



Water Chestnut and Water Scouts – What's it all About?

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Lake Hopatcong Foundation Mission:

The Lake Hopatcong Foundation dedicates itself to protecting the lake environment and enhancing the lake experience, bringing together public and private resources to encourage a culture of sustainability and stewardship on and around New Jersey's largest lake, for this and future generations.

Lake Hopatcong



AQUATIC PLANT ECOLOGY: INVASIVE SPECIES

- Grow and spread quickly
- Typically no local predators
- Nuisance densities – swimming/boating
- Typically easily spread (bottom of boats, animals, etc.)

AQUATIC PLANT IDENTIFICATION: FLOATING LEAVED



Water chestnut with Water lily

- Floating-leaved: rooted to the bottom, leaves float on surface and flowers above the water.
 - Water chestnut (invasive)
 - White water lily (native)
 - Spatterdock (native)
- Identification Manual of Aquatic Plants in Lake Hopatcong and Potential Future Invasive Species available at:
<http://www.lakehopatcong.org/pubs.htm>

Emerging **Invasive** Aquatic Plants Non-Native to Lake Hopatcong (Be on the lookout!)



Water chestnut (*Trapa natans*)



Hydrilla (*Hydrilla verticillata*)



WHY WATER CHESTNUT?

- Spreads aggressively
- Forms a yearly impenetrable floating mat of vegetation
- Highly disruptive
 - Outcompetes and eliminates native species
- Easy to find and ID
- Can be easily managed with early detection

WHERE IS WATER CHESTNUT FOUND?



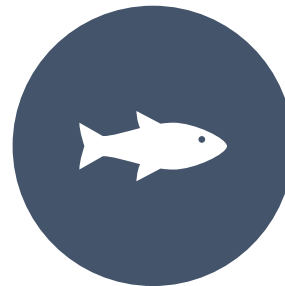
Lakes, ponds, reservoirs
and slow-moving
streams/rivers.



Shallow waters (typically
<15 feet in depth)

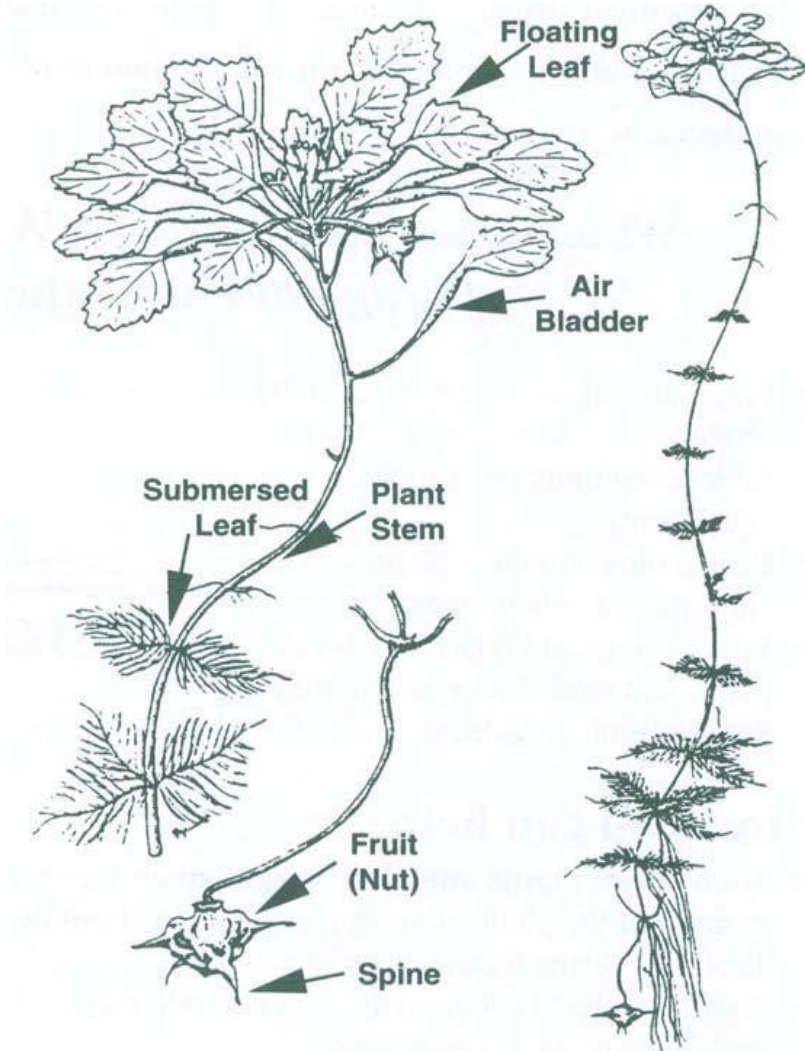


Optimum depth of <6
feet



Nutrient rich waters with
soft bottoms

ANATOMY OF WATER CHESTNUT



“Floating leaf/Rosette”



“Fruit/nut”



“Air bladder”

An individual seed can give rise to 10 to 15 rosettes, each of which can produce 15 to 20 seeds. **One seed can produce 300 new seeds in a single year.** Seeds drop to the lake bottom and can remain viable for up to 12 years.

WATER
CHESTNUT
IN LAKE
HOPATCONG



WHAT LHF HAS DONE RELATIVE TO WATER CHESTNUT AND WATER SCOUTS:

- The Lake Hopatcong Water Scouts is a program designed to find and eradicate invasive water chestnut on Lake Hopatcong.
- Established by the Knee Deep Club in 2010, the program trains and organizes volunteers in the identification and removal of water chestnut.
- The Foundation took over management of the Water Scouts in 2013.

WATER SCOUTS IN ACTION:

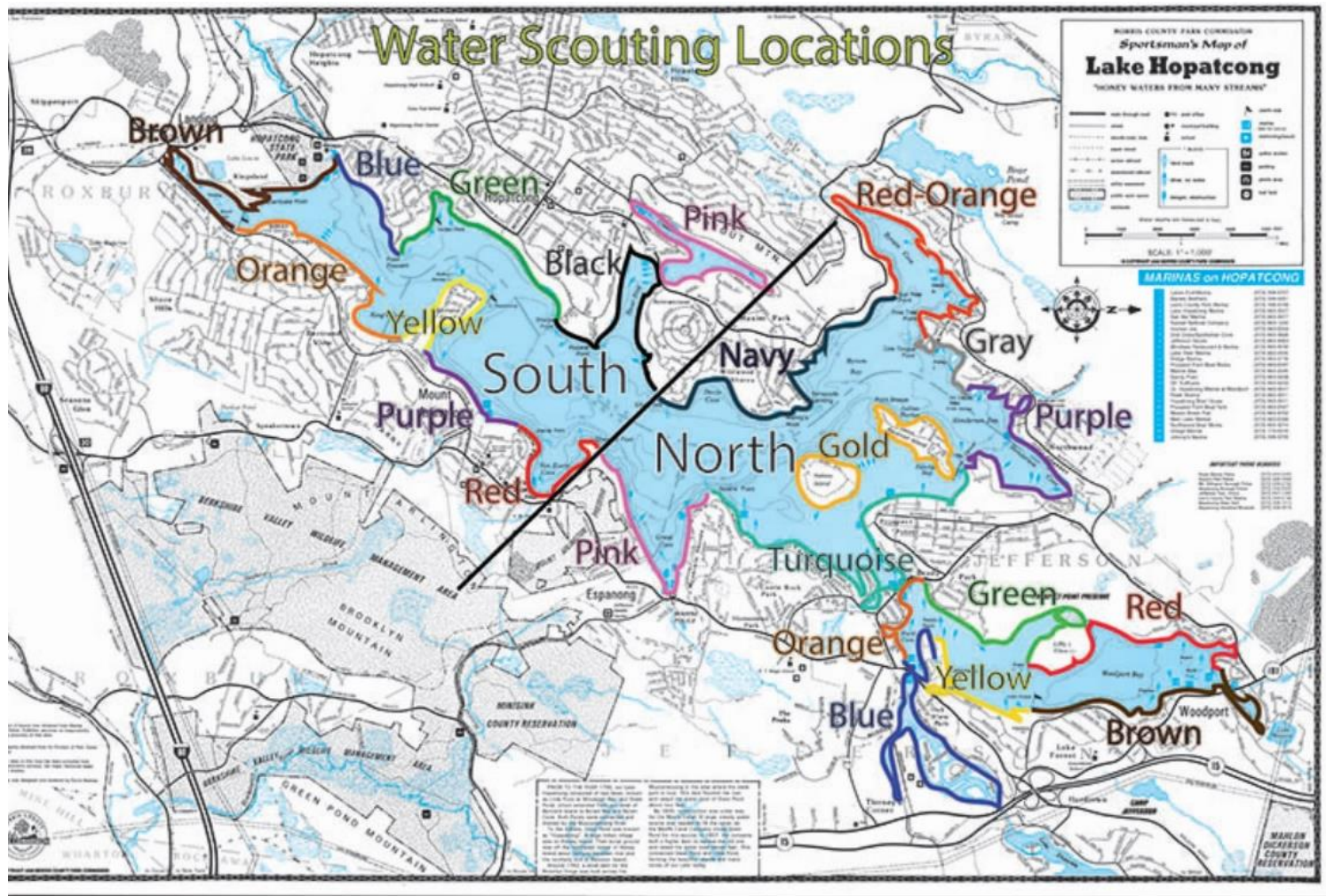


WATER SCOUTS IN ACTION:



WHAT WATER SCOUTS DO:

- Water Scouts are responsible:
 - Seek out and remove instances of the invasive Water chestnut in Lake Hopatcong
 - Kayak or canoe through an area/zone which they select
 - Survey their assigned area/zone at least once between Mid-June and through July and more frequently when possible
 - Contact LHF to let us know when you surveyed your area/zone

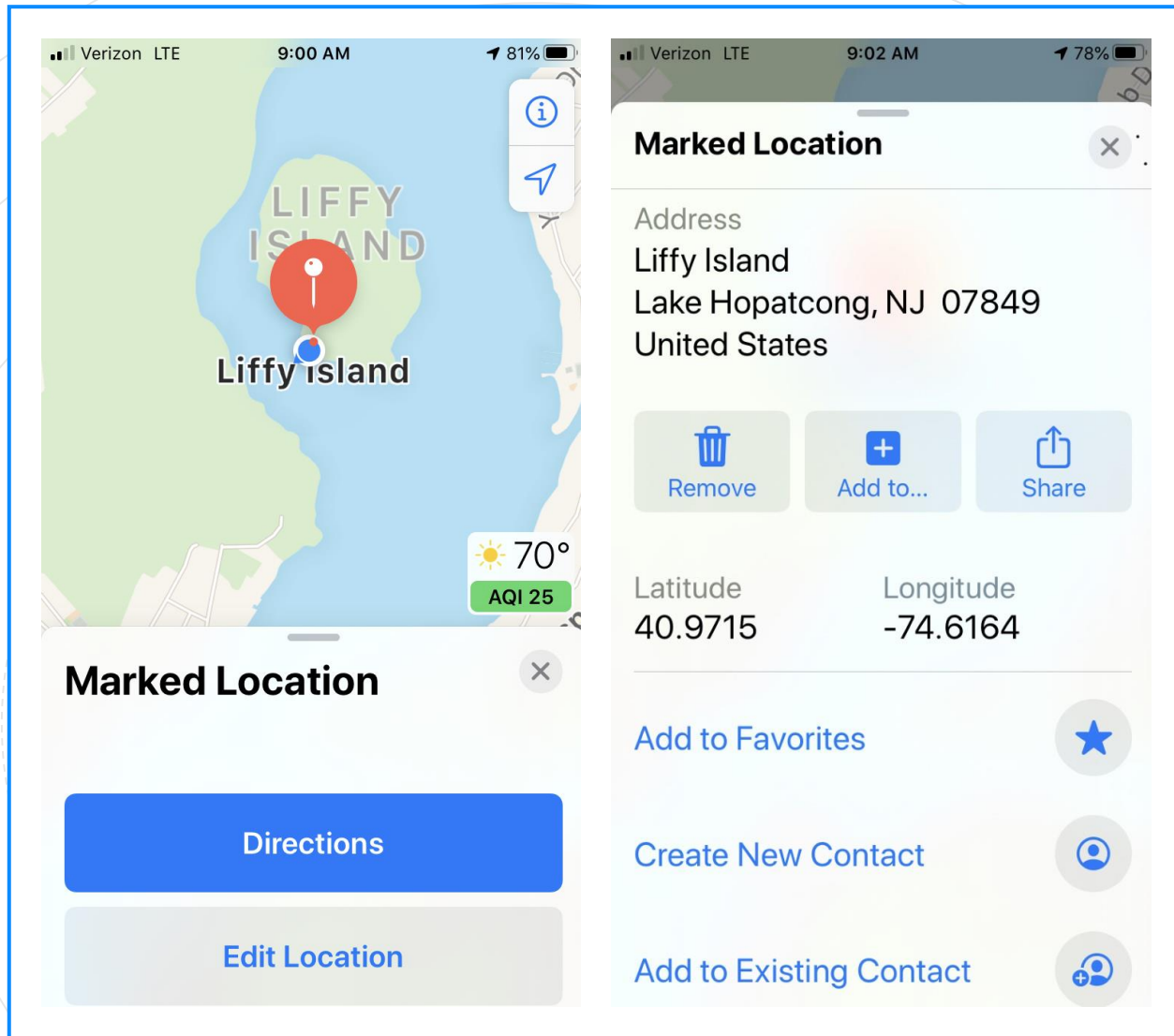


LAKE
HOPATCONG
WATER SCOUT
ZONE MAP

WHAT TO DO WHEN SCOUTING:

➤ If you find Water chestnut in your zone:

1. Take picture of area with plants
2. Take picture of a landmark nearby (boat houses, docks, specific structures aligned with it on land, etc.)
3. If possible, pin GPS location
4. If possible, pull plant by hand, reaching down as far as possible
5. Keep plant, DO NOT throw back in lake
6. Count number of plants you pulled, their rosettes, and if they had have seed pods attached
7. Send location information/photos, plant details along with your volunteer hours to donna@lakehopatcongfoundation.org
8. Survey your area *at least* once from mid June through the end of July– report back to LHF to detail whether you pulled any plants or if your area was clear



PINNING YOUR GPS LOCATION

If possible, pin your GPS location of where you found instances of water chestnut

INTERESTED IN BECOMING A WATER SCOUT?

- If you would like to join our team and become a water scout, please visit our SignUpGenius page:

<https://www.lakehopatcongfoundation.org/how-to-help/volunteer>

Thank You

- Lets keep Water chestnut out of our lake!
- Questions/Comments
- Contact Info:
donna@lakehopatcongfoundnation.org

