LOON PRESERVATION COMMITTEE

NEWSLETTER

FALL 2023

Ray Hennessy Photo

The Loon Preservation Committee
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The Loon Preservation Committee (LPC) is a non-profit, self-directed and self-funded organization affiliated with New Hampshire Audubon. Autonomous in membership and fundraising, LPC works to preserve loons and their habitats in New Hampshire through monitoring, research, management, and education.

DIRECTOR'S MESSAGE

A Bad Year and a Silver Lining

It was a bad year to be a loon egg in New Hampshire. Into every summer a little rain must fall, to slightly mangle the well-known saying, and in fact we like a little summer rain here at the Loon Preservation Committee; a wet Memorial Day or July 4th weekend can be helpful if you are a loon trying to sit tight on a shoreline nest and avoid crowds of recreators on our lakes. So we were happy enough to see some rainy days in May and June, but that sanguine attitude turned to concern and then outright worry as the rain kept falling, day after day after day. By the end of June the ground was saturated, and any additional rain had nowhere to go but directly into our lakes to raise water levels and flood nests. Then July brought record amounts of rainfall and a greater number of flash flood warnings in a single month than New Hampshire had experienced previously in any one entire year. That did it for a number of our nesting loons, and New Hampshire experienced its third worst year ever, behind only 2008 and the disastrous summer of 1998, for loon breeding success. This despite convincingly smashing our previous record, set just last year, for the number of loon nesting rafts floated on our lakes and our other ramped-up management and education to support our loons this summer.

If there is a silver lining to the ever-present storm clouds of 2023, it is that loons, like LPC, are in it for the long haul. Loons can deal with a bad year. If you don't typically begin to breed until six or seven years of age and then have at most two chicks per year (and more typically one surviving chick every two years), the key to passing your genes forward into the next generation is living a lot of years. To that end, in addition to our work to help loons nest successfully, we also devote a fair amount of effort and resources into the task of keeping adult loons alive from year to year, so they have many chances over their lifetimes to nest and raise young. That work includes rescuing loons in distress as a result of illness or injury, our Lead Tackle Buyback Program to keep lead out of our lakes and our loons, our necropsies of dead loons to identify and address causes of death, and our outreach to teach people about loons and their needs.

If we are successful in our work to address avoidable causes of mortality and keep our loons alive, then a new year will bring a new chance for these loons. Our challenge in the future will be to mitigate, as much as possible, the negative impacts of washout years like this one and help loons make the most of those fair-weather years going forward.

2023 Loon Monitoring Results

From May through August, LPC staff again teamed up—for the 48th year!—with a dedicated network of volunteers to survey Common Loon abundance and productivity at over 500 occupied or potential breeding territories, on 340 lakes throughout the Granite State. A few lakes and ponds were unexpectedly empty and a few had gained one or two loons, but the 2023 total was virtually unchanged from 2022. In both years we counted 345 pairs of adult loons exhibiting a pair bond and occupying a territory for at least four weeks (Table 1). The floater population of unpaired adult loons was about the same size this year, too.

Do we need to worry? No-growth years give us pause, but they have been common enough over the last five decades in the ongoing, stepwise recovery of the population. On the brighter side, the plateau this year in pair abundance came with a few more of those pairs nesting. Typically, about two-thirds of territorial pairs nest in a given year. In 2023 this nesting propensity was slightly higher, garnering a record number of nesting pairs (242) and nesting attempts (260).

More encouragement came as we discovered breeding loons in new and unusual places. For example, in the past, loons from nearby ponds have often foraged in the Androscoggin River between Errol and Berlin. This year, the river had its own resident pair of loons, in a swift-flowing reach south of Seven Islands Bridge. In the Sunapee region, Perkins Pond celebrated the first loon chick hatched in recent memory. And in the Lakes Region, little Mud Pond in Ossipee hosted a successful nest. Mud Pond is so small and shallow that it has no name on maps or lists of public waters. Before 2023, it had only been surveyed once for loons, accidentally, when it was mistaken for the larger Conner Pond, further up the same back road. But this June, as LPC field biologist Sanne Donneski drove by at 30 mph en route to Conner Pond, a pair of loons caught their eye. A second survey found a nest, and after that, a local photographer stopping at the pond caught images showing

continued on page 4

Table 1. Results and Highlights for 2023 Common Loon Breeding Season in New Hampshire

Population and Productivity	2023	Five-Year Ave. (2018-2022)	2023 vs. prev. 5 yrs.
Territorial Loon Pairs	**345**	323	7%
Nesting Pairs	**242**	226	7%
Chicks Hatched	**196**	211	-7%
Chicks Surviving to mid-August	**137**	154	-11%
Nest Failures	**127**	107	19%
Chicks Surviving/Territorial Pair	**0.397**	0.48	-17%
Management Activity			
Rafts	**151**	104	45%
Signs/Ropes	**120**	128.5	-7%
Loons Rescued (through Nov. 1)	**32**	22.2	44%
Survey Effort (occupied or potential loon territories)			
Occupied - Territorial (Paired) Loons	**345**	322	
Occupied - Unpaired Loons (only)	**60**	50	
Loons Absent	**105**	138	
TOTAL	**510**	**510**	

continued from page 3

that one of the adults was originally banded in Massachusetts. We were satisfied to find an interesting loon story in this improbable setting, and a good cautionary tale not to underestimate unlikely-looking habitat as we monitor.

Nesting: The. Worst. Year. Ever… Almost.

The summer of 2023 was the rainiest on record in New Hampshire. Cool, damp weather during most of June gave way to intense storms in July, vaulting the state out of the drought of 2022 and into the record books. Loons nest at the water's edge, and timing and geographic location made all the difference for loon nest outcomes this year. Loons nesting earlier in the season did better, and July storm impacts formed a patchwork of nesting success across the state, as towns like Alton and Marlow experienced torrential downpours and road washouts while loon nests a few towns away persisted and hatched during the same few weeks. Surprisingly, some nesting loons on historically flood-prone larger lakes, like Newfound and Ossipee, were able to thread the needle and hatch this year, likely benefitting from a combination of careful dam management and good luck.

