

Introduction

Milone & MacBroom, Inc. (MMI) was retained by the Town of Simsbury to develop an Open Space Improvement Plan for the 375 acre Ethel Walker parcel located in Simsbury, CT. The goal of the Open Space Improvement Plan was to identify existing passive recreational opportunities on the parcel, provide enhancement strategies for improving the sites existing and/or future recreational capabilities, provide a long term sustainable recreational management plan for the parcel, and identify linkages to adjacent town owned and state owned open space parcels. The following tasks were undertaken as part of the improvement plan:

- Gathered and reviewed existing site data including mapping, reports, land agreements, and local land use regulations.
- Completed site reconnaissance to evaluate existing trail conditions, identify special site features, and evaluate changes in wetland habitat type at key locations on site.
- Evaluated existing site access, security and parking areas

Existing Conditions Analysis

Over the past 10 years, MMI has worked extensively on the Ethel Walker parcel, having completed A-2 property boundary surveys, T-2 topographic surveys, inland wetland and watercourse delineations, vernal pool surveys, endangered species surveys, wetland and upland habitat surveys, and tree surveys. In addition to our extensive knowledge and work on site, the Town retained Ferrucci & Walicki, LLC, a forestry management company to develop a management plan for the Ethel Walker Open Space parcel. This plan focused on the parcels existing forest health and provided a host of recommendations for maintaining and/or enhancing the forests of the Ethel Walker parcel. MMI gathered the new data from the Ethel Walker site to help augment the existing reports and mapping that have been developed for this site. A handheld Global Positioning System unit was used to gather point data files that were then overlaid onto the mapping that is appended to this improvement plan.

Trail Conditions

Prior to completing our field investigations, MMI developed a recreational trail field evaluation form to help assess the quality and function of each of the trails located on the parcel. Our completed evaluation forms are appended. In addition to mapping the existing trail networks within the Ethel Walker parcel, our team extended our trail mapping to the adjacent Town open space parcel known as _____. The trail networks are illustrated on Figure ____.

The Ethel Walker site has six main trail systems that have been color coded and marked by the Town and these include Blue Trail, Yellow Trail, Green Trail, Orange Trail, Purple Trail, and Red Trail. In addition to the main trails the site has several unmarked spurs and loops all of which were surveyed and added to the base map.

Over all the parcel's main trails are in good condition but are inadequately blazed for consistent identification of trail route, intersections, and wayfinding.

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Orange Trail

Total Orange Trail Length: 1 mile

Trail Connections: Blue Trail and Green Trail

Trail Difficulty: Moderate, Trail is generally rolling terrain with a few sections of steep grades

Existing Conditions: primarily an eight foot wide trail that is in good condition. Trail does have sections of narrower, varied segments as described below.

Segment – A

Primary access into subject parcel, Bridge crossing of Stratton Brook, Narrower, undulating and serpentine section with exposed roots, Views of Stratton Brook, Intersection with Green Trail

Segment – B

Wider trail, Highest trail elevation on site, Traverses up and over ridgeline with steep section connecting to Orange Segment – C

Segment – C

Wider trail, Traverses toe of slope near east property line, Steep Section connects to Blue Trail north

Trail passes through hardwood forest. Common trees adjacent to trail include black birch, red oak, red maple, white oak, American beech and sugar maple.

As the primary site access the trail should be considered for modifications to comply with trail accessibility guidelines.

Special Features along Trail: Primary access to site, Bridge crossing of Stratton Brook, Highest elevation trail section on site, Varied topography



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Green Trail

Total Green Trail Length: 0.5 miles

Trail Connections: Blue Trail and Orange Trail

Trail Difficulty: Low, Trail is generally flat with a few sections of grades above 5%.

Existing Conditions: eight foot wide trail that is in good condition. Fairly flat for majority of length.

Trail passes through hardwood forest.

Common trees adjacent to trail include black birch, red oak, red maple, white oak, American beech and sugar maple.

Trail should be considered for modifications to comply with trail accessibility guidelines.

