revised, 2003



SHERMAN

Natural Resource Inventory

Wetlands / Watercourses and Water Resources

LEGEND

- Stream
- Lake or Pond
- Marsh
- Deciduous Forested Wetland
- Coniferous Forested Wetland
- Deciduous Shrub Wetland
- Alkalal and Floodplain Soils
- Poorly Drained Soils &/or Very Poorly Drained Soils
- Impounded Water with Original Stream Course

Dam

Potential Sources of Water Pollution

- Inactive Septage Disposal Site
- Contaminated Well
- Sept Storage
- Leak of #2 Fuel Oil
- Manure Storage Site
- Agricultural Waste Management Plan Site

Stream Quality

- Class AA
- Class A
- Class B
- Class C

Potential Aquifer

Additional Features

- Sherman Town Boundary
- Other Town Boundary
- Road
- Trail

January, 2004

SOURCE

Data obtained from the Map and Geographic Center, University of Connecticut (Available at <http://mapgeo.uconn.edu>)

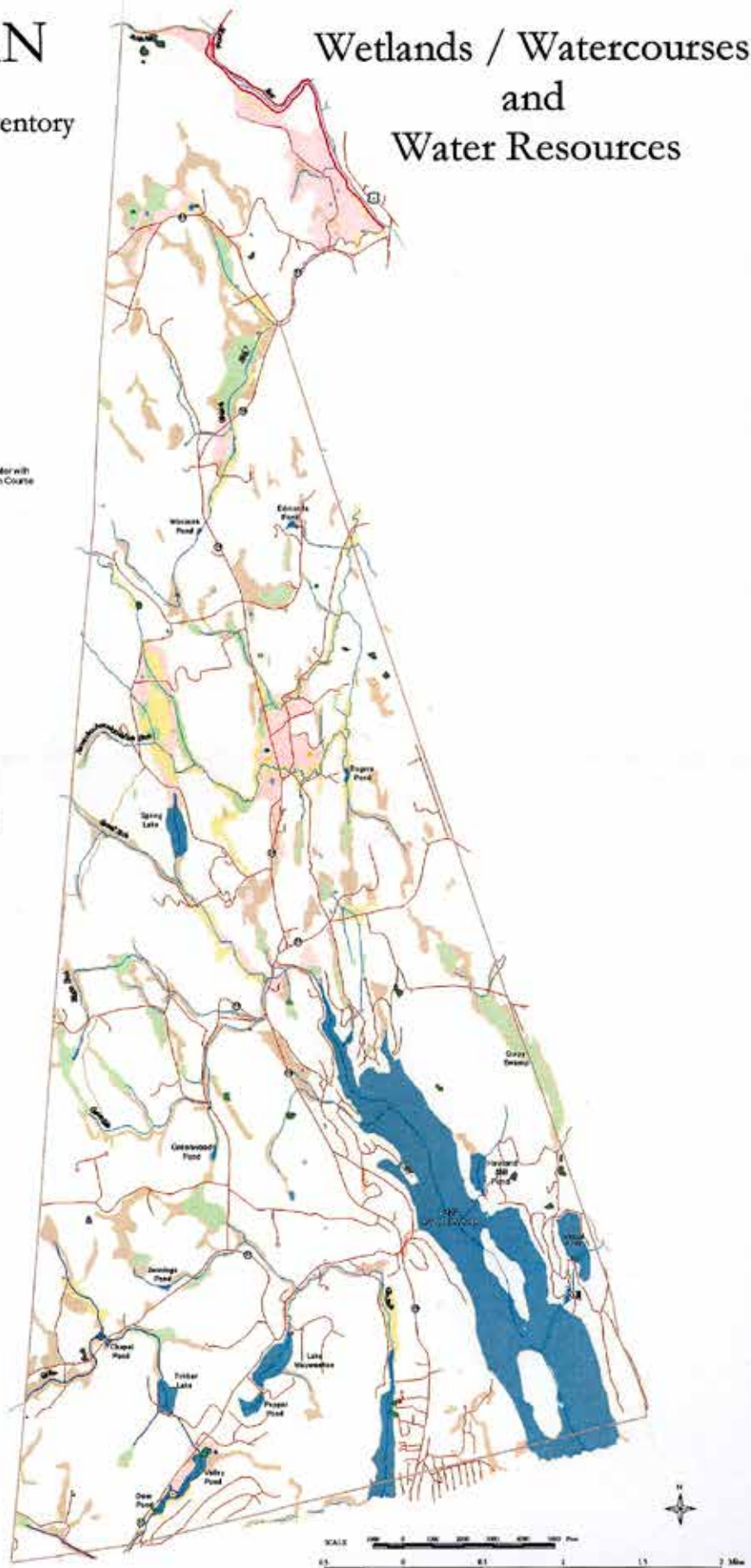
This map was prepared by
The Northwest Connecticut District
1000 New London Street
Torrington, CT 06790
860.656.1122
arc@nctd.net