In addition to their good or bad luck with timing and geography, nesting loons gamble on their nest site—natural island, artificial raft, marsh hummock or mainland shore. Artificial nesting rafts, or platforms, can rise and fall with changing water levels, and they were a good bet in 2023, much better than the sandy or rocky substrate of an island or mainland shoreline (Figure 1). This spring, through continued membership and volunteer support and federal oil-spill settlement funding from US Fish and Wildlife Service,

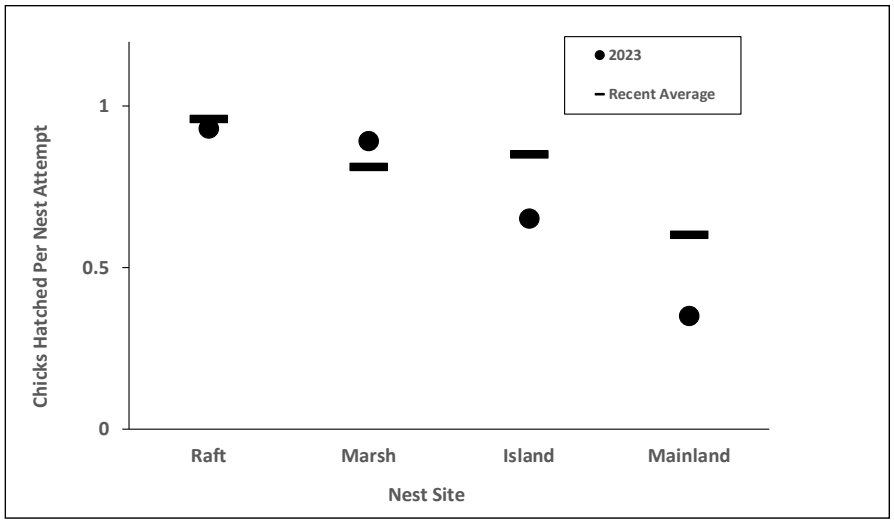


Figure 1. The wettest summer on record made raft and marsh nest sites more successful than firm shoreline sites in 2023. Over a quarter (27%) of chicks hatched in the state came from one of the 151 nest raft platforms provided by LPC and volunteers.

LPC floated a record 151 nest rafts; 56 were used for nesting, producing 27% of all chicks hatched.

Altogether, the season saw a record number of flooded nests (42) (Figure 2). The number of chicks fledged per pair of loons, the basic measure of productivity, sank below 0.40 (CS/TP) for only the third time in the 48-year monitoring period, narrowly joining 2008 and the catastrophic flood year – 1998, at the bottom of the barrel (Figure 3). All the rain this summer diminished the role of fair-weather stressors. The lakes were quiet, especially in June. Fewer sites required nest warning signs (120 vs. 129 in 2022), and

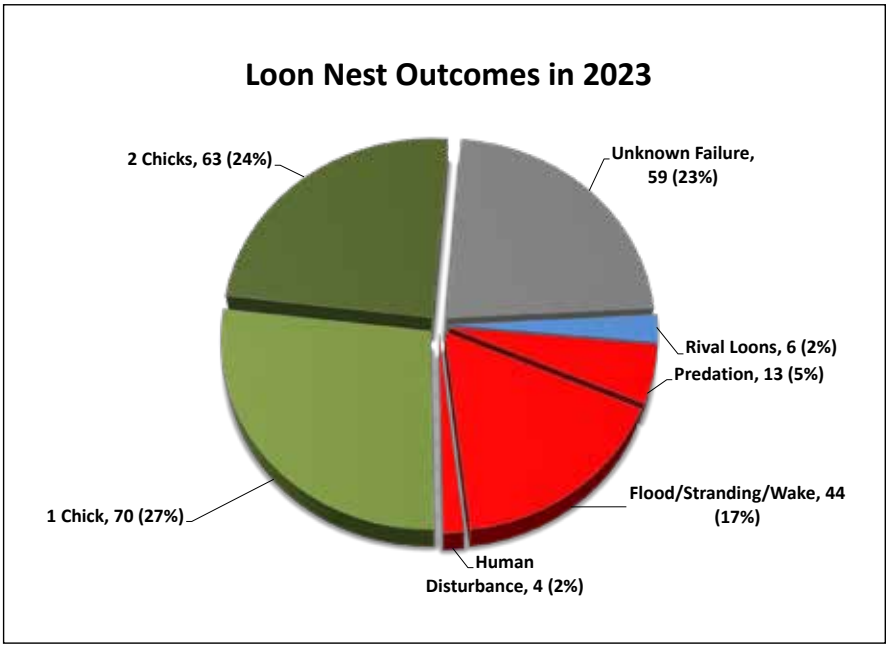


Figure 2. 2023 Nest Outcomes. Record rainfall led to a record number of water-level related nest failures (43) in 2023, reducing successful nests (green wedges) to half (51%) of all nest attempts.

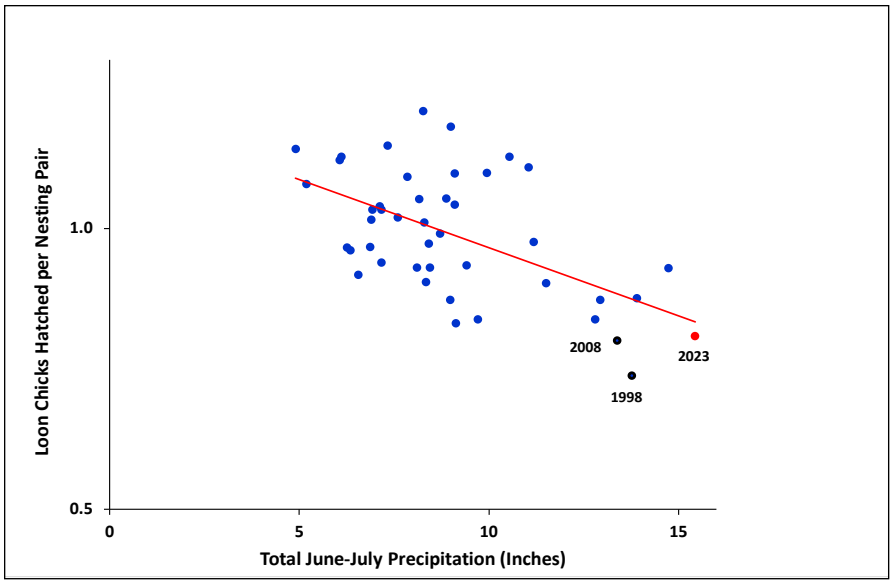


Figure 3. The wettest summer on record in New Hampshire was one of the worst for hatching success (2023, red dot), matching the trend observed from long-term monitoring. Each point represents statewide hatching success for an individual year, 1980-2023.

the number of nest failures attributed to human disturbance was below average. We also saw a drop in predated nests (5%, versus 12%, average, in the previous five years (2018-2022)). None of this changed the bottom line result—the record-breaking weather of 2023 gave us, almost, the worst nesting season ever.

