

SPECIAL MEETING AGENDA

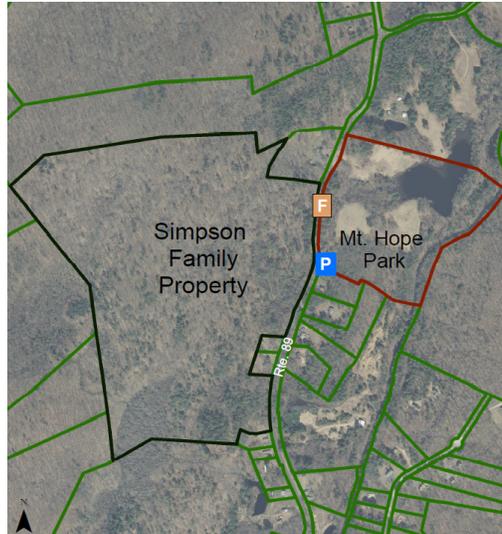
- 1. CALL TO ORDER AND ROLL CALL**
- 2. OPPORTUNITY FOR PUBLIC COMMENT**
- 3. CONTINUING BUSINESS**
 - 3.1. Simpson-Wood Draft Management Plan** 2 - 11
[2019.04.22 Simpson Mgmt Plan with goals TH](#)
[2019.06.26 New Goals Formatted](#)
 - 3.2. Moss Sanctuary Management Plan** 12 - 23
[2019.06.25 Moss Sanctuary Mgmt Plan no goals TH](#)
[2019.06.26 New Goals Formatted](#)
- 4. ADJOURNMENT**

SIMPSON-WOOD PRESERVE

Natural Area Management Plan

Mansfield, Connecticut

2019



Location: The Simpson-Wood Preserve (“property”) is an undeveloped parcel on the West side of Warrenville Road (Rte. 89). As shown above, the parcel is located directly across from Mount Hope Park, a 35-acre park purchased in 1999. The parcel has approximately 1900 feet of wooded frontage along the west side of Warrenville Road, with two noncontiguous links of frontage of 491 feet and 1,374 feet. See attachments #2-3, *Town Road Map* and *Property Boundary Map*.

Access:

Existing farm roads and logging trails provide a network of trails that with scenic views and many of the site features. These existing paths will be used to develop a more extensive trail network. The public will be directed to the new preserve from the Mt. Hope Park parking area. The town will develop a trail guide, similar to the one developed for Mt. Hope Park (available upon request), that will be published on the town’s website to increase public awareness of the preserve.

Coordinates: 41°48'21.74"N, 72°10'18.59"W

Map/Block/Lot: Map 19, Block 70, Lot 12-1

Size: 114.648 acres

Zone: RAR-90 (Rural Agricultural Residential)

Property Classification: OPEN SPACE

Date this Plan was prepared: Feb., 2019

Date of Revisions/Amendments: _____

Date of Town Council Approval: _____

Committee Review (biannual review by Parks and Natural Resources Committee or other appropriate committee):

Reviewed by	Date

Reviewed by	Date

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INTRODUCTION

Authors, Contributors, and Sources

Jennifer Kaufman, Mansfield’s Environmental Planner, Weston Henry, Sustainability Intern, and other Ttown staff; Town commissions (Conservation) and committees (Parks and Natural Resources); CT Department of Energy & Environmental Protection (DEEP); UConn Center for Land Use Education & Research (CLEAR).

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Purpose

The purpose of this plan is to describe how the Town of Mansfield envisions the management and public use of the Simpson-Wood Preserve. This plan describes the property’s natural and cultural resources and recommends actions which are designed to: preserve and maintain natural habitats and native species, protect cultural resources, and balance public use and enjoyment.

Property Intent and History

Named Simpson-Wood Preserve because the Wood Family and its descendants farmed this parcel pre-Revolutionary land grant from approximately 1719 to 1939. This parcel was part a much a larger parcel owned and occupied by the Simpson Family since 1963. In 1993, Dorothy Simpson conveyed the house located at 699 Warrenville Road with approximately 5 acres on the west side of the road and the 35-acre parcel across the street to Holly Hatch and Kirk Skinner. In 1999, the town acquired the 35-acre eastern parcel now known as Mt. Hope Park. In 2016, the Simpson family approached the town about purchasing this property for open space.

In 2017, the town negotiated a purchase and sale with the Simpson family and submitted an Open Space and Watershed Land Acquisition Grant to CT DEEP. In 2017, the state awarded \$207,000 or 65% of the \$325,000 purchase price to the town. The town acquired the property on June 25, 2018. Pursuant to the grant, CT DEEP will hold a conservation easement on the property.

Preservation of this 114-acre parcel could be the beginning of a much larger effort to preserve the highlands that form a north/south corridor of interior forest extending over two miles from Mt. Hope Road to Mulberry Road. Further, acquisition of this property protects access to multiple valuable resources such as:

- A large corridor of interior, diverse forestland;
- Important wildlife habitat;
- Unique geological features;
- Significant Native American ceremonial stone landscapes;
- Land within a public drinking supply watershed;
- An area that has been identified on the December 2016 CT DEEP NDDDB as having endangered, threatened, or special concern plants or wildlife habitats.

