2005

The Loon Pond Experience

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The Loon Pond Experience

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Located in Lakeville, Massachusetts
Approximately 32 feet deep
Covers an approximate 0.69 square miles
Surrounded by forest and houses
Most of the houses are summer homes
Used for:
  • swimming
  • fishing
  • canoeing
History of Loon Pond

- The property was owned by Horatio Sampson until Orville Gerrish bought it in 1889
- When Orville died, the Boy Scouts bought it to be used as a summer camp
- The property was later sold to the Lakeville Parks Department
- The land was then sold to baseball great Ted Williams who created Ted Williams Baseball Camp
- In 1986, the town of Lakeville bought the park and now use it as a recreational area
Objective:

To find out if there are invasive weeds in Loon Pond

Why?

The town of Lakeville wanted to know if there were invasive weeds in Loon Pond.
Loon Pond Sample Sites

Lakes & Ponds
- Wetland / Salt Marsh
- Cranberry Bog
- Surface Water
- Tidal Flat
- Impoundment
- Dam
- MA Towns

Created by: Jeff Kent
April 15, 2005
Protocol

• 20 feet into the water, 45 feet across
• Waded parallel to the shore
• Established protocol in order to keep consistency and uniformity
• Utilized weed watcher’s booklet in order to identify weeds
Weeds Identified

- White Water Lily
- Little Floating Heart
- Pipewort
- Elodea Nuttallii
- Elodea Canadensis
- Hedge Hyssop
- Water-star Grass
- Wild Celery
<table>
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<tr>
<th>Macrophyte Species:</th>
<th>Ted Williams Camp</th>
<th>Boy Scout Beach</th>
<th>60 Precinct St.</th>
<th>Rustic Drive</th>
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<td>White Water Lily</td>
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<td>3</td>
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<tr>
<td>Wild Celery</td>
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</table>

*indicates the number of times the site was visited
White Water Lily

- Rooted plant with large, firm, dark green leaves
- Leaves are circular with a 5” to 9” diameter and are usually floating or standing above the water’s surface
- Have a distinctive sweet-scented white or pink flower
- Found throughout ponds, lakes, swamps, and streams
- Non-invasive
Little Floating Heart

- Located in ponds, lakes, and slow moving streams
- Has shiny, green, heart-shaped leaves and white flowers
- Leaves are arranged alternately along the stem and oppositely on the flower stalks
- Leaves are purplish underneath and root bunches on the bottom of the stem
- Found on the water’s surface
Pipewort

• Lives in shallow freshwater
• Has small, white flowers
• 1” to 10” in height
• Unmistakable when in bloom; a tiny, white pinhead rising just above the water
• Distinguished by its leafless stem and narrow, grass-like leaves
• Non-invasive
Elodea Nuttallii

- Underwater perennial plant
- May occur as a tangled mass
- Provides food and habitat for fish
- Common throughout the Eastern United States
- Non-invasive
Elodea Canadensis

- Has leaves in whorls around the stems
- Three leaves per whorl
- Found throughout temperate North America
- Provides a good habitat
- Food for some animals
- Non-invasive
Hedge Hyssop

- Trailing to standing annual plants up to 30 cm tall
- Found along shorelines of lakes, ponds, and rivers
- Oppositely arranged narrow leaves with slightly toothed margins
- Tubular, irregular flowers, with groups of 5 petals
- Distinguished by its leaf shape and attachment, the presence of sticky glands, and the flower shape
- Non-invasive
Water star Grass

- Underwater plant
- Has small, star shaped yellow flowers that float or rise above the water surface
- Has long, grass-like, dark green leaves
- Frequently grow into large tangled masses in shallow water or along shore lines
- Can be distinguished from pond weeds by the lack of a prominent mid-vein in the leaves
- Non-invasive
Wild Celery

- Surface plant
- Ribbon-like leaves which grow to the surface and then bend and float on the surface
- Leaves are serrated with a stripe down the middle
- Flowers are on long stalks that float
- Found in ponds
- Provides food and habitat
- Non-invasive
Water Quality Analysis

- Data from Probe launched on April 15, 2005
- Nitrogen as Nitrate monthly sampling data
- Reactive Phosphorous monthly sampling data

The above photo shows the launching of the probe.
Reactive Phosphorus (mg/L) in Loon Pond from July 2004 to April 2005

Date

Precinct
Rustic Drive
Ted Williams
Boy Scout Beach
Conclusions

~Loon Pond does not contain invasive weeds.

~Loon Pond contains healthy nitrogen and phosphorous levels

~Loon Pond retained normal temperatures and levels of dissolved oxygen throughout the year
Acknowledgements

• Mrs. Hubbard, Rustic Drive, Lakeville
• Ms. Kim McCoy, WAL, Bridgewater State College
• Mr. Ralph Blackburn, Lakeville
• Residence of Precinct St., Lakeville