Mortalities and Rescues

LPC's ongoing investigation into loon health and mortality causes included the collection of 45 mortalities to date in 2023. Remarkably, there were no winter or spring collections. With a more typical influx of cases beginning in late May, LPC's collaborating veterinary intern, Tufts University graduate Emilie Gurnon, single-handedly kept pace, examining two or three cases a week through September. Her findings ran the gamut of mortality causes. The initial case in May, a male loon from Sessions Pond in Errol, originally banded there in 1999 (at least 27 years old), died of gun shot injuries. One of the final cases of the season was another male, breeding at Evergreen Island on Winnipesaukee and originally banded in 2010 (at least 16 years old this year), who succumbed to injuries from a fight with a rival loon in September. Human causes (lead poisoning, entanglement, gunshot, and boat strikes) have accounted for half of the adult mortalities thus far in 2023.

Despite the noble efforts of volunteers on Big Pea Porridge Pond, who captured and brought this loon to CAVES for medical treatment, this otherwise healthy loon did not survive the gross entanglement of its bill and tongue in fishing line.

LPC staff, volunteers, members of the public, and cooperating agencies like NH Fish and Game have rescued 32 loons so far this year, with unsuccessful rescue attempts (sometimes on multiple occasions) in at least nine other cases. Thirteen of the rescued loons (41%) were released successfully without further incident. Representative examples included, in early July, LPC field program coordinator Ashley Keenan's successful rescue of an immature loon from the outlet canal of Lake Waukewan in downtown Meredith. This unfortunate loon was badly snared by the treble hooks of a plastic minnow lure, and had been chased ashore by the territorial adult loons on the south end of the lake. Immature loons, one or two years old, are usually on the ocean until maturity, and often get into trouble when they stray inland. Four were rescued this summer on New Hampshire lakes. The Meredith loon was untangled and released on the coast the same evening, back where it belonged.

An adult loon required rescue in another unusual setting, this time a tiny pond in Colebrook, where the loon had been stuck for several days, lacking enough open water to take off. LPC's Caroline Hughes and seasonal staff combined a trip north for surveys and capture work with a stop in Colebrook to seine the pond with a long net (see photos, page 6), catching the loon and releasing it on a larger pond nearby, where there was adequate room for the loon to forage and take flight.

In late June, LPC Director of Development and Membership

continued on page 6

continued from page 5

Betsy McCoy, the closest staff available, helped kayakers on Newfound Lake rescue an adult loon from the clutches of a Bald Eagle near Hebron Marsh. The risk to adult loons from Bald Eagles is usually low—they can stay out of harm's way—but as the state's Bald Eagle numbers continue to soar (to over 100 pairs in 2023), the odds can tilt in the eagle's favor. This seemed to be the case for the Newfound loon, but a post-mortem necropsy revealed the real problem—not eagles, but lead (Pb) poisoning. Debilitated by high Pb levels, this loon almost certainly would have died anyway. Although a few eagle predations of juvenile loons were confirmed in 2023, New Hampshire's experience has been consistent with other New England states: colleagues in Maine and Vermont report that adult loon mortalities from eagles remain rare. A few predations of chicks or juveniles were confirmed in each state, along with other anecdotal reports where predation seemed plausible, and a much higher volume of reports where eagle predation attempts were unsuccessful. This mix is a far cry from the situation in Washington state, where researchers Daniel and Ginger Poleschook report that in the last five years, in their study population of 14-16 breeding loon pairs, Bald Eagles have predated as many as a third of the loon chicks hatched each year. For the time being, this loon dystopia is not on the near horizon in New Hampshire. The underlying issue affecting adult loons here remains the human threat of Pb poisoning, rather than the natural, albeit increasing, risk from Bald Eagles.

Acknowledgements

LPC's summer field season is sustained by a diverse community. Seasonal staff throw themselves headlong into a whirlwind of surveys on unfamiliar lakes, and depend on hundreds of volunteers and organized lake associations to provide everything from loon sightings to boat rides to housing. All the field work carried out by volunteers and staff is coordinated with collaborators, partner agencies and other non-profits. During the field season we are especially aware that LPC's membership and donor support is extended at every turn by generous in-kind donations of services and materials from local businesses throughout the state: from lumberyards to printshops, boat mechanics, diagnostic labs and veterinary clinics. We are inspired by and grateful for all of this help. We can't thank everyone individually here, but the following examples convey the breadth of this community and the depth of our appreciation!

The seasonal crew

A big shout out to a fabulous gang who signed up for the rainiest summer on record, even if they didn't know it ahead of time: Dylan, Emilie, Ethan, Evrett, Logan, Melanie, Michele, Sam, Sanne, Sarah, Will. You were 100% waterproof, monsoon heroes this summer, and we'll miss you!

Logistical support

Squam Boat Livery, Irwin Marine, Roberts Cove Basin, Middleton Building Supply (Meredith), Heath's Hardware, Vortex Optics, Kirshner Floating Signs, Inc.

Wildlife Rehabilitation and Veterinary Care

Mark Pokras, DVM, Maria Colby at Wings of the Dawn Wildlife Rehabilitation, Meadow Pond Animal Hospital, Capital Area Veterinary Emergency and

Above: Outreach Biologist Caroline Hughes and North Country Biologist Michele Adams disentangle a loon stranded on a tiny pond in Colebrook (NH) from the gillnet used for capture.
Below: Michele Adams releases the loon on a larger pond nearby.