Special Features along Trail: Provides direct access to Stratton Brook. Provides connection to Stratton Brook Open Space property



Blue Trail North

Total Blue Trail Length: 2 miles

Blue North Segment Length: 0.9 miles

Trail Difficulty: Easy, Trail is generally flat with a few sections of grades between 5-8%. Sections of grades over 5% are sustained for approximately 200 to 400 linear feet.

Trail Connections: Red Trail, Purple Trail, Orange Trail, Green Trail, White Trail

Existing Conditions: 15-foot wide gravel and compact sand road. Primary Access Trail/Road into property and to existing Ethel Walker School Wellfield. Trail in good stable condition with some vehicle ruts in low lying areas.

Trail passes through hardwood forest, forested wetland, and mixwood forest. Common trees adjacent to trail include black birch, red oak, red maple, white oak, pignut hickory, eastern hemlock, and eastern white pine. Invasive shrub species including multiflora rose and



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Japanese barberry present near forested wetland.

Trail should be considered for modifications to comply with trail accessibility guidelines.

Special Features along Trail: Vernal Pool #7 and Wegner Meadow

Blue Trail South

Total Blue Trail Length: 2 miles

Blue South Segment Length: 1.1 miles

Trail Difficulty: Moderate, Trail is rolling terrain with a few sections of grades between 8-10%. Eastern section for trail has sustained lengths of trail equal to or greater than 5%

Trail Connections: Purple Trail, Red Trail, Yellow Trail, White Trail

Existing Conditions: 15-foot wide gravel and compact sand road. Primary Access Trail/Road into property and to existing Ethel Walker School Wellfield. Trail in good stable condition.

Trail passes through hardwood forest and mixwood forest. Trail passes along Open Wetland System associated with Stratton Brook. Common trees adjacent to trail include black birch, red oak, red maple, white oak, pignut hickory, eastern hemlock, and eastern white pine.

Trail should be considered for modifications to comply with trail accessibility guidelines.

Special Features along Trail: Access to/from small parking area near observatory at Ethel Walker School property, View of surrounding hills from parking area



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Yellow Trail

Total Yellow Trail Length: 1.1 miles

Trail Difficulty: Moderate, Trail is generally rolling terrain with a few very steep sections of grades above 10%. Care should be taken on steep sections due to loose soil and rocks.

Trail Connections: Blue Trail, White Trail

Existing Conditions: Eight foot wide trail that is in good condition. A number of unmarked trail spurs intersect the trail at various points

Trail passes through hardwood forest. Common trees adjacent to trail include black birch, red oak, red maple, white oak, American beech and sugar maple.

Special Features along Trail: Connection to Woodhaven Drive, Wolf tree – white pine near Woodhaven entrance, Intersecting trail spurs provide varied trail experience



Purple Trail

Total Purple Trail Length: 0.3 miles

Trail Connections: Blue Trail north and south

Trail Difficulty: Low, Trail is generally flat with its southern section having grades between 5-7%. Ruts in southern portion of trail makes secure footing difficult

Existing Conditions: Eight foot wide trail that is in fair condition. Southern section is uneven, rutted terrain apparently from vehicle use. Intermittent drainage crossing needs improvements

Trail passes through hardwood forest. Common trees adjacent to trail include black birch, red oak, red maple, white oak, American beech and sugar maple.

Special Features along Trail:
Well House, Drainage crossing



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Red Trail

Total Red Trail Length: 0.3 miles

Trail Connections: Blue Trail

Trail Difficulty Low, Trail is generally flat with its southern section having grades between 5-7%.

Existing Conditions: eight foot wide trail that is in good condition. Trail narrows in places with dense undergrowth (white pine and black birch saplings) causing trail width reduction.

Trail passes through mix hardwood forest
Common trees adjacent to trail include black birch, red oak, red maple, white oak, eastern hemlock, and eastern white pine. A small watercourse crossing is located within the forested wetland.

Special Features along Trail: Great White Oak Specimen, Conifer Groove, Fern Groove, Watercourse Crossing



White Trail

Total Red Trail Length: 0.2 miles

Trail Connections: Blue Trail, Yellow Trail

Trail Difficulty: Difficult, Trail is generally sloped above 5% with sections of grades at 20% -25%.

Existing Conditions: eight foot wide trail that is in fair condition. Trail has steep sections on both east and west ends that have developed rills, gullies, and loose soil due to erosion

Trail passes through mixwood forest and forested wetland. Common trees adjacent to trail include black birch, red oak, red maple, white oak, eastern hemlock, and eastern white pine.

Special Features along Trail: None identified



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Unmarked Trails – Ethel Walker Woods Property

There are a number of unmarked trail spurs, primarily in the western half of the property, that provide connections between the main trails. Some of these spurs are clearly used more than others. The town should decide whether to blaze these trails and incorporate them into the trail system or close them off from any further use. Unmarked trails can lead to users becoming disoriented, off track and lost. They can also lead users to believe it is permitted to wander off the marked trails creating new unauthorized trails. The trail spurs do however provide a different trail experience from the majority of the main trails as they are more of a singletrack with a narrower footprint and traverse a more diverse, and in most cases challenging, topography in a shorter distance than the main trails

Unmarked Trails – Adjacent Parcels

Town forest park includes a number of unmarked spurs that connect into the Ethel Walker Woods property. These spurs provide connections to the baseball field, parking areas, Farmington River Trail, and Massacoe State Park and as such they should be preserved with some minor modifications.

The Stratton Brook Open Space parcel has a few unmarked trail spurs off of the main green trail which runs east west connecting the intersection of Bushy Hill Road and Stratton Brook Road to the Ethel Walker Woods parcel. One feature accessed from the trail spurs is the open field area which provides a unique area for bird watching. There is the potential to connect to the Farmington River Trail parking area at the corner of Stratton Brook Road and Town Forest Road. This would provide an off road linkage to the adjacent Farmington River Trail. A bridge crossing would be necessary to complete this connection.

Site Access and Parking Areas

The Ethel Walker parcel is accessible from select locations. The primary site access is from the south side of Town Forest Road from the adjacent Town Forest Park. The south side of the park has a dirt parking area, picnic pavilions, open lawn area, a basketball court, and trailhead map for the Ethel Walker Woods parcel. Across the road to the north is the Town Forest Park swimming area and additional parking. There is additional pull-off parking to the west of the park off Town Forest Road near the little league baseball field.



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Secondary parking is available on the Ethel Walker School property adjacent to the schools observatory. This is a small gravel area for approximately three vehicles.

There is also some limited pull off parking on the south side of the parcel on the cul-de-sac of Woodhaven Drive. Space is limited to approximately 3 vehicles.



Parking at Ethel Walker School

Special Site Features

In addition to mapping and assessing trail conditions, our team evaluated the site for special site features such as historic rock walls, specimen trees, and unique wetland and/or upland habitats. The following text provides a summary of key site elements and/or features.

Stratton Brook

The largest and most significant wetland system on site is Stratton Brook and its tributaries along the western boundary of the site. Stratton Brook has two distinct flow regimes. A portion of the brook is impounded by a former beaver dam. Flow is quiescent here with moderate sized expanses of open water. The beaver dam has formed an impoundment upstream resulting in the formation of scrub-shrub and emergent marsh wetland habitats. The water is shallow and warm since there is little canopy to provide shade. Although there are no published fishery surveys for this reach of Stratton Brook, it is clearly a warm-water fishery supporting species such as sunfish, grass pickerel, white sucker, brown bullhead, perch and bass.



Stratton Brook Emergent Wetland System

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Some of the shrub species observed within the scrub-shrub wetland included highbush blueberry, maleberry, common winterberry, speckled alder, swamp azalea, swamp rose, willow, spicebush, and buttonbush. Species observed in the emergent marsh were common reed, broad leaved cattail, purple loosestrife, yellow loosestrife, bur-reed, fringed sedge, lurid sedge, tussock sedge, soft-stemmed bulrush, woolgrass, cinnamon fern, sensitive fern, marsh fern, forget-me-not, meadowsweet, boneset, skunk cabbage and jewelweed, among many others. The upper reaches of the wetland are seasonally flooded and thickly forested with evergreen species dominant, especially Eastern hemlock and mountain laurel. This is an uncommon wetland forest



Former Beaver Dam Area with Scrub Shrub wetlands

type. Common reed (*Phragmites australis*) has become a dominant invasive plant within both the scrub shrub, emergent marsh, and evergreen forested wetlands along Stratton Brook. Its domination is beginning to lower biodiversity within the wetlands and the colonies of this species is spreading rapidly through the Stratton Brook impoundment system.

