

North Yarmouth Chandler Brook Management Plan

March 21, 2023

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Description of Document

This document includes a general description of the Preserve followed by a description of the various areas and functions that should be managed including the South Field, the North Field, various trails and wooded areas, minor structures and the care and protection of field nesting birds.

Location of Chandler Brook Preserve

Chandler Brook Preserve (CBP) is located east of North Road about .6 miles north of Rte. 9 and about 1.3 miles south of Rte. 231. The 63-acre Preserve is bounded on the west by the St. Lawrence and Atlantic rail line and on the east by Chandler Brook. It is accessed from North Road by a gravel driveway leading to an 8-10 vehicle parking lot. The Preserve is shown on North Yarmouth's Tax Map 009 as Lot 066.

Property Characteristics

The Chandler Brook Preserve includes 2.9 miles of trails along the brook and through hemlock woods and fields that are popular with walkers, hikers, runners and equestrians. It is home to abundant birdlife, woodland and wetland animals and many varieties of wildflowers. The Preserve provides excellent birdwatching. It's considered an eBird "hotspot" with 121 species recently identified. Kestrel/ Flicker and bluebird boxes have been placed there by the Committee.

Acquisition of the Preserve and the Town's Obligations

At the Annual Town Meeting in 2004, the residents of the Town of North Yarmouth voted to purchase the 63-acre Preserve from Karl Hawkes with funds from the Town of North Yarmouth, the State of Maine, and Friends of the Royal River (FORR), which later merged with other local conservation groups and became the Royal River Conservation Trust (RRCT). A condition of the State's and the FORR's funding was that the Town grant a Conservation Easement on the "Protected Property" exclusively for conservation purposes to the State of Maine via its Department of Conservation's Bureau of Parks and Public Lands (BPL) and grant to the

FORR third party rights of enforcement of the terms of the easement. The easement was recorded on 8/19/2004 in the Cumberland County Registry of Deeds in Book 21686 at Page 26. On March 29, 2012, the MBPL and RRCT signed a Memorandum of Understanding (MOU) establishing commitments regarding their respective roles in monitoring, reporting and compliance with the Conservation Easement.

The Easement states “The people of the State of Maine purchased the Conservation Easement to forever conserve the Protected Property for the following conservation purposes”:

- the scenic, undeveloped, and open character of the property for public benefit and scenic enjoyment from the brook
- the availability of the land for low impact recreational activities for the general public and to allow low-impact recreational uses by the public
- the water quality of the brook and to protect the riparian area along the brook
- the ecological integrity and diversity of wildlife habitat and wildlife
- the agricultural values for hay, pastureland, commercial agricultural activities including growing agricultural crops and managing the fields by fertilizing, soil amendments, burning, biologic and chemical herbicides, mowing etc.
- wildlife habitat for grassland birds, waterfowl and woodland animals.

The Easement requires the Town of North Yarmouth to manage and protect the conserved protected property.

The Conservation Easement requires the Town and FORR (now RRCT) to develop a Recreational Management Plan to be approved by the BPL that addresses habitat, wildlife, scenic impacts, recreational uses, and agricultural uses and to assure that the management of the property is consistent with the purposes of the Conservation Easement.

The Select Board has designated the CBP as a town property to be managed by the Parks Committee which will implement the plan, evaluate results of

the implementation and changing conditions and recommend changes to the Town, the BPL and the RRCT.

A Management Plan will be developed by the Parks Committee (PC) based on the Conservation Easement and discussions with BPL, RRCT and the Select Board. The Select Board, BPL and RRCT will agree upon and accept a plan that the PC Committee will implement, manage and evaluate. PC will report recommendations to the BPL, RRCT and the Select Board.

The Conservation Easement allows low-impact recreational uses or activities that do not appreciably alter the wildlife habitat value of the protected property including but not limited to hiking, picnicking, swimming, launching of hand-carried boats, primitive camping in designated areas, cross country skiing, snowshoeing, walking, running, nature observation, horseback riding, and hunting.

Planning Cycles and Plan Revisions

The plan will be reviewed annually. The plans for areas and activities may have planned activity cycles of multiple years.

Minor structures

The Easement allows for minor structures, such as benches and tables, signs, and information display, which may be placed at various places in the Preserve to allow visitors the opportunity to pause and enjoy the scenic beauty of the natural surroundings and to better understand and appreciate them.

All minor structures would be designed as much as possible to blend with the natural surroundings and complement the natural and scenic features of the landscape.

Shoreline and brook bank erosion has been observed. Techniques and strategies to enable dogs to access the water without eroding the shoreline and banks will be evaluated and may include jute mats. **Signage**

The Committee will develop signs to identify areas, management and visitor usage issues and to present natural history information.