FIELD NOTES

I was sitting in my car for a lot of this survey to answer emails etc. while waiting for the storm to let up. Eventually got to collect egg and take floating sign out.

~Will Krohn,
Pemigewasset Biologist

Specialty (CAVES), Hopkinton Animal Hospital (Dr. Dutton and Dr. Richard), Center for Wildlife, University of Miami – Comparative Pathology, Kappy Sprenger, Magellan Diagnostics/Meridian Bioscience.

Cooperating Partners

New Hampshire Fish and Game/ Department of Safety (Marine Patrol)/Department of Environmental Services (Dam and Wetlands Bureaus), US Fish and Wildlife Service (UNWR and NEFO), NH Audubon (especially this Fall, for loon storage), NH State Parks, NH Veterinary Diagnostic Lab, Squam Lakes Association and Squam Lakes Natural Science Center, Bio-Diversity Research Institute, Tin Mountain Conservation Center.

~John H. Cooley, Jr.

FIELD NOTES

Went to try to retrieve eggs, nest was about a foot underwater and one loon was still swimming over it and trying to sit on it. Wouldn't let me get close and would put head down in the water to move the eggs around, I would guess. Picking at the surrounding cover in a nest building manner.

~ Dylan Ricker,
Sunapee Biologist

Photo courtesy of Cathie Eastburn

Even on a raft, this loon on Lower Baker wasn't taking any chances. It continued to build up its nesting material as water levels from unprecedented rainfall rose.

Raincoats and rubber boots were the standard attire for the 2023 field crew. Pictured: Tufts Veterinary Intern Emilie Gurnon, Winnipesaukee Biologist Evrett Fiddian-Green, and Field Program Coordinator Ashley Keenan.

Photo courtesy of Ray Hennessy

FIELD NOTES

Was not prepared for sheer number of black flies, next time I will bring a net.

~Ethan Hobbs, Seacoast Biologist

Nest Cameras Provide Insights into the Intricacies of Loon Nesting

Every summer as LPC's Live Loon Cams get up and running, Loon Cam viewers eagerly watch, waiting first for the eggs to be laid and then for the chicks to hatch. Predictions abound – when will the first egg come? The second? Is there any way to predict with any certainty when the chicks will hatch?

According to the books, loons typically lay 2 eggs, 1–3 days apart. These eggs will hatch after an incubation period of 26–28 days. But these wide ranges in potential timing often do not satisfy Loon Cam viewers, and many have fun in guessing, down to the minute, when key events (such as the laying of the second egg or the hatch of the chicks) will occur. Their curiosity raises a good question: Is it possible to predict these events with more precision?

Cameras trained on nest sites for the duration of the incubation period allow us to document the exact moment of egg laying. This screenshot from Loon Cam 2 captures the moment shortly after egg 2 was laid.

The information laid out above (2 eggs, laid 1–3 days apart, hatching after 26–28 days) comes from data painstakingly collected by loon biologists over decades. It is accurate; however, because it is usually not feasible for biologists to monitor loon pairs 24/7, our current understanding of the timing of egg laying and incubation is at a coarse scale. The development of camera technology, which allows us to observe loon pairs constantly over the course of their incubation (and therefore allows us to document the exact time each egg is laid and each chick hatches) can help to narrow down those ranges.

Over the past several years, LPC biologists have deployed not only our Loon Cams that live stream loon nests in real time, but also dozens of game cameras on nests throughout the state that photograph nesting loons as they incubate. Not every camera that we deploy catches every event—sometimes, the view of the nest bowl is obscured by precipitation that fogs up the camera lens, or by vegetation that obscures our view of the nest bowl, making it impossible to tell exactly when eggs are laid or chicks hatch. However, we have been able to collect precise data on egg laying and chick hatching from a number of nests over the past decade. Here is what we have learned:

Egg laying: In the 17 nests where we are sure of the exact date and time that both eggs were laid (plus or minus 2 hours), the eggs were laid, on average, 60.5 hours apart (roughly 2.5 days). The longest gap that we documented between the laying of egg 1 and egg 2 was 70 hours and 20 minutes; however, in the vast majority of the nests observed, eggs were laid between 55 and 65 hours apart (Figure 1).

Chick Hatching: Because many of the nests that we have monitored with cameras have only hatched 1 chick (or have hatched no chicks at all), we have fewer data points regarding the timing of chick hatch. And because chicks often spend several hours underneath their parents when they first hatch, escaping the view of the camera, we do not know exact hatch times even for those nests that are broadcasting live footage in real time. Nevertheless, we can estimate hatch times for both chicks to within about half a day for a number of nests that we've recorded. Of six nest attempts caught on camera that have hatched 2 chicks, the first chick has hatched, on average, 27.25 days after egg 1 was laid. The second chick, on average, hatches just under 26 days after the second egg was laid.

