

LOON CALLER

VERMONT CENTER FOR ECOSTUDIES



Vermont Loon Conservation Project



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A loon finds momentum for take-off.

LAKE PROFILES

Groton State Forest Area

Loons nest on six of the eight lakes and ponds within or abutting the 26,164 acre Groton State Forest. Several other loon pairs nest on nearby lakes. The close proximity of these water bodies creates important core habitat for Vermont's loon population, while the conserved state forest lands ensure these critical nesting sites will remain undeveloped, especially on Peacham Pond and Lake Groton, which are surrounded by much private land. The seven state parks and multiple boat access areas on these lakes and ponds make them a popular destination for recreational users, from anglers and kayakers, to campers and hikers. Here is an overview of loon activity on these important eight water bodies.

The **Lake Groton** "south" pair began nesting in 1998 on a raft. In 2014, the raft was removed due to deterioration. We chose not to replace it because

suitable marsh-nesting habitat exists in the south end of the lake. Since then the pair has nested successfully once, although we never found the nest. Nesting did not occur in 2014 or 2016, possibly due to interference by intruding extraterritorial loons.

The **Lake Groton** "north" pair first nested in 2010 on a strip of grassy shoreline at the mouth of a brook that is within 100 feet of a private home. The owners of the house have since built a raft which the loons have used faithfully with intermittent success. We consider a site like this "experimental" due to the high disturbance potential; any success is a bonus.

Kettle Pond hosts one of the longest-occupied territories in the region. There have been mate switches on this lake every few years, an occurrence which often leads to years with no nesting activity. But a pair (*continued on page 2*)

When to Place a Loon Nesting Raft

Floating rafts have proved to be an amazingly effective management tool to increase loon nesting success. But when should we use them? The answer has changed over the years. Back in the early to mid-1990s, when there were fewer than 25 territorial loon pairs statewide, we routinely placed rafts whenever there was an inkling of hope that a pair might form, or whenever a natural nest failed, even if only once.

As Vermont's Common Loon population began to rebound in the early 2000s, we re-assessed our use of rafts. Knowing that some nests will inevitably flood and some be depredated, we made a decision to promote natural nesting whenever possible for several reasons:

- to stress the importance of undeveloped shorelines and their long-term conservation;
- to promote "wild" loon populations that persist independent of our management;
- to reduce the time and money necessary to maintain rafts; and
- to acknowledge that not all lakes will support breeding loons. Where natural nesting habitat is limited, a given lake might not naturally support nesting loons, but could still provide

(*continued on page 3*)



Volunteer Dennis Hendy prepares to place this loon nesting raft on Fairfield Pond.

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The Vermont Center for Ecostudies (VCE) is a nonprofit organization whose mission is to advance the conservation of wildlife across the Americas through research, monitoring, and citizen engagement.

The Vermont Loon Conservation Project (VLCP) is a joint program of VCE and the Vermont Fish and Wildlife Department (VFWD).

The VLCP's mission is to restore and maintain Vermont's Common Loon population through monitoring, management, education, and research.

The Vermont Fish and Wildlife Department's mission is to protect and conserve our fish, wildlife, plants, and their habitats for the people of Vermont.

Volunteer information and VLCP publications are available on the VCE website: www.vtecostudies.org

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VCE volunteer Lorna Kane-Rohloff won the Wisconsin Loon Watch photo contest with this photo of a chick backriding.

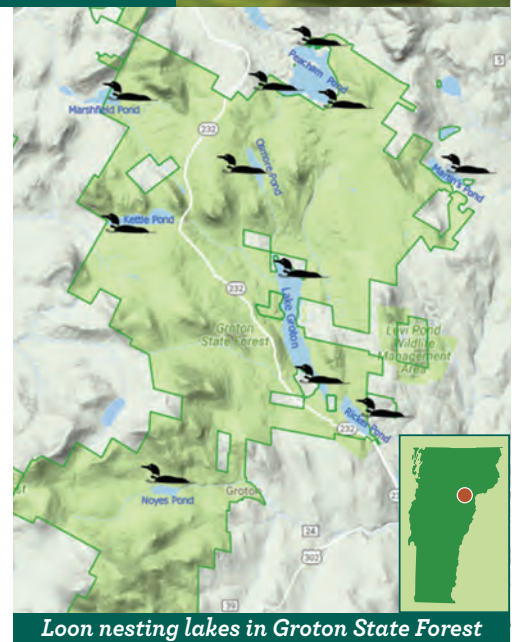
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has nested on a raft almost every year in the west end since the mid-1990s, an indicator that this is high-quality territory. The pair used a shoreline site in 2014, losing that nest to apparent depredation.