Carto Read, Chalmers
Cartography by E. Conigan

Note: This map does not include water ponds and watercourse watercourses.

* not to scale or as shown on map or as a reference for field work.

January, 2004



SHERMAN

Natural Resource Inventory

Drainage Basins

LEGEND

DRAINAGE BASINS

MAJOR

HOUSATONIC

HUDSON

REGIONAL

SUBREGIONAL

Deuel Hollow

Tenmile River

Naromi Brook

Housatonic River

Lake Candlewood

Sawmill Brook

Quaker Brook

Local Watershed

Additional Features

Stream

Open Water

Wetland

Sherman Town Boundary

Other Town Boundary

Primary or Secondary Highway

Local Road

Minor Road

Trail

May, 2004

SOURCE

Data obtained from the Map and Geographic Center, University of Connecticut
(available at <http://geog.cba.uconn.edu>)

This map was produced by
The Northwest Conservation District
1105 New Litchfield Street
Troy, CT 06069
860-635-7222
www.nwc.org



Colin Wood, Chairman
Catherine E. E. Grogan

Note: This map does not include wetlands
and riparian areas.

* Maps for sale or on a separate survey or as a reference for field surveys.
Nov. 2004



SHERMAN

Natural Resource Inventory

Open Space

- LEGEND**
- National Land Trust Properties, Conservation Easements, and Other Protected Land
 - Appleton Trail Corridor (National Park Service)
 - Potokuck State Forest
 - Town Beach
 - Town Meadows
 - Veterans Memorial Park
 - School
 - Cemetery
 - Other Open Space
 - Tamarack Trees Easement

- Additional Features**
- Sherman Town Boundary
 - Parish Boundary
 - Road

September, 2004
Updated July, 2018

SOURCE

Data obtained from the Map and Geographic Center, University of Connecticut
(<http://map.mcgill.ca/ct/ct.html>)

This map was produced by
The Northwest Connecticut District
1101 New Litchfield Street
New Britain, CT 06053
860.426.7222
nwd@nwd.net



Note: This map does not include water bodies, waterways, and ponds.

Data is for use as an advisory map only and is not intended for legal purposes.




SHERMAN

Natural Resource Inventory

Areas with Potential Ecological Significance

LEGEND

- | | | | |
|---|----------------------------------|---|----------------------------|
|  | Rock Outcrop |  | Marine Bedrock |
|  | Steep Rocky Slopes
Silt Talus |  | Limestone-derived
Soils |
|  | Alluvial &
Floodplain Soils |  | Muck Soils |
|  | Gravel Mor Sand |  | Upland Wetland
Soils |
|  | Vegetated Wetland | | |
|  | Lake or Pond | | |
|  | Revere | | |
|  | Stream | | |
|  | CT Natural Diversity Data Base* | | |