You may be wondering: Why

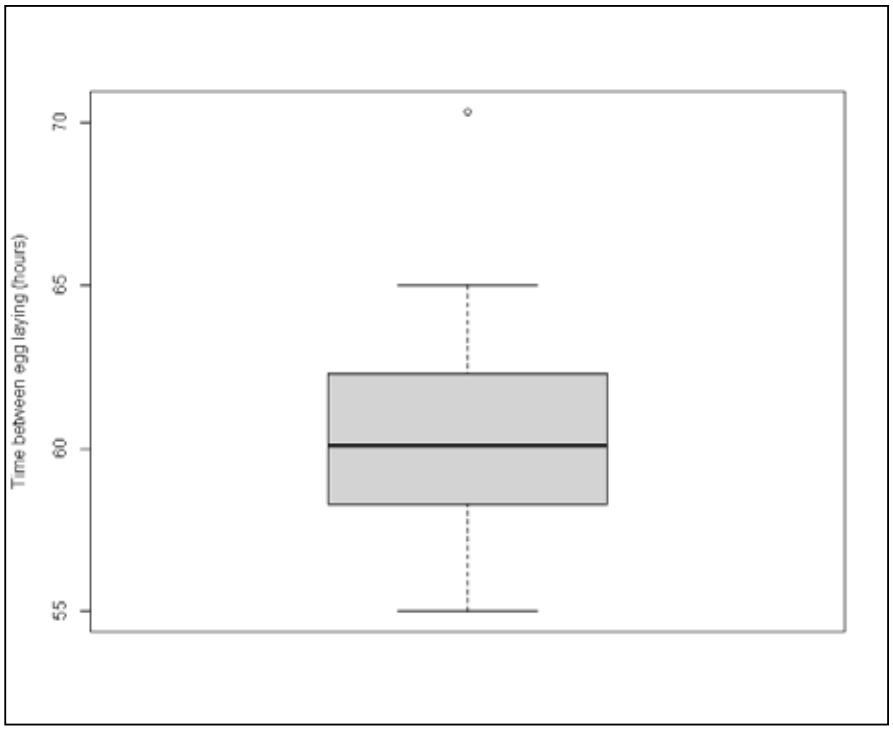


Figure 1: Distribution of the time elapsed between the laying of eggs for 17 2-egg clutches documented by LPC cameras. Eggs were typically laid 55 - 65 hours apart, with a median of just over 60 hours. Dot at the top represents one outlier—a single nest where eggs were laid 70 hours apart.

does it take egg 2 less time than egg 1, on average, to hatch after being laid? The difference may be the result of sporadic incubation at the start of the nesting period. Though the loons that we collected this data from laid their first egg 60.5 hours (on average) before their second egg, they did not sit on the first egg consistently until the second egg was laid. Loon eggs need specific temperature conditions to develop. The initial inconsistent incubation of egg one may prevent it from outpacing the development of egg 2 by too much, giving egg 2 time to "catch up" to its sibling's developmental stage and making it so that, although the eggs are laid over 60 hours apart, they only hatch, on average, 26 hours apart.

All of this data comes from a small number of nests. As such, these estimates may change as we deploy more cameras and add to our dataset. However, next summer, when loon cam watchers ask for predictions on when the eggs will be laid and the chicks will hatch, my best guess will be:

1) Egg 2 will come just about 60 hours after egg 1

2) Chick 1 will hatch 27.25 days after it was laid

3) Chick 2 will hatch just under 26 days after it was laid, and about 26 hours after its sibling.

I look forward to seeing if these predictions hold true when our Loon Cams start up again in the spring, and I hope that you will join us in following our Loon Cam pairs next year!

~Caroline Hughes

Nature does not hurry, yet everything is accomplished.

-Lao Tzu

2023 Loon Cam Summary

This year's Loon Cams acted as the perfect microcosm to illustrate an average year for New Hampshire's loons. LPC's long-term monitoring data indicates that on average, a New Hampshire loon pair will fledge just 1 chick every other year, for a reproductive rate of 0.5 chicks surviving per pair per year. This low reproductive rate is the result of a number of factors. Not all loon pairs nest in a given year, and close to 50% of nests fail. Additionally, not all chicks that hatch survive to fledge.

In 2023, the loons at the Loon Cam 1 site did not nest. This pair appears to have fallen victim to their own past success – while both of the historic, banded pair members were present on the lake this summer, 1–5 intruding loons were also routinely present on the lake. These intruders were likely interested in taking over the territory for their own use because of how successful it has been over the past decade. As a result of the presence of these intruders, the resident loon pair did not nest, and we shut the live stream down in late June. The Loon Cam 2 pair, consisting of the historic banded female and an unbanded male, nested successfully, hatching 2 chicks. Sadly, one of the chicks was predated by an eagle shortly after hatching. The remaining chick fledged. One chick fledged divided by two loon pairs (an admittedly small sample size) gives us 0.5 chicks surviving per pair, exactly on par with what we'd expect here in New Hampshire.

Many thanks to LPC volunteer and Loon Cam operator Bill Gassman for his tireless work to get the cameras up and running and for operating the camera to keep it focused and on the action!

~Caroline Hughes

Lead Tackle Buyback Program Grows Significantly in 2023

2023 is the sixth year of LPC's groundbreaking Lead Tackle Buyback Program, a first-in-the-nation effort to reduce Common Loon mortality from ingested lead tackle. Evidence suggests that the majority of loons that die from lead tackle ingestion are consuming tackle that is in active use, rather than lost tackle on lake bottoms. They may swallow a fish that has broken an angler's line (in the process, also swallowing the line and any attached tackle), consume lead tackle directly by instinctively striking at tackle as it moves past them in the water while being reeled in (mistaking the glint of tackle for a shiny minnow), or by taking a fish off of an angler's line. By eliminating active use of lead tackle, we can substantively reduce loon deaths from lead tackle ingestion. The Lead Tackle Buyback Program works toward this goal by educating the public about the danger that lead tackle use poses to loons and other wildlife, and by creating and promoting a number of options for the safe, easy disposal of now illegal to use lead tackle.

In the summer of 2023, funding from generous donors allowed LPC to create a Lead Tackle Buyback Internship, greatly expanding the capacity of the Lead Tackle Buyback Program. Together, 2023 Lead Tackle Buyback Intern Logan Krahn and year-round staff worked to expand all aspects of the program. In addition to reaching a milestone 50,000 pieces of tackle collected since the program began in 2018, this year brought a number of exciting accomplishments. Particularly noteworthy feats achieved to date in 2023 include:

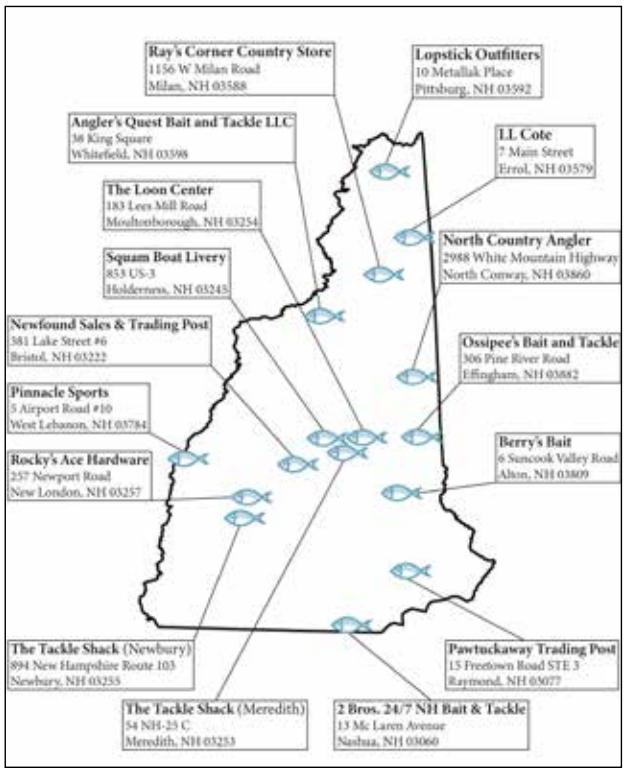


Figure 1. The Lead Tackle Buyback Program will finish 2023 with 16 participating retail locations throughout New Hampshire – six more than last year!