With its diversity of vegetation, complex stratification of habitat and variety of wetland types; the impounded area provides excellent wildlife habitat. A wide variety of birds, mammals, amphibians and insects use this wetland. Typical marsh species such as swamp sparrow, common yellowthroat, yellow warbler, wood duck, tree swallow, belted kingfisher and great blue heron have been observed within this wetland in the past.

Downstream of the beaver dam, the topography steepens and the brook flows more rapidly. The riparian corridor is forested and heavily shaded resulting in cooler water temperatures. The substrate consists of coarse sand, gravel, cobbles, and stones and the brook demonstrates a riffle-run-pool geomorphology. This combination of features typically results in conditions ideal for cold-water fish species such as brook trout. The forest is predominantly an Eastern hemlock, red maple, and yellow birch community with a narrow floodplain. MMI also noted large quantities of coarse woody debris along portions of the brook. This provides important habitat for macro invertebrates, foraging fish, and salamanders. Typical wildlife for this area includes Louisiana water thrush, black-throated green warbler, pine warbler, hermit thrush, Eastern wood pewee and wild turkey. The corridor would likely support species such as porcupine, red fox, raccoon and weasels including mink.

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Vernal Pools

The Ethel Walker site has several productive vernal pools which were extensively surveyed and assessed by MMI in 2005. Vernal pools are typically considered to be a special wetland type for their ability to provide valuable habitat to obligate wetland fauna such as wood frogs, spotted salamanders, and marbled salamanders. MMI did not revisit each pool as part of our 2014 field survey, however we focused on those pools that were accessible and/or immediately border the existing trails. Vernal Pool-7 (VP-7) was a pool that supported a diverse assemblage of wetland types and vernal pool fauna species that are within close proximity to a trail. This vernal pool was selected as a special site feature.



Vernal Pool-7

VP-7

Vernal pool seven is located within in the northern portion of the site and is located adjacent to Blue Trail North. The pool abuts the trail which acts as a berm. This pool system has two distinct wetland communities associated with it. The northern part of the pool is a scrub-shrub/emergent marsh habitat, while the southern part is a shrubby/ hemlock forested habitat. Both of these habitats provide high quality amphibian breeding habitat. The scrub-shrub/emergent marsh pool habitat is dominated by shiny winterberry, common winterberry, silky dogwood, buttonbush, and speckled alder. The herbaceous plants included jewelweed, lesser bur-reed, fringed sedge, water smartweed, and sensitive fern. The forested pool habitat is dominated by Eastern hemlock with a moderate density of common winterberry growing within it. Typical species that have been observed within this pool include spotted salamanders, wood frogs, red-spotted newts, green frogs, spring peepers, and odonates.



Wegner Meadow

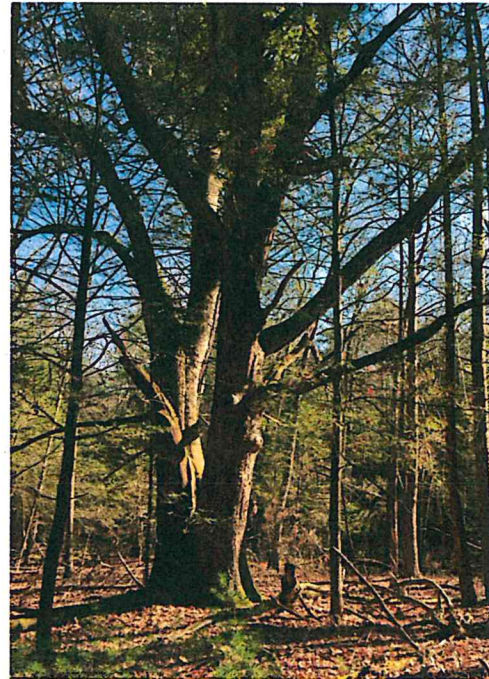
Wegner Meadow is an equestrian jumping area for the Ethel Walker School that was designated a habitat preservation area and named after Patricia and Arthur Wegner. There are a number of jumping obstacles scattered throughout the meadow area.