Marshfield and Noyes ponds have regular loon activity but no nesting pairs. A twosome has frequently been observed on Noyes Pond, so continued monitoring at this site is warranted. Marshfield Pond is shallow and might not have the necessary food resources to support a nesting loon pair, but the pond does provide a safe spot for non-breeders to rest and feed.

Loons nested on **Martin's and Osmore ponds** prior to the statewide loon population crash in 1983. Both loon pairs disappeared and did not reoccupy these waters consistently until the late 1990s. Since then, the loons on Martin's Pond have been very successful utilizing a raft in the one quiet cove on the lake. Osmore Pond supports the region's newest nesting pair, although we've observed territorial activity on and off for 20 years. The pair has changed nest sites almost every year, using hummocks and protrusions from the mainland.

Peacham Pond currently has two regular breeding pairs and an intermittent third pair. Although this is a fairly developed lake, all the nest sites are located on protected state land. The "north" territory, located on a small island in the north end, is



Loon nesting lakes in Groton State Forest

© KENT MCFARLAND

one of 12 sites in Vermont that loons have occupied since monitoring began in 1978. The "southwest" territory, first occupied in 1986, is located in quality marsh habitat full of raised hummocks (making it difficult for predators to reach the nest sites). The "southwest" pair has recently experienced a streak of failures and/or a lack of nesting attempts. The last time the pair had surviving chicks was 2010, and they have not nested at all during three of the last six years. Competition from intruding loons could be a factor, as Peacham Pond is often a gathering spot for non-breeding birds and visiting breeders.

The close proximity of these water bodies creates important core habitat for Vermont's loon population, while the conserved state forest lands ensure these critical nesting sites will remain undeveloped.

On the annual mid-July loon count, volunteers often count 10-14 loons on this active water body. In contrast to these two long-established pairs, Peacham Pond's "southeast" pair has struggled to become established, with just two successful nests in six attempts since 2006. Unlike the large southwest cove and the north end, nesting habitat is very limited in the southeast cove, and territory space is not well-defined.

Ricker Pond has begun to see the effects of a rebounding loon population and increased competition during 16 years of territorial loon activity. From 2003 to 2011, eight of nine chicks survived there. Since 2012, however, only one of seven chicks has survived; at least four have died during skirmishes with intruder loons. We are currently keeping the raft in place on this small but heavily-used lake to encourage nesting in an easily-protected area.

Thanks in part to VCE's on-the-ground presence and the help of dedicated volunteers, lake associations, state park staff, and an aware boating community, loons have done well in this region of the state. While intraspecific competition might have reduced nesting success and chick survival on a few lakes, that is to be expected in a healthy loon population. At the same time, with more kayakers and boaters, we have observed increased pressures on natural habitats and on loons themselves, including reports of harassment by humans on Peacham Pond and Lake Groton. These pressures highlight the vital importance of an educated lake user community that understands how loons and people can coexist in a highly-visited and occupied landscape. —E.H.

valuable feeding and resting habitat for non-breeders and visiting loons.

In 2001, VCE placed 15 rafts on lakes with consistent loon activity, but no established territorial pair. In all but one case, these "experimental" rafts did not promote formation of a breeding loon pair, despite the consistent presence of birds for over a decade on some lakes. Consequently, we removed most of these rafts.

Concurrently, we assessed natural habitat available to loons that were using rafts. On lakes with suitable island or marsh habitat, we decided to remove some rafts. In most cases, the loon pairs selected a natural nest site within a year or two (e.g., Little Hosmer Pond, Lake Elligo, Osmore Pond). However, on some of these lakes, pairs have since been less successful because the natural habitat is of marginal quality (e.g., Jobs Pond, Bald Hill Pond). We suspect that, historically, these were not prime loon breeding lakes.

There is no question that rafts can be effective if used strategically. Today, we deploy rafts primarily to mitigate three situations: 1) flooding caused by dams and hydro regulation, 2) disturbance by shore-based human activities, and 3) loss

of suitable natural nesting habitat. Many dams are constructed such that even minor rain events can cause water levels to rise three or more inches, often flooding nests. Rafts on both Averill Lakes, Norton Pond, Hardwick Lake, Fairfield Pond, and Pensioner Pond mitigate this risk. On busy or highly developed lakes, rafts can limit conflicts between loons and human recreationists by encouraging nesting in quieter coves (e.g., Greenwood Lake, Martins Pond, Woodbury Lake, Lake Seymour, Spectacle Pond, and Ricker Pond). There are many lakes where we could remove rafts and the loons would probably find a suitable natural nest site, but lake shore owners and volunteers are understandably reluctant to remove rafts that have been present for 10–20 years, risking harm to the loons they so devotedly caretake.

Rafts have played a major role in the recovery of loons in Vermont, but it takes time and resources to deploy, maintain, and monitor them. Currently, about 25 percent of Vermont's nesting loons use rafts — a high percentage. As long as VCE and volunteers dedicate effort and resources, rafts will continue to help loons nest successfully on many of our lakes and ponds. —E.H.

Building a loon nesting raft on the north shore of Lake Fairlee. From left to right: VCE biologist Eric Hanson, VCE interns Nate Launer and Kirsti Carr, and VCE volunteer and lake resident Barbara MacAdam.



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HOW YOU CAN HELP

Please support the Vermont Loon Conservation Project and Vermont's loons through a tax-deductible contribution to the Vermont Center for Ecostudies today.

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Constituents receive the *Loon Caller* and VCE's biannual *Field Notes*.

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VLCP is funded in part by the Vermont Fish and Wildlife Department's Nongame Wildlife Fund.

Please support the Nongame Wildlife Fund by purchasing the Conservation License Plate and through the tax check-off on your VT income tax form.

VLCP would like to thank its many volunteers and contributors for their continued support.



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Nest exchange on Newark Pond in 2002. The bird leaving the nest was re-sighted in June 2017 on Newark Pond. Now at least 25 years old, it is Vermont's oldest-known loon.

Oldest Known Common Loon

Back in 1987, researchers banded a loon chick with red, green, and silver bands at the Seney National Wildlife Refuge (NWR) on the Upper Peninsula of Michigan. This past April, the same individual returned yet again to the Seney NWR at the ripe old age of 30! Nicknamed ABJ (adult banded as juvenile), he has reared over 20 chicks during his record-setting lifetime. ABJ's reproductive success is no accident, as his well-documented parenting habits attest. Compared to the average loon, ABJ spends far more time with his offspring and stays with them longer into the fall. Loon biologists have long surmised that most loons live for 20-30 years, given the known lifespans of other birds with similar life histories; now there is a banded bird to prove it.

Closer to home, in early June 2017, VCE biologist Eric Hanson resighted a loon he color banded in 1998. Given the bird's likely age at the time of banding, this loon is at least 25 years old and likely a bit older – Vermont's oldest-known loon. Read Eric's blog about this historic resighting here: vtecostudies.org/blog/loon-banded-in-1998-found-again/. For more information about ABJ, go the Seney NWR website. www.fws.gov/refuge/Seney/wildlife_and_habitat/common_loon.html.

FROM AFAR

Loons in Washington State

Common Loons out in the Wild West face challenges that our New England loons rarely encounter, such as forest fires and fish kills.

In 2015, forest fires surrounded multiple lakes in Washington State; weeks of smoke, heat, and ash fallout prevented Dan and Ginger Poleshook, who track the statewide loon population, from reaching many of the breeding lakes that summer. They were relieved to confirm through resighting of color bands that all known breeding birds in the fire-affected region returned in 2016.

During the winter of 2016, two loon-breeding lakes experienced major fish kills. The die-offs occurred due to a longer than normal ice period and subsequent reduction of oxygen in the lakes. As a result, the resident loon pair

on both lakes moved to nearby Bonaparte Lake. These four extra loons, plus several other non-breeders, moved in the spring, infringing on the territory of Bonaparte Lake's established resident pair. Increased competition led to several fights. The resident loons held their own, but the conflicts led to injuries and the eventual mortality of two of the visiting loons.

This past spring, melting waters from record snow falls washed out many roads to loon-occupied lakes. While this is likely to affect the researchers more than the loons, it appears that Mother Nature has plenty in store every year for loons and researchers alike in Washington State. Washington now hosts 15 pairs of loons statewide, up from 2 to 3 pairs in the mid-1980s. —E.H.