A 60% increase in the number of participating tackle shops: At the end of 2022, the Lead Tackle Buyback Program included ten participating retail locations throughout New Hampshire. We are proud to announce that we are ending 2023 with sixteen participating shops (Figure 1). The addition of these new shops greatly expands our program's spatial coverage of the state to include critical areas in far northern and southern New Hampshire, helping to ensure that all potential program participants have a participating tackle shop within a reasonable driving distance. While we made great strides on increasing tackle shop participation in 2023, the Monadnock Region of New Hampshire remains underserved, and we are looking to add more shops in 2024.

Expanded partnerships to facilitate awareness and easy, safe tackle disposal: One thing we have learned since the Lead Tackle Buyback Program started in 2018 is that there are many people who have lead tackle in their possession that do not necessarily want or need a financial incentive to turn it in. These people are more interested in finding an easily accessible spot where they can dispose of their tackle with the knowledge that it will be handled in a responsible manner. Accordingly, a major focus of our program in 2023 was to work with lake and watershed associations, household hazardous waste planners, and transfer stations throughout the state to increase the number of locations where lead tackle could be safely dis-

posed of.

In total we partnered with 50 lake associations who included information about the dangers of lead tackle use and proper tackle disposal in communications with their membership. Partners also collected lead tackle either at their headquarters, at boat launches, or at their annual meetings. We identified 40 transfer stations that accept lead, posted an interactive map of these locations on loonsafe.org, and offered to provide stations with educational signage to post on-site about the impact of lead tackle on loons and other wildlife. In the end we were able to have posters at 17 of 40 transfer stations, all that accepted posters from outside organizations. We also partnered with regional planning commissions to facilitate and publicize the collection of lead tackle at Household Hazardous Waste collection events in 31 towns across the state.

Continued and expanded education and outreach: Education and outreach is a key component of the Lead Tackle Buyback Program, and this summer we continued to incorporate information about the impacts of lead on loons in our newsletters, social media posts, press releases, and presentations. We also advertised the Lead Tackle Buyback Program across a variety of media, including print ads in eight newspapers with statewide or local coverage areas, radio ads covering much of the state, and social media ads targeted towards people located in New Hampshire with interests in fishing and other lake-based recreation.

The 2023 Lead Tackle Buyback Program runs through the end of December, so there is still time to turn in your lead tackle (see options at LoonSafe.org). We are looking forward to continuing to grow the program in 2024 and we'd love your help! If you are aware of a tackle shop, lake association, conservation commission, or other group that may be able to serve as a location for the public to drop off lead tackle, please contact LPC. Together, we can make a difference for New Hampshire's loons!

~Caroline Hughes

Lead Tackle Buyback Intern Logan Krahn (left) collects tackle turned in at The Tackle Shack in Newbury, NH – one of 16 participating retailers in the state.

A selection of lead tackle turned in by a Lead Tackle Buyback participant in 2023.

Photo courtesy of David Pushee

The first chick in 20 years! And lessons from a loon's long life.

For the first time in 20 years, the Five Finger Point territory on Squam Lake this past summer fledged a chick—and, in many ways, this chick brought things full circle. The female of the Five Finger Point pair is the oldest banded loon on Squam Lake. Banded in 1998 as an adult loon with a chick, she is likely at least 31 years old, given that loons on average do not begin nesting until they are 6 years old. And it was at Five Finger Point that she was banded back in 1998 and where she fledged chicks in 1998 and annually from 2000-2002. She has spent fifteen of the last twenty-six years as a member of the Five Finger Point pair, but this year marked the first year she has raised a chick there since 2002.

With close monitoring of such a long-lived loon, the vicissitudes of a loon's life are on full display. Life was good for the Five Finger Point (FFP) female for the first five years after she was banded. The territorial female in FFP from 1998-2002, she nested annually, hatching seven chicks over those five years, of which four fledged—an outstanding rate of breeding success for loons. In the only year she did not successfully hatch a chick (1999), the nest was abandoned due to the close approach of canoes and kayaks.

Over the next several years, summers of being the FFP pair member were interspersed with years of not being reported on the lake. Moving to a neighboring territory, she successfully fledged a chick in 2012 but was evicted from the territory the following summer. She spent the remainder of that summer at the Five Finger Point territory, of course!

Several more years followed of being the FFP female mixed in with being a single loon, but always hanging around the fringes of the FFP territory. Finally, in 2020, she regained firm control of the FFP territory, even hatching a chick that year, which, sadly, was taken by a predator within hours of hatching. Subsequent years saw repeated nest failures due to mammalian predation, until this year. After so many years struggling to control her territory and of failed attempts at nesting, she was again successful in the same territory where she produced chicks over twenty years ago.

Following loons over many years elucidates much about their survival, long-term breeding success, territorial occupancy and intrusions, and the challenges loons face in their daily lives. But, in the case of this loon, we have several other crucial pieces of information: snapshots of contaminant burdens for this female through the testing of her inviable eggs over twenty years. LPC has tested failed eggs from this female in 1999, 2010, 2020, and 2021, all from the FFP territory.

The results of this testing present a concerning picture for this female. While average levels of contaminants on Squam across contaminant classes have gradually declined from the 1990s to the present (with the notable exception of the spike in contaminant levels between 2005-2007), the levels of the FFP female have done the opposite. Across tested contaminant classes, the levels in her 1999 egg were below the average of other eggs tested from Squam Lake between 1993-2004, i.e., prior to the years of critical decline of loons on Squam Lake from 2005-2007. Her 2010 egg saw levels creeping up, either slightly above or slightly below the averages for that post-decline period.