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Great White Oak

A large diameter white oak is located along red trail and is in close proximity to VP-7. The white oak is in moderate health condition and is likely to be at least 100 years old. This tree is of special value to the site.



Great White

Fern Glens

Ferns are well established along several of the trails within the site. Fern grove areas are located primarily along Red Trail and Blue Trail. Fern species including lady fern, Christmas fern, cinnamon fern, hay scented fern, sensitive fern, Bracken fern, and New York fern are found in these grooves.



Fern Glen near Blue Trail

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Conifer Forest Glen

Mixed hardwood forested areas are found throughout the Ethel Walker property. Several of the trails especially Red Trail, Blue Trail, Orange Trail, and Green Trail pass through some of these glens. Species including eastern white pine and eastern hemlock dominate these forested areas. The understory is typically open with some ferns being present such as Christmas fern.



Invasive Vegetation

The Ethel Walker site has relatively low populations of invasive vegetation within the upland and wetland areas. There are some areas on site where invasive vegetation has begun to colonize. Many of these areas are located in areas that have been disturbed over the last 10 years and/or those areas that are no longer being managed. These areas include Wegner Meadow, Blue Trail near vernal pool -7, forested wetland/upland areas near Yellow Trail, Stratton Brook emergent wetland and scrub shrub wetland system, and former logging roads.



Wegner Meadow

Wegner Meadow

Wegner meadow served as part of Ethel Walkers equestrian jumping area, however it is evident by the lack of recent mowing and the colonization of woody vegetation within the meadow that this site is no longer being used for such activities. The meadow appears to have not been mowed for at least five years. Many sapling and pole sized trees have grown up into islands within the meadow. Areas formerly having grass species are now being dominated by goldenrods, autumn olive, multiflora rose, oriental bittersweet, eastern red cedar, white ash, and red maple. Autumn olive, multiflora rose, and oriental



Multiflora rose and Japanese barberry within VP-7 wetland

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bittersweet are considered nonnative invasive vegetation. These species typically outcompete native vegetation, lower biodiversity, limit site accessibility, and can become a vector for spreading seed (bird dispersal, animal dispersal, and/or wind dispersal) into other areas of the site.

Forested Wetland adjacent to Blue Trail

The forested wetland located near VP-7 is becoming colonized by multiflora rose and Japanese barberry. These species are growing adjacent to the trail and can become a safety hazard to trail users. These plants are also diminishing the aesthetic quality of the wetlands and lowering biodiversity.

Stratton Brook Wetland System

The Stratton Brook Wetland system is being heavily infested with common reed. Common reed is an aggressive emergent wetland plant that can outcompete most herbaceous and woody vegetation. The plant forms dense monoculture community. Common reed can reach heights in excess of 12 feet, which can cause shading that can suffocate the native wetland plants. The resulting dominance of these species typically results in depressing biodiversity (fauna and flora species) within a wetland, often impedes vistas of wetlands, and lowers aesthetic value.



Mixwood and Hardwood Forest Systems

As stated previously invasive vegetation occurs in relatively low densities on this property, however there are some areas that have invasive species intermixed within the forested understory. Japanese barberry and multiflora rose are the dominant invasive species found within these forested understories. Japanese barberry is a known to provide habitat for a variety of small mammals including field mice and has



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been connected to the harbinger of Lyme disease-infected ticks. In fact, the Connecticut Agriculture and Experiment Station (CAES) estimates that eliminating stands of Japanese barberry from forested areas can reduce the number of Lyme disease-infected ticks on a given property by 80 percent. To help prevent further migration and/or spread of these invasive shrubs other areas on site would decrease the potential for public health issues.

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