



Pond Condition Progress Report and Work Plan 2015

Cape Cod National Seashore



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Year 16

Introduction

The freshwater kettle ponds of the Cape Cod National Seashore are a unique habitat formed up to 13,000 years ago by the retreating glaciers. They support a wide variety of species including fish, frogs, and turtles. Unfortunately, these ecosystems are also fragile, and have been degraded due to the high level of visitor use at their beaches. The kettle pond beaches are typically packed on hot summer days, and visitors unknowingly cause erosion by trampling vegetation, creating new social paths, and continuously walking on steep banks.

Management of the seashore's kettle ponds is highly complex due to the interactions between privately owned land, the town, and the NPS, as well as between various departments within the seashore. A complete assessment of the condition of these ponds was undertaken by AmeriCorps member Patrick Roehrdanz in August 2002, which paved the way for the action which taken in the past three years to restore the kettle pond shorelines. AmeriCorps has taken a major role in helping with pond management through the monitoring work of the seashore's Planning Assistant placement, as well as through group workdays.

During the 2013-2014 AmeriCorps year, a pond condition assessment was completed and showed that the ponds needed critical and direct erosion and overuse corrections to maintain their health and guide visitors to better use patterns. This work was managed by a Ponds Workgroup that included a core group of seashore staff partnered with the AmeriCorps member placed in the National Seashore Planning office. The workgroup focused on the Truro ponds in 2014 because they were higher priorities for immediate work based on the fact that the Wellfleet Ponds received priority the previous year. In 2015, no town was prioritized but rather the ponds with heaviest use and erosion control needs were prioritized. Two AmeriCorps workdays were carried out in April to help restore ponds in Wellfleet and Truro, including Duck Pond, Dyer Pond, Great Pond Truro, Ryder Pond, Spectacle Pond, Horseleech Pond, and Slough Pond Triangle. Restoration work involved jute netting in order to hold soil in place on steep banks, and planting to help anchor the soil and return native vegetation for wildlife. Fencing and signs were also installed in order to keep people out of restoration areas, as well as to explain regulations designed to help protect the pond resources. Additional work included the installation of a water bar and railings.

The condition progress report provides a summary of the work completed at the Wellfleet and Truro ponds, and the work plan identifies a list of the priorities to focus on for the coming year, as well as routine check-up items throughout the ponds area. This document is essentially an update of the *2014 Ponds Condition Progress Report and Work Plan* created by AmeriCorps member Elizabeth Migliore. For each pond there is a list of the work completed and the follow-up or additional work that is needed.

Ponds

Below is a list of all of the ponds in Wellfleet and Truro that were worked on or that are priorities for further work. Also listed are the other ponds in the area that are not included in this pond work because they have limited public access and therefore do not have the same erosion problems as the rest.

Wellfleet:

- Dyer
- Duck
- Spectacle
- Higgins
- Herring
- The Sluiceway (town landing at Gull-Higgins Ponds with NPS-owned land adjacent)
- Long Pond "pocket" or walk-in park (also has town-owned landing)
- Great (town landing)
- Gull (town landing)

Truro:

- Snow
- Great
- Ryder
- Slough
- Horseleech

Limited public access:

- Kinnacum
- Northeast
- Round
- Southeast
- Turtle
- Williams

Ponds Resource Management:

Building on the previous two years of hands-on natural resource management based work days at Cape Cod National Seashore ponds to address erosion and other concern, the focus of 2015 was to visit and assess needs of each pond, attend to maintenance needs (redo jute netting,

sign installation, new fencing), and to address newly arisen issues. The 2015 targeted ponds are listed below by the structure of the organized work days, established by prioritizing needs:

Work Day 1 –

- Duck
- Dyer
- Spectacle
- Great Pond Truro

Work Day 2 –

- Spectacle (revisited)
- Horseleech
- Slough
- Herring
- Ryder
- Great Pond Truro (revisited)

Group of Ponds assessed but not worked on due to lower maintenance needs:

- Snow
- Sluiceway
- Long “pocket” park
- Higgins

Work Procedure

- Conduct site assessment and log needs, supplies, and whose help is needed.
- Submit park work orders and AmeriCorps group project request forms as needed.
- Order supplies and organize workdays.
- Consult with conservation commissions as needed.
- Record visitor use on monitoring sheet (see appendix A).

Duck, Dyer, Spectacle, Great Pond Truro

In 2015, extensive work was completed at these ponds due to large spans or eroding areas that required jute netting, as well as for issues related to vandalism.

Duck Pond

Work completed:

- Jute netting redone
- Closed steep social trail leading directly down to beach using fallen trees & branches
 - o Revegetated pathway using 5 plants in pathway
- Removed rope fence, replaced with split rail fencing
- Move split rail fence at bottom of old social trail to new social trail

Follow-up:

- Replace rusty screws
- Regulations sign needed



Dyer Pond

Work completed:

- Plantings:
 - o 5 plants near steep edge into water (blue berries, viburnum)
 - o 2 plants at 2nd steep edge into water (blue berries)
 - o 3 plants near access (bay berries)
 - o 12 plants in restoration area behind split rail fence (6 viburnum, inks if available)
- Pulled tree out water and place over edge to prevent access
- Removed rope swing
- Jute netting redone near shoreline and eroded slope

Follow-up:

- Monitor condition of plants, jute netting, and fencing.
- Remove fallen tree
- Cut jute netting around fallen tree & potentially reinstall



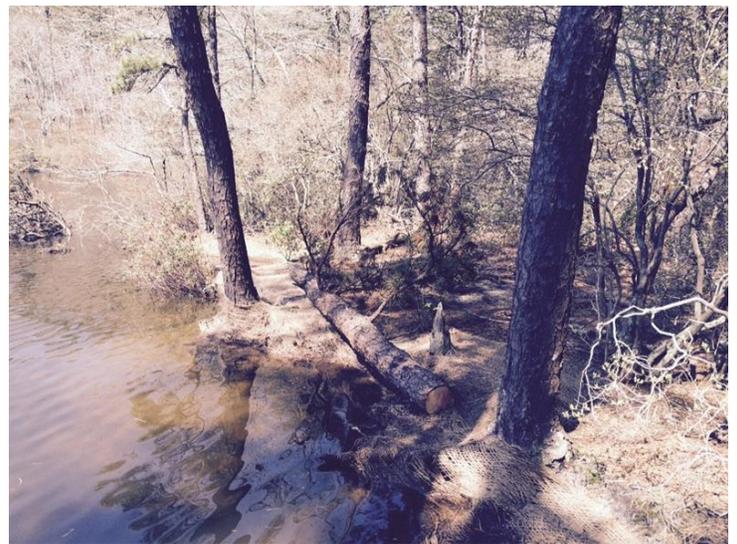
Spectacle Pond

Work completed:

- Replaced broken rails of split rail fencing
- Cleaned up 2 trees that had been chopped with a hatchet (vandalism)
- Revegetated closed areas with 12 plants
- Jute netting redone
- Installed one segment split rail fence to close path
- Removed fence near boardwalk
- Moved fallen tree to block off access

Follow-up:

- Site vandalized in early July 2015 – Ponds regulation sign was removed, split rail fencing removed and thrown into the woods.
- Site assessed for installation of a ramp that would reduce erosion issues at entrance to pond. Must be followed up to ensure stair gets installed.
- Monitor condition of plants, jute netting, and fencing.



Great Pond Truro

Work completed:

- Native plantings of 6 inkberry and 4 bayberry along the eroded slope to the right of the stairwell, and at the second beach to the left of the stairwell.
- Jute netting placed on the right of the existing stairwell, following an eroded social path.
- Jute netting placed along the second beach (left of the stairwell).

Follow-up:

- Update with new pond regulations sign on closed area.
- Monitor condition of plants, fencing, and jute netting.



Group 2: Horseleech, Slough, Ryder, Herring

Horseleech Pond

Work completed:

- Replaced unpainted sign post
- Reinstall protect ponds sign
- Split rail fence: replaced 6 broken rails
- Installed Ponds Regulations sign at 1st beach
- Installed Protect & Regulations signs at 2nd beach access
- Planted 6 shrubs in social pathway
 - o Shut down middle trail beach access
 - Used brush, to cover path

Follow-up:

- Rope down large fallen tree and use it to cover social trail
- Monitor condition of plants, fencing, and jute netting.



Social trail covered by brush

Slough Pond

Work completed:

- Replaced 7 broken rails of split rail fencing
- Moved downed trees to prevent parking in certain areas
- Installed Ponds Protection sign and Regulations sign at new access point
- Fill in access point area with sticks, branches
- Patched jute netting
- Moved pond regulations sign at triangle

Follow-up:

- Monitor condition of plants, jute netting, and fencing.
- Replace rusty screws on signs
- Rope down large tree to fill in path



Ryder Pond

Work completed:

- Installed new post for Ponds Regulations sign.
- Replaced 4 rails of broken split rail fencing.
- Reinstalled jute netting to stabilize shoreline.

Follow-up:

- Monitor condition of plants, jute netting, and fencing.



Herring Pond

Work completed:

- No work was completed here in 2015.

Follow-up:

- New assessment of this site may be needed.

Group 3: Snow, Sluiceway, Long “pocket” park, Higgins

As the groups for 2015 were listed based on prioritization of needs, Group 3 represents the ponds that required little hands-on natural resource management in 2015. These sites should be assessed in 2016 for any new needs.

Snow Pond

Work completed:

- No work was completed here in 2015

Follow-up:

- Install sign on North side at fishing access point – Protect Ponds and Pond Regs
- Fix broken step

Sluiceway

Work completed:

- No work was initially completed here in 2015.

Follow-up:

- Site vandalized: fence dismantled at road triangle and reassembled
 - Installation of gate; should be between parking and private driveway to prevent turnarounds.
- Installation of “no unauthorized vehicles” sign
- One section of split rail fence on the right side on Steele Road recommended before the triangle to prevent illegal parking

Long Pond Pocket Park

Work completed:

- No work was completed here in 2015.

Follow-up:

- New assessment of this site may be needed.

Higgins Pond

Work completed:

- No work was completed here in 2015.

Follow-up:

- New assessment of this site may be needed.

Pond workgroup members:

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In cooperation with:

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Suzanne Thomas, Wellfleet Beach Administrator

And help from:

AmeriCorps Cape Cod LeHac House



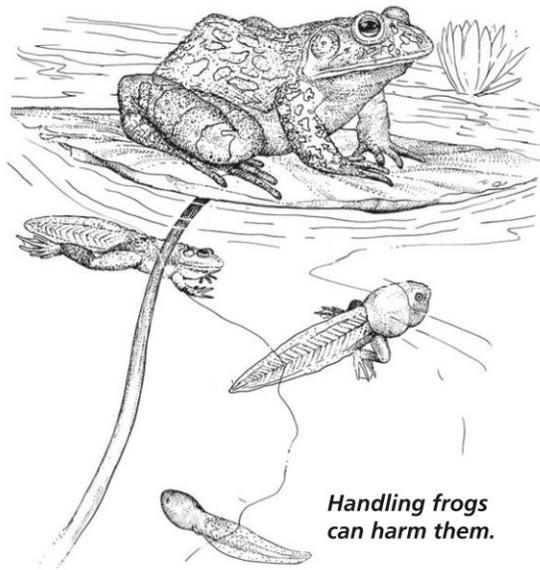
Protect Ponds

Cape Cod National Seashore

National Park Service
U.S. Department of the Interior



Kettle ponds are glacially-formed basins filled with clear, naturally-acidic fresh water. In addition to their beauty and the recreational opportunities they offer, they provide habitat essential for distinct communities of plants and animals. Their unique chemistry and ecology render these ponds particularly sensitive to human-caused impacts.



Preserve their beauty and ecology.

- ❖ Use restrooms before entering the water.
- ❖ Avoid trampling or removing shoreline and aquatic plants.
- ❖ Stay on marked trails to prevent slope erosion.
- ❖ Keep pets and horses away from ponds.
- ❖ Use well-fitting swim diapers on babies.
- ❖ Enjoy pond wildlife through observation; handling animals can harm them.
- ❖ Carry out all trash including cigarette butts.
- ❖ Keep soaps and detergents out of ponds.