But her 2020 egg saw a steep rise in levels across almost all contaminant classes. PCBs (industrial insulating/cooling agents) are a case in point, with 2020 levels rising to well above the Squam average for the post-decline period (Figure 1). Her 2021 egg showed a decline, but levels are still above the lake-wide average. Total chlordane (a pesticide) showed a similar pattern. BDEs (flame retardants) likewise spiked for this female in 2020, but we are still awaiting BDE results for her 2021 egg, so, as of time of writing, it is unclear whether they also declined in 2021.

A couple contaminant classes showed a different long-term pattern for the FFP female. Dioxins and furans (byproducts of industrial processes) have showed a steady increase over the years for her, despite an overall slight decline in lake-wide averages (Figure 1), and her levels are now nearly twice the average—but still below levels affecting the health and reproductive success of other bird species, even when taking into account those PCBs which function like dioxins. In the case of PFAS (stain guards, fire-fighting foam), after declining in the FFP female in 2020, they increased again in 2021 and are well above the lake-wide average.

DDT and DDE (a breakdown product of the pesticide DDT and the predominant form of DDT in wildlife) deserve a special mention for this loon, as one of the sites in the Squam watershed identified by LPC as having elevated levels of DDT in the sediments is in the FFP territory. Given this proximity to a known source of DDT into the lake, we

continued on page 17

Loon Preservation Committee

ANNUAL REPORT 2022

APRIL 1, 2022 - MARCH 31, 2023

The Loon Preservation Committee exists to restore and maintain a healthy population of loons throughout New Hampshire; to monitor the health and productivity of loon populations as sentinels of environmental quality; and to promote a greater understanding of loons and the natural world.

My late wife and I began supporting the Loon Preservation Committee more than forty years ago. Together, we successfully rescued a chick with fishing line wrapped around its beak about thirty years ago. For nine years I have been a Trustee of the Loon Preservation Committee (LPC), and now serve as Chair of our energetic Board of Trustees, joining Executive Director Harry Vogel's enduring guidance of the LPC's effective efforts to expand and improve loon population numbers and the entire loon experience in New Hampshire. Among the several state and provincial loon oversight organizations that exist in the United States and Canada, the LPC stands out by virtue of its successful restoration of loon habitat and loon numbers per square mile and per lake within New Hampshire and because of its estimable focus on fundamental loon biological research. The LPC counted a record 345 breeding pairs on 229 lakes in 2022, with an additional unpaired 106 loons also on our lakes. 177 chicks successfully fledged last year. Of equal importance, in 2022 LPC's biologists collected data and samples central to investigating dangerous contaminants (16 eggs were tested), emerging climate-dependent pathogens like avian malaria, and a deeper understanding of loon behavior and biology. One effort that we are pursuing now and for the near future is to test more and more loon eggs from more and more lakes, the resulting data contributing to our growing knowledge of loon life chances and the health of lakes and streams within the state. The LPC Board believes that your organization leads the world in research-based knowledge about the Common Loon (Great Northern Diver outside North America). We intend this year and in future years to double down (with your backing and financial assistance) on our research efforts and to build strongly on the existing investigations of our staff. Indeed, I am pleased to report that the LPC Board and its Executive Director are committed to contribute even more significantly to the global knowledge of common loon behavior and loon avifaunal understanding in the years to come.

Robert I. Rotberg, Chair
Board of Trustees

The first winter rescue of FY23 was in early December on Kezar Lake in Sutton, NH, where a loon was trapped near shore by a thick layer of skim ice. Following rescue, the loon spent the night at Wings of the Dawn for observation, and was banded and released at Odiorne Point in Rye, NH. Pictured: Senior Biologist John Cooley paddles through skim ice to reach the trapped loon. Cooley and Outreach Biologist Caroline Hughes disentangle the captured loon from the gill net.

EXECUTIVE DIRECTOR'S MESSAGE:

Loons by the Numbers in FY23

The Loon Preservation Committee (LPC)'s fiscal year ending March 31st of 2023 (FY23) was one of challenges and records in New Hampshire. LPC continued to build strongly on its proven base of monitoring, management, research, and education to benefit loons over those 12 months. A few examples of note include a record 141 rafts floated, a record 38 loons rescued, and a record 12,472 pieces of lead tackle collected through our Lead Tackle Buyback Program to keep lead out of our lakes and our loons. LPC's in-person education returned in force as Covid finally waned, with a record 144 exhibits and presentations given to teach people about loons and their needs. That work included our continued partnership with the Squam Lakes Natural Science Center to carry out Loon Cruises with an LPC biologist on Squam Lake (part of our expanded outreach made possible by our Squam Lake Loon Initiative) and a return to guided loon paddles to teach people about loons and demonstrate good loon-watching etiquette. These records are all the more impressive when viewed in the context of a number of staff absences due to Covid and injuries (all thankfully overcome) over the course of the fiscal year.

It is satisfying to be able to report that loons responded to our expanded programs with continued gains in their population: a record 345 territorial loon pairs (pairs that are together for at least four weeks over the season, defend their lake or area of water from other loons, and have the potential to breed), a record 236 nesting pairs (pairs that created a nest and laid one or more eggs in that nest), a record 244 chicks hatched, and a record 177 chicks thriving by mid-August and presumed to have fledged from our lakes. The continued recovery of our loon population, despite its ever-increasing challenges, is evidence that our founders' hopes, that loons and people can thrive in each others' company, was well founded. The equal hope that interested and concerned residents and visitors would support those efforts through volunteerism and financial donations turned out to also be well founded; thank you to all of you who have supported LPC through your time, memberships, and other donations. We will continue to honor your dedication to loons and to the Loon Preservation Committee with continued hard work and proven as well as innovative programs to help loons thrive.

Harry Vogel,
Senior Biologist/Executive Director

LPC Trustee Kristen Begor and volunteer Dave Beardsley float a loon nesting raft on Lake Sunapee. Rafts help loons displaced from traditional nesting sites by shoreline development and changing water levels. Almost one in every four loon chicks hatched in New Hampshire in FY23 came from one of the record 141 nesting rafts floated by LPC.