Consistency with the 2015 Mansfield Tomorrow Plan of Conservation and Development

The acquisition and preservation of this property accomplishes the following goals and strategies from the 2015 *Mansfield Tomorrow: Plan of Conservation and Development*:

1. Goal 2.2: Mansfield has healthy watersheds with high-quality ground and surface water resources and aquatic habitats.
2. Goal 3.1: Natural resources within Mansfield’s public and private open spaces are protected and well-managed.
 - Strategy A: Continue efforts to protect important natural and agricultural resources through property acquisition, development rights, easements and clustering development.
3. Goal 3.3 Mansfield’s park and preserve system, including natural and active recreation areas, provides access to residents and meets the needs of the population.
 - Strategy B: Continue to develop a safe network of walking and biking trails to improve connectivity and provide opportunities for outdoor recreation and alternative transportation.

Some of these goals were achieved through the property’s acquisition as open space by the Town of Mansfield. For the specific Goals, Strategies, and Actions recommended for this property, see “Management & Stewardship Action Plan” on page 6.

INVENTORY OF NATURAL RESOURCES

Overview

While the area was part of a farm in earlier times, the property today is undeveloped and mostly dominated by natural systems and processes. Its 114± acres of mature forest are located in the highlands that form a north/south corridor of interior forest extending from Northeast Mansfield to Mulberry Road, portions of which have been identified on the CT DEEP NDDDB map. The property lies directly across Warrenville Road from the Town-owned 35-acre Mt Hope Park, which was purchased in 1999.

The elevation at Warrenville Road is 300 feet. From Warrenville Road the property slopes gently 600 feet west to an elevation of 350 feet, then sharply rises to the high point in the property of 485 feet in a distance of approximately 365 feet. From there it slopes gently down approximately 600 feet to an elevation of 400 feet and then north to the northern boundary to an elevation of 420 feet. There is a dramatic slope and ridge of exposed bedrock running north to south through the eastern third of the property, and nearly 18 acres of delineated wetlands. In addition to unique geological features, the property contains several stone features that are significant Native American ceremonial stone structures identified by the Tribal Historic Preservation Officer for the Mohegan Tribe.

Protection of this 114-acre tract expands recreational opportunities in northeastern Mansfield where there are few town parks. Town ownership of this property provides permanent public access to a network of trails within the preserve, many which already exist as old farm and logging roads and showcase views of the property’s agricultural history. These views include large, long, stone walls, an extensive line of imposing

rock ledges, occasional glacial erratics, and diverse wetlands. These trails lead to overlooks where glimpses of the scenic Mt. Hope River valley offer a sense of being "away from it all."

Geological Features

This property is notable for its naturally occurring ledges and ridgeline. According to Dr. Peter Drzewiecki, Professor of Environmental Earth Science at Eastern Connecticut State University, the property contains unique geological features including well exposed bedrock along a number of NNE-SSW oriented ridges. These rocks are mapped as the Canterbury Gneiss Formation on the Bedrock Geologic Map of the Spring Hill Quadrangle (Pease, 1988). The statewide Bedrock Geological Map of Connecticut (Rodgers, 1985) also includes most of the property within the Canterbury Gneiss, but places the northernmost portion of the property within the slightly older Hebron Gneiss Formation. For further detail, Dr. Drzewiecki's complete report is provided in Attachment 11.

Ecology & Natural Resources

The Simpson-Wood Preserve rises in a series of terraces and scenic ledges, with permanent and ephemeral wetlands interspersed. The forest is mainly oak/hickory, but there are several red maple swamps. There are a few spots where invasive plant species will need to be controlled.

While the property does contain some State-Wide Important Farmland Soils, it will not be used for agriculture. At a future date, the town may develop a forest stewardship plan, which may include limited harvesting to improve the health of the forest and support wildlife habitat. The property was farmed in the 18th and 19th, and early 20th centuries as evidenced by the numerous stone walls. Other than a responsible timber harvest within the last 10 years, there have not been any agricultural uses on the property in the recent past. This property contains 17.8 acres of wetlands that were field-delineated in 2007 when the family was considering development.

The entire property drains into the Mt. Hope River, which is a tributary to the public water supply in the Willimantic Reservoir. Thus, protection of this property from development reduces threats of increased pollutant levels in a public drinking water supply.

Because the property is part of a large forest tract (250 to 500 acres of forest, as shown on Map 2.3 in the Mansfield Tomorrow Plan of Conservation and Development), it provides habitat for wildlife that require interior forest areas to survive. On an adjacent similar property, an interior forest species that is on the CT-DEEP's Natural Diversity Database (NDDDB) list was recorded. This species' presence on the Simpson property is probable, but has not yet been confirmed. The numerous ledges and wetlands are potential sites for NDDDB plant species, but presence of these species would need to be confirmed during the growing season. The subject property does not support any of the 25 critical habitats listed for Connecticut.

To provide an initial inventory of the property's natural resources, several attachments are included:

- Forest Map
- Natural Diversity Database (NDDDB) Map
- Soils Map

Additional resources can be found on the following websites:

- CT Environmental Conditions Online
<http://www.cteco.uconn.edu/index.htm>
- CT DEEP Wildlife Action Plan (2015)
http://www.ct.gov/deep/cwp/view.asp?a=2723&q=329520&deepNav_GID=1719
- Town of Mansfield GIS mapping service
<http://www.mainstreetmaps.com/ct/mansfield/public.asp>

Cultural & Historical Sites

The Simpson-Wood Preserve and Mt. Hope Park are part of a pre-Revolutionary land grant that was farmed by the Wood Family and descendants from approximately 1719 to 1939. Adjacent to the northern end of the property and visible from the road, the original house (circa 1719) retains its colonial character. The stone walls on the property speak to its agricultural history. Preservation of the subject property reunifies approximately 150 acres of the Wood Family property.