Natural History

The Parks Committee intends to develop natural history information to post at the Preserve entrance and at locations within the Preserve where specific things may be seen. Trees, shrubs and grasses etc. may be identified and described in terms of providing habitat and feed for various species. Birds and insects that frequent the preserve may be identified and described in terms of their migratory patterns and the habitat and food sources they require. Animals that frequent the Preserve and fish that live in the Brook may be identified and described in terms of the habitat and the vegetation, insects or other animals they eat.

Preserve Areas include the entrance, parking, kiosk area, South and North fields, woods, brook and banks and trails.

Entrance, signage, driveway, parking and kiosk

Public works will continue to

- Mow around the driveway and parking area

- Grade and plow the driveway and parking area

The Parks Committee will monitor the condition of the signs, repair or replace as necessary within the annual budgeting process.

The Parks Committee will maintain the kiosk and will develop rules and information to post on the kiosk.

South Field

Overview

The South Field is about 2,000 feet long and includes 19 acres of rolling hay fields with beautiful scenic views. The previous owner, Mr. Hawkes, hayed the field which maintained a favorable habitat for ground nesting grassland birds, including Bobolinks. In 2022 the Bobolink nesting population was estimated to be about 100 birds. The fields and the

surrounding shrubs and trees create a special habitat for a variety of other wildlife.

Public Use and Access Guidelines

The Conservation Easement allows the Town of North Yarmouth to maintain the South Field for a balance of commercial hay production and grassland nesting bird habitat. To accomplish these goals, from Mid-May to mid-July the fields are maintained and protected for ground nesting and hay growth and are to be left undisturbed by human and domestic animal traffic. In the nesting and haying season, the only access will be on mowed paths around and through the field. The field will be hayed as soon as possible after the ground nesting birds have fledged. The Parks Committee will post signs at the Preserve entrance and around the field explaining the nesting period and the commercial hay crop. The signage will request that use of the field be limited to the recreational mowed paths during the breeding period and until the fields have been hayed. After an initial haying, the Parks Committee may limit access to the field for field maintenance or for growing a second hay crop.

Field and Path Maintenance

The Conservation Easement calls for maintaining the fields for habitat and for commercial hay production which includes ensuring the agronomic value of the fields is monitored and that maintenance and corrective action recommended when necessary. Application of herbicides, if required, is allowed by the Conservation Easement and therefore may be utilized in the management of the fields subject to the approval of the MBPL per Page 7, Para 6 of the CE. The MBPL and the RRCT make appropriate targeted limited use of herbicides using licensed applicators on comparable nearby properties. The Parks Committee will recommend to the Select Board various ways to pay for the expenses of maintaining the field including grants of money or services, bartering haying rights for maintenance materials and services and the municipal budget process.

Maintaining the field involves several actions including: mowing for hay or bushhogging once or twice per year to discourage weeds liming and

fertilizing periodically to encourage a better hay crop that will shade out and outcompete weeds treating for weeds and invasives periodically.

The field has been hayed by a farmer at no cost to the Town. Little has been done by the Town to maintain or improve the condition of the soils and the hay crop. Smooth bedstraw is an invasive weed that is present which easily spreads and diminishes the value of the hay crop. The Parks Committee will try to recruit a mower who will lime, fertilize, and address the weeds of a period of years for the right to hay the field.

When a mower has not been found, Public Works has bushhogged the field.

The field has perimeter and a bisecting six-foot-wide recreational path maintained by the Public Works Department for recreational use such as walking, running, birdwatching and horseback riding. The cost of maintaining the paths and other work has been included in the Public Works budget.

South Field Management Plan

Year 2023 Activities

The committee will:

Assess the condition of the fields for ground nesting birds' habitat and commercial hay production.

Determine the cost of liming, fertilizing and weed control.

Contract for mowing with a farmer who can schedule mowing around the ground nesting birds' time frames and help maintain proper soil conditions by liming and fertilizing and addressing weeds and invasive plants that can make hay unusable for fodder.

Work to eliminate invasive plants such as honeysuckle around the field.

Present to the SB a policy which allows P&RC post signs asking visitors and their animals to stay on the trails during the breeding and hay growing season.

Keep permanent records of what and when the above were done to the field, the success in breeding and schedules for the next year.

Budget

The Parks Committee will develop a budget based on the operating options discussed above.

NORTH FIELD

Overview

The North Field is on the northeast side of the Preserve. A broad path leads down a slope to the 7-acre field that is isolated from the rest of the Preserve by steep wooded slopes and is bounded on three sides by the Brook.

About 4 higher acres are grassy with a mix of tree, shrub and grass species including red maple, a few wild apple trees, a sizable number of medium sized white pine, a few very large white pine trees, stands of spiraea and dogwood, low bush vaccinium, open areas of grass and wildflowers including goldenrod, asters and milkweed that provide a mix of habitat for shelter and food. The area's size, terrain, wet areas, and flood plain make it unsuitable for commercial hay production.

The remaining 3 lower acres are surrounded by a bend in the Brook and is more susceptible to flooding, erosion and silt deposition. There are some trees and is mostly covered with an impenetrable thicket of waist high spiraea.

The soil is Podunk fine sandy loam. Podunk soils are fertile, deep, and moderately well drained, formed in recent alluvium on floodplains.

The Conservation Easement requires a 100' vegetative buffer of trees and understory of shrubs etc. from Chandler Brook to protect water quality and provide wildlife habitat which will reduce the grassy area. In 2006, to support this requirement and to enhance the mixed tree and shrubland habitat, the North Yarmouth Conservation Commission (which was eliminated by the North Yarmouth Town Charter enacted in 2013), the Town, BPL and RRCT agreed on a plan to plant several species including Fraser fir, hamamelis, red pine, pin oak, highbush blueberry, and dogwood. Surviving plants are established and flourishing.

As small as it may be, this field has a significant role in providing year-round and seasonal shelter and food and a diverse wildlife habitat for a wide range of wildlife.

The field has been mowed outside of the 100-foot buffer late in the season to allow newborn wildlife to become mobile and to allow seed maturation of plants as a food source for birds and other wildlife. The mowing suppresses the natural progression in Maine for fields to develop shrub, alder and invasive species such as multiflora rose, bittersweet and honeysuckle and trees that eliminate the open and open space boundaries that provide forage, shelter and protection as it becomes a forest. Without intervention, shrubland habitats are generally temporary. The Parks Committee is selectively mowing and cutting to preserve, protect and promote the North Field as a shrubland habitat.

Stewardship

Public Use and Access Guidelines

The Conservation Easement's purposes include protecting the ecological integrity and diversity of the wildlife habitat for birds and animals and controlling access to protect the habitat and the wildlife.

The North Field provides habitat and shelter year-round in an undisturbed setting. It protects migratory and non-migratory wildlife from nesting to being

able to move about. It also protects non-migratory wildlife year-round. The year-round wildlife needs to be protected from human visitors and from their domestic animals. Human visitors will be restricted to the mowed trails in all seasons. Domestic animals, including dogs and horses, will not be allowed in the North Field area. Signs will be posted to this effect.

North Field Management Plan

The management plan outlines a phased approach to the work over short and long planning horizons required to improve, maintain and enhance the Preserve's North Field as a thriving year-round, mixed woods and shrubland wildlife habitat and carry out the directions of the Conservation Easement.

Ongoing Seasonal/Annual Activities

- Public Works will routinely mow a 5-foot-wide walking trail that parallels Chandler Brook. The intent of the 5-foot-wide path is to minimize the creation of a "cow path".
- Photographs taken to record events and status of the habitat area.
- Ongoing observations recorded for habitat progress, concerns, issues, and activities taking place.
- Annual mowing outside the 100 foot is to occur in late fall when birds have fledged, and the wildlife has eaten the nutritious portions of the plants. Mowing shall be done to avoid wet areas and thickets. Thickets will be scheduled for cutting back on an 'as recommended' basis.
- Solicit the public for observations and findings for purposes of both understanding the wildlife, how best to manage the habitat and to record observed wildlife.
- Public Works and the Parks Committee will eliminate invasives. This may occur within the 100-foot zone if the invasives are deemed non-essential for erosion control in the riparian zone with prior written consent of MBPL and RRCT.
- White pine has seeded in the open space. Remove a significant portion of them before they take over the open space.

- White pine that is currently causing stunted and misshapen growth of plants installed in 2006 by the Conservation Commission are to be removed. These may be in the 100-foot buffer zone and findings must show evidence planted trees are suffering due to the proximity of the white pine. Any white pine to be removed must not adversely affect erosion on the riparian zone. (According to a site review there is one pine that is recommended for removal, if there is prior written consent MBPL and RRCT).
- Adaptive management activities will be allowed to address the effects of climate change, fire, flood, or other natural events. Such activities, if required, shall ensure the site's biological resources and conservation values are adhered to.
- A checklist of tasks shall be completed annually and reported to the Select Board, the MBPL and RRCT.

Year 2022 Activities

The Parks Committee did:

Avoid trail-clearing-cutting of intentional plantings from 2006. The plantings will be identified in such a manner as to avoid any accidental damage or removal of them.

- Confer with Public Works to clearly identify where a walking path can be created and maintained. Using the map provided by the Bureau of Public Lands GPS data will detail the exact location of the walking trail. This walking path will follow as closely as possible the North Field loop recorded on the Chandler Brook Preserve map posted on the kiosk.
- Update the Chandler Brook trail map to reflect the location of the North Field walking trail.
- Take photographs of the field for documentation of the shrubland habitat.
- Establish one in and out access point to the Chandler Brook stream. Install a bench at this overlook point.

Year 2023 Activities

The Parks Committee will:

- Consult with a naturalist to inventory herbaceous perennials and shrubs.

Design signage that educates visitors to the habitat area.

- Consult with the three parties (MBPL, RRCT, NYSB) involved in approving the conservation easement.
- Advise the Select Board of the intentions of the management plan.
- Consult with Public Works on the removal of white pine trees. These trees shall be marked by the Committee.
- Identify by GPS the thickets and vernal pools.
- Develop a policy regarding dogs and horses in the habitat area.
- Install SB approved signage indicating the access path to the North Field as an in and out trail only
- Install signage describing the shrubland habitat area, its purpose and how it is being managed

Activities for years 2024, 2025 and 2026

The Parks Committee will:

- Monitor site for those activities which are ongoing seasonal/annual activities listed on page eleven.
- Monitor the shrubland habitat for needs, corrections or remediation.

Evaluation at Year 2027:

The Parks Committee will:

- Complete an evaluation of the management plan for modifications, additions, or deletions.
- Revisit the management plan spreadsheet for changes reflected in the previously mentioned evaluation.
- Provide a brief report to the Select Board on the results of the management plan.

Broad Goals:

The Parks Committee will:

- periodically evaluate the planting of additional trees, shrubs and herbaceous material. Native plants will be selected on their ability to provide food for birds and insects, nesting opportunity and habitat refuge. Diversification of plants shall be an important consideration in the selection of plants.

Enhancing the North Field habitat with additional plants may play a small part in encouraging the survival of shrubland

species in decline, such as the New England cottontail, American woodcock, and Eastern towhee.

- facilitate educational opportunities relating to the establishment of the shrubland habitat in the North Field.
- propose an annual publication describing wildlife observations and monitoring activities that support the wildlife habitat.
- as necessary, update maps to reflect any changes made.

Management practices shall be guided by the Conservation Easement. The easement states on page 6: “within 100 feet of

Chandler Brook there shall be a buffer of trees and understory to protect water quality and wildlife habitat. The Town of North Yarmouth retains the right to maintain the fields for open space and wildlife habitat and to selectively cut, limb, prune or plant vegetation in the upland area to improve the wildlife habitat, to develop a healthy ecosystem, to control fire and disease, and improve views from the footpaths located in this area”. The footpath shall be referred to as the walking trail indicated on the map provided in the addendum.

Management practices will protect and promote a healthy riparian buffer area which may include leaving dead and dying trees to remain for use by cavity nesters, insects and for eventual recruitment to the stream channel. Trees that pose a risk for visitors may be removed.

Estimated Costs

Annual Operational Costs

- Mowing of the trail from April through first week November Approx. 1 hour per week times 25(skip 3 weeks due to weather) @ \$50 = \$1,250
- Annual mowing of field: 5 hrs. @ \$100 = \$500

One Time Costs

- Tree removal spring 2022/fall 2022: crew 2 for 8 hrs. @ \$50 = \$1,000
- Signage: (top of hill) dogs, horses prohibited, lower field designation and rules, no exit, new map for kiosk \$500
- Kiosk at North Field: \$1,500

Wooded Areas Management

The North and South Fields occupy about 26 of the Preserve's 63 acres. The remaining 37 acres include upland and lowland forest.

The Parks Committees has broadly discussed managing the forested areas and feels that the first step is to discuss the subject with BPL and RRCT and then to survey the 37 acres with a forester and develop a management plan that is conducive to having a sustaining habitat.

Wooded Area Trails

Public Works will continue to mow and maintain the trails.

With the MBPL and RRCT's consent, the Parks Committee developed a trail through the woods from the trail to the barn and to the North Field.

Appendices

Conservation Easement

Memorandum of Understanding between BPL and RRCT of 3/29/2012

Location Map

Soils Map

Conservation Easement Imagery

Hydrology and Wetland Map

Trails and 100 Foot Vegetative Buffer Setback

Habitat Map

North Field Photo

