

Little Green Pond Round Whitefish Egg Take Survey #521084

Jonathan Fieroh, Region 5 Fisheries

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Little Green Pond (C-P192) is a 68-acre water bordering both the Saranac Lakes Wild Forest and the St. Regis Canoe Area in Franklin County. It is part of the Adirondack Fish Hatchery administrative area and fishing is prohibited. It has a maximum depth of 46 ft, an average depth of 18.4 ft, and the pH is circumneutral with a corresponding ANC value. The dissolved oxygen/temperature profile here has been studied extensively since 2013. Silica and sodium levels were also monitored multiple times in 2018 (#518031). Groundwater input seems likely, as the silica value is normally high, approximately 5.5 mgL^{-1} , and because the pond's outlet discharge exceeds its tributary inflows. Little Green Pond has a complicated management history and has been reclaimed four times including in 1963, 1991, 1999, and 2003. Recent management efforts have focused primarily on endangered round whitefish and the pond has been used as an egg source in the ongoing recovery effort for this species.

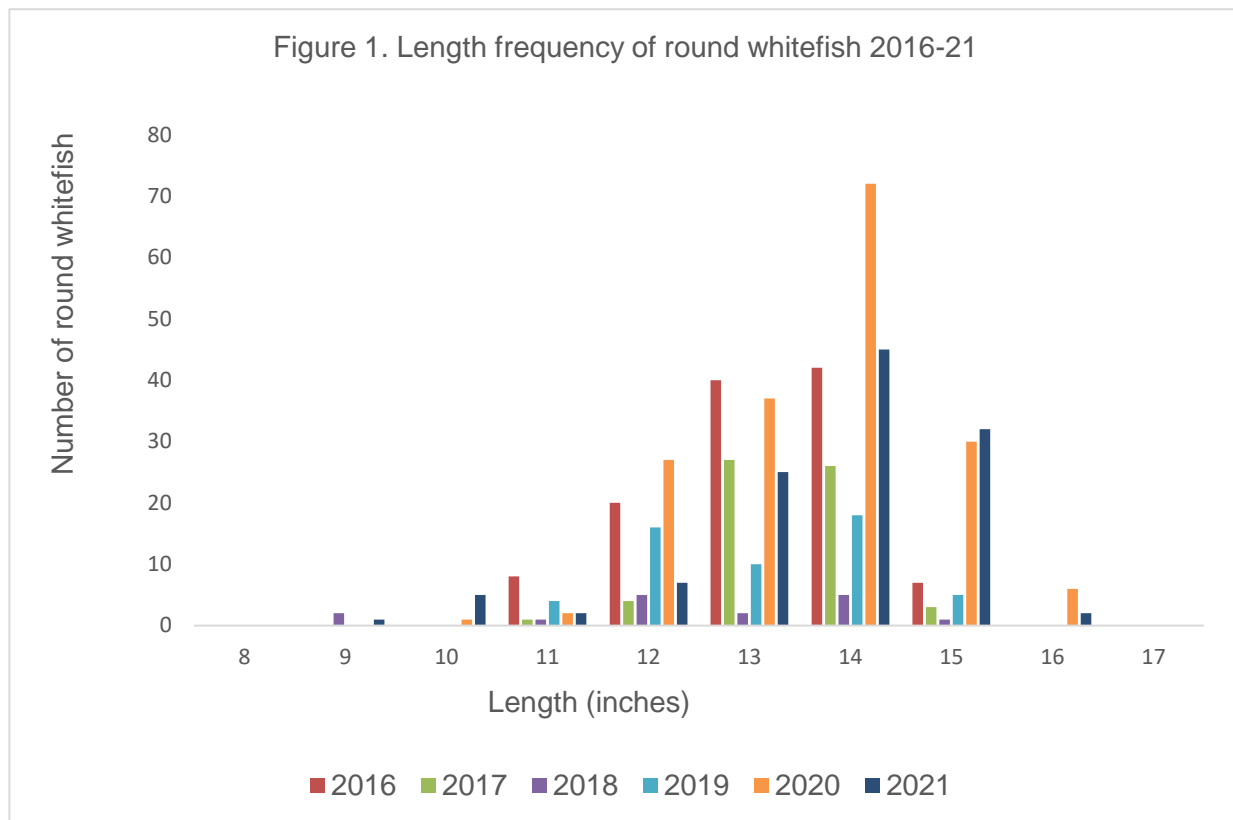
The 2021 survey was conducted primarily by Adirondack Hatchery staff as part of the egg-take for the ongoing restoration and stocking effort for this species. Two Oneida-style trap nets were used to collect round whitefish in December 2021 and the fish were then held at the Adirondack Hatchery until females ripened. Length and weight information was collected at the hatchery soon after netting was completed. Passive integrated transponder (PIT) tags began to be inserted in round whitefish in 2019 (#519128) and tagging continues. Round whitefish stocked here have been fin clipped since 2016, (Table 1).

Table 1. Round whitefish collected, Little Green Pond egg-take 2021.

Fin Clip	Year Stocked	Number Stocked	Number Collected 2021	Average length (inches)	Average weight (pounds)
LV	2020	241	5	10.4	0.37
	2019	0	-	-	-
RVAD	2018	183	1	11.1	0.49
LVAD	2017	272	16	13.3	0.85
AD	2016	AD	20	14.1	1.01
No clip			77	14.8	1.2
2021 Total			119	14.2	1.08

The spawning season for round whitefish in 2021 was characterized by warm weather and late ice cover, which are important factors in the success of an egg-take for this late-spawning species. The target number for eyed eggs was 35,000 and this goal was reached, with 77,000 green eggs collected and an estimate of 50-60% survival. A total of 21 females, 62 males and 36 fish of unknown sex were collected. The male to female ratio is perhaps skewed by the fact that individual spawners may skip some years (Steinhardt, 2007). It cannot be presumed that round whitefish females will spawn in successive years. It is possible this phenomenon may also help explain the lack of female recaptures seen in the PIT tag data for 2021.

The average size of a round whitefish collected in 2021 was 14.2 inches and 1.08 pounds. Like 2020, in 2021 most of the round whitefish captured were 13, 14 or 15-inches in length, (Figure 1). PIT tags were again inserted in the fish captured during this survey and it is hoped this tag information will bring valuable insights into the management of this very long-lived species.



Continued round whitefish stocking is critical for this water’s feral round whitefish population. The round whitefish of Little Green Pond will likely continue as an important egg-source supporting on-going species restoration efforts. However, to minimize potential hatchery influences, management efforts to encourage successful natural reproduction should continue.

Literature Cited

Steinhardt, G.B., Mineau M., and Kraft C.E. 2007. Status and recovery of round whitefish (*Prosopium cylindraceum*) in New York, USA. Department of Natural Resources, Cornell University, Ithaca, N.Y.