

**LITTLE LAKE SUNAPEE INVASIVE WATCH
FINAL REPORT FOR THE DECEMBER 8, 2018 BOARD MEETING**

We had a successful invasive watch program this year, with 40+ volunteers covering the entire lake shoreline plus Murray Pond. A great "thank you!" to our captains and weed watchers. We welcome new watch volunteers Mike Morgan (captain of a 1-man team in Jeffers Cove), Barry Fougere and Dru Vinton. Surveys were run July 1, August 1 and September 1. **No invasive species were found**, and the watchers were diligent in checking any suspicious plants with Amy Smagula at NHDES who literally wrote the book on NH lake plants. This year we added observations of birds, fish, turtles and other wildlife, and this shows the diversity of animals in and around the lake.

Water temperatures were warmer than 2017, but 2017 was cooler than 2016. So no long-term trend can be inferred.

WATER TEMPERATURE

Date	2017		2018	
	Low reported	High Reported	Low reported	High Reported
July 1	68	73	74	85
August 1	72	82	76	80
Sept 1	72	74	78	82

A notable change from last year is the expansion of submerged thin-leaved pondweed (native) in the east basin. One area of expansion is east of Stanley Point, reported by Debbie Stanley. This previously was confined to one patch 150-200 feet offshore, but on September 1 they observed several new patches as close as 75 feet offshore. Another area of apparent expansion is a newly observed patch off Woody Point. Roger Bloch found this while surveying the lake bottom. The top of the weed patch shows up as a false image on sonar about 3' shallower than true lake depth, and clumps of 3' tall pondweed came up on the sounding line. This covers 10 acres in 18 ft water depth, 200-400' offshore, 1400' long and up to 500' wide (see map in "Invasive Report 2018 summary.xlsx", Sep 1 ID pix tab). How recently this patch formed is uncertain, as it's in water too deep to see from the surface. Steve Bailey observed this area by scuba some years ago, and saw no such weed patch. **Amy Smagula told us that pondweed is growing very well this year in NH, and it is nothing to worry about.** Perhaps next year it will subside.

Otherwise, the weeds appear generally similar in relative abundance to last year. The most common weeds (in order of abundance) are pipewort, tape grass, pickerel weed, floating heart, and yellow/white lilies.