Other Features

-  Sherman Town Boundary
-  Other Town Boundary
-  Road
-  Trail

June, 2004

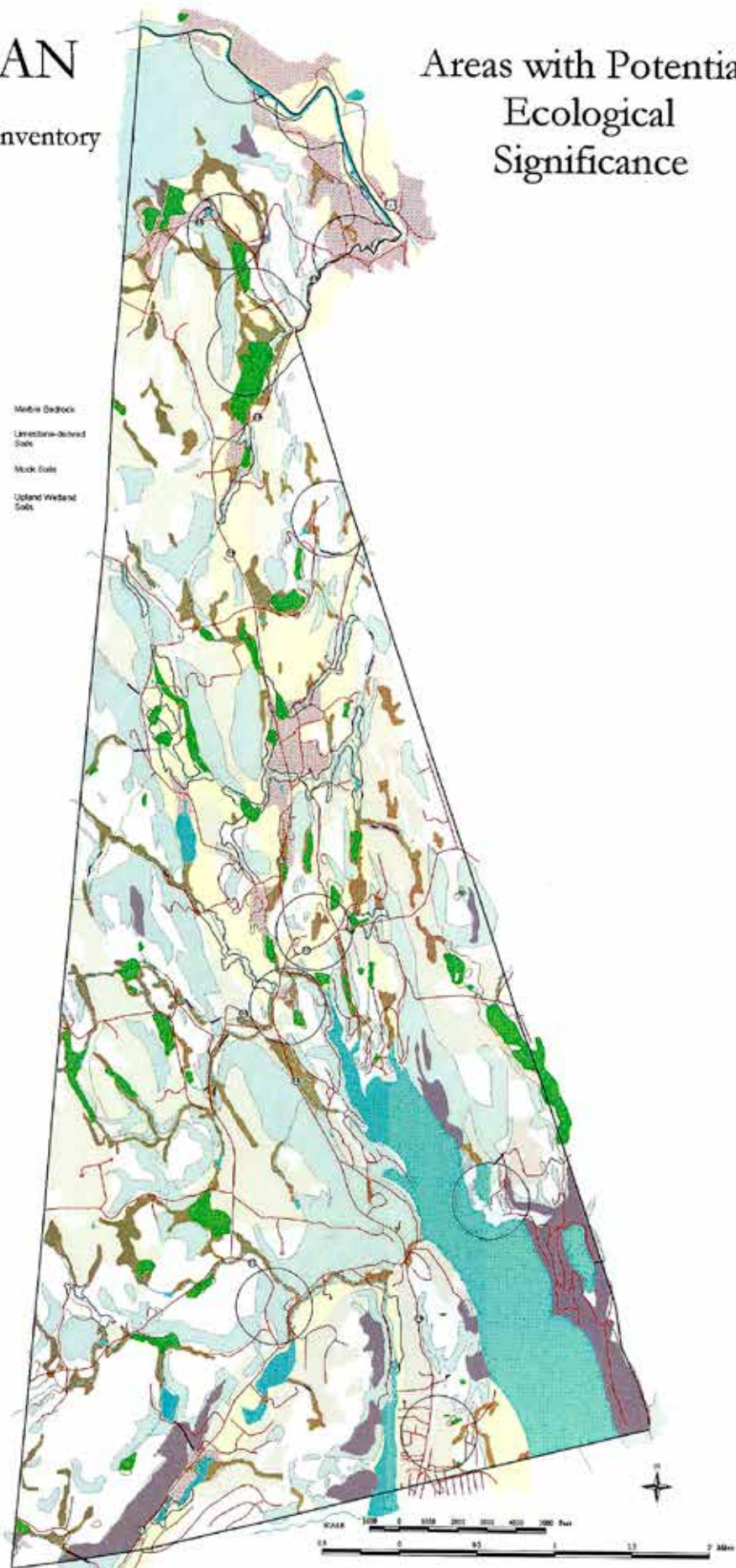
SOURCE

Ecological information was interpreted from data obtained from the Map and Geographic Center, University of Connecticut, Storrs (available at <http://maps.lib.uconn.edu>)

Note: This map does not include information on wetlands, wetlands, or protected areas. Map is not to be used as an accurate survey or as a substitute for field surveys.

This map was produced by
The Northern Connecticut District
1555 New Lockfield Street
Hartford, CT 06186
860-526-7222
nctd@nctd.net

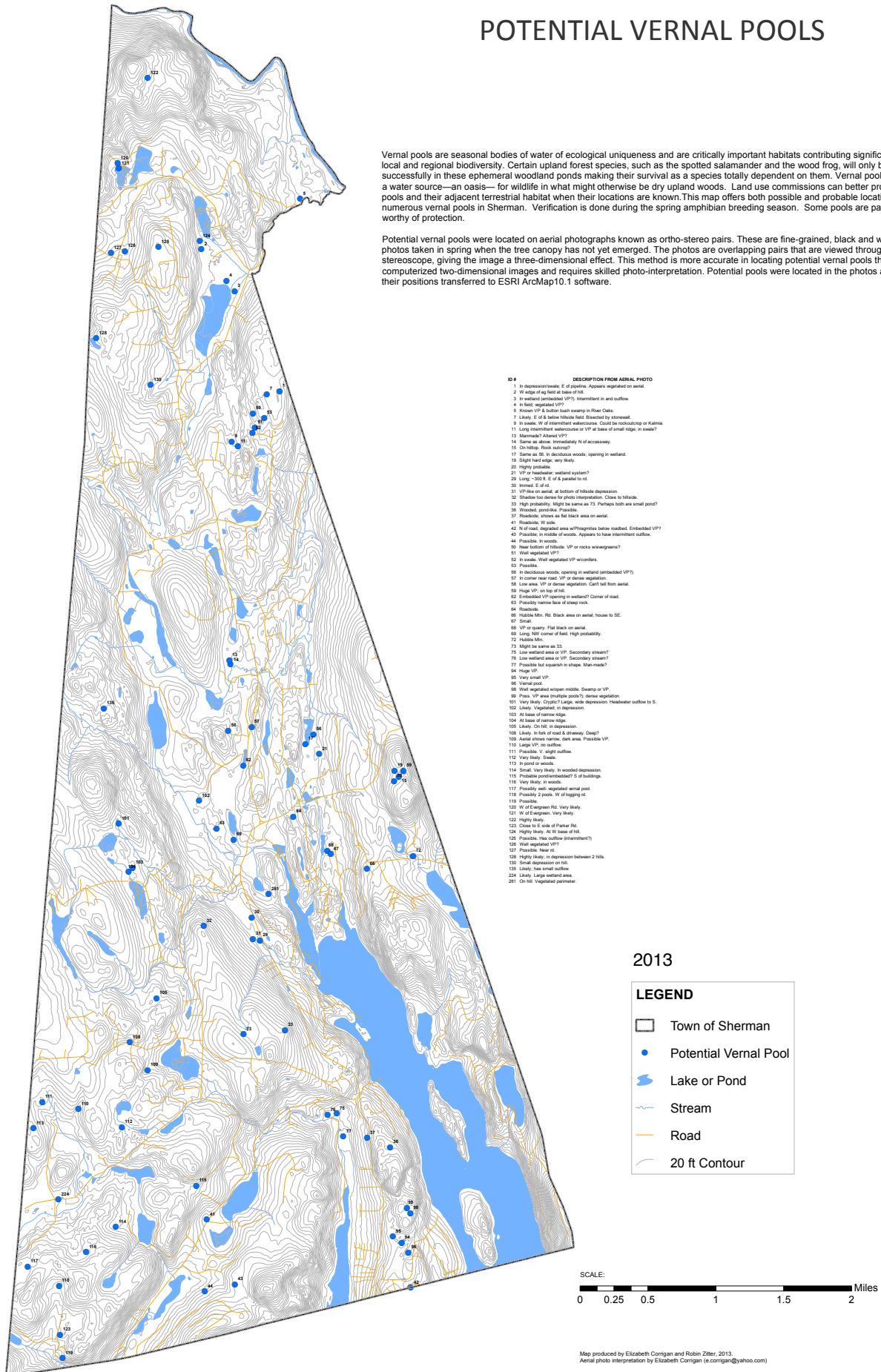
Debra Reed, Chairman
Cartography by E. Cawley
June, 2004



POTENTIAL VERNAL POOLS

Vernal pools are seasonal bodies of water of ecological uniqueness and are critically important habitats contributing significantly to both local and regional biodiversity. Certain upland forest species, such as the spotted salamander and the wood frog, will only breed successfully in these ephemeral woodland ponds making their survival as a species totally dependent on them. Vernal pools are also a water source—an oasis—for wildlife in what might otherwise be dry upland woods. Land use commissions can better protect vernal pools and their adjacent terrestrial habitat when their locations are known. This map offers both possible and probable locations of numerous vernal pools in Sherman. Verification is done during the spring amphibian breeding season. Some pools are particularly worthy of protection.

Potential vernal pools were located on aerial photographs known as ortho-stereo pairs. These are fine-grained, black and white photos taken in spring when the tree canopy has not yet emerged. The photos are overlapping pairs that are viewed through a stereoscope, giving the image a three-dimensional effect. This method is more accurate in locating potential vernal pools than using computerized two-dimensional images and requires skilled photo-interpretation. Potential pools were located in the photos and their positions transferred to ESRI ArcMap10.1 software.



Sources

The Center for Land Use Education and Research (CLEAR), <http://www.clear.uconn.edu/about.htm>

Connecticut Environmental Conditions Online (CT ECO), <http://cteco.uconn.edu/index.htm>

The Connecticut Department of Energy and Environmental Protection Natural Diversity Database, <http://www.ct.gov/deep/cwp/view.asp?A=2702&Q=323464>

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For More Information: How You Can Help

The smooth green snake photo on page 51 of this Natural Resources Inventory was made available to us by CT DEEP Wildlife Photographer Paul J. Fusco. For additional information about threatened Connecticut wildlife and how you can help, readers are invited to visit these web pages:

Endangered, Threatened and Special Concern Species in Connecticut:

<http://www.ct.gov/deep/cwp/view.asp?a=2702&q=323486>

Threatened species in Fairfield and Litchfield Counties:

http://www.ct.gov/deep/cwp/view.asp?a=2702&q=323474&deepNav_GID=1628

If you are a land owner, you may help preserve or create suitable habitat for threatened Connecticut species. For further information, please contact the Sherman Conservation Commission and visit the CT DEEP pages at:

http://www.townofshermanct.org/government/commissions_and_boards/government/conservation_commission.php

http://www.ct.gov/deep/cwp/view.asp?a=2696&q=322648&devNav_GID=1630

http://www.ct.gov/deep/cwp/view.asp?a=2723&q=514596&deepNav_GID=1655

Everyone can help by reporting unusual wildlife sightings or threats to wildlife.

http://www.ct.gov/deep/cwp/view.asp?a=2723&q=325720&deepNav_GID=1655

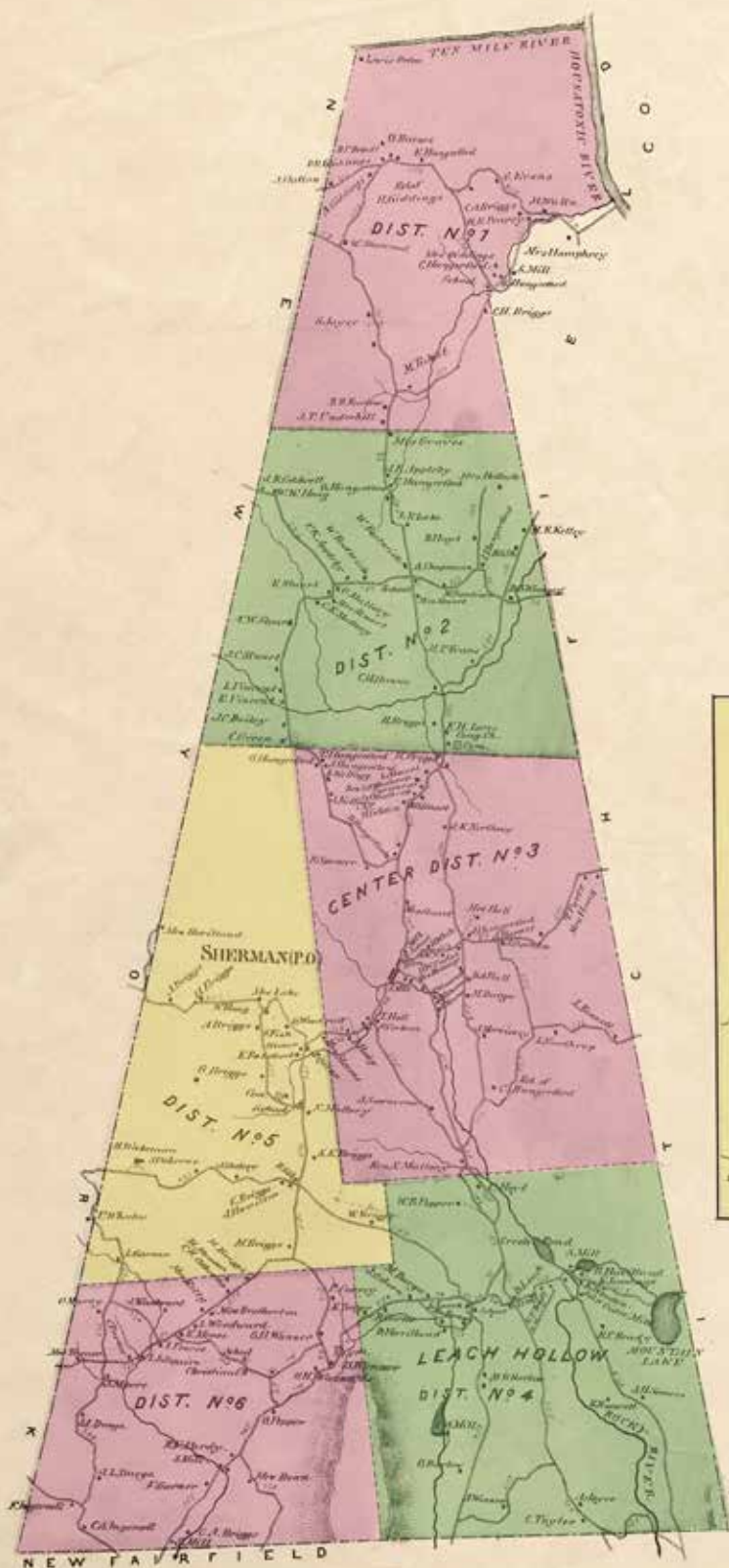
http://www.ct.gov/deep/cwp/view.asp?a=2723&q=325722&deepNav_GID=1655

http://www.ct.gov/deep/cwp/view.asp?a=2690&q=322442&deepNav_GID=1511

http://www.ct.gov/deep/cwp/view.asp?a=2690&q=322410&deepNav_GID=1511

<http://thewildlifeline.org/index.html> (for information about injured or abandoned, baby animals in Sherman)

Scale 1½ inches to the Mile.



This map of Sherman was published by Frederick W. Beers in the Fairfield County Atlas of 1867