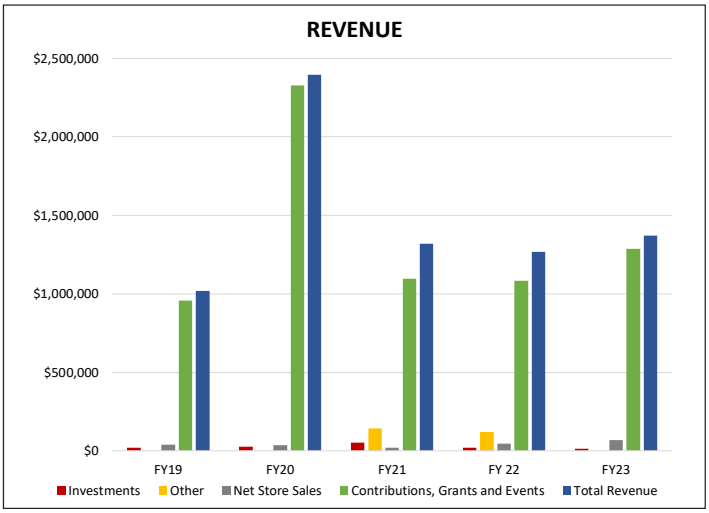
Population and Productivity:

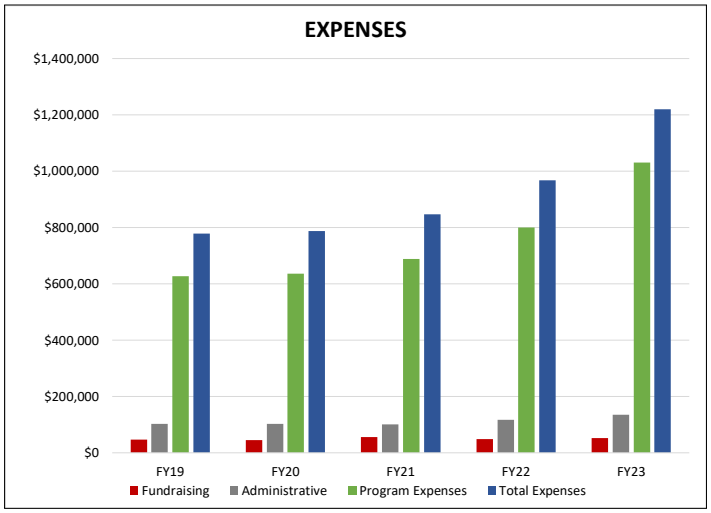
	2018	2019	2020	2021	2022
Territorial Loon Pairs	309	313	321	326	345
Nesting Pairs	226	221	216	229	236
Chicks Hatched	224	193	203	192	244
Chicks Surviving to mid-August	157	148	156	133	177

FINANCIAL SUMMARY:

Loon Preservation Committee: Summary of Activities and Changes in Net Assets
Fiscal Year Ending: March 31

	FY19	FY20	FY21	FY22	FY23
Revenue:					
Contributions, Grants and Events	$959,380	$2,328,325*	$1,098,165*	$1,082,662	$1,287,768
Store Sales, Net Cost of Goods	$38,894	$37,952	$22,385	$45,600	$69,685
Investments	$19,657	$28,768	$54,487	$19,344	$13,395
Other (PPP1, Energy Rebates, etc.)	—	—	$144,066	$120,681	—
Total Revenue	**$1,017,931**	**$2,395,045**	**$1,319,103**	**$1,268,287**	**$1,370,848**
					**Includes gifts received during the capital campaign*
Expenses:					
Program Expenses	$627,733	$636,374	$688,111	$800,597	$1,029,983
Administrative	$103,132	$104,337	$108,672	$117,219	$135,580
Fundraising	$48,182	$46,166	$49,390	$50,338	$53,399
Total Expenses	**$779,047**	**$786,877**	**$846,173**	**$968,154**	**$1,218,962**
Increase in Net Assets:	**$238,884**	**$1,608,168**	**$472,930**	**$300,133**	**$151,886**





LPC's financial records are audited by Rowley & Associates of Concord, NH. Copies of the audit and the IRS 990 return are available on our website: www.loon.org.

LPC's Loon Webcam was viewed over 276,000 times and delighted and educated viewers from all over the world in FY23. News of loons and LPC's work to support them reached thousands more through our website (loon.org), e-Newsletter, Facebook, Twitter, Instagram, and Zoom presentations.

Lead Tackle Buyback Program—five years strong!

In 2022, the Lead Tackle Buyback Program, a joint project of the Loon Preservation Committee, New Hampshire Fish & Game, and tackle retailers throughout the state, entered its fifth year!

- The 2022 Lead Tackle Buyback Program proved to be our biggest year yet. We collected a record 12,472 individual pieces of lead tackle, weighing a record total of 115.6 pounds!
- Lead sinkers and lead-headed jigs weighing one ounce or less have been illegal to sell and to use in freshwater in New Hampshire since 2016.
- Lead poisoning resulting from the ingestion of lead fishing tackle is the number one cause of documented adult loon mortality in New Hampshire, accounting for 39% of loon deaths from 1989-2021.
- To date, the Lead Tackle Buyback Program has removed over 45,000 pieces of illegal lead tackle from circulation and use in New Hampshire, any one of which had the potential to kill a loon if ingested.
- Patrons who dropped off one ounce or more of lead tackle at participating retail locations received a $10 voucher to be used to purchase replacement tackle or other supplies.
- Participants were entered in the "Collect to Protect Contest" with a chance to win $100 and $50 prizes respectively for turning in the largest and second-largest amounts of illegal lead tackle at each participating shop.
- The Lead Tackle Buyback Program partnered with the Lakes Region Planning Commission and lake associations to increase access to responsible lead disposal locations throughout the state.
- LPC ran advertisements on social media, in statewide and local newspapers, and on radio stations to spread the word about the Lead Tackle Buyback Program.
- LPC's Lead Tackle Buyback Program has served as a model for the development of similar programs in other New England states, including Maine, New York, and Vermont.

Participating retailers in FY23:
LL Cote, Errol
Newfound Sales & Trading, Bristol
Ossipee's Bait & