



Natural Resources Inventory Canton, Connecticut



Photo by C. Zdanzukas

Adopted by Board of Selectmen February 12, 2020

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Photo by A. Rand

Chapter 1: Introduction

Canton is characterized by its natural beauty, abundance of natural resources, and the tranquility that flows from its hills, streams, fields, and valleys. Whether it's the steep hillsides that embrace our mill town of Collinsville, or the rolling farm fields of North Canton, our ecology defines our community. Canton's natural resources are the foundation upon which its residents, businesses, homes, and vibrant small town life relies. Without our forests, rivers, and rugged slopes, we simply would not be Canton.

The purpose of this document is to describe the variety of natural resources found within the town. Our goal is to highlight the special natural and historic features that make Canton unique, so that, as the town continues to grow and develop as a community, we do not lose sight of that which is special. This document seeks to provide as much detail as possible about Canton's geology, geography, plants, animals, aquatic ecosystems, historic sites, scenic resources, and existing open space. This Natural Resources Inventory concludes with recommendations for stewardship and targeted future protection. We anticipate this will be a living document that will continue to be modified over time, both as the town develops and as our knowledge of science and the natural world expands.

Join us in celebrating the astonishing beauty, diversity, and interconnectedness of Canton's natural resources, and helping to protect these very special attributes of Canton, Connecticut.

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In Appreciation

*The Canton Conservation Commission would like to express gratitude to Emily Kyle, Canton's Assistant Town Planner, for her invaluable contributions to the successful completion of this project. Emily's contributions included staffing and guidance, design, photo collection, developing maps, writing and editing several sections of the **Natural Resources Inventory**, and providing overall project management for this ambitious endeavor.*

Chapter 2: Geography and Geology of Canton

The town of Canton is located in the northwestern corner of Hartford County. Rectangular in shape, the town has a total area of 25.0 square miles, of which 24.6 square miles is land and 0.42 square miles is water. Located in the Farmington Valley, Canton is defined by the Farmington River. Neighboring towns include Simsbury, Avon, Granby, Burlington, New Hartford, and Barkhamsted. Canton was settled in 1737, organized in 1750 as the parish of West Simsbury, and incorporated as a separate town in 1806.

Geography - Transportation

Canton is divided by Albany Turnpike, is the original highway connecting Hartford, Connecticut and Albany, New York. Albany Turnpike runs in an east-west direction, and is now known as U.S. Route 44. The other main highway, running in a north-south direction is Connecticut Route 179, connecting to the town of Burlington to the south, and Barkhamsted to the north. Historically, Canton was served by two railroads, the New Haven and North Hampton. The evidence of these railroads is mainly gone, however, a bicycle and pedestrian trail and bridge adjacent to the historic Collins Company factory occupy the old rail bed. A former train station in Collinsville now houses a restaurant.



Photo by C. York

Geology

Tectonic forces and multiple episodes of plate tectonic collisions shaped the geology of Canton. The town of Canton lies in the middle of this complex geology at the boundary of two major geologic environments. The Generalized Bedrock Geologic Map of Connecticut separates Connecticut's geology into four geologic terranes. A geologic terrane is a group of rocks that is bounded by faults and shares a common geologic history. The bedrock underlying Canton represents two terranes: the Iapetos Terrane and the Newark Terrane. The bedrock geology of Canton was mapped in detail by Stanley (1964) and Schnabel (1975). Although the two publications have slightly different map units, they are generally consistent across the map boundaries.

Most of the town is underlain by rocks of the Iapetos Terrane. In Canton, these rocks consist of a sequence of metamorphosed sedimentary sandstones and mudstones that accumulated on the continental margin 400 to 500 mya (Ordovician age). These metamorphic rocks are

predominately schist, with lesser amounts of quartz gneiss, plagioclase gneiss, amphibolite, quartzite, calc-silicate gneiss, garnet-quartz gneiss, and granulite. The rocks vary in color and have distinct foliation (alignment of the mineral grains within the rock). The variations in mineral composition and physical appearance provide sufficient differences to map distinct geologic units. Within the metamorphic assemblage, minor amounts of granitic rock occur as lenses, along with pods of pegmatite (medium to coarse-grained granitic rock) and aplite. The granitic rocks are commonly light in color and without foliation. The individual rock units and structural features all trend north-northeast to south-southwest.

The bedrock in the Breezy Hill and Ratlum Mountain area of North Canton belongs to the Hartland Formation, a coarse-grained schist with locally abundant kyanite and sillimanite. Locally, some units contain staurolite, apatite, epidote, tourmaline and magnetite. Some units are calcium rich. Although the texture is predominantly coarse-grained, some units are medium or fine-grained. The rocks have indistinct layering marked by local increases in the abundance of individual minerals. Some amphibolite forms parallel to the schistosity in thin layers. In this area, bedrock outcrops are very extensive and nearly continuous.

In the Cherry Brook area, a series of normal faults separates some of the distinct schist units. Between the faults, an upper member of the Hartland Formation has dropped down in contact with older members of the same formation. A sliver of fault-bounded younger sedimentary Triassic red sandstone also occurs between the faults in Cherry Brook from Ratlum Road to Barbourtown Road.

South of Barbourtown Road, the Hartland Formation contains numerous lenses of granite, some of which have a pegmatitic (coarse-grained) texture. Lenses of amphibolite are also present. The rocks have structural antiforms and synforms that trend in the same direction as the faults.

The Collinsville Dome is a large structural dome that extends from East Hill southward into Avon. The core of the dome, which includes Mount Horr and Huckleberry Hill, is composed of a metamorphic schist that is older than the Hartland Formation. Structurally, these rocks form an antiform that plunges to North Canton. On the western flank of the dome, younger rocks of the Hartland Formation surround the older rocks of the core of the dome. These rocks generally have foliation that is consistent with the north-northeast plunging anticlinal structure of the dome. The eastern edge of the dome is truncated by a major normal fault that separates the older schist from the arkosic sandstones and basalt of the Connecticut Valley.

The bedrock in the eastern part of the town represents the Newark Terrane. It consists of sedimentary rocks (arkosic sandstone) and basalt formed during the rifting event 220 million years ago when Pangaea broke apart and the Atlantic Ocean formed. A major normal fault oriented north-northeast separates the younger rocks of the rifting event from the older metamorphic rocks. The fault is projected to cross Route 44 east of Secret Lake. From there, the fault runs north-south along the western side of Onion Mountain before it turns and trends north-northeast. A thin layer of basalt runs north-south on the very eastern edge of town.

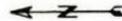
The following diagrams highlight the Central Valley of Connecticut and its relationship geographically to the entire state.

GENERALIZED BEDROCK GEOLOGIC MAP OF CONNECTICUT

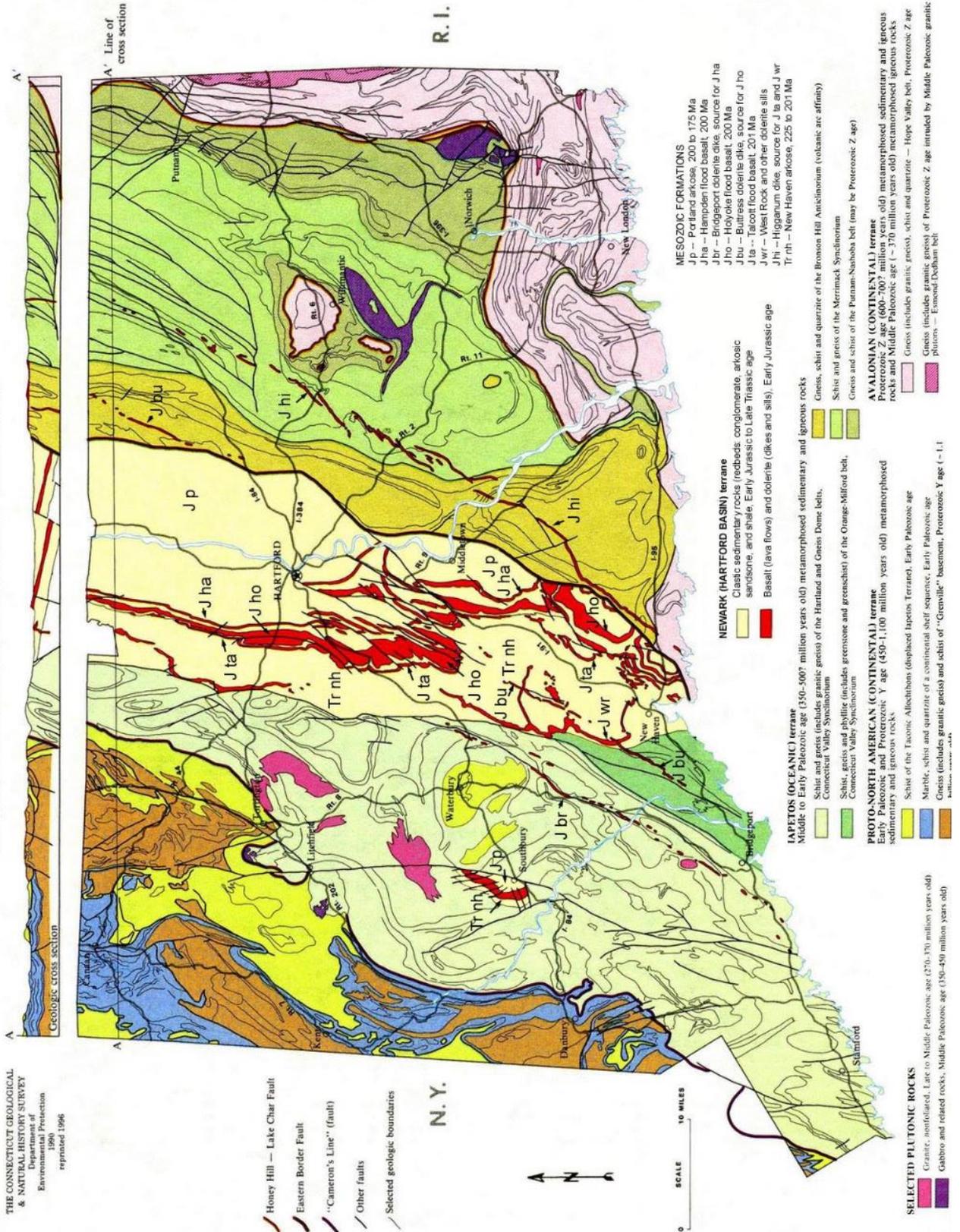
THE CONNECTICUT GEOLOGICAL & NATURAL HISTORY SURVEY
 Department of Environmental Protection
 1990
 reprinted 1996

- Honey Hill — Lake Char Fault
- Eastern Border Fault
- "Cameron's Line" (fault)
- Other faults
- Selected geologic boundaries

N. Y.



0 SCALE 10 MILES



- SELECTED PLUTONIC ROCKS**
- Granite, nonfoliated, Late to Middle Paleozoic, age (270-370 million years old)
 - Granite, nonfoliated, Late to Middle Paleozoic, age (150-470 million years old)
 - Gabbro and related rocks, Middle Paleozoic, age (150-470 million years old)
- NEWARK (HARTFORD BASIN) terrane**
- Clastic sedimentary rocks (redbeds, conglomeration, arkosic sandstone, and shale, Early Jurassic to Late Triassic age)
 - Basalt (lava flows) and dolerite (dikes and sills), Early Jurassic age
- MESOZOIC FORMATIONS**
- Jp — Portland arkose, 200 to 175 Ma
 - Jha — Hampden flood basalt, 200 Ma
 - Jbr — Bridgeport dolerite dike, source for Jha
 - Jho — Hoyoke flood basalt, 200 Ma
 - Jhu — Buttrick dolerite dike, source for Jho
 - Jta — Talcott flood basalt, 201 Ma
 - Jwr — West Rock and other dolerite sills
 - Jtrh — Higganum dike, source for Jta and Jwr
 - Jtrh — New Haven arkose, 225 to 201 Ma
- IAPETOS (OCEANIC) terrane**
- Middle to Early Paleozoic age (350-500 million years old) metamorphosed sedimentary and igneous rocks
 - Schist and gneiss (includes granitic gneiss) of the Hartland and Greens Dome belts, Connecticut Valley Synclinorium
 - Schist, gneiss and phyllite (includes greenstone and gneiss) of the Orange-Milford belt, Connecticut Valley Synclinorium
- PROTO-NORTH AMERICAN (CONTINENTAL) terrane**
- Early Paleozoic and Proterozoic Y age (450-1,100 million years old) metamorphosed sedimentary and igneous rocks
 - Schist of the Taconic-Alleghenian (deformed Inapetos Terrane), Early Paleozoic age
 - Marble, schist and quartzite of a continental shelf sequence, Early Paleozoic age
 - Gneiss (includes granitic gneiss) and schist of "Greenville" basement, Proterozoic Y age (~1.1 billion years old)
- AVALONIAN (CONTINENTAL) terrane**
- Proterozoic Z age (600-700 million years old) metamorphosed sedimentary and igneous rocks and Middle Paleozoic age (~370 million years old) metamorphosed igneous rocks
 - Gneiss (includes granitic gneiss), schist and quartzite — Hope Valley belt, Proterozoic Z age
 - Gneiss (includes granitic gneiss) of Proterozoic Z age intruded by Middle Paleozoic granitic plutons — Emond-Dodham belt

Chapter 3: Soils of Canton

Soil is a critically important part of the natural environment. Soils are as important as the plants and wildlife, because they are responsible for the existence and growth of these resources. Soil feeds resources, recycles waste, provides a habitat for specimen, and holds water and oxygen. Simply said, without soil, there would be no natural resources.

Soil also has the ability to provide insight to the history of the land. By looking at the agricultural soils, one can determine ideal locations for farms as well as where farms have existed in the past. Additionally, soil is always changing; soil is constantly being removed, added, and altered. Situations can occur that can be damaging to soil, such as a spill of chemical materials. There are many reasons to be knowledgeable of the soils in Canton, and also to be proactive in soil conservation.

Soil Explained

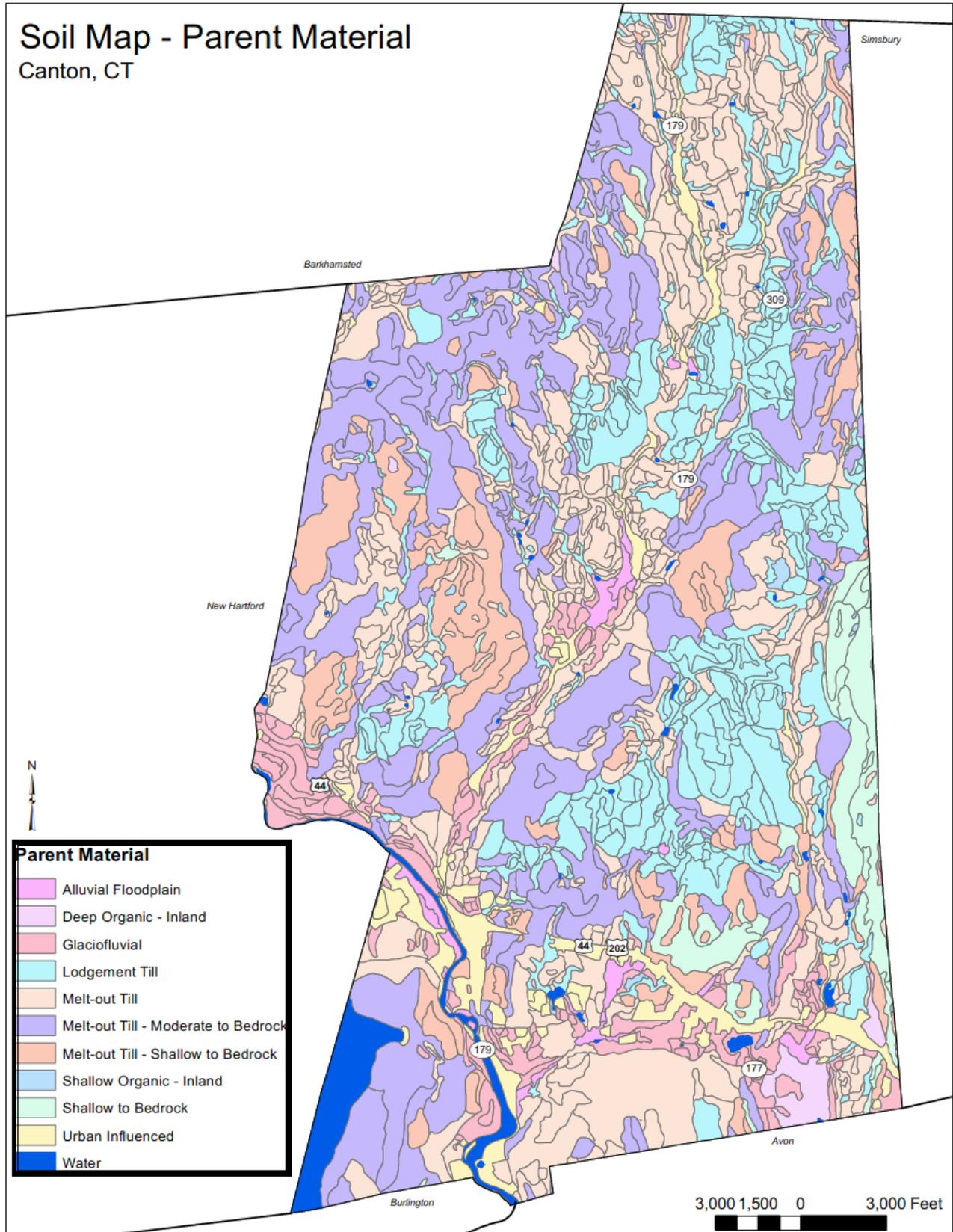
The Soil Science Glossary defines soil as “the unconsolidated mineral or organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. Also, the unconsolidated mineral or organic matter on the surface of the earth that has been subjected to and shows effects of genetic and environmental factors of: climate, micro/macro-organisms, conditioned by relief, acting on parent material over a period of time.” Simply put, soil is a mixture of components, including rocks and minerals, air, water, and organic matter in varying ratios. These components are more commonly called “Parent Material.” Soil scientists collect data to analyze the parent material, and they do this both in the field and in the laboratory. Maps are often made to illustrate this data. Soil is a fragile resource and can be damaged by spills, erosion or flooding.



Photo by J. Kaplan

Parent Material

Soil Map - Parent Material Canton, CT



Based on data from the State of Connecticut Department of Energy and Environmental Protection (DEEP), Canton consists of Alluvial Floodplain, Deep Organic, Glaciofluvial, Lodgement Till, Melt-out Till, Shallow Organic, Shallow to Bedrock, and Urban Influenced parent material.

Alluvial Floodplain

Alluvial soils are soils deposited by running water and are often located in existing floodplains. Alluvium in general is gravel, sand, and sediment that is moved by flowing water and later deposited along stream banks by active flooding, forming the terraces found along many streams and rivers. Soils formed by these materials can be referred to as flood plain soils with a range of textures from sand to silt loams. These soils are often very fertile and some are prime agricultural soils.

Deep Organic - Inland

Organics are materials deposited from decaying vegetation and microorganisms. These materials have a very high water holding capacity and buffering capability. The depth of the organic materials is greater than 51 inches.

Glaciofluvial

Glaciofluvial material has been transported by moving water from melting glacial ice. The material is usually rounded, well sorted sands and gravels. It has very high air and water movement throughout, but very low available water, making it susceptible to drought. These materials are important for ground water and aquifer recharge.

Lodgement Till

Lodgement Till is material deposited directly beneath the glacier under enormous pressure. It is compact and contains a greater amount of fine-grained sediment. The compact or dense layer reduces the flow of air and water movement, producing a slowly permeable zone which supports perched water tables.

Melt-Out Till

Melt-out till is material deposited as the ice beneath the glacier slowly melts away. It is less consolidated and friable than lodgement till.

Melt-Out Till - Moderate to Bedrock

Melt-out till is material deposited as the ice beneath the glacier slowly melts away. It is less consolidated and friable than lodgement till. The soil depth to bedrock ranges from 20-40 inches.

Melt-Out Till - Shallow to Bedrock

Melt-out till is material deposited as the ice beneath the glacier slowly melts away. It is less consolidated and friable than lodgement till. The soil depth to bedrock is less than 20 inches.

Shallow Organic - Inland

Organics are materials deposited from decaying vegetation and microorganisms. These materials have a very high water holding capacity and buffering capability. The depth of the organic materials is 16 to 51 inches.

Shallow to Bedrock

The soil depth to bedrock is less than 20 inches.

Urban Influenced

Urban Influenced refers to materials that show extreme variability from one location to another due to disturbance.

Prime Farmland Soils

Connecticut Environmental Conditions Online (CTECO) describes farmland soils to include 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, CFR title 7, part 657. 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.

Prime Farmland Soils are defined as soils that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oil seed crops, and are also available for these uses (the land could be cropland, pastureland, range-land, forestland, or other land, but not urban built-up land or water.) It has the soil quality, growing season and moisture supply needed to economically produce sustained high yields or crops when treated and managed, including water management, according to acceptable farming practices.

Statewide Important Farmland Soils

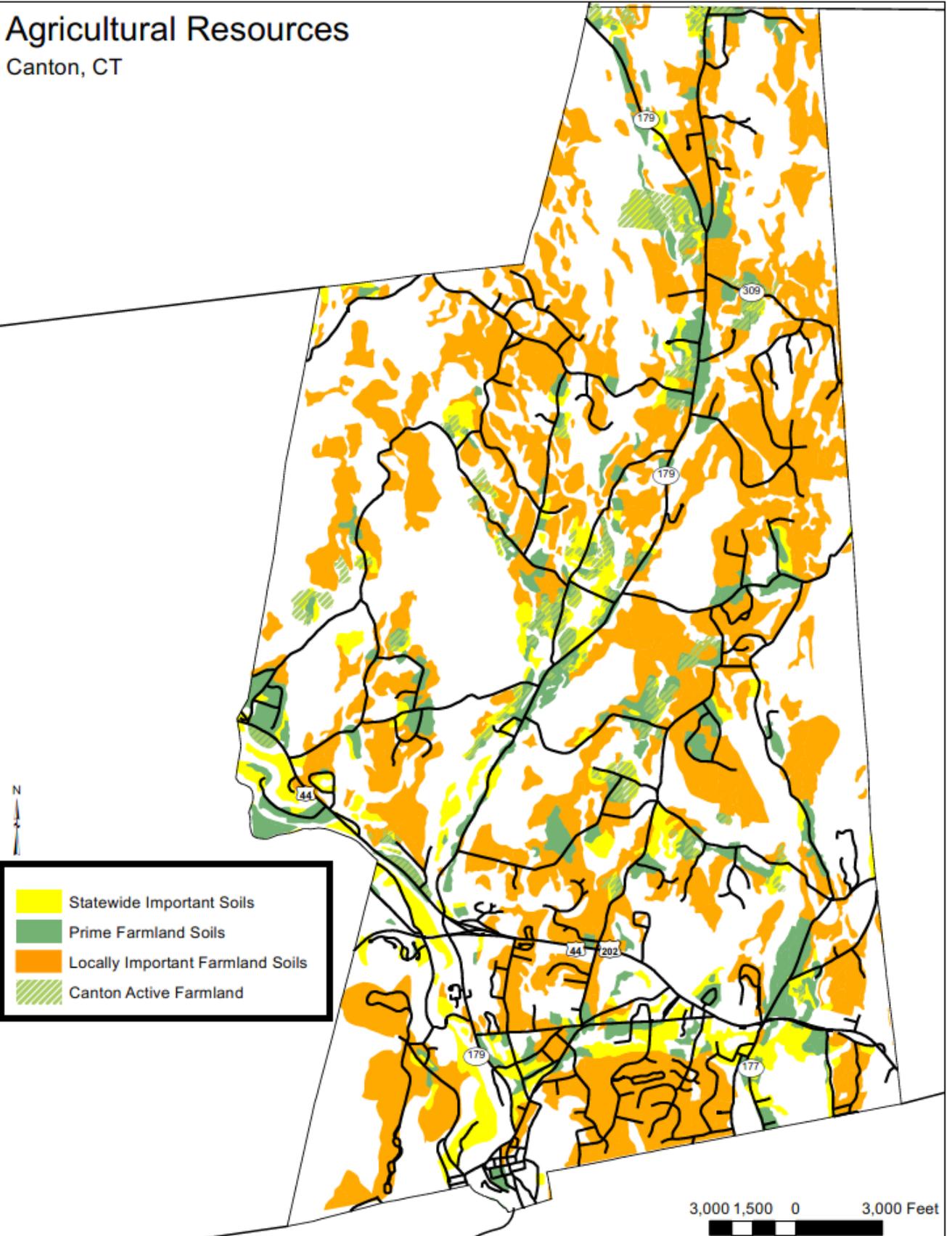
Statewide Important Farmland Soils are defined as soils that fail to meet one or more of the requirements of prime farmland, but are important for the production of food, feed, fiber, or forage crops. They include those soils that are nearly prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.



Photo by S. York

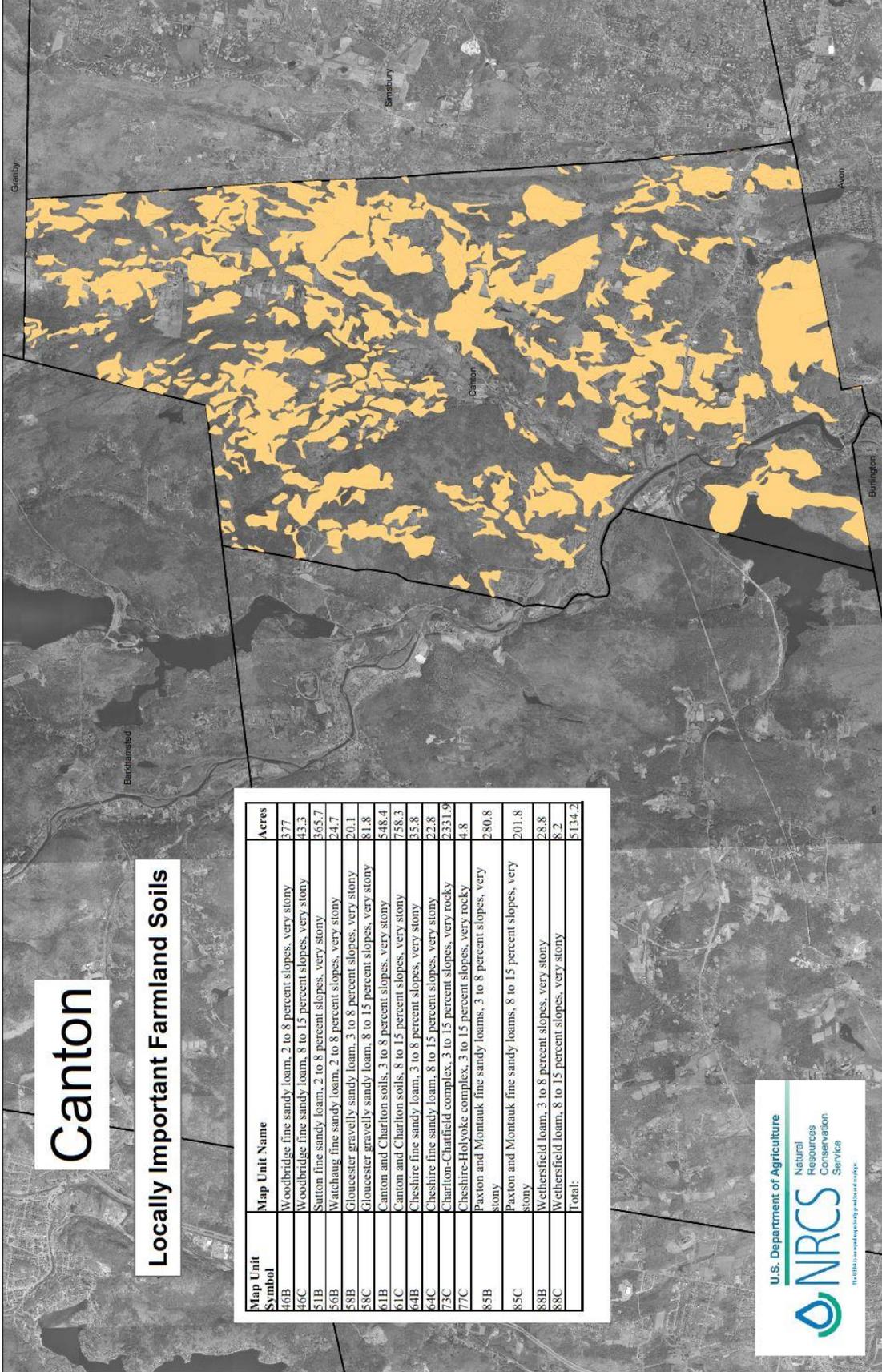
Agricultural Resources

Canton, CT



Canton

Locally Important Farmland Soils



Map Unit Symbol	Map Unit Name	Acres
46B	Woodbridge fine sandy loam, 2 to 8 percent slopes, very stony	377
46C	Woodbridge fine sandy loam, 8 to 15 percent slopes, very stony	43.3
51B	Sutton fine sandy loam, 2 to 8 percent slopes, very stony	565.7
56B	Watchaug fine sandy loam, 2 to 8 percent slopes, very stony	24.7
58B	Gloucester gravelly sandy loam, 3 to 8 percent slopes, very stony	20.1
58C	Gloucester gravelly sandy loam, 8 to 15 percent slopes, very stony	81.8
61B	Canton and Charlton soils, 3 to 8 percent slopes, very stony	548.4
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	758.3
64B	Cheshire fine sandy loam, 3 to 8 percent slopes, very stony	35.8
64C	Cheshire fine sandy loam, 8 to 15 percent slopes, very stony	22.8
73C	Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky	2331.9
77C	Cheshire-Holyoke complex, 3 to 15 percent slopes, very rocky	4.8
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	280.8
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	201.8
88B	Wethersfield loam, 3 to 8 percent slopes, very stony	28.8
88C	Wethersfield loam, 8 to 15 percent slopes, very stony	8.2
Total:		5134.2



Wetland Soils

The Connecticut Inland Wetlands and Watercourses Act, Connecticut General Statutes (C.G.S.) Section 22a-38, defines wetland soils to include, “Any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soil Survey, as may be amended from time to time, of the Natural Resources Conservation Service of the United States Department of Agriculture.”

Poorly Drained and Very Poorly Drained Soils

Poorly drained soils occur where the water table is at or just below the ground surface, usually from late fall to early spring. The land where poorly drained soils occur is nearly level or gently sloping. Very poorly drained soils generally occur on level land or in depressions. In these areas, the water table lies at or above the surface during most of the growing season. Most marshes are on these soils.

Alluvial and Floodplain Soils

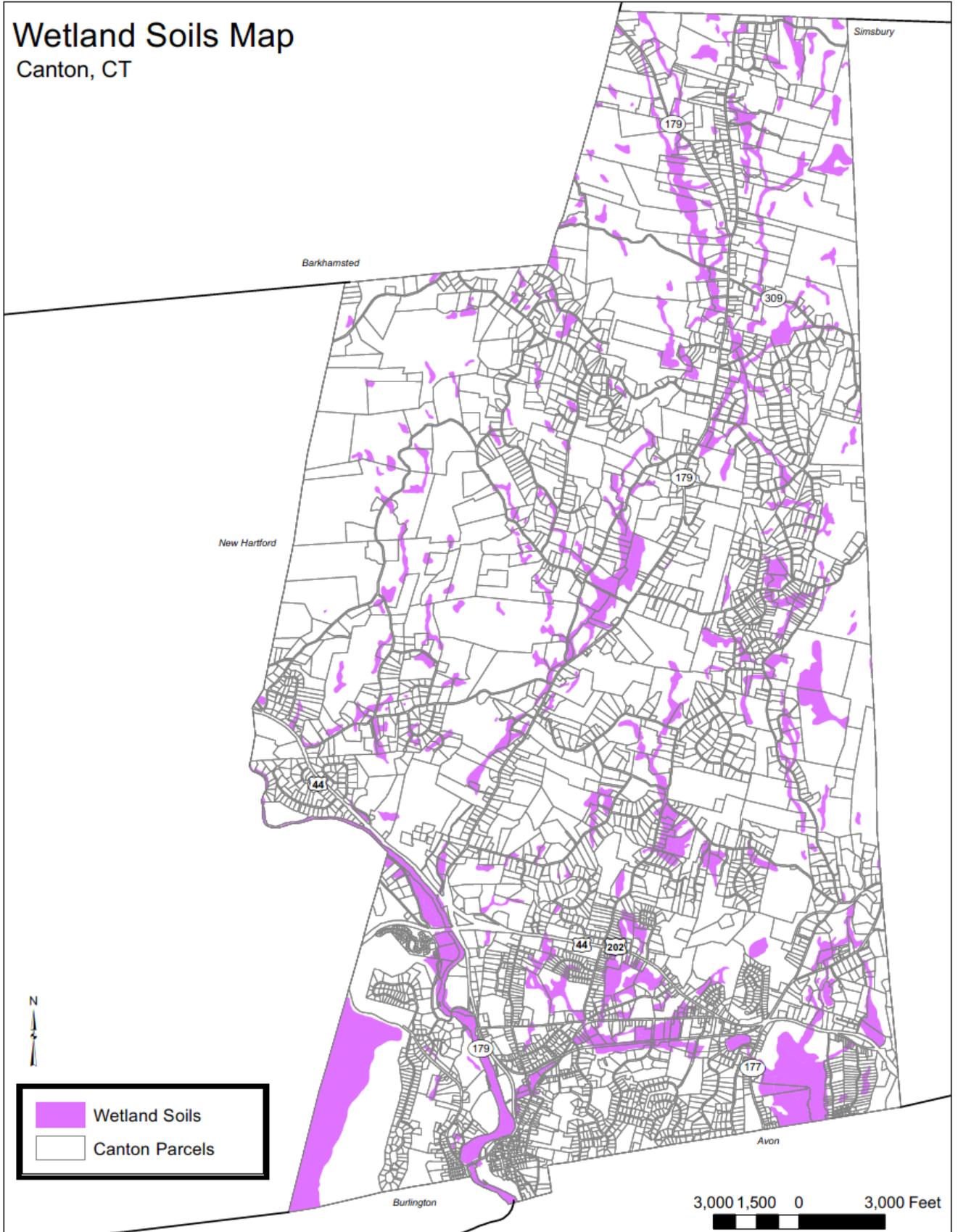
Soils that occur along watercourses occupying nearly all level areas are subject to periodic flooding. These soils are formed when material is deposited by flowing water. Such material can be composed of clay, silt, sand or gravel. Alluvial and floodplain soils range from excessively drained to very poorly drained.



Photo by E. Vallo

Wetland Soils Map

Canton, CT



Topography

The topography of Canton reflects two distinct geologic environments. The hilly topography, which dominates most of western Canton, is underlain by very old metamorphic rocks, which were compressed and folded several times. Relatively soft sedimentary rocks and more resistant basalt ridges underlie the easternmost portion of the town.

The topographic features of the metamorphic area are the result of differential erosion of the specific metamorphic rocks, modified by subsequent glaciation. Rocks with a greater percentage of quartz underlie the higher topographic areas, and rocks with a greater percentage of plagioclase feldspar underlie the lower areas of the metamorphic area. The trend of the major hills and valleys is north-northeast, which reflects the underlying structural geology and the folds and faults found in the rocks. The Collinsville area, including Mount Horr and Huckleberry Hill, is a geologic dome composed of crystalline gneiss. Rock outcrops are common throughout the area, providing scenic vantage points and interesting landscapes.

Evidence of glaciation is common. Glacial deposits occur throughout the area, mainly as unsorted till covering parts of the hilltops, particularly on northern slopes. Glacial erratics are relatively common, and bedrock outcrops show evidence of polish from the glaciers moving over them. Many of the rock walls in town are built partly or entirely of rocks that have been carried by the glaciers and rounded by movement in the glaciers.

Chapter 4: Aquatic Resources

Canton's water resources provide aesthetic beauty, recreational opportunities, drinking water supplies, as well as serving more mundane needs, such as storm water run-off and wastewater management.

Many people have been heard to say "If it ain't steep, it's wet" when referring to Canton's topography and water resources. Indeed, Canton is largely composed of hills and steep slopes, with wetlands and watercourses occupying the flatter areas, although many of these have been filled or otherwise disturbed over the years. As we have come to realize, the water resources of a region do not exist in isolation from one another, but form an intricate natural web that is essential to maintaining a high quality water supply for all of the myriad uses of our society. In centuries past, a "swamp" was often viewed as wasted space, best utilized by being filled in and developed, or used as a dumping area for all manner of refuse. However, we try to learn from the mistakes of the past, and in the early 1970's, regulations were passed by the State of Connecticut establishing an Inland Wetlands and Watercourses Agency in each of the state's municipalities. The legislative finding written when the Inland Wetlands and Watercourses Act was originally enacted in 1972 bears repeating here:

"The inland wetlands and watercourses of the state of Connecticut are an indispensable and irreplaceable but fragile natural resource with which the citizens of the state have been endowed.

The wetlands and watercourses are an interrelated web of nature essential to an adequate supply of surface and underground water; to hydrological stability and control of flooding and erosion; to the recharging and purification of groundwater; and to the existence of many forms of animal, aquatic and plant life.

Many inland wetlands and watercourses have been destroyed or are in danger of destruction because of unregulated use by reason of the deposition, filling or removal of material, the diversion or obstruction of water flow, the erection of structures and other uses, all of which have despoiled, polluted and eliminated wetlands and watercourses.

Such unregulated activity has had, and will continue to have, a significant, adverse impact on the environment and ecology of the state of Connecticut and has and will continue to imperil the quality of the environment thus adversely affecting the ecological, scenic, historic and recreational values and benefits of the state for its citizens now and forever more.

The preservation and protection of the wetlands and watercourses from random, unnecessary, undesirable and unregulated uses, disturbance or destruction is in the public interest and is essential to the health, welfare and safety of the citizens of the state.

It is, therefore, the purpose of sections 22a-36 to 22a-45 [of the Connecticut General Statutes], inclusive, to protect the citizens of the state by making provisions for the protection, preservation, maintenance and use of the inland wetlands and watercourses by minimizing their disturbance and pollution;

maintaining and improving water quality in accordance with the highest standards set by federal, state or local authority; preventing damage from erosion, turbidity or siltation;

preventing loss of fish and other beneficial aquatic organisms, wildlife and vegetation and the destruction of the natural habitats thereof;

detering and inhibiting the danger of flood and pollution;

protecting the quality of wetlands and watercourses for their conservation, economic, aesthetic, recreational and other public and private uses and values;

and protecting the state's potable fresh water supplies from the dangers of drought, overdraft, pollution, misuse and mismanagement by providing an orderly process to balance the need for the economic growth of the state and the use of its land with the need to protect its environment and ecology in order to forever guarantee to the people of the state, the safety of such natural resources for their benefit and enjoyment and for the benefit and enjoyment of generations yet unborn.”

Canton has significant water resources, including rivers, brooks, ponds, and numerous wetland areas. As noted above, they are part of an interrelated web of hydrology that benefits each and every citizen. The following inventory is not intended to be an exhaustive review of every pond, brook, and river in Canton, but a broad overview of the town's more significant water resources.

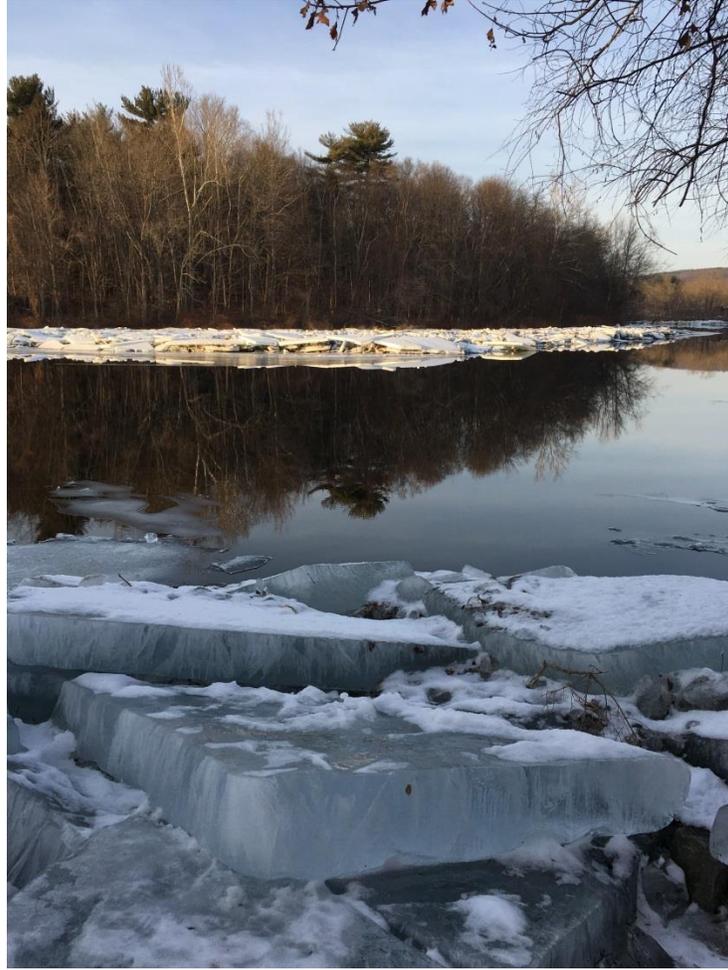


Photo by W. Rosenberg

Watercourses

The **Farmington River** is undoubtedly Canton's most prominent water resource and has been vital to human activity in this area for as long as people have lived here. Native tribes fished, hunted and farmed along its banks long before Europeans arrived. With the arrival of English settlers in the 17th Century, the Farmington River provided water for drinking, irrigation of crops, transportation, and power for industrial production. The village of Collinsville sprouted along the banks of the Farmington River in the 19th century, and the flow of its waters provided power for the historic Collins Company.

Though it no longer powers industrial production today, the Farmington River continues to draw thousands of people each year to its banks in Canton for recreation, such as canoeing and kayaking, and is one of Connecticut's premier fly fishing rivers. Abundant and varied wildlife are resurgent throughout the ecosystem of the river. Several of the former railroad lines along the river have been converted to greenways for pedestrians and cyclists, affording splendid views of this magnificent resource.

Canton has several noteworthy tributaries of the Farmington River. **Cherry Brook**, flowing down from the hills in Barkhamsted through North Canton to join the Farmington River near the

current intersection of Routes 44/202 and 179, is a beautiful stream which was essential to the agricultural and commercial growth of Canton Center in centuries past. Mills constructed along Cherry Brook produced lumber that built many of the homes and farms in North Canton and Canton Center. Barbour Brook joins Cherry Brook near the current Cherry Brook Primary School, as do many smaller, un-named streams which feed into Cherry Brook on its journey to the Farmington River.

Rattlesnake Brook flows south from the Bahre Corner area of Canton roughly along East Hill Road. It is joined by a tributary from the Mount Horr area near Canton Village, then flows toward Collinsville, where it meets the Farmington River near the existing water treatment facility. In addition to these two named brooks, there are numerous, smaller un-named watercourses which flow into the Farmington River.

A short section of the **Nepaug River** connects the spillway from the Nepaug Reservoir with the Farmington River. Other brooks include **Jim Brook**, which originates on the west side of Onion Mountain, flows south in the general direction of Gracey Road, crossing under Route 44 near the present-day Shoppes at Farmington Valley, then feeds into **Secret Lake**. Jim Brook hosted a dish mill in the first part of the nineteenth century where a water wheel powered a lathe that made wooden dishware. Saw Mill Brook on the east side of Case Street in North Canton, as its name implies, hosted a saw mill. Other small brooks, tributaries of the larger watercourses, include Indian Hill Brook, Ratlum Brook, Creamery Brook and Finnegan Brook to name but a few.



Photo by K. Kenney

Ponds and Wetlands

Canton is not a town of large lakes, but rather home to a number of smaller ponds. **Mills Pond** is located near the Middle/High School complex, close to the town recreation area which bears its name. Its smaller neighbor, often called “Little” Mills Pond, can be seen at the intersection of East Hill Road and Simonds Avenue. **Bond Pond** is tucked near the intersection of Routes 44 and 177, and is adjacent to the Farmington Valley Greenway. A very small piece of Avon’s **Secret Lake** just crosses the border into Canton, south of the Shoppes at Farmington Valley. The Metropolitan District Commission’s (“MDC”) **Nepaug Reservoir** is located in the extreme southwestern part of Canton, bordering Burlington and New Hartford. This three billion gallon reservoir provides drinking water to the MDC member towns to our east. In addition, there are numerous smaller ponds on private property and farms throughout Canton. A number of these ponds began as watering holes for livestock, ice ponds, ponds for fish rearing, or as a source for swimming, ice skating and other recreational pursuits.

As noted earlier, Canton is home to significant wetland areas, and a review of aerial and/or satellite photos, or USGS topographical maps reveals a number of these. A few of the larger areas are: a large parcel along Route 44 between La Trattoria Restaurant and Cheryl Drive, the area south of the aforementioned Shoppes and north of Secret Lake, and in the area of Rattlesnake Brook bounded by Route 44 to the north, East Hill Road to the west, and Dowd Avenue to the south. Frequently, wetland areas are in proximity to rivers, brooks and ponds, but more often than not are too small to be identified on larger scale maps.

Vernal pools may be quite small and are dry for significant portions of the year. These small water bodies serve as breeding grounds for amphibians and other wildlife species and are also protected by law. Finally, aquifers remain unseen below the surface, but provide drinking water for a significant portion of Canton’s population. Despite their sometimes modest sizes, it must be remembered that wetland and watercourse areas do not exist in isolation unto themselves, but are connected in a complex hydrological web. Activity in one wetland area can have unforeseen consequences beyond its boundaries, and all wetland areas are regulated under state and municipal regulations. Citizens should consult with the Canton Land Use Office prior to undertaking any construction or excavation within 100 feet of a wetland or watercourse, as a permit may need to be issued by the town’s Inland Wetlands and Watercourses Agency.

Potential Threats

Potential threats to our aquatic resources include filling or disturbance of wetlands during construction or building within wetland buffer areas, pollution from a variety of sources including, but not limited to pesticide or fertilizer use, faulty septic systems, erosion and road runoff, leakage from adjacent industrial sites such as the well documented pollution of an aquifer caused by the former Swift Chemical Company, and the proliferation of invasive species.

It is up to all Canton citizens to treat these resources with care and respect, so that they may be used and enjoyed for many generations to come.

Written by Robert C. Oswald, November 2011

Chapter 5: Plant Life

Plants play an important role in all ecosystems. Plants function to clear the air and water, provide food and shelter for many organisms, and much more. Human life relies on plants in a variety of ways. Plants provide sources of food for humans, and they also can be used for medicinal purposes.

Plant life varies on geographical location, as it is directly influenced by climate, soils, topography, human intervention, and water availability.



Photo by A. Rand

Canton's forests are influenced by several broad categories of soil. Residual soils are based on the underlying bedrock geology. Our town is framed by Ratlum Mountain and Onion Mountain with several smaller mountains and hills elsewhere. The dominant soil type in the upland hills is of the Charlton type, which supports mixed stands of oak, beech, hickory, maple, birch, ash, eastern hemlock and eastern white pine. There are large stands of white pines on the lower slopes of Ratlum Mountain, off Breezy Hill Road. On steeper slopes, the Hollis soil type dominates and chestnut oak is more prevalent in the drier, thinner soils.

The tops of Onion Mountain and of Mt. Horr have large areas of bare rock, and the harder, thinner soils there support stands of eastern white pine, red cedar, and chestnut oak. Along the lower slopes, the soil is richer and supports a broader range of species, including sugar maple and shagbark hickory in addition to northern red oak, white oak, red maple, birch, pine, and hemlock. In the more fertile soils of the Cherry Brook Valley, species adapted to a wetter environment are found, including sycamore and silver maple.

Climate

Canton's climate is very favorable for growing trees because it is in a zone between the cold northern climate and the warmer south. Trees from both climates are often mixed together in a transition forest that includes a variety of species. Climate is also a local influence and varies within small areas due to topography and orientation to the sun.

Disturbance

Canton's forest history includes a long period of settlement by Native Americans, who likely used fire to control vegetation for hunting and agriculture. The settlement by colonists brought intensive exploitation for both agriculture and industry. Any forest that was not cleared for agriculture was probably clear-cut to supply charcoal for Connecticut's iron industry. Additionally, settlement brought the end of the large predators such as mountain lions and wolves, thus creating favorable conditions for deer, which has greatly influenced Canton's present forest.

There are also numerous and continual natural disturbances that create ever-changing forests through the process known as succession. These include biotic stresses such as insects and disease, and abiotic stresses such as drought, fire, air pollution, and mechanical injury. Several introduced insects and diseases have resulted in significant changes to Canton's forests, including chestnut blight, gypsy moth infestations, and Dutch elm disease. Recent threats are also potentially serious, including hemlock wooly adelgid, emerald ash borer and Asian long-horned beetle. The hemlock wooly adelgid has contributed to significant hemlock mortality, while the emerald ash borer is likely to decimate Canton's ash trees.

Forest Types

Deciduous Forest

Deciduous trees are known as broad-leafed. They lose their leaves before winter to prevent damage to the sensitive system of veins when temperatures drop below freezing. This is the most extensive forest type in Canton and includes over 40 species of trees and shrubs, many of them of commercial value. On the drier slopes, the predominant species are mixed oaks, hickory, beech, and red maple. The lower slopes tend to be more productive, with deeper soils, more moisture and a less extreme climate. These species are found, with mixtures of ash, sugar maple, black cherry, tulip poplar, birches, and several others. There is rarely a distinct line that divides forest types unless the strand results from agricultural abandonment or other large-scale disturbance; species are very mixed in a transition type of forest. The evergreen species such as hemlock and white pine are also common within the deciduous forest, although not as a dominant feature. Some of Canton's forests result from earlier disturbance and are approaching a mature or even old-growth condition.



Photo by W. Rosenberg

Evergreen Forest

Trees in the evergreen forest are generally known as conifers. With the exception of tamarack or larch, they do not lose their needles in the fall. Conifers are more primitive than the deciduous trees in terms of reproductive and biological function. Predominant evergreen species include white pine and eastern hemlock, with lesser representations of red cedar, or introduced Norway spruce and larch (tamarack). Our evergreen forests may occur as nearly pure stands or in mixtures with many other species. Hemlock plays an important role along our upland streams by cooling the water with its dense shade. It is a very long-lived species, and ultimately can create a “climax” forest, because other trees cannot grow in its shade. White pine is a handsome and commercially valuable species that rarely lives for over 200 years.

It is possible that the pre-settlement Canton forest included more conifers, but they may have been eliminated in the heavy clearing during the previous centuries. Unlike most deciduous species, pine and hemlock lack the ability to re-sprout from stumps after cutting, and this factor probably favored the deciduous species. Nevertheless, Canton is fortunate to have a fine representation of each species within its forests.

Forest Wetlands

There are two main types of wetland forests in Canton. The first, the red maple swamp, occurs throughout our wetland soil types and is common throughout southern New England. The predominant species is red maple, with lesser representations of white, black, and yellow birch, ash, hemlock, and white pine, as well as other tree species and shrubs. The second wetland forest, known as bottomland hardwoods, occurs primarily along Cherry Brook and the Farmington River. This forest is common along most river systems in the eastern United States, and includes sycamore, silver, and red maple. The forests provide a valuable ecological function in regulating flood waters and providing wildlife habitat.

Understory Plants

Understory plants, including shrubs and wildflowers, grow beneath the forest trees. In stands of eastern hemlock, understory plants may be absent due to lack of sunlight. In mixed deciduous forests, understory plants may include common shrubs like mountain laurel, witch hazel and lowbush blueberry, as well as a variety of wildflowers, ferns, and mosses.

Mountain Laurel

Mountain laurel, Connecticut's State Flower, occurs in numerous habitats, with prolific populations in oak forests particularly on Ratlum and Onion Mountains. It appears to achieve its best growth in drier areas. Mountain laurel blooms regularly in June, with showy displays of attractive white and pink flowers. Native Americans valued its wood for use as a utensil and botanists named it "spoon tree." It has some horticultural value for nursery greens and provides shelter for wildlife species. Mountain laurel may form dense and almost impenetrable thickets, forming a barrier to juvenile trees and inhibiting their growth. It is possible that mountain laurel colonized areas as a result of fire, which created an environment favorable to its proliferation.



Photo by W. Rosenberg

Invasive Plants

Invasive species present one of the greatest threats to diversity in plant life. A number of Canton's most common invasive plants were originally planted as windbreaks, highway buffers, or backyard ornamentals. Many have fruits or berries that are eaten by birds and other animals, who then deposit the seeds thereby spreading these plants into the forests and fields. Many common invasives are native to Europe and Asia, where they exist under similar conditions to those found in Canton. Once established, they become extremely difficult to eliminate.

Other Vegetation Types

While upland forest is the most common vegetation type in Canton, other types include fields and brushlands or young forests. One hundred years ago, these habitats were far more plentiful as abandoned farm fields were in the process of reverting to forest. Today, they are in short supply and the animals that depend upon these habitats have, in many cases, declined or even disappeared from Canton. Those few significant grasslands that remain in town are primarily privately owned providing an uncertain future for the wildlife that inhabit them. In 2016, the Canton Land Conservation Trust entered into a federally-funded program that sought to increase this type of habitat. The Trust took ten acres of forest and turned it into open grassland that will slowly revert to brushland, and then young forest, to provide habitat for such species as the New

England cottontail and birds including ruffed grouse, American woodcock, eastern towhee and numerous warblers.

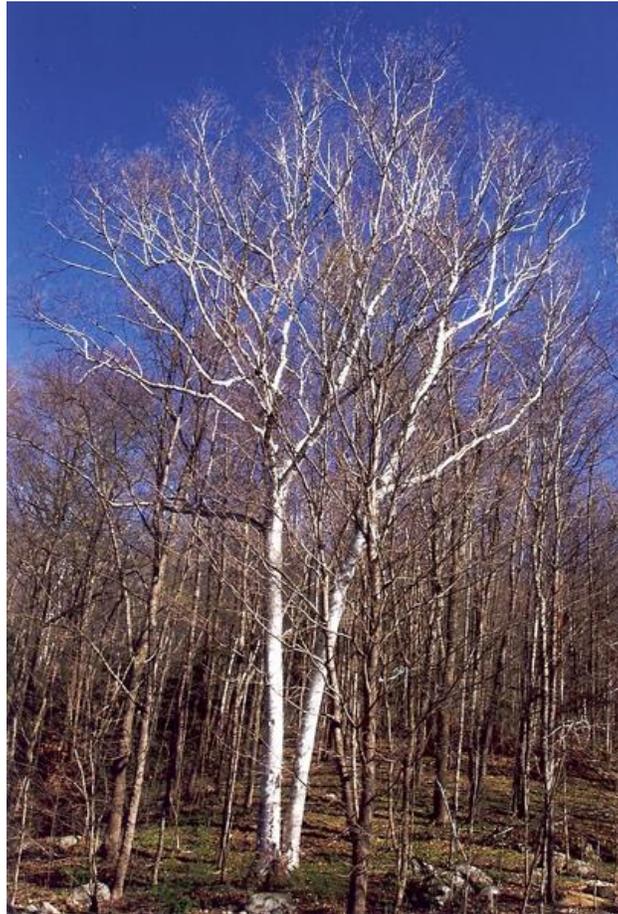


Photo by R. Maglietti

Canton Plant Lists

Below are selections of some of Canton’s common plant species. This list is not inclusive and does not include more restricted, uncommon or rare species found within the Town of Canton. (List reviewed by Bill Moorhead, Consulting Botanist/Plant Community Ecologist, 2017)

Trees

White Pine	<i>Pinus strobus</i>	Sassafras	<i>Sassafras albidum</i>
Eastern Hemlock	<i>Tsuga canadensis</i>	American Beech	<i>Fagus grandifolia</i>
Red Cedar	<i>Juniperus virginiana</i>	American Chestnut	<i>Castanea dentata</i>
White Ash	<i>Fraxinus americana</i>	Trembling Aspen	<i>Populus tremuloides</i>
Silver Maple	<i>Acer saccharinum</i>	Big-toothed Aspen	<i>Populus grandidentata</i>
Red Maple	<i>Acer rubrum</i>	American Basswood	<i>Tilia americana</i>
Striped Maple	<i>Acer pennsylvanicum</i>	Black Cherry	<i>Prunus serotina</i>
Sugar Maple	<i>Acer saccharum</i>	Slippery Elm	<i>Ulmus rubra</i>
Flowering Dogwood	<i>Cornus florida</i>	American Elm	<i>Ulmus americana</i>
Mockernut Hickory	<i>Carya tomentosa</i>	Gray Birch	<i>Betula populifolia</i>
Pignut Hickory	<i>Carya glabra</i>	White Birch	<i>Betula papyrifera</i>
Shagbark Hickory	<i>Carya ovata</i>	Black Birch	<i>Betula lenta</i>
Bitternut Hickory	<i>Carya cordiformis</i>	Yellow Birch	<i>Betula lutea</i>
		American Hornbeam	<i>Carpinus caroliniana</i>
		Hop Hornbeam (Ironwood)	<i>Ostrya virginiana</i>

Trees (continued)

American Sycamore	<i>Plantanus occidentalis</i>
Tulip Tree (Yellow Poplar)	<i>Liriodendron tulipifera</i>
Chestnut Oak	<i>Quercus montana</i>
Red Oak	<i>Quercus rubra</i>
Black Oak	<i>Quercus veluntina</i>
Scarlet Oak	<i>Quercus coccinea</i>
White Oak	<i>Quercus alba</i>

Shrubs

American Red Raspberry	<i>Rubus idaeus</i>
Arrowwood	<i>Viburnum dentatum</i>
Black Alder (Winterberry)	<i>Ilex verticillata</i>
Blackberry	<i>Rubus allegheniensis</i>
Blueberry, High Bush	<i>Vaccinium corymbosum</i>
Blueberry, Low Bush	<i>Vaccinium vacillans</i>
Buttonbush	<i>Cephalanthus occidentalis</i>
Choke Cherry	<i>Prunus virginiana</i>
Dogwood, Gray	<i>Cornus racemosa</i>
Dogwood, Red-osier	<i>Cornus stolonifera</i>
Dogwood, Round-leaved	<i>Cornus rugosa</i>
Hobblebush	<i>Viburnum alnifolium</i>
Maple-leaved Viburnum	<i>Viburnum acerifolium</i>
Meadowsweet	<i>Spiraea latifolia</i>
Mountain Laurel	<i>Kalmia latifolia</i>
Nanny-berry	<i>Viburnum lentago</i>
Poison Ivy	<i>Rhus radicans</i>
Purple Flowering Raspberry	<i>Rubus odoratus</i>
Pussy Willow	<i>Salix discolor</i>
Rugosa Rose	<i>Rosa rugosa</i>
Shadbush (Serviceberry)	<i>Amelanchier sp.</i>
Spicebush	<i>Lindera benzoin</i>
Sumac, Poison	<i>Rhus vernix</i>
Sweetfern	<i>Comptonia peregrina</i>
Sumac, Smooth	<i>Rhus glabra</i>
Sumac, Staghorn	<i>Rhus typhina</i>
Sweet Pepperbush (Summersweet)	<i>Clethra alnifolia</i>
Witch Hazel	<i>Hamamelis virginiana</i>

Non-Flowering Plants

Fern, Bracken	<i>Pteridium aquilinum</i>
Fern, Christmas	<i>Polystichum acrostichoides</i>
Fern, Cinnamon	<i>Osmunda cinnamomea</i>
Fern, Common Polypody	<i>Polypodium virginianum</i>
Fern, Ebony Spleenwort	<i>Asplenium platyneuron</i>
Fern, Hay-scented	<i>Dennstaedtia punctilobula</i>
Fern Interrupted	<i>Osmunda claytoniana</i>
Fern, Maidenhair	<i>Adiantum pedatum</i>
Fern, Maidenhair Spleenwort	<i>Asplenium trichomanes</i>
Fern, Marginal Wood	<i>Dryopteris marginalis</i>
Fern, Royal	<i>Osmunda regalis</i>
Fern, Sensitive	<i>Onoclea sensibilis</i>
Horsetails	<i>Equisetum sp.</i>

Non-Flowering Plants (continued)

Liverworts	<i>Marchantia sp.</i>
Running Ground Club Moss	<i>Lycopodium digitatum</i>
Tree Club Moss Princess Pine	<i>Lycopodium obscurum</i>

Common Invasive Plans

Black Locust	<i>Robinia pseudoacacia</i>
Common Buckthorn	<i>Rhamnus cathartica</i>
Common Reed	<i>Phragmites australis</i>
Dame's Rocket	<i>Hesperis matronalis</i>
European Privet	<i>Ligustrum vulgare</i>
Forget-me-not	<i>Myosotis scorpioides</i>
Garlic Mustard	<i>Alliaria petiolata</i>
Giant Hogweed	<i>Heracleum mantegazzianum</i>
Japanese Barberry	<i>Berberis thunbergii</i>
Japanese Honeysuckle	<i>Raynouria japonica</i>
Japanese Knotweed	<i>Fallopia japonica</i>
Leafy Spurge	<i>Euphorbia esula</i>
Multiflora Rose	<i>Rosa multiflora</i>
Norway Maple	<i>Acer plantanoides</i>
Olive, Autumn	<i>Elaeagnus angustifolia</i>
Olive, Russian	<i>Elaeagnus umbellata</i>
Purple Loosestrife	<i>Lythrum salicaria</i>
Ragged Robin	<i>Lychnis flos-cuculi</i>
Spotted Knapweed	<i>Centaurea maculosa</i>
Winged Euonymus (Burning Bush)	<i>Euonymus alatus</i>
Yellow Iris	<i>Iris pseudacorus</i>

Common Wildflowers

Beachdrops	<i>Epifagus virginiana</i>
Bellwort	<i>Uvularia grandiflora</i>
Black Cohosh (Bugbane)	<i>Cimicifuga racemosa</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>
Bloodroot	<i>Sanguinaria canadensis</i>
Canada Hawkweed	<i>Hieracium canadense</i>
Canada Lily	<i>Lilium canadense</i>
Canada Mayflower	<i>Maianthemum canadense</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Chicory	<i>Chicorium intybus</i>
Closed Gentian	<i>Gentiana andrewsii</i>
Columbine	<i>Aquilegia canadensis</i>
Common Buttercup	<i>Ranunculus acris</i>
Common Cattail	<i>Typha latifolia</i>
Common Cinquefoil	<i>Potentilla simplex</i>
Common Milkweed	<i>Asclepias syriaca</i>
Common Mullein	<i>Verbascum thapsus</i>
Common St. Johnswort	<i>Hypericum perforatum</i>
Early Meadow-Rue	<i>Thalictrum dioicum</i>
Dandelion	<i>Taraxacum officinale</i>
Day Lily	<i>Hemerocallis fulva</i>
Deptford Pink	<i>Dianthus armeria</i>
Dutchman's Breeches	<i>Dicentra cucullaria</i>
Early Saxifrage	<i>Saxifraga virginensis</i>

Common Wildflowers (continued)

Evening Primrose	<i>Oenothera biennis</i>	Solomon's Seal	<i>Polygonatum pubescens</i>
False Hellebore	<i>Veratrum viride</i>	Spotted Coralroot	<i>Corallorhiza maculata</i>
False Solomon's Seal	<i>Maianthemum racemosum</i>	Spotted Jewelweed (Touch-me-not)	<i>Impatiens capensis</i>
Field Thistle	<i>Cirsium discolor</i>	Spotted Wintergreen	<i>Chimaphila maculata</i>
Fringed Polygala	<i>Polygala paucifolia</i>	Spring Beauty	<i>Claytonia virginica</i>
Goldenrods	<i>Solidago sp.</i>	Swamp Milkweed	<i>Asclepias incarnata</i>
Indian Pipe	<i>Monotropa uniflora</i>	Toothwort	<i>Dentaria diphylla</i>
Jack-in-the-Pulpit	<i>Arisaema triphyllum</i>	Trailing Arbutus	<i>Epigaea repens</i>
Marsh Marigold	<i>Caltha palustris</i>	Trout Lily (Adder's Tongue)	<i>Erythronium americanum</i>
Mayapple (Wild Mandrake)	<i>Podophyllum peltatum</i>	Violet, Downy Yellow	<i>Viola pubescens</i>
New England Aster	<i>Aster novae-angliae</i>	Violet, Purple	<i>Viola sororia</i>
New York Ironweed	<i>Vernonia noveboracensis</i>	Violet, White	<i>Viola alba</i>
Partidgeberry	<i>Mitchella repens</i>	White Banberry	<i>Actaea pachypoda</i>
Pink Lady's Slipper	<i>Cypripedium acaule</i>	White Wood Aster	<i>Aster divaricatus</i>
Pipsissiwa	<i>Chimaphila umbellata</i>	Wild Bergamot	<i>Monarda fistulosa</i>
Quaker Ladies (bluet)	<i>Houstonia caerulea</i>	Wild Geranium	<i>Geranium maculatum</i>
Queen Anne's Lace (Wild Carrot)	<i>Daucus carota</i>	Wintergreen	<i>Gaultheria procumbens</i>
Pinesap	<i>Monotropa hypopitys</i>	Wood Anemone	<i>Anemone ciquefolia</i>
Pokeweed	<i>Phytolacca americana</i>	Wood Lily	<i>Lilium philadelphicum</i>
Purple Coneflower	<i>Echinacea purpurea</i>	Yellow Loosestrife	<i>Lysimachia terrestris</i>
Rattlesnake Plantain	<i>Goodyera repens</i>	Yellow Wood Sorrel	<i>Oxalis europaea</i>
Red Clover	<i>Trifolium pratense</i>		
Red Trillium	<i>Trillium erectum</i>		
Robin Plantain	<i>Erigeron pulchellus</i>		
Round-lobed Hepatica	<i>Hepatica americana</i>		
Rue Anemone	<i>Anemonella thalictroides</i>		
Shinleaf	<i>Pyrola elliptica</i>		
Skunk Cabbage	<i>Symplocarpus foetidus</i>		
Sneezeweed	<i>Helenium autumnale</i>		

Chapter 6: Wildlife

When early settlers arrived in Canton, the Town was home to large predators including mountain lion (or catamount) and gray wolf that fed on white-tailed deer and possibly moose. Flocks of the now extinct Passenger Pigeon likely nested in Canton's forests. By the early 1800s, these virgin forests had been largely cleared for agriculture and the wild turkey, the "king of the forest birds," had already disappeared from Canton and the rest of Connecticut.

By the latter half of the nineteenth century, stories of better farmland and the proliferation of railroads allowed many Canton farmers to abandon their farms for the deeper, less rocky soils of the midwest. Since that time, agricultural and old field/mixed successional habitats have declined and this decline continues to this day. This loss of shrublands and young forests should be addressed in order to promote wildlife diversity. Although Canton has a rich agricultural history, much of the town is once again covered with maturing deciduous/coniferous forest.

The Farmington River Biodiversity Project (2006) identified five primary and two secondary core forest areas for biodiversity within Canton's twenty-five square mile area. These diverse natural environments include Ratlum Mountain North and Ratlum Mountain South in the west along the New Hartford and Barkhamsted town lines, the West Mountain Ridge bordering

Simsbury and Granby in the northeast corner of town, Onion Mountain along the eastern border with Simsbury, and Mt. Horr.



Roaring Brook Nature Center File Photo

Threats to wildlife diversity in the coming years include the inevitable loss of habitat due to development and the proliferation of invasive species that outcompete native plants and animals. Two secondary core areas identified by the Biodiversity Project include Sweetheart Mountain and Huckleberry Hill. Significant portions of both of these areas have been covered by residential subdivisions since the publishing of the study project.

Canton includes a number of what are defined as “critical habitats.” These are areas that may be small or reduced in size, thereby limiting populations of some species that inhabit these areas. Examples of critical habitats include Onion Mountain, the westernmost of Connecticut’s traprock ridges. Much of this ridgeline is protected under the ownership of the Canton Land Conservation Trust. Farmland, brushland and young forest does exist in Canton, but in much reduced acreage from the early twentieth century. These habitats have been developed or have matured into older forests. A number of those species found on the Connecticut Department of Energy and Environmental Protection’s Endangered Species List are found in these critical habitats.

Amphibians

Four-toed salamander	<i>Hemidactylium scutatum</i>
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>
Marbled Salamander	<i>Ambystoma opacum</i>
Northern Dusky Salamander	<i>Desmognathus fuscus</i>
Northern Two-lined Salamander	<i>Eurycea bislineata</i>
Redback Salamander	<i>Plethodon cinereus</i>
Red-spotted Newt	<i>Notophthalmus viridescens</i>
Spotted Salamander	<i>Ambystoma maculatum</i>
American Toad	<i>Anaxyrus americanus</i>
Bullfrog	<i>Lithobates catesbeiana</i>
Gray Treefrog	<i>Hyla versicolor</i>
Green Frog	<i>Lithobates clamitans</i>
Northern Spring Peeper	<i>Pseudacris crucifer</i>
Pickerel Frog	<i>Lithobate spalostris</i>
Wood Frog	<i>Lithobates sylvaticus</i>

Reptiles

Common Musk Stinkpot Turtle	<i>Sternotherus odoratus</i>
Common Snapping Turtle	<i>Chelydra serpentina</i>
Eastern Box Turtle	<i>Terrapene carolina</i>
Painted Turtle	<i>Chrysemys picta</i>
Spotted Turtle	<i>Clemmys guttata</i>
Wood Turtle	<i>Glyptemys insculpta</i>
Black Rat Snake	<i>Elaphe obsoleta</i>
Eastern Garter Snake	<i>Thamnophis sirtalis</i>
Eastern Hognose Snake	<i>Heterodon platorhines</i>
Eastern Milk Snake	<i>Lampropeltis triangulum</i>
Eastern Smooth Green Snake	<i>Opheodrys vernalis</i>
Eastern Worm Snake	<i>Carphophis amoenus</i>
Northern Black Racer	<i>Coluber constrictor</i>
Northern Brown Snake	<i>Storeria dekayi</i>

Reptiles (continued)

Northern Redbelly Snake *Storeria occipitomaculata*
Northern Ringneck Snake *Diadophis punctatus*
Northern Water Snake *Nerodia sipedon*

MAMMALS

Marsupials

Opossum *Didelphis virginiana*

Insectivores (shrews and moles)

Masked Shrew *Sorex cinereus*
Short-tailed Shrew *Blarina brevicauda*
Smoky Shrew *Sorex fumeus*
Water Shrew *Sorex palustris*
Eastern Mole *Scalopus aquaticus*
Hairy-tailed Mole *Parascalops breweri*
Star-nosed Mole *Condylura cristata*

Chiroptera (Bats)

Big Brown bat *Eptesicus fuscus*
Hoary Bat *Lasiurus cinereus*
Little Brown Bat *Myotis lucifugus*
Northern Long-eared Bat *Myotis septentrionalis*
Red Bat *Lasiurus borealis*
Silver-haired Bat *Lasionycteris noctivagans*
Tri-colored Bat (Pipistrelle) *Perimyotis subflavus*

Lagomorphs (Rabbits)

Eastern Cottontail *Sylvilagus floridanus*

Rodents

Beaver *Castor canadensis*
Eastern Chipmunk *Tamias striatus*
Gray Squirrel *Sciurus carolinensis*
House Mouse *Mus musculus*
Meadow Jumping Mouse *Zapus hudsonicus*
Meadow Vole *Microtus pennsylvanicus*
Muskrat *Ondatra zibethicus*
Norway Rat *Rattus norvegicus*
Porcupine *Erethizon dorsatum*
Red Squirrel *Tamiasciurus hudsonicus*
Southern Flying Squirrel *Glaucomys volans*
Southern Red-backed Vole *Myodes gapperi*
White-footed Mouse *Peromyscus maniculatus*
Woodchuck *Marmota monax*
Woodland Jumping Mouse *Napaeozapus insignis*
Woodland Vole *Microtus pinetorum*

Carnivores

Black Bear *Ursus americanus*
Bobcat *Felix rufus*
Coyote *Canis latrans*
Fisher *Martes pennanti*
Gray Fox *Urocyon cinereoargenteus*
Long-tailed Weasel *Mustela frenata*
Mink *Mustela vison*
Raccoon *Procyon lotor*
Red Fox *Vulpes vulpes*
River Otter *Lutra canadensis*
Short-tailed Weasel *Mustela erminea*
Striped Skunk *Mephitis mephitis*

Hoofed mammals

Moose *Alces alces*
White-tailed Deer *Odocoileus virginianus*



Photo by P. Cianfaglione

Bird Habitats

Canton contains bird habitats that account for a wide diversity of species. Nearly a century ago, much of Canton remained in agriculture. In the latter half of the twentieth century, much of this agricultural land reverted to forest or was developed into residential subdivisions. Now, the second decade of the twenty-first century, Canton is heavily forested, providing habitat for many bird species of the interior forest including vireos, thrushes and warblers.

Agricultural land is significantly reduced, although fields or former fields in the process of transitioning to forest land are still suitable for certain grassland species including bobolink, listed as a Species of Special Concern by the Department of Energy and Environmental Protection (DEEP). The Farmington River traverses Canton, entering from New Hartford on the western boundary of the town and flowing southeast through Collinsville and into Burlington. The River provides valuable feeding grounds for bald eagles and other species, particularly during late fall/early winter and again during spring migration. Additionally, a significant portion of Nepaug Reservoir is within town borders, providing an important migration stopover for many aquatic species, including loons, grebes, and waterfowl. Canton's numerous hills, and also Onion Mountain, the westernmost of Connecticut's traprock ridges, provide habitat for species that require higher elevations as well as unfragmented forest land.

Finally, a few significant wetland areas including Mills Pond and areas within the Cherry Brook Valley may provide habitat for more secretive marsh species. Much of this open land is preserved by the Canton Land Conservation Trust, the Metropolitan District Commission and the State of Connecticut, however, a significant percentage of the open field habitat remains in private ownership and does not offer long term protection.



Photo by J. Keane

Breeding Birds of Canton

The following list of the breeding birds of Canton was compiled using the Atlas of the Breeding Birds of Connecticut (1994) with additional observations from Canton birders including Paul Cianfaglione, Jay Kaplan, Jamie Meyers and Dave Tripp, Jr. To date, 108 species have been found breeding in Canton.

The following list includes only those birds for which there is evidence of breeding in Canton. Numerous other species have bred in close proximity to Canton, but not within its borders. These include bald eagle (Burlington) and great blue heron (Barkhamsted). The list also does not include migrant species that pass through our area in spring and fall. This would include loons, ducks, and other water birds that may utilize the Farmington River and/or Nepaug Reservoir, and songbirds that migrate through our upland forests. Finally, Canton provides winter habitat for a number of species, varying from year to year and dependent upon food availability to the north. These species include raptors, shrikes, and winter finches such as pine siskins and redpolls, among others. The latter are “irruptive” meaning that they can be abundant in one year and totally absent in the next.

Waterfowl

Canada Goose
Common Merganser
Hooded Merganser
Mallard
Wood Duck

Branta canadensis
Mergus merganser
Lophodytes cucullatus
Anas platyrhynchos
Aix sponsa

Game Birds

Ruffed Grouse
Wild Turkey

Bonasa umbellus
Meleagris gallopavo

Hérons

Green Heron

Butorides virescens

Vultures, Hawks and Falcons

Black Vulture	<i>Coragyps atratus</i>
Turkey Vulture	<i>Cathartes aura</i>
Osprey	<i>Pandion haliaetus</i>
American Kestrel	<i>Falco sparverius</i>
Broad-winged Hawk	<i>Buteo jamaicensis</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Red-tailed Hawk	<i>Buteo platypterus</i>
Sharp-shinned Hawk	<i>Accipiter striatus</i>

Rails and Shorebirds

American Woodcock	<i>Scolopax minor</i>
Killdeer	<i>Charadrius vociferus</i>
Spotted Sandpiper	<i>Actitis macularia</i>
Virginia Rail	<i>Rallus limicola</i>

Pigeons and Doves

Mourning Dove	<i>Zenaida macroura</i>
Rock Pigeon	<i>Columba livia</i>

Owls & Goatsuckers

Barred Owl	<i>Strix varia</i>
Eastern Screech Owl	<i>Megascops asio</i>
Great Horned Owl	<i>Bubo virginianus</i>
Whip-poor-will	<i>Caprimulgus vociferus</i>

Swifts & Hummingbirds

Chimney Swift	<i>Chaetura pelagica</i>
Ruby-throated Hummingbird	<i>Archilochus colubris</i>

Kingfishers & Woodpeckers

Belted Kingfisher	<i>Ceryle alcyon</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Northern Flicker	<i>Colaptes auratus</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>

Flycatchers

Acadian Flycatcher	<i>Empidonax virescens</i>
Alder Flycatcher	<i>Empidonax alnorum</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Eastern Wood-Pewee	<i>Contopus virens</i>
Great Crested Flycatcher	<i>Myiarchus crinitus</i>
Least Flycatcher	<i>Empidonax minimus</i>
Willow Flycatcher	<i>Empidonax trailii</i>

Vireos

Blue-headed Vireo	<i>Vireo solitarius</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Warbling Vireo	<i>Vireo gilvus</i>
Yellow-throated Vireo	<i>Vireo flavifrons</i>

Swallows

Bank Swallow	<i>Riparia riparia</i>
Barn Swallow	<i>Hirundo rustica</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Tree Swallow	<i>Tachycineta bicolor</i>

Jays & Crows

American Crow	<i>Corvus brachyrhynchos</i>
Common Raven	<i>Corvus corax</i>
Blue Jay	<i>Cyanocitta cristata</i>
Fish Crow	<i>Corvus ossifragus</i>

Chickadee, Titmouse, Nuthatch

Black-capped Chickadee	<i>Poecile atricapillus</i>
Tufted Titmouse	<i>Baeolophus bicolor</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>

Creepers & Kinglets

Blue-Gray Gnatcatcher	<i>Poliophtila caerulea</i>
Brown Creeper	<i>Certhia Americana</i>
Golden-crowned Kinglet	<i>Regulus satrapa</i>

Wrens

Carolina Wren	<i>Thryothorus ludovicianus</i>
House Wren	<i>Troglodytes aedon</i>
Winter Wren	<i>Troglodytes troglodytes</i>

Thrushes & Mimics

American Robin	<i>Turdus migratorius</i>
Eastern Bluebird	<i>Sialia sialis</i>
Hermit Thrush	<i>Catharus guttatus</i>
Veery	<i>Catharus fuscescens</i>
Wood Thrush	<i>Hylocichla mustelina</i>
Brown Thrasher	<i>Toxostoma rufum</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>

Waxwings & Starlings

Cedar Waxwing	<i>Bombycilla cedrorum</i>
Eurasian Starling	<i>Sturnus vulgaris</i>

Wood Warblers

American Redstart	<i>Setophaga ruticilla</i>
Black-and-white Warbler	<i>Mniotilta varia</i>
Blackburnian Warbler	<i>Setophaga fusca</i>
Black-throated Blue Warbler	<i>Setophaga caerulescens</i>
Black-throated Green Warbler	<i>Setophaga virens</i>
Blue-winged Warbler	<i>Vermivora pinus</i>
Chestnut-sided warbler	<i>Setophaga pensylvanica</i>
Canada Warbler	<i>Wilsonia canadensis</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Louisiana Waterthrush	<i>Seiurus motacilla</i>
Magnolia Warbler	<i>Setophaga magnolia</i>
Northern Waterthrush	<i>Seiurus noveboracensis</i>
Ovenbird	<i>Seiurus aurocapilla</i>
Pine Warbler	<i>Setophaga pinus</i>
Prairie Warbler	<i>Setophaga discolor</i>
Worm-eating Warbler	<i>Helmitheros vermivora</i>
Yellow Warbler	<i>Setophaga petechial</i>
Yellow-rumped Warbler	<i>Setophaga coronata</i>

Tanagers, Cardinals, Grosbeaks, Sparrows

Eastern Towhee	<i>Pipilo erythrophthalmus</i>
Indigo Bunting	<i>Passerina cyanea</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>
Scarlet Tanager	<i>Piranga olivacea</i>
Chipping Sparrow	<i>Spizella passerina</i>
Field Sparrow	<i>Spizella pusilla</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Song Sparrow	<i>Melospiza melodia</i>
Swamp Sparrow	<i>Melospiza georgiana</i>

Blackbirds

Baltimore Oriole	<i>Icterus galbula</i>
Bobolink	<i>Dolichonyx oryzvorus</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Common Grackle	<i>Quiscalus quiscula</i>
Eastern Meadowlark	<i>Sturnella magna</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>

Finches & House Sparrow

American Goldfinch	<i>Carduelis trisix</i>
House Finch	<i>Carpodacus mexicanus</i>
Purple Finch	<i>Carpodacus purpureus</i>
House Sparrow	<i>Passer domesticus</i>

Canton Moths

Over 2,000 moth species have been documented in Connecticut by Dr. David Wagner of the University of Connecticut. Of this total, approximately 50% are found in Canton. A list of all moths found in Canton is more than can be provided in this inventory, however, the following provides a small sampling of commonly encountered species to be found in Canton.

Giant Silkworm Moths

Cecropia Moth	<i>Hyalophora cecropia</i>
Io Moth	<i>Automeris io</i>
Luna Moth	<i>Actias luna</i>
Polyphemus Moth	<i>Antheraea polyphemus</i>
Promethea Moth	<i>Callosamia promethea</i>
Rosy Maple Moth	<i>Dryocampa rubicunda</i>

Prominent Moths

Angulose Prominent	<i>Peridea angulosa</i>
Checkered-fringe Prominent	<i>Schizura ipomoeae</i>
Gray Furcula	<i>Furcula cinerea</i>
Unicorn Caterpillar	<i>Schizura unicornis</i>
Variable Oakleaf Caterpillar	<i>Lochmaeus manteo</i>
White-dotted Prominent	<i>Nadata gibbosa</i>

Loopers, Inchworms, and Spanworm Moths

Camouflaged Looper	<i>Synchlora aerate</i>
Common Lytrosis	<i>Lytrosis unitaria</i>
Fringed Looper	<i>Campaea perlata</i>
Maple Spanworm	<i>Ennomos magnaria</i>

Owlets, Cutworms, & Underwings Moths

American Dagger Moth	<i>Acrionicta americana</i>
Armyworm	<i>Mythimna unipuncta</i>
Beautiful Wood-nymph	<i>Eudryas grata</i>
Bronzed Cutworm	<i>Nephelodes minians</i>
Brown-hooded Owlet	<i>Cucullia convexipennis</i>
Copper Underwing	<i>Amphipyra pyramidoides</i>
Corn Earworm	<i>Helicoverpa zea</i>

Owlets, Cutworms, & Underwings Moths (continued)

Eight-spotted Forester	<i>Alypia octomaculata</i>
Girlfriend Underwing	<i>Catocala amica</i>
Grapevine Epimenis	<i>Psychomorpha epimenis</i>
Ilia Underwing	<i>Catocala ilia</i>
Large Yellow Underwing	<i>Noctua pronuba</i>
Smartweed Moth	<i>Acrionicta obliqua</i>
Tufted White Pine Moth	<i>Panthea furcilla</i>

Slug Moths

Skiff Moth	<i>Prolimacodes badia</i>
Crowned Slug	<i>Isa textual</i>

Sphinx Moths

Five-spotted Hawkmoth	<i>Manduca quinquemaculata</i>
Galium Sphinx	<i>Hyles galii</i>
Hog Sphinx	<i>Darapsa myron</i>
Hummingbird Clearwing	<i>Hemaris thysbe</i>
Laurel Sphinx	<i>Sphinx kalmiae</i>
Nessus Sphinx	<i>Amphion floridensis</i>
Pandorus Sphinx	<i>Eumorpha pandorus</i>

Sphinx Moths (continued)

Snowberry Clearwing	<i>Hemaris diffinis</i>
White-lined Sphinx	<i>Hyles lineata</i>

Tent Caterpillars

Eastern Tent Caterpillar	<i>Malacosoma americanum</i>
Forest Tent Caterpillar	<i>Malacosoma disstria</i>

Tiger Moths

Banded Tussock Moth	<i>Halysidota tessellaris</i>
Fall Webworm	<i>Hyphantria cunea</i>
Isabella Tiger Moth (woolly bear)	<i>Pyrrharctia Isabella</i>
Leconte's Haploa	<i>Haploa lecontei</i>
Milkweed Tussock Moth	<i>Euchaetes egle</i>
Scarlet-winged Lichen Moth	<i>Hypoprepia miniata</i>
Virgin Tiger Moth	<i>Grammia virgo</i>
Virginia Ctenucha	<i>Ctenucha virginica</i>

Tussock Moths

Gypsy Moth (introduced)	<i>Lymantria dispar</i>
White-marked Tussock Moth	<i>Orgyia leucostigm</i>



Photo by C. Zdanzukas

Canton Butterfly Species

The Connecticut Butterfly Atlas Project (1995 – 1999) identified 110 butterfly species within Connecticut. This list of 61 species identified in Canton has been compiled through results of Farmington Valley Butterfly Counts conducted between 1996 – 2016 and additional sightings made by Roaring Brook Nature Center Staff. (*List reviewed by Michael Thomas, CT Agricultural Experiment Station October 2016*)

Swallowtails

Black Swallowtail	<i>Papilio polyxenes</i>
Eastern Tiger Swallowtail	<i>Papilio glaucus</i>
Giant Swallowtail	<i>Papilio cressphontes</i>
Pipevine Swallowtail	<i>Battus philenor</i>
Spicebush Swallowtail	<i>Papilio troilus</i>

Whites and Sulphurs

Cabbage White (introduced)	<i>Pieris rapae</i>
Clouded Sulphur	<i>Colias philodice</i>
Cloudless Sulphur	<i>Phoebis sennae</i>
Orange Sulphur	<i>Colias eurytheme</i>

Hairstreaks and Blues

Acadian Hairstreak	<i>Satyrium acadicum</i>
American Copper	<i>Lycaena phlaeas</i>
Banded Hairstreak	<i>Satyrium calanus</i>
Brown Elfin	<i>Callophrys augustinus</i>
Coral Hairstreak	<i>Satyrium titus</i>
Eastern Pine Elfin	<i>Callophrys niphon</i>
Eastern Tailed Blue	<i>Everes comyntas</i>
Gray Hairstreak	<i>Strymon melinus</i>
Harvester	<i>Feniseca tarquinius</i>
Hickory Hairstreak	<i>Satyrium caryaevorum</i>
Juniper Hairstreak	<i>Callophrys grynea</i>
Spring Azure	<i>Celastrina ladon</i>
Striped Hairstreak	<i>Satyrium liparops</i>
White M Hairstreak	<i>Parrhasium m-album</i>

Brush-footed Butterflies

American Lady	<i>Vanessa virginiensis</i>
Aphrodite Fritillary	<i>Speyeria aphrodite</i>
Appalachian Brown	<i>Satyroides appalachia</i>
Common Buckeye	<i>Junonia coenia</i>
Common Ringlet	<i>Coenonympha tullia</i>

Brush-footed Butterflies Cont.

Common Wood Nymph	<i>Cercyonis pegala</i>
Compton Tortoiseshell	<i>Nymphalis vau-album</i>
Eastern Comma	<i>Polygonia comma</i>
Great Spangled Fritillary	<i>Speyeria cybele</i>
Little Wood Satyr	<i>Megisto cymela</i>
Meadow Fritillary	<i>Boloria bellona</i>
Milbert's Tortoiseshell	<i>Nymphalis milberti</i>
Monarch	<i>Danaus plexippus</i>
Mourning Cloak	<i>Nymphalis antiopa</i>
Northern Pearly-eye	<i>Enodia anthedon</i>
Painted Lady	<i>Vanessa cardui</i>
Pearl Crescent	<i>Phyciodes tharos</i>
Question Mark	<i>Polygonia interrogationis</i>
Red Admiral	<i>Vanessa atalanta</i>
Red-spotted Purple	<i>Limnitis arthemis</i>
Silver-bordered Fritillary	<i>Boloria selene</i>
Viceroy	<i>Limnitis archippus</i>
Variiegated Fritillary	<i>Euptoietia claudia</i>

Skippers

Black Dash	<i>Euphyes conspiciua</i>
Common Sootywing	<i>Pholisora catullus</i>
Delaware Skipper	<i>Anatrytone logan</i>
Dun Skipper	<i>Euphyes vestris</i>
European Skipper	<i>Thymelicus lineola</i>
Hobomok Skipper	<i>Poanes hobomok</i>
Juvenal's Duskywing	<i>Erynnis juvenalis</i>
Least Skipper	<i>Anclyoxpha numitor</i>
Little Glassywing	<i>Pompeius verna</i>
Long Dash	<i>Polites mystic</i>
Mulberry Wing	<i>Poanes massasoit</i>
Northern Broken Dash	<i>Wallengrenia egeremet</i>
Northern Coudywing	<i>Thorybes pylades</i>
Peck's Skipper	<i>Polites peckius</i>
Silver-spotted Skipper	<i>Epargyreus claru</i>
Southern Cloudywing	<i>Thorybes bathyllus</i>
Tawny-edged Skipper	<i>Polites Themistocles</i>
Wild Indigo Duskywing	<i>Erynnis baptisiae</i>
Zabulon Skipper	<i>Poanes zabulon</i>



Roaring Brook Nature Center File Photo

Canton Damselflies and Dragonflies

Jewelwings

River Jewelwing
 Superb Jewelwing
 Ebony Jewelwing

Calopteryx aequabilis
Calopteryx amata
Calopteryx maculate

Spreadwings

Spotted Spreadwing
 Northern Spreadwing
 Slender Spreadwing
 Swamp Spreadwing

Lestes congener
Lestes disjunctus
Lestes rectangularis
Lestes vigilax

Darners

Canada Darner
 Lance-tipped Darner
 Black-tipped Darner
 Shadow Darner
 Green-striped Darner
 Common Green Darner
 Comet Darner
 Springtime Darner
 Fawn Darner
 Harlequin Darner
 Spatterdock Darner

Aeshna canadensis
Aeshna constricta
Aeshna tuberculifera
Aeshna umbrosa
Aeshna verticalis
Anax junius
Anax longipes
Basiaeschna Janata
Boyeria vinosa
Gomphiaeschna furcillata
Rhionaeschna mutata

Clubtails

Lilypad Clubtail
 Unicorn Clubtail
 Black-shouldered Spinylegs
spinus
 Lancet Clubtail
 Ashy Clubtail
 Dusky Clubtail
 Dragonhunter
 Southern Pygmy Clubtail
 Maine Snaketail
 Eastern Least Clubtail

Arigomphus furcifer
Arigomphus villosipes
Dromogomphus
exilis
Gomphus lividus
Gomphus spicatus
Hagenius brevistylus
Lanthus vernalis
Ophiogomphus mainensis
Stylogomphus albistylus

Pond Damsels

Violet Dancer
 Aurora Damsel
 Familiar Bluet
 Marsh Bluet
 Skimming Bluet
 Orange Bluet
 Citrine Forktail
 Fragile Forktail
 Eastern Forktail
 Sedge Sprite

Argia fumipennis
Chromagrion conditum
Enallagma civile
Enallagma erbiium
Enallagma geminatum
Enallagma signatum
Ischnura hastate
Ischnura posita
Ischnura verticalis
Nehalennia irene

Spiketails

Delta-spotted Spiketail
 Tiger Spiketail
 Twin-spotted Spiketail

Cordulegaster diastatops
Cordulegaster erronia
Cordulegaster maculate

Cruisers

Steam Cruiser
 Swift River Cruiser

Didymops transversa
Macromia illinoiensis

Emeralds

American Emerald
 Prince Baskettail
 Beaverpond Baskettail
 Common Baskettail
 Clamp-tipped Emerald
 Williamson's Emerald
 Brush-tipped Emerald

Cordulia shurtleffii
Epitheca princeps
Epitheca canis
Epitheca cynosure
Somatochlora tenebrosa
Somatochlora williamsoni
Somatochlora walshii

Skimmers

Calico Pennant
 Halloween Pennant
 Common Pondhawk

Celithemis elisa
Celithemis eponina
Erythemis simplicicollis

Skimmers Cont.

Dot-tailed Whiteface	<i>Leucorrhinia intacta</i>
Spangled Skimmer	<i>Libellula cyanea</i>
Slaty Skimmer	<i>Libellula incesta</i>
Widow Skimmer	<i>Libellula luctuosa</i>
Twelve-spotted Skimmer	<i>Libellula pulchella</i>
Painted Skimmer	<i>Libellula semifasciata</i>
Four-spotted Skimmer	<i>Libellula quadrimaculata</i>
Great Blue Skimmer	<i>Libellula vibrans</i>
Blue Dasher	<i>Pachydiplax longepennis</i>
Wandering Glider	<i>Pantala flavescens</i>
Spot-winged Glider	<i>Pantala hymenaea</i>
Eastern Amberwing	<i>Perithemis tenera</i>

Common Whitetail	<i>Plathemis lydia</i>
Cherry-faced Meadowhawk	<i>Sympetrum internum</i>
Band-winged Meadowhawk	<i>Sympetrum semicinctum</i>
Autumn Meadowhawk	<i>Sympetrum vicinum</i>
Black Saddlebags	<i>Tramea lacerata</i>

Chapter 7: Scenic Resources

The identification and protection of scenic resources is vital to preserving the character of the Town of Canton, as described and discussed in the 2014-2024 Plan of Conservation and Development (POCD). Canton is a town of many styles, landscapes, and historic small village centers, and is distinguished by a wealth of scenic resources.

These resources include several thousand acres of open space, farms and forest, undeveloped ridgelines, scenic vistas, magnificent and expansive waterways which have significant historical importance to the Town. Stunning hiking trails and preserves are protected by the Canton Land Conservation Trust and the Town of Canton. A map of Character Resources in the POCD Strategic Plan identifies scenic roads, possible future scenic roads, archaeological resources, open space, historic districts of local and national importance, historic places of national and state importance, scenic views, and active farmland.



Photo by L. Rizzo

Scenic Views

The following list identifies a partial inventory of Canton's scenic views:

- Canton Springs Road (top section)
- Case Street (upper section near Granby line)
- Cherry Brook Farm and Western Vista – 600 and 604 Cherry Brook Road
- Collinsville Dam
- Morgan and Olson Roads
- Mount Horr
- Nepaug Reservoir
- Sunrise Drive
- Sweetheart Mountain
- Collinsville and St. Patrick's Cemeteries (bordered by Huckleberry Hill and Cemetery Roads, Collinsville)

Notable Roads

The following list identifies a partial inventory of Canton's notably scenic roads as identified by the Conservation Commission:

- Cherry Brook Road – Numerous locations between Route 44 and Barkhamsted Town Line
- Maple Avenue (Collinsville section)
- Olson Road
- Route 309 (West Simsbury Road) between Route 179 in North Canton and West Simsbury
- West Road

Locations

The following list identifies a partial inventory of Canton's scenic locations:

- Cherry Brook Valley
- Collinsville:
 - Main Street
 - Downtown
 - Railroad Bridge Bike Trail
 - Rails to Trails Linear Trail – Most Sections
 - Route 179 Bridge over Farmington River
 - Farmington River
 - Cemetery west of the Farmington River
 - Collinsville Green
- Roaring Brook Nature Center and Surrounding Trails
- Town Green/Gallery on the Green

- Town Bridge

Local Mountains

- Mount Horr
- Onion Mountain (*Note: Onion Mountain is the only trap rock ridge in CT without a trail bisecting the ridgeline.*)
- Ratlum Mountain
- Sweetheart Mountain

Hiking Trails

- Collinsville and Canton Walking Trails
- Farmington River Trail
- Ratlum Mountain Trail
- Sweetheart Mountain Trail
- Canton Land Conservation Trust Trails
- Roaring Brook Nature Center Trails

Other

Canton Land Conservation Trust (CLCT) Properties (these are the larger properties)

- Land Trust (Onion Mountain) Properties Accessed via Gracey Road Near Nature Center or via Red Fox Run or Sexton's Hollow Roads)
- Mary Conklin Sanctuary – 144 Indian Hill Road
- Sweetheart Mountain Properties – 80 Dunne Avenue
- Sun, Wind and Woodland Property – 200 Breezy Hill Road

Department of Environmental and Energy Protection (DEEP)

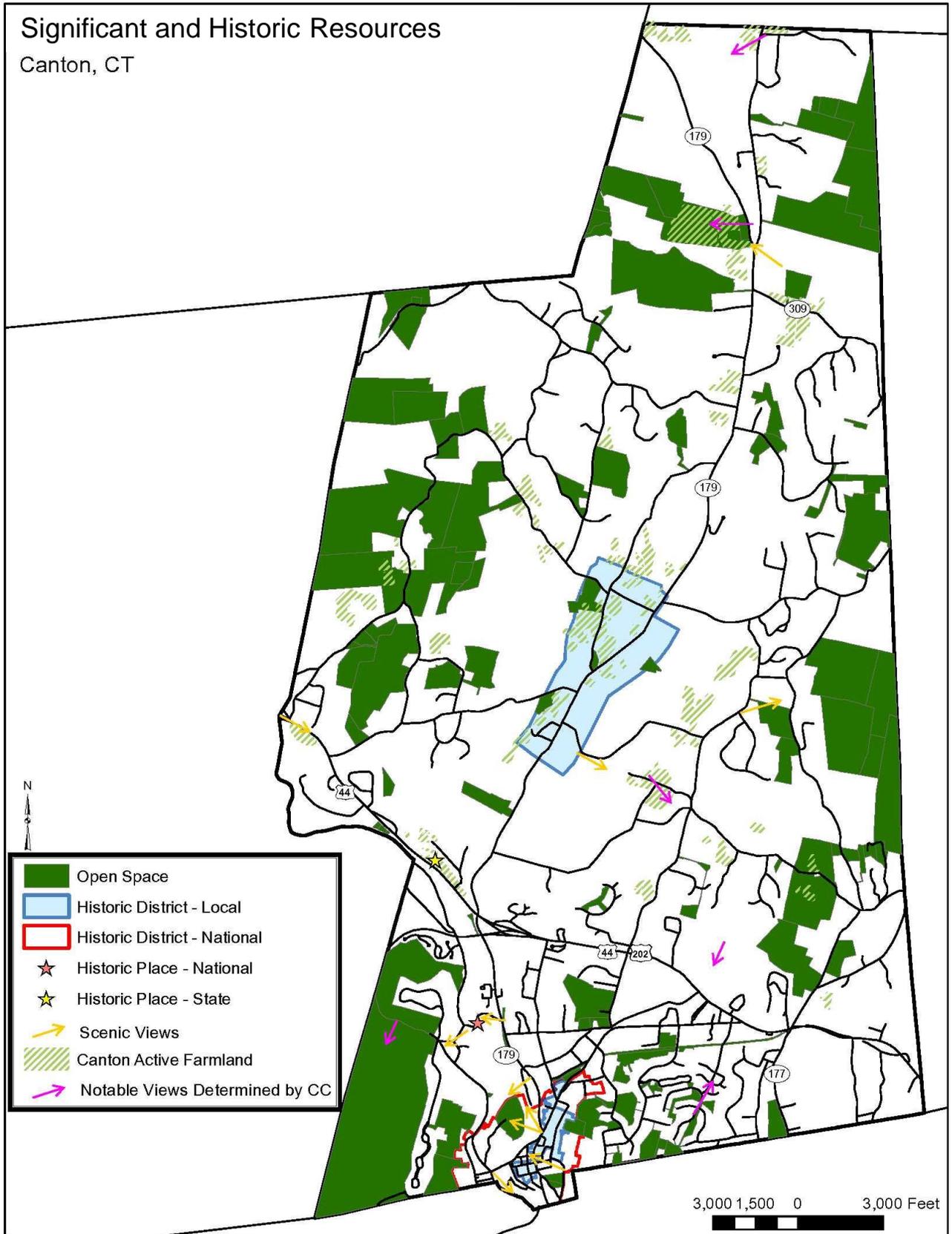
- Werner's Woods

Town of Canton Open Space Properties:

- Cannon Property – Accessed on Robin Road
- Carpenter Property – Accessed on Case Street

Significant and Historic Resources

Canton, CT



Chapter 8: Historic Resources

In Canton's case, there may be greater than usual truth to the claim that "geography is destiny." The town's natural resources – especially its waterways and topography – have significantly shaped its residents' lives, from prehistory to the present. Of course, the converse is also true – people have altered, shaped and even transformed Canton's natural resources by damming waterways, cutting forests, and blasting bedrock. Physical traces are a historical resource that helps us understand the lives and livelihoods of previous and current generations.



Photo by R. Morrison

Traces of Pre-Contact Native American Life in Canton

Today's Farmington River and Route 44 hardly evoke Native American trade routes, but each was in use long before European settlement. The Farmington River was part of an extensive trade network connecting tribes living in and near Canton to those in coastal Connecticut and to others as far away as central New York (Lavin 2013). Route 44 was an important overland trade route known as the Northwest Trail, which connected the Massacoe of the Simsbury area to trading partners in the Canaan area. Artifacts from Native Americans living and trading in and around Canton can be found at the Roaring Brook Nature Center and the Canton Historical Society.

Taming the Wild: Tracing the First European Settlers through Domestic Architecture and Waterpower

Canton's first colonial settlers, Richard Case and his wife, Mercy Holcomb Case, traveled over an old Native American trail from Simsbury (probably following a route similar to present-day East Hill Road) and settled on East Hill in 1737 (Phelps 1845). Within a year, Sarah Barber, a widow with six children, followed, and her four grown sons established farms in the Cherry Brook Valley. Although these settlers' original houses (probably small log cabins) are long gone, Canton still has many colonial period houses, several from as early as 1745 to 1760. Notable examples include 765 Cherry Brook Road, built by Benoni Moses in 1744; 225 Barbourtown Road (the "Henry Barbour house"), built by Moses Gaines in 1760; and 3 Dowd Avenue, built by Benjamin Dyer, a friend of Benjamin Franklin. Many more historic Canton houses are featured in the historical driving tours available on the town's website: (www.townofcantonct.org/walkingtours).

Waterpower was vital to Canton's history from its earliest settlement. Because of the difficulty of transporting building materials, the town's earliest mills were sawmills, which transformed many of the old chestnuts and other tree species into beams and boards for houses and barns. By the mid-nineteenth century, sawmills existed along Saw Mill Brook, south of the current North Canton Methodist Church; on Cherry Brook where it passes under West Road in Canton Center; and on Rattlesnake Brook, where it passes under East Hill Road for the last time before reaching Route 44. Water power was also used to grind the early settlers' grain. The first gristmill was built on Cherry Brook by original settler, Sergeant Daniel Case, whose house was south of the Canton Center Church. A "dish mill" along Jim Brook near Bahre Corner Road operated lathes to create wooden dishes, a necessity given the lack of local clay resources for pottery.



Photo by W. Rosenberg

Distinct but Interdependent: 19th Century Industry and Agriculture

Canton's development through the second half of the nineteenth and first half of the twentieth centuries involved the parallel, but interconnected evolution of its factories and farms. Much remains visible of this history. The main buildings and dams of Canton's famous Collins Company still stand, as does much of the 19th century village that formed around them. In addition to the few remaining working farms, many barns, stone walls and twisted old apple trees still testify to livestock and crop production on once-flourishing farms, even where forests and subdivisions have replaced them.

In 1826, Samuel Watkinson Collins and his brother, David, bought a grist and saw mill on the Farmington River in the South district of Canton and opened a factory there producing axes. Unlike the town's smaller mills, whose products rarely left their neighborhoods, Collins Company axes, adzes, machetes, shovels, hoes, and plows eventually travelled not just to other states, but to many parts of the globe. Collins Company machetes were used to clear land in Mississippi and Louisiana for the cotton industry (Baptist, 2014). More prominently memorialized in town is the fact that John Brown acquired the pikes he planned to use for his 1859 raid on Harper's Ferry from the Collins Company. During the Civil War, the Collins Company manufactured bayonets for the Colt factory in Hartford. One estimate suggests that 90% of the machetes used to clear land in South and Central America were made by the Collins Company. An in-depth history of the company, along with maps, photographs, examples of

Collins Company products, and related documents can be found at the Canton Historical Museum. Many of the buildings that housed the Collins Company itself, as well as the housing and commercial buildings that sprung up around the factory, can be seen by following walking tours developed through a cooperative effort by the Collinsville Historic District Commission, the Canton Historical Society, and the Canton Town Historian, available at the Canton Town Hall or online at www.townofcantonct.org/walkingtours.

Farms Here and Gone

Modern soil maps show that the greatest concentration of Prime Farmland soils in Canton lie along the Cherry Brook Valley and Barbour Brook; near the intersection of Cherry Brook with the Farmington River; and scattered over the East Hill area. Unsurprisingly, these areas formed some of the first places that colonial settlers chose to establish their farms. When more marginal farms on Ratlum Mountain failed, their land was often absorbed into the more prosperous farms along the brooks.

Canton's first farmers were farming for subsistence, but it was not long before they developed cash crops for sale – either locally, particularly once the Collins Company led to an increase in the non-farm population – or in Hartford. The Albany Turnpike, then the New Haven to Northampton Canal, and finally, the railroads, allowed farmers as well as the Collins Company to reach more distant markets.

Canton's farmers were not immune to nineteenth Century farming fads. They joined in the enthusiasm for Merino sheep that swept through New England in the 1810s and 1820s. Several, including Elijah Barbour and Decius Humphrey, tried raising silkworms and built “cocoeneries” to house them and planted mulberries to feed them in the 1830s and 1840s. This craze ended when disease wiped out the mulberry trees around 1844. By 1880, the most important cash crop for many Canton farms was tobacco. At about the same time, with the founding of the Canton Creamery in 1878, and multiple daily trains to carry dairy products to market, Canton farmers were able to sell fresh milk to markets in Hartford and beyond (previously most milk had been turned into butter or cheese before sale).



Photo by K. Kenney

Early Residents' Schools, Churches, and Businesses

The contemporary division of Canton, with a commercial district in the south and farming districts in the center and north, has not always prevailed. In the late eighteenth and early nineteenth centuries, the need to travel by foot or on horseback on unimproved roads meant that Canton developed four distinct villages, each with its own church, school(s), mills, general store, inn or tavern, and post office, as well as other small businesses such as blacksmiths, tanners, carpenters, and wheel wrights. The village of Suffrage (Canton) along the Albany Turnpike, now almost continuously commercial from the Avon border to the River, continued to be home to large farms well into the late nineteenth and early twentieth centuries.

Schools

Walkability was essential for Canton's early schools. Children started school as early as age 3 or 4, and most walked the entire distance. According to one source, they were not supposed to have to walk more than three miles. Phelps (1845) reported that there were 11 school districts in Canton, including East Hill, North Canton, Canton Street, River District, West District, two in Collinsville (one on each side of the river), and two in Canton Center (the result of an 1840s dispute over the new school's location) (Hoben, 2006). Several one-room school buildings from the mid- to late nineteenth century are still standing, including East Hill (now a Boy Scout Hall); North Canton (moved in 1927 to just south of the North Canton United Methodist Church); and Canton Center (one now a private home, at 135 West Road, and the other on Cherry Brook Road across from the Canton Center Congregational Church). The current Gallery on The Green, built in 1871, housed students from the Suffrage or Canton Street district, with elementary students on the first floor and a private college preparatory academy on the second.

Churches

Canton's first colonial settlers may have moved here – at least in part – for religious reasons. Phelps (1845) suggests the impetus for the original settlement of Canton Center and East Hill was likely “the ecclesiastical quarrel which, at this period, raged with so much acrimony in the old parish.” The town's oldest congregation is the one in Canton Center, designated as an independent parish by the General Assembly in 1750 (Bristol, 1956). Although the original 1763 church building is no longer standing, the current Canton Center Congregational Church, built in 1814, stands on the same site.

The oldest still-standing church building in town is that of the old Canton Baptist Church at 185 Albany Turnpike, across Route 44 from the Canton Green. A group of parishioners broke off from the Canton Center church in 1783. After three years, when further dissension split the group, about half became Baptists (Bristol, 1956). In 1807, this congregation raised money to construct a building on the Canton Green. In 1838, the church was moved to its present location. The congregation moved to a new building on Dowd Avenue in the 1960s, and the original building is now a commercial enterprise.

The earliest church in North Canton was an “independent” meeting house near the current house at 80 Case Street. By 1839, this building had fallen out of use, and parts of the structure were moved to Decius Humphrey's property on Old Canton Road for use in his experiment growing silk worms. After a period holding church meetings at the old red schoolhouse, the present North Canton United Methodist Church was constructed in 1871 on land donated by Milo Lee and Ruggles Case just below the intersection of Cherry Brook Road with Case Street.

The First Ecclesiastical Society in Collinsville, now the First Congregational Church of Collinsville, was built in 1836 by Sam Collins to serve the workers in his factory. The original building burned in 1857 and was rebuilt in 1858, with a further subsidy from Collins to supplement the fire insurance payment. When the church was organized, members did not need to be Congregational in affiliation. This continued to be the case until 1924, when the Collins Company transferred the church building and parsonage to the Congregational Church.

Further information on Canton's churches, including the Carpenter Gothic-style Trinity Episcopal Church of 1875; the Swedish Pilgrim Church of 1893 (now deconsecrated); and St. Patrick's Catholic Church (rebuilt in 1936 after the original was destroyed by fire) can be found in Kathleen Woolam's chapter on religion and churches in the Canton Bicentennial Commemorative Book (Hoben, 2006) and the chapter on churches in the Canton Sesquicentennial book (Canton Sesquicentennial Committee, 1956).

The Early Commercial Villages

Canton Center

In Canton Center, the Canton Center Store (now Cherry Brook Pizza) and the old Canton Creamery building (now Canton Clayworks) remain as markers of a once dense collection of businesses. On the west side of Cherry Brook Road, between the church and Humphrey Road, there were also carpenter and blacksmith shops. Earlier stores were in houses at 190, 193, and 197 Cherry Brook Road (LeGeyt, 2006). By the time of the 1869 map, there was also a "tobacco manufactory" and a gristmill on Humphrey Road. Perhaps the most famous business in Canton Center was Griswold's Salve, which was manufactured by Chauncey Griswold at 225 Cherry Brook Road.

Suffrage or Canton Street

The village of Suffrage (Canton Village or Canton Street) was named for the 40 acres granted to each householder who moved to Canton from Simsbury because this amount of land conferred the right to vote. This area was already densely built up by the mid-19th century. Beginning with the first road connecting Hartford and Litchfield in 1764, followed by the Talcott Mountain Turnpike in 1795, this area was a significant thoroughfare between Hartford and all points west. As a result, many of the buildings along the Albany Turnpike between Lovely Street and the current Canton Village Development served as taverns, inns, or hostelrys. Perhaps more surprising is that some of the most prosperous farms in town continued to be located along this stretch of road, coexisting with the commercial establishments. In the first half of the nineteenth century, there was a large orchard whose apples were processed for cider and applejack (now the site of the Shoppes at Farmington Valley).

North Canton

Of the early villages, it is most difficult to picture North Canton as a bustling commercial hub. Although relatively few of the buildings associated with North Canton's heyday remain, we can imagine what the village was like based on information from historical documents and photographs, old foundations, and an old road. The busiest hub of the old village extended from the intersection of Cherry Brook Road and West Simsbury Road up to the Y-intersection of Cherry Brook Road and Case Street. North Canton's businesses served not only residents, but also stagecoach passengers travelling from Hartford to Albany. Coaches continued up Route 179 (past a tavern in the Messenger house at 667 Cherry Brook Road) or directly over Ratlum

Mountain on the Old Stagecoach Road, now barely a trail between old stone walls. In the first half of the nineteenth century, North Canton was home to “two blacksmith shops, a powder mill, two or three taverns, two sawmills, a gristmill, several cider mills and distilleries, a button factory, a tannery, and a shoe and leather shop” (Hoben, 2006). Milo Lee, whose house was on the site of the present Methodist parsonage, manufactured carriages, sleighs, bedsteads, wooden plows, and caskets, and operated a sawmill, the foundation of which remains at 569 Cherry Brook Road. Colonial houses at 3 and 4 West Simsbury Road served as taverns and inns for the stagecoach trade.

South Canton or Collinsville

Prior to the establishment of the Collins Company in 1826, the area now known as Collinsville was called South Canton and had few if any commercial establishments. Shortly after purchasing the land and old mills where the Collins Company was being established, Samuel Collins realized the importance of developing housing, businesses, and civic institutions to support the workers in his factory. Collins himself, upon first moving to Canton from Hartford, initially boarded in the colonial era farmhouse at the corner of River Road and Simonds Avenue, and many of the earliest workers in his factory also boarded with area farmers. By 1828, Collins began construction on two workers’ boarding houses north of Main Street. In 1831, he built 21 duplex cottages for workers on the east side of the river followed in 1832 by another 24 on the west side of the river. In his journals, Collins expressed concern about the “demoralizing tendency” of factory towns, and he determined to counter this by establishing schools, a library, and a church on company-owned property. By the 1850s, the village was well-populated with a variety of businesses; in 1866, Collinsville was made a separate village; and by 1886 the village had 2,500 inhabitants. In the early twentieth century, downtown businesses included “grocery stores, a jewelry store, restaurants, law and insurance offices, a drug store, a millinery parlor, a hardware store, clothiers, a shoe store, a newspaper, a feed and grain establishment, a photographer, a plumber, and shops that sold general merchandise” (Leff, 2006).



Photo by W. Rosenberg

Recent History: The Loss of Farms, the Hurricane of 1956 and the Closing of the Collins Company

From a factory village and farm town through the first half of the 20th century, Canton, like many New England towns, evolved into a mostly suburban community. After World War II, with the combination of declining local railroads and a dramatic increase in highway shipping, small farmers were unable to compete with much larger farms in the midwest and west. The last tobacco was grown in Canton around 1940, while a handful of dairy farms continued through the 1980s. (Only one now remains).

Unlike many water-powered New England mills, the Collins Company survived both World Wars, but it suffered great damage in the 1955 flood. After a hurricane and subsequent drenching storm, the Farmington River flooded, reaching a height of 15 feet above the Collinsville Dam. The main state highway bridge in Collinsville was swept away, and many Collins Company buildings were destroyed or seriously damaged. According to Miller (2006), Collins Company employees cleaned up from the flood, repaired damaged machinery, and resumed production, but “there has been speculation that the flood damage may have contributed to the company’s demise.” A year earlier, the Collins Company had opened its first factory in Mexico, and in 1966, it ended production in Collinsville in favor of production in Brazil, Columbia, and Guatemala. Collins axes are now made by Truper Herramientas in Mexico.

Chapter 9: Critical Habitats

Canton has seven named ridgelines, the Farmington River and several tributaries that provide critical habitats for a variety of rare and declining species. According to the Connecticut Department of Energy and Environmental Protection's (DEEP) Natural Diversity Database (NDDDB), Canton is home to numerous plant and animal species listed as endangered, threatened or of special concern. These include, but are not limited to, interior forest nesting and grassland birds, eastern box and wood turtles, the tiger spiketail, a threatened species of dragonfly, and numerous plants, most notably the long-leafed bluet, an endangered wildflower found in only a handful of locations statewide.

Information about the plants, animals and natural communities found within the Town of Canton has been assembled by consultation with scientific researchers, previously conducted studies, and information available in current State of Connecticut publications. The Connecticut Comprehensive Wildlife Conservation Strategy emphasizes the importance of the Town's natural communities and critical habitats and its recommendations are geared towards habitat maintenance rather than focusing on individual species in most instances. The Strategy does, however, identify species of greatest conservation need, along with their affiliated habitats, and identifies priority research needs and conservation actions needed to address problems facing these species and habitats.

A goal of the study is "to identify actions needed to conserve species' diversity and to keep common species common." The Farmington Valley Biodiversity Project, on the other hand, collected and mapped comprehensive data on the biological resources within a seven town area including Canton. A primary objective of the project was to "identify and map priority conservation areas for incorporation within each town's Plan of Conservation and Development to help guide municipal planning and decision making regarding land use." Another project goal was to "promote awareness of unique ecological communities, the importance of biodiversity, threats to biodiversity, and the roles that various municipal commissions can take towards the conservation of biodiversity."

Upland Forest

Upland forest habitats are characterized by deciduous trees, evergreen trees, or mixed forests with overlapping crowns that form at least a 60% canopy cover. Much of Canton is currently forested. The Canton Land Conservation Trust owns upwards of 2,000 acres, much of which is upland forest. Additional areas are owned by the State of Connecticut and the Metropolitan District Commission (MDC). The MDC manages approximately 500 acres in the southwestern corner of Canton in the vicinity of the Nepaug Reservoir that supplies drinking water to Hartford and other MDC towns. State land is managed by the Department of Energy and Environmental Protection (DEEP) and includes the 160+ acre Werner's Woods, for which Roaring Brook Nature Center serves as steward and maintains walking trails. The Town also owns forested landscapes, notably the 140 acre Cannon Property on Ratlum Mountain, purchased as open space, as well as the development rights to Cherry Brook Farm along Route 179 (Cherry Brook Road) in the Cherry Brook Valley. There are also large, private upland forest holdings.

Concerns/Stressors

Upland forests are being fragmented by development. Numerous interior-forest nesting birds are declining due to introduction of a wide range of predators including house cats, raccoons,

opossums and skunks, crows and blue jays, as well as parasitic brown-headed cowbirds. The latter species lay its eggs in the nests of a wide variety of songbirds at the expense of the birds' eggs and young. Upland forests are also impacted heavily by invasive plants and animals. Some of the most noticeable of these plants include oriental bittersweet, oriental barberry, multiflora rose, autumn and Russian olive and winged euonymus, more commonly known as burning bush. Some of these plants are intentionally planted by homeowners. These invasives out-compete native species and are a prime cause of reduced diversity in our forests. Animal invasives include the hemlock woolly adelgid. Two other invasive insects have been found nearby – the Asian long-horned beetle and the emerald ash borer. These insects will cause tremendous damage to our woodlands.

Traprock and Amphibolite Ridges

The Farmington Valley Biodiversity Project (FVBP) identified five primary and two secondary conservation areas within the Town of Canton. Onion Mountain is part of the “traprock ridge ecoregion.” According to the FVBP “this unique geologic feature is composed of erosion resistant basalt from ancient lava flows. Traprock ridges harbor important natural communities including talus slopes and cliffs, bald rocky summits, perched vernal pools, and large tracts of continuous forest that serve as natural corridors for migratory birds and large mammals including bobcat, fisher and black bear. Rare plants are located within traprock ridge communities including the state-endangered longleaf bluet (*Houstonia longifolia*), found only in this habitat type.” Ratlum, West and Sweetheart Mountains are part of the western or northwest highlands ecoregion, while Mt. Horr is what is known as an amphibolite formation (a form of metamorphic rock) and supports communities similar to traprock ridge formation.

Concerns/Stressors

Unregulated development along Canton's ridgetops would diminish the aesthetic beauty of the town. Neighboring towns provide examples of what ridgetop development looks like.

Vernal Pools

A June 2010 Town of Canton Potential Vernal Pool Inventory & GIS Assessment was prepared by the Farmington River Watershed Association for the Farmington River Coordinating Committee. The report lists a possible 76 vernal pools in Canton, and it is likely that other vernal pools also exist that were not included in this survey. According to a Metropolitan Conservation Alliance publication, Best Development Practices: Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States (2002), “vernal pools and the adjacent critical terrestrial habitats used by vernal pool amphibians during the nonbreeding season, often overlap with land slated for residential or commercial development.” Due to their small size, vernal pools and the species that depend upon them, are quickly impacted by development and are disappearing at a rapid rate.

Concerns/Stressors

A majority of vernal pools are small and easily lost. In addition to development, vernal pools can be damaged by the use of pesticides and/or fertilizers that may enter the pools from nearby lawns or from other pollutants; introduction of animals like fish or crayfish, or alteration to nearby soils or wetlands that might cause pools to dry out.

Farmington River

The Farmington River has been characterized as the “lifeblood” of Canton. From the time of Sam Collins and the building of the first dam across the Farmington River in Collinsville in the mid-nineteenth century, the River has been a focal point for the Canton community. The River includes a multitude of uses and users and is arguably the most heavily-used river in Connecticut, if not New England. These constituencies compete for use of the River and include commercial and recreational, as well as public and private interests.

Concerns/Stressors

One hundred years ago, the Farmington River was so polluted that fish did not live in it and it was unsafe for people to swim. The establishment of sewage treatment plants and new clean water regulations helped to improve water quality so that the River is now a heavily utilized, multi-use waterway. A strong Inland Wetlands and Watercourses Agency (IWWA) helps to maintain the quality of the River by stringently regulating potential threats such as inappropriate development, and point and non-point sources of pollution. Invasive species such as the algae “rock snot” are also a concern.

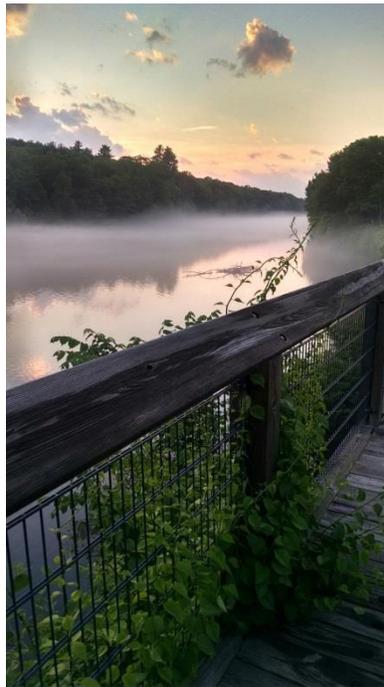


Photo by R. Riley

Grasslands

Although formerly an agricultural community, much of Canton’s farmland has reverted to woodlands. Grasslands are now considered to be a critical habitat throughout Connecticut, and many of the species that inhabit grasslands are now listed by DEEP as endangered, threatened or special concern species. Although listed bird species such as bobolink continue as sporadic breeders in Canton’s remaining grassland communities, a majority of these grasslands are privately owned at this time. Currently, bobolink and savannah sparrow, both grassland specialists, maintain small breeding colonies within town.

Concerns/Stressors

Grasslands are one of the most imperiled habitats in Connecticut. Development is the greatest threat to grassland areas, however, it should also be noted that grasslands must be maintained so that they do not revert to forest. Invasive species including Japanese knotweed are also a major problem in many areas.

Brushlands and Young Forests

The forests of northwest Connecticut matured over the last quarter of the twentieth and into the twenty-first century, as Canton's farms were abandoned and pastures and other farm fields ceased to be mowed or planted. Such forest "succession" from open pasture to mature forest is a well-documented phenomenon. Numerous wildlife species have declined in Canton over this time, replaced by species that prefer mature forest stands. That is not to say brushlands and young forests cannot return. Severe weather systems such as micro-bursts or tornados, forest fire, or extensive forestry initiatives are agents that produce these habitats. In 2016, the Canton Land Conservation Trust clear cut a ten acre area on one of its larger, forested preserves in an attempt to bring back the New England cottontail, Connecticut's original rabbit species, as well as numerous "young forest" birds such as ruffed grouse, American woodcock and numerous songbirds. The area will be carefully monitored over the next decade to determine if this project will produce the desired result with respect to wildlife.



Photo by E. Sondergeld

Concerns/Stressors

Brushlands and young forests are among Connecticut's most rapidly declining habitats and are vulnerable to dual pressure. If left alone, they will grow into mature forests within twenty-five to thirty years. They are also often developed and turned into residential or commercial areas. Maintenance of brushlands requires mowing, invasive plant control, and other measures that may be time consuming and prohibitively expensive. It is no wonder that a number of species currently found on Connecticut's Endangered Species List are found in this habitat type.

Wildlife Corridors/Linkages

Wildlife corridors serve as linkages permitting travel by wildlife species from one suitable habitat to another. These areas are crucial to allow animals to move seasonally from one area to another in search of food, mates, and territories in which to reproduce and raise young. They are

also critical to maintaining gene pools and healthy populations. Wildlife movements do not recognize town or political boundaries. Examples might include Ratlum Mountain in the western portion of Canton, which can be used by species as an access route to the undeveloped woodlands of Barkhamsted and Hartland to Canton's north; or Onion Mountain on Canton's eastern edge, which can be used by species moving to or from the trap ridges of Granby and Simsbury to the north or Avon to the south.

Concerns/Stressors

There are two great "roadblocks" to wildlife corridors. Animals moving from one habitat to another can be cut off by a subdivision or even by a single house or two should they be placed in a location that will hinder or even prevent animals from traversing a property. An example might be amphibians, frogs and salamanders, moving from upland woodlands to a vernal pool in the spring to mate and lay eggs. A few houses with lawns that are maintained by lawn care products can quickly reduce a population of salamanders that may have been making this journey for many generations. A second, and equally damaging concern is the placement of roads and the automobiles that use them. The eastern box turtle is listed as a species of special concern in Connecticut. Roaring Brook Nature Center initiated a box turtle study in 1999 that continues. Each year, at least one box turtle meets its end along Canton roadways, often males in search of mates in spring.

Chapter 10: Open Space

Open space is defined as an area of land or water that either remains in its natural state or is used for agriculture, or is free from intensive development for residential, commercial, industrial or institutional use and is intended to remain in its undeveloped condition.

Open space plays an integral role in Canton. Typically consisting of undisturbed forests and wetlands, open space is land that has not been developed and is often in its original state. Some open space has recreational value, and other open space areas protect land from development. Currently, over 20 percent of Canton's land area is preserved as open space thanks to the efforts and generosity of many individuals and organizations.

The idea of protecting land from development not only relates to the state of Connecticut's goal of preserving 20 percent of the state as open space, but it also is a strong step in conservation, protecting wildlife habitats, plant communities and watersheds, as well as connecting forest preserves and reducing fragmentation. Canton is very lucky to have residents who truly care about the land and what it has to offer.

Types of Open Space

Dedicated Open Space

Land which has been permanently preserved to serve one or more of the functional purposes identified previously. Such land may be owned by the Town, State, Canton Land Conservation Trust, or other similar entity or may have a conservation restriction placed upon it. Public access is typically allowed.

Managed Open Space

Land which may have another purpose but provides open space benefits (e.g. Class I or II public water supply lands, cemeteries, golf courses, etc.). Such land may be owned by a quasi-public or other entity, and may or may not have a reasonable assurance of providing open space benefits for a very long time.

Protective Covenant Open Space

Privately owned land, which is preserved from future development through protective covenants recorded in the Town Land Records. Examples include conservation easements, appropriately held development rights, etc.

Typically Does Not Include:

Open space typically does not include undeveloped land or agricultural land that is not preserved, land submitted for reduced tax assessments under Public Act 490, land which services one or more of the functional purposes identified previously but has not been preserved for such purposes (e.g. unpreserved wetlands, etc.).

Benefits

The Town has identified preserving open space as important as described in Canton's Plan of Conservation and Development. Some of the objectives behind preserving and protecting land include:

- To preserve and protect water supply;
- To preserve and protect wildlife habitat;
- To preserve scenic views, scenic roads and aesthetic values;
- To preserve and protect historical sites;
- To encourage the retention of agricultural lands and/or practices;
- To maintain Canton's rural town character;
- To protect and enhance Canton's natural environment;
- To preserve the purity and adequacy of the communities natural resources;
- To promote biodiversity; and,
- To determine property management needs.

There is quite a bit of town character within open space, and the Town believes that natural resources, ridgelines, farmland, and other non-developed properties are essential to maintaining this character.

There are also economic benefits associated with open space. Open space enhances the value of nearby properties and can reduce the cost of installing infrastructure and providing services. Open space preservation can avert development. Purchase of development rights can preserve land while allowing farmers to continue farming the land. Open space donations or easements can also be used to reduce estate and/or property taxes.

Management and Maintenance

Open space has many wonderful benefits that focus on protection from development. Some levels of protection fluctuate with permanence. A high level of protection can be procured through a conservation easement or a deed restriction. This is land on which development is

either limited or prohibited and is filed on Town land records for the highest degree of permanence.

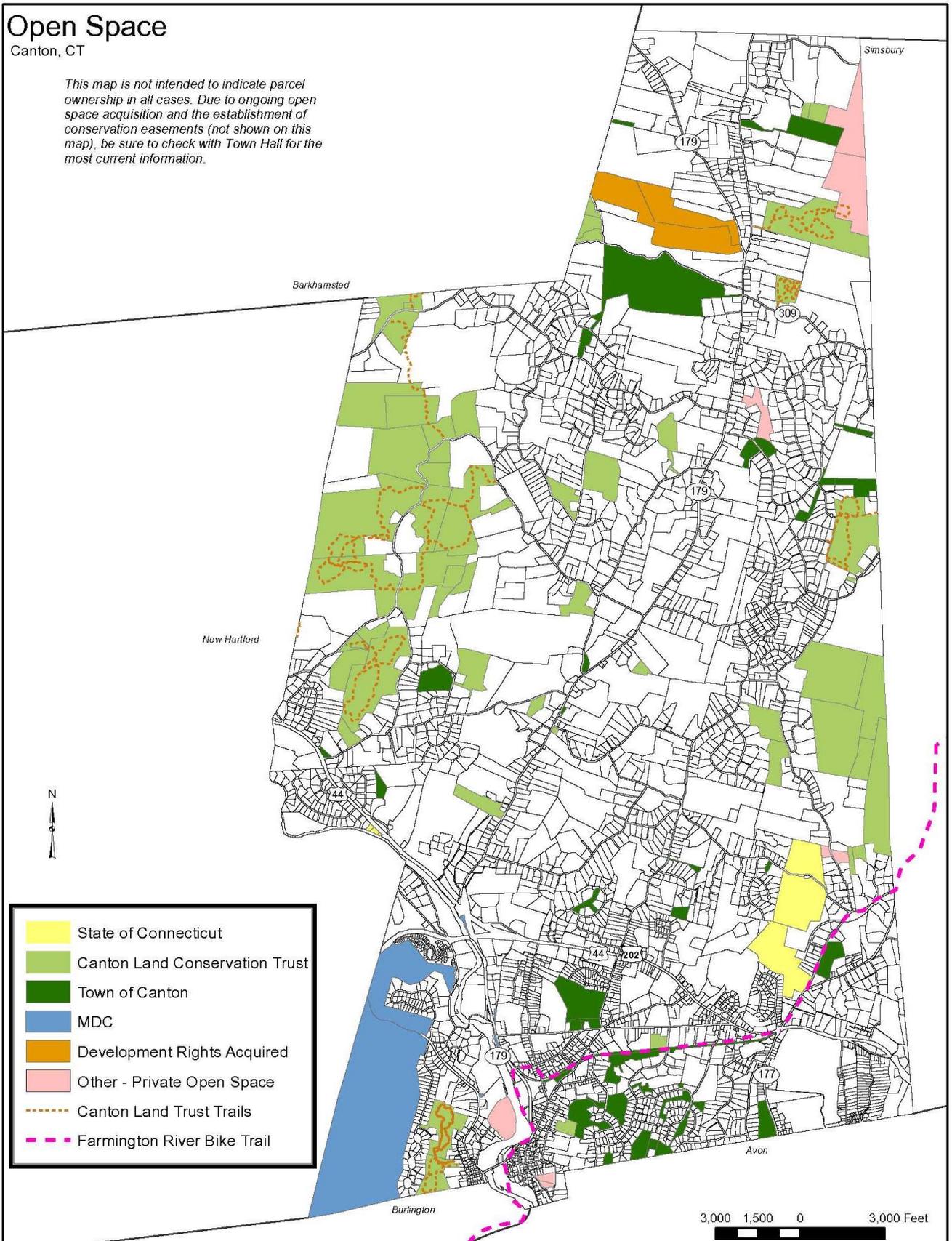
Often, organizations that hold easements and deed restrictions are also responsible for their enforcement. These include the federal government, the State, the Town of Canton, or the Canton Land Conservation Trust. Despite the recorded easement, the land itself generally remains the property of the owner.

While easements and deed restrictions are designed to provide the highest level of open space protection, PA-490 land provides open space incentive, but not protection. PA-490 (Public Act 490 established by the State of Connecticut) land is tax abated, but does not restrict the land owner from selling or developing at any time. Public Act 490 encourages preservation of agricultural, forested and open lands by taxing them at a lower rate to reflect that use. The land is not taxed to reflect its potential value as developed property.

Open Space

Canton, CT

This map is not intended to indicate parcel ownership in all cases. Due to ongoing open space acquisition and the establishment of conservation easements (not shown on this map), be sure to check with Town Hall for the most current information.



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