According to Elaine Thomas, Deputy Tribal Historic Preservation Officer for the Mohegan Tribe, there are several stone features on the property that are significant Native American ceremonial stone structures. The preliminary report on the property’s culturally significant stone features is available upon request.

Other Activities & Uses

- Encroachments: none
- Rights-of way: none
- Abandoned infrastructure (old road, structures, etc.): none
- Dams, culverts, and other water control devices: none
- Agricultural: none

ACTIVITIES & USES

The Simpson-Wood Preserve is open to the public from dawn to dusk. Chapter A194 of Mansfield’s Code of Ordinances contains the Park Rules and Regulations adopted by the Town Council.

Permitted	Prohibited
Hiking	Consumption of alcohol
Running	Fires
Birdwatching	Unauthorized vehicles
Educational programs	Removal of Flora and Fauna
Picnicking	
Pets on leash only	

MANAGEMENT & STEWARDSHIP ACTION PLAN

This Management & Stewardship Action Plan identifies:

- **Goals** that describe how the property is intended to be used and managed;
- **Strategies** for advancing each goal; and
- **Actions** – specific steps our community can take over the short term (before end of 2021), medium term (between 2022 and 2026) and long term (between 2027 and 2037) in support of each strategy.

These Goals, Strategies and Actions **do not provide a guarantee that resources will be available to advance each action.** In addition, this Management & Stewardship Action Plan is not intended to preclude the Town from preserving other actions as opportunities arise. As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the intention outlined in this plan.

Goals to be determined by PNRC see email attachment for a list of DRAFT Goals.

ATTACHMENTS

1. Topographic Map
2. Town Road Map
3. Property Boundary Map
4. Ortho Photo Map
5. Forest Map
6. Natural Diversity Database Map
7. Soils Map
8. State Locational Guideline Map
9. Final Survey
10. Warranty Deed
11. Geologic Summary

The following is available in the property file for the Simpson-Wood Preserve:

1. Appraisal Report – Stewart Appraisal Services
2. Appraisal Report – T.W. Henry Real Estate Appraisals, LLC
3. Application for Open Space and Watershed Land Acquisition Grant Program
4. Proposed Trail Map, prepared by James Morrow

Goal 1. Protect the property’s historical features, natural resources and wildlife.

Strategy A: Preserve and protect wildlife habitat and ecosystem health.

ACTION	WHO	WHEN	RESOURCES
1. Recruit qualified individuals to conduct surveys of species/habitats and create inventories to inform management options. Identify notable habitats found on the property (e.g. vernal pools, grasslands), CT DEEP critical habitats, and species listed by State or Federal agencies as endangered, threatened or of special concern.	Parks and Natural Resources Committee (PNRC), Town Staff, DEEP, Consultant	Short Term	Volunteer time
2. Develop a wildlife management plan to guide decisions on maintaining ecosystem health. Include recommendations to: <ul style="list-style-type: none"> a. Monitor forests, meadows and wetlands for invasive species or other signs of degradation. b. Protect vulnerable species and implement management practices that preserve habitats. c. Communicate with owners/managers of adjacent open space about conservation objectives and look for opportunities to partner. 	PNRC, Town Staff, DEEP, Consultant	Ongoing	Staff time, volunteer time, Parks Improvement Fund, grant funding

Strategy B: Protect surface or groundwater resources.

ACTION	WHO	WHEN	RESOURCES
1. Recruit qualified individuals to monitor watercourses and waterbodies for signs of degradation (e.g. erosion, invasive species). Address impacts as needed.	Parks and Rec, PNRC	Ongoing	Volunteer time

Strategy C: Protect historic and/or archaeological resources.

ACTION	WHO	WHEN	RESOURCES
1. Recruit qualified individuals to identify archaeological resources or historic structures, sites or features (e.g. mill site, cemetery, foundations, or stone wall).	PNRC, Town Staff, Consultant	Short Term	Volunteer time
2. Monitor historic or archaeological structures, sites or features for vandalism, theft or degradation. Address impacts as needed.	PNRC, Town Staff	Ongoing	Volunteer time

Strategy D: Encourage partnerships that advance scientific knowledge and/or conservation.

ACTION	WHO	WHEN	RESOURCES
1. Partner with qualified volunteers, UConn and ECSU faculty or students, CT DEEP, area land trusts, USDA NRCS and other organizations to conduct scientific research (e.g. archaeological, ecological studies).	PNRC, Town Staff, Volunteers	Ongoing	Volunteer time
2. Partner with qualified volunteers and organizations to implement conservation practices on the property consistent with the wildlife management plan. Examples include installing nest boxes, invasive species control, and trail maintenance/improvement projects.	PNRC, Town Staff, Volunteers	Ongoing	Volunteer time

Goal 2. Improve and encourage access to the preserve.

Strategy A: Develop trails and other infrastructure.

ACTION	WHO	WHEN	RESOURCES
1. Create a trail system that connects to adjacent or nearby open spaces.	Volunteers, Town Staff	Short Term	Staff time, volunteer time, Parks Improvement Fund
2. Evaluate the possibility of installing biking trails.	PNRC, Parks and Rec	Short Term	Staff time
3. Route trails away from vulnerable areas, such as steep slopes, stream banks, wetlands, ecologically significant areas, and historically significant sites or structures.	PNRC, DPW	Ongoing	Volunteer time
4. Include signage to guide appropriate public use and access. This could include: a. Wayfinding signage to and from parking areas. b. Signs at major trailheads. c. Painted blazes or signs to mark trails and connections. d. Boundary signs around the perimeter of the preserve.	Volunteers, Parks and Rec	Short Term	Volunteer time, Parks Improvement Fund

Strategy B: Maintain trails and other infrastructure.

ACTION	WHO	WHEN	RESOURCES
1. Ensure trails are passable to the public travelling on foot. Maintain tread and	Volunteers,	Ongoing	Staff time,

appropriate widths and clearances.	Town Staff		volunteer time, Parks Improvement Fund
2. Conduct general monitoring visits and file reports according to monitoring guidelines. High-priority tasks are to: a. Develop a monitoring form and online system to submit reports to Town staff or stewardship coordinator. b. Monitor and report on the condition of trails, trailheads, signs/blazes, and parking areas. c. If needed, document violations or areas of concern (degraded areas, unauthorized use, dumping, encroachment, Mansfield <i>Code of Ordinances</i> Prohibited Activities, etc.) d. Address issues as necessary.	Volunteers, Parks and Rec, PNRC, Town Staff	Ongoing	Staff time, volunteer time

Strategy C: Encourage access for people of different ages and abilities.

ACTION	WHO	WHEN	RESOURCES
1. Evaluate the possibility of ADA-compliant recreation opportunities (e.g. accessible paths, waterfront access).	Town Staff	Ongoing	Staff time, volunteer time
2. Develop a trail guide that is readily available and posted on the Town's website. Include information such as site directions, trail connections, descriptions of key features, and other educational information.	Volunteers, Town Staff	Short Term	Volunteer time, Parks Improvement Fund
3. Encourage educational programs and other group-oriented activities on the property (i.e. CT Trails Day, Walktober).	Volunteers	Ongoing	Volunteer time, staff time

Strategy D: Create or enhance connections to nearby open spaces and recreation areas.

ACTION	WHO	WHEN	RESOURCES
1. Evaluate opportunities for connections to state-designated, town-wide or multi-town greenway or trail systems (such as Willimantic River, Mt Hope River, Fenton River, Natchaug River, or the Nipmuck Trail).	Parks and Rec, PNRC, Town Staff	Ongoing	Staff time, volunteer time
2. Improve connection to nearby existing parks, open spaces, or residential neighborhoods through trail connections	Parks and Rec, PNRC, Town	Ongoing	Staff time, volunteer time

and signage.	Staff		
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MOSS SANCTUARY
Natural Area Management Plan
Mansfield, Connecticut
2019



Location: The 135-acre Albert E. Moss Sanctuary is a natural area between South Eagleville Road and Birchwood Heights Road. It is bounded by Route 195 to the east, South Eagleville Road and the University of Connecticut apartment complex to the north, private residential properties and Birchwood Heights Road to the South, and private residential properties and Knollwood Road to the west.

Other abutting properties included in this management plan are the Birchwood Heights-Monticello Connector Property, and open space acquired through the Planning and Zoning Commission subdivision process detailed in Table 1 and depicted Attachment #1, *Moss Sanctuary Map*.

Access:

Currently, there is trail and maintenance vehicle access behind UConn’s student apartments across from town hall, and from both ends of Birchwood Road. For residents from other areas of town, parking and bicycle racks are available across the street in the Mansfield Community Center and town hall parking lot.

The Birchwood Heights-Monticello Connector and Open Space Birchwood Heights may be accessed via Birchwood Heights Road. Open Space Monticello is accessible via Monticello Lane, and Open Space Fellen may be accessed through Fellen Road. See Attachment #1, *Moss Sanctuary Map*.

Coordinates: N 41.796254° W 72.241393° (Moss Sanctuary)

Size: 156.27 acres

Zone: RAR-90 (Rural Agricultural Residential)

Property Classification: OPEN SPACE

Date this Plan was prepared: March, 2019

Date of Revisions/Amendments: _____

Date of Town Council Approval: _____

Committee Review (biannual review by Parks Advisory Committee or other appropriate committee):

Reviewed by	Date	Reviewed by	Date

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INTRODUCTION

Authors, Contributors, and Sources

Jennifer Kaufman, Mansfield’s Environmental Planner, Weston Henry, Sustainability Intern, and other Town staff; Town commissions (Conservation) and committees (Parks and Natural Resources); CT Department of Energy & Environmental Protection (DEEP); UConn Center for Land Use Education & Research (CLEAR).

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Purpose

The purpose of this plan is to describe how the Town of Mansfield envisions the management and public use of the Moss Sanctuary and four nearby parcels. This plan describes the property’s natural and cultural resources and recommends actions which are designed to: preserve and maintain natural habitats and native species, protect cultural resources, and balance public use and enjoyment with these actions.

Property Intent and History

The Moss Sanctuary parcel was a farm dating back to at least 1840, with a farmhouse at the corner of Route 195 and Birchwood Heights Road. In 1840 Baruch Southwick and Sanford Tift purchased the 140-acre farm, including the farmhouse. In 1848 George Hanks acquired two acres of the farm and the right to dam the brook to create Hanks Reservoir. He also bought enough property for the new pond, which would be an auxiliary water supply for the Hanks Hill Silk Mill, the first silk mill in the country. The mill was built roughly one mile downstream from the pond.

While the rest of the farm was sold to James Sullivan in 1874, the pond remained in the Hanks family until 1945. Both the Hanks Property and the Sullivan Property were eventually purchased by the University of Connecticut in 1952. Although the pond is locally known as Tift Pond or Sullivan's Pond, neither of these families ever owned the pond.

In 1989, the land was designated as the Albert E. Moss Forest, Wildflower and Wildlife Sanctuary in honor of Professor Moss. Albert E. Moss was an inspiring educator in UConn's Forestry Department from 1914-1942, known for developing the first curricula in forest management (1924) and in wildlife management (1932).

Starting in 2002, the Connecticut Forest and Parks Association (CFPA), the University of Connecticut, and the Town of Willington have been working cooperatively to preserve land in the Fenton River Watershed. This acquisition of the Moss Sanctuary involved CFPA purchasing a 96-acre property from Willington (known as the North Property) and conveying it – subject to a permanent conservation restriction – to UConn in exchange for a) the 152-acre Albert E. Moss Forest, Wildflower and Wildlife Sanctuary; b) a 50-year conservation restriction on the 300-acre UConn-Willington Forest tract, and c) permanent trail easements on several miles of Blue-Blazed Nipmuck Trail running through both the UConn-Willington Tract and UConn's Fenton Tract, which lies behind Horsebarn Hill and the College of Agriculture.

On April 12, 2005 the UConn Board of Trustees voted to convey the Moss Sanctuary to CFPA in exchange for the North Property. In 2010, the Town of Mansfield purchased the Sanctuary for \$100,000 to preserve its diverse habitats and to serve as a "village woods" offering walking trails for nearby residents. The CT Forest and Park Association holds a conservation restriction on the land to ensure its preservation as forest and wildlife habitat. The restriction includes a building envelope reserved for educational uses.

The Moss Sanctuary is a particularly valuable natural area because of its proximity to Storrs Center, one of Mansfield's most densely developed areas. Its acquisition is part of a continued preservation effort by the town, and allows for trail connections to nearby town-owned open spaces and conservation easements. Several nearby town-owned parcels, as shown in the *Moss Sanctuary Map* (Attachment 1), were acquired as a result of subdivisions or donations. Information on these parcels is listed in the tables below:

Parcel Name	Parcel ID	Acreage	Date Acquired	Amount Paid	Appraised Value	Survey vol./pg.	Deed(s) vol./pg.	Acquisition Information
Moss Sanctuary	16.57.6-OP	135.56	02/02/2010	\$100,000	\$474,500	38/17-18	683/371; 683/402	CFPA via UConn
Birchwood Heights-Monticello Connector	22.57.7	1.4	--	\$0	\$4,900	6/80	Not Available	Not Available
Open Space Fellen Road	22.59.10	0.90	06/05/1973	\$0	\$3,200	8/46	122/165	Joseph Glasser
Open Space Birchwood Heights	22.59.40	0.97	11/22/2010	\$0	\$3,400	3/190	105/296 97/478	Estate of Jeffrey Ossen & James McCoy
Open Space Monticello	22.59.46-OP	17.4	12/22/2005	\$0	\$48,000	33/87-102	594/249	KMC, LLC

Consistency with the 2015 Mansfield Tomorrow Plan of Conservation and Development

The acquisition and preservation of this property accomplishes the following goals from the 2015 *Mansfield Tomorrow: Plan of Conservation and Development*:

1. Goal 2.2: Mansfield has healthy watersheds with high-quality ground and surface resources and aquatic habitats.
 - Strategy B: Maintain and improve health of watercourses, water bodies and wetlands.
2. Goal 2.3: Mansfield’s soil, plant and wildlife habitats are healthy and diverse.
3. Goal 3.1: Natural resources within Mansfield’s public and private open spaces are protected and well-managed.
 - Strategy A: Continue efforts to protect important natural and agricultural resources through property acquisition, development rights, easements and clustering development.
4. Goal 3.3: Mansfield park and preserve system, including natural and active recreation areas, provides access to residents and meets the needs of the population.
5. Goal 4.1: Mansfield honors and preserves its historic resources by protecting them for future generations.
 - Strategy C: Continue to protect villages and other areas with significant historic, cultural and scenic value.

INVENTORY OF NATURAL RESOURCES

Overview

The 135-acre Moss Sanctuary parcel has been an outdoor classroom for university and town programs and a place where visitors from northeastern Connecticut can enjoy native flora and fauna, walks on trails, and discover a variety of natural habitats since it was established in 1989. This parcel currently serves as a “village woods” with trails that are easily accessible by nearby residents in a densely developed area. It provides an additional location for outdoor recreational programs at the Mansfield Community Center, and is used for field trips and research projects by E.O. Smith and UConn students.

The property is relatively hilly, with elevations ranging from about 680 feet (southern and western sides) to about 580 feet on the northeastern side (see Attachment #2, *Topographic Map*). The high points along the southern edge of the property slope downwards towards Monticello Lane and Fellen Road, and all four of the other parcels included in this plan are downslope. The Open Space Fellen and Open Space Monticello parcels each reach a low point of about 580 feet on the southern side.

Public access is available through a well-developed trail network that includes a trail around the perimeter of the property and a shorter loop around Tift Pond. The 1.3-mile perimeter loop begins 200 feet from the north entrance and gradually climbs through oak-hickory woods to the high point in the park. After descending beside a hemlock grove, the trail continues in oak woods before emerging on the west side of a field. There the trail splits into two parallel paths that cross the field through grassy glades and thickets of shrubs and young trees. After these paths merge on the east side of the field, the trail curves north toward the pond, crosses the dam and returns to the entrance.

A half-mile trail around the pond begins at the dam and cuts through cool woods along the south shore. After crossing one of the pond’s feeder brooks, the trail skirts to the west side of the pond, then crosses a maple swamp and a second feeder brook before rejoining the entrance trail. See Attachment #1, *Moss Sanctuary Map*.

The properties listed in table 1 provide several connections to trails within the Moss Sanctuary. On the southwest side of the perimeter loop trail, a trail through the Birchwood Heights – Monticello Connector property connects to the end of Birchwood Heights Road. About halfway down Birchwood Heights, a publically accessible trail through the Birchwood Heights Open Space (parcel 22.57.7) and the adjacent conservation easement (parcel 22.59.46-1) connects Birchwood Heights Road and the Monticello Open Space. See Attachment #1, *Moss Sanctuary Map*.

Geological Features

According to Downhan & Craig’s *Rare and Endangered Species of Connecticut and their Habitats* (1976), Moss Sanctuary lies within the Northern Hills Ecoregion. Described as an interior upland 30-55 miles from Long Island Sound, this area is characterized as a variably hilly landscape of intermediate elevation with local areas of steep and rugged topography. The property’s bedrock is classified as Hebron Gneiss (map unit SOh), interlayered dark-gray schists and green-grey gneisses that date back to about 500 million years ago.

The Moss Sanctuary’s most common parent material is glacial till, deposited by glaciers moving through the region from 26,000 to 15,000 years ago. Till is also the only parent material found within the four other properties included in this plan. Younger sediments classified as “swamp” deposits are found in the wetland to the northwestern corner of the Moss Sanctuary property, and the stream that flows from this wetland to Tift Pond lies along an “inferred glacial spillway” (see Attachment 3, *Hydrography Map*). A spillway is a valley created by the melting of a glacial ice sheet.

Ecology & Natural Resources

The Moss Sanctuary is in various forest stages, with early successional hardwood forest along Birchwood Road in the southeast corner and young mature stands of mixed hardwoods covering much of the property. In the northeast corner, an area of plantation softwoods (the "George Washington Memorial Forest") dates back to 1932. Most of the forest is 60-80 years old, with an area in the 80-100 year age class in the southwest and an area in the 40-60 year age class in the southeast. About 90 acres of mature forest is managed under the existing conservation easement.

The property has a legacy of agricultural uses that has reverted back to forestland within the last 100 years. Individual, open grown oaks in excess of 100 years are scattered throughout as are plantings of red and white pine (*Pinus* spp.) and Norway spruce (*Picea abies*), the largest stand being the 15-20 acre plantation planting in the northern corner. At the high point of the trail is a grove of hemlock trees (*Tsuga canadensis*), in a cool, moist site on the east side of the hill.

Although it does not fall within a Natural Diversity Database Area, Moss Sanctuary contains a number of significant species. For example, there is an extensive stand of Northern white cedar (*Thuja occidentalis*), an uncommon plant typically found in northwestern Connecticut and farther north. Non-native, invasive plants are mostly absent from woodland areas; however around property edges, especially sunny roadsides, they may be quite common. Species-specific data for the other four nearby parcels is not available at this time.

Including Tift Pond, wetlands cover about one quarter of the Protected Property. These wetlands are interconnected draining easterly from the northwest. Water flows from the wetlands complex along South Eagleville Road southeast to Tift Pond, where it drains into another wetland along Ct. Route 195. From here, it flows northeast along an unnamed stream for 7200 feet to the Fenton River, eventually reaching the confluence of the Shetucket and Fenton Rivers in Willimantic. This is an important wetlands complex for wildlife and for the remediation, storage and recharge of storm water runoff from the surrounding road system. See Attachment #3, *Hydrography Map*.

Town-delineated wetlands occur in two of the four other parcels included in this plan, Open Space Birchwood Heights and Open Space Monticello. Like those within the Moss Sanctuary parcel, these wetlands drain into the complex along Ct. Route 195 and eventually into the Fenton River.

The soils on the protected property are a mix of unstratified glacial tills of the Charlton/Canton complex. Wetland soils are a combination of Ridgebury and Carlisle muck. There are no prime, statewide important or locally important farmland soils on the property. See Attachment #4, *Soils Map*.

Several attachments are included to provide an inventory of the property's natural resources. Included in this plan's Attachments are:

- Hydrography map, including inland wetland soils
- Forest Land Map
- Soils Map

Additional resources can be found on the following websites:

- CT Environmental Conditions Online
<http://www.cteco.uconn.edu/index.htm>
- CT DEEP Wildlife Action Plan (2015)
http://www.ct.gov/deep/cwp/view.asp?a=2723&q=329520&deepNav_GID=1719
- Town of Mansfield GIS mapping service
<http://www.mainstreetmaps.com/ct/mansfield/public.asp>

Cultural & Historical Sites

In 1932, George Washington’s 200th birthday was celebrated by tree plantings throughout the country. Under the direction of Professor Moss, head of the University of Connecticut’s Forestry Department, the forestry students planted white pine seedlings near what is now the trail entrance at the North end of Moss Sanctuary. Red pines were planted nearby several years later, and the area was named the George Washington Memorial Forest. Mary Sherwood, one of the students that planted the pines, would soon become the first woman in the country to graduate with a degree in forestry.

Other notable historic features include Tift Pond, which was originally built to serve as an auxiliary water source for the first silk mill in the United States. The trail around the pond passes over the historic stone dam, a dry masonry faced earth dam typical of 19th century mill dam construction. Historic farm features include a covered root cellar, stone walls, and a small gravel “borrow” pit.

Other Activities & Uses

- Encroachments: small yard waste dumping from residences along Birchwood Road, deer exclusion fencing intruding on the property behind one landowner's house, small dumps of used furniture along the property's western side.
- Rights-of way: none
- Abandoned infrastructure (old road, structures, etc.): covered root cellar, contamination-free oil tank on the northwest side.
- Dams, culverts, and other water control devices: Tift Pond Dam. Constructed between 1846 and 1848, the dam is classified as “lowest risk” by CT-DEEP and does not present an immediate threat to safety. However, the dam will require significant future maintenance, as there is not sufficient storage area between the dam and Route 195 to safely contain the combination of stormflow and dam failure flow without severe overtopping of the road (2008 Public Works report).
- Agricultural: none

ACTIVITIES & USES

Moss Sanctuary is open to the public from dawn to dusk. Chapter A194 of Mansfield’s Code of Ordinances contains the Park Rules and Regulations adopted by the Town Council.

Permitted	Prohibited
Hiking	Consumption of alcohol
Running	Fires
Birdwatching	Unauthorized vehicles
Educational programs	Removal of Flora and Fauna
Picnicking	Dumping of material
Pets on leash only	Horseback Riding
<i>Permitted in designated areas:</i>	Bicycles
Boating	
Fishing	

MANAGEMENT & STEWARDSHIP ACTION PLAN

This Management & Stewardship Action Plan identifies:

- **Goals** that describe how the property is intended to be used and managed;
- **Strategies** for advancing each goal; and

- **Actions** – specific steps our community can take over the short term (before end of 2021), medium term (between 2022 and 2026) and long term (between 2027 and 2037) in support of each strategy.

These Goals, Strategies and Actions **do not provide a guarantee that resources will be available to advance each action.** In addition, this Management & Stewardship Action Plan is not intended to preclude the Town from preserving other actions as opportunities arise. As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the intention outlined in this plan.

See attached goals in email. Final goals to be determined by PNR.

ATTACHMENTS

1. Moss Sanctuary Map
2. Topographic Map
3. Hydrography Map
4. Soils Map
5. Forest Map
6. Moss Sanctuary Survey

The following information is available in the Property File for Moss Sanctuary:

1. Conservation Restriction Baseline Documentation Report
2. Moss Sanctuary Trail Guide
3. Moss Sanctuary Comments on the Tift/Sullivan's Pond (Mansfield Department of Public Works). Completed March 20, 2008.
4. Quit-Claim Deed for Moss Sanctuary. Vol. 683 Page 371-375. Signed February 2, 2010.
5. Quit-Claim Deed for Moss Sanctuary. Vol. 683 Page 402-406. Signed February 2, 2010.
6. Warranty Deed for Open Space Fellen. Vol. 122 Page 165-166. Received June 5, 1973.
7. Warranty Deed for Open Space Birchwood Heights. Vol. 105 Page 296-298. Received January 30, 1968.
8. Executor's Deed for Open Space Birchwood Heights. Vol. 697 Page 478-480. Filed November 22, 2010.
9. Warranty Deed for Open Space Monticello. Vol. 594 Page 249-251. Filed December 22, 2005. '
10. Birchwood Heights (Parcel 22.59.46-1) Conservation Easement. Vol. 594 Page 242-248. Filed December 22, 2005.
11. Survey for Open Space Fellen. Vol. 8 Page 46. Received April 30, 1973.
12. Survey for Open Space Birchwood Heights. Vol. 3 Page 190.
13. Surveys for Open Space Monticello. Vol. 33 Pages 94, 96, 97. Received December 22, 2005.
14. Birchwood Heights – Monticello Connector Survey. Vol. 6, Page 80. Filed October 22, 1968.

Goal 1. Protect the property’s historical features, natural resources and wildlife.

Strategy A: Preserve and protect wildlife habitat and ecosystem health.

ACTION	WHO	WHEN	RESOURCES
1. Recruit qualified individuals to conduct surveys of species/habitats and create inventories to inform management options. Identify notable habitats found on the property (e.g. vernal pools, grasslands), CT DEEP critical habitats, and species listed by State or Federal agencies as endangered, threatened or of special concern.	Parks and Natural Resources Committee (PNRC), Town Staff, DEEP, Consultant	Short Term	Volunteer time
2. Develop a wildlife management plan to guide decisions on maintaining ecosystem health. Include recommendations to: <ul style="list-style-type: none"> a. Monitor forests, meadows and wetlands for invasive species or other signs of degradation. b. Protect vulnerable species and implement management practices that preserve habitats. c. Communicate with owners/managers of adjacent open space about conservation objectives and look for opportunities to partner. 	PNRC, Town Staff, DEEP, Consultant	Ongoing	Staff time, volunteer time, Parks Improvement Fund, grant funding

Strategy B: Protect surface or groundwater resources.

ACTION	WHO	WHEN	RESOURCES
1. Recruit qualified individuals to monitor watercourses and waterbodies for signs of degradation (e.g. erosion, invasive species). Address impacts as needed.	Parks and Rec, PNRC	Ongoing	Volunteer time

Strategy C: Protect historic and/or archaeological resources.

ACTION	WHO	WHEN	RESOURCES
1. Recruit qualified individuals to identify archaeological resources or historic structures, sites or features (e.g. mill site, cemetery, foundations, or stone wall).	PNRC, Town Staff, Consultant	Short Term	Volunteer time
2. Monitor historic or archaeological structures, sites or features for vandalism, theft or degradation. Address impacts as needed.	PNRC, Town Staff	Ongoing	Volunteer time

Strategy D: Encourage partnerships that advance scientific knowledge and/or conservation.

ACTION	WHO	WHEN	RESOURCES
1. Partner with qualified volunteers, UConn and ECSU faculty or students, CT DEEP, area land trusts, USDA NRCS and other organizations to conduct scientific research (e.g. archaeological, ecological studies).	PNRC, Town Staff, Volunteers	Ongoing	Volunteer time
2. Partner with qualified volunteers and organizations to implement conservation practices on the property consistent with the wildlife management plan. Examples include installing nest boxes, invasive species control, and trail maintenance/improvement projects.	PNRC, Town Staff, Volunteers	Ongoing	Volunteer time

Goal 2. Improve and encourage access to the preserve.

Strategy A: Develop trails and other infrastructure.

ACTION	WHO	WHEN	RESOURCES
1. Create a trail system that connects to adjacent or nearby open spaces.	Volunteers, Town Staff	Short Term	Staff time, volunteer time, Parks Improvement Fund
2. Evaluate the possibility of installing biking trails.	PNRC, Parks and Rec	Short Term	Staff time
3. Route trails away from vulnerable areas, such as steep slopes, stream banks, wetlands, ecologically significant areas, and historically significant sites or structures.	PNRC, DPW	Ongoing	Volunteer time
4. Include signage to guide appropriate public use and access. This could include: a. Wayfinding signage to and from parking areas. b. Signs at major trailheads. c. Painted blazes or signs to mark trails and connections. d. Boundary signs around the perimeter of the preserve.	Volunteers, Parks and Rec	Short Term	Volunteer time, Parks Improvement Fund

Strategy B: Maintain trails and other infrastructure.

ACTION	WHO	WHEN	RESOURCES
1. Ensure trails are passable to the public travelling on foot. Maintain tread and	Volunteers,	Ongoing	Staff time,

appropriate widths and clearances.	Town Staff		volunteer time, Parks Improvement Fund
2. Conduct general monitoring visits and file reports according to monitoring guidelines. High-priority tasks are to: a. Develop a monitoring form and online system to submit reports to Town staff or stewardship coordinator. b. Monitor and report on the condition of trails, trailheads, signs/blazes, and parking areas. c. If needed, document violations or areas of concern (degraded areas, unauthorized use, dumping, encroachment, Mansfield <i>Code of Ordinances</i> Prohibited Activities, etc.) d. Address issues as necessary.	Volunteers, Parks and Rec, PNRC, Town Staff	Ongoing	Staff time, volunteer time

Strategy C: Encourage access for people of different ages and abilities.

ACTION	WHO	WHEN	RESOURCES
1. Evaluate the possibility of ADA-compliant recreation opportunities (e.g. accessible paths, waterfront access).	Town Staff	Ongoing	Staff time, volunteer time
2. Develop a trail guide that is readily available and posted on the Town's website. Include information such as site directions, trail connections, descriptions of key features, and other educational information.	Volunteers, Town Staff	Short Term	Volunteer time, Parks Improvement Fund
3. Encourage educational programs and other group-oriented activities on the property (i.e. CT Trails Day, Walktober).	Volunteers	Ongoing	Volunteer time, staff time

Strategy D: Create or enhance connections to nearby open spaces and recreation areas.

ACTION	WHO	WHEN	RESOURCES
1. Evaluate opportunities for connections to state-designated, town-wide or multi-town greenway or trail systems (such as Willimantic River, Mt Hope River, Fenton River, Natchaug River, or the Nipmuck Trail).	Parks and Rec, PNRC, Town Staff	Ongoing	Staff time, volunteer time
2. Improve connection to nearby existing parks, open spaces, or residential neighborhoods through trail connections	Parks and Rec, PNRC, Town	Ongoing	Staff time, volunteer time

and signage.	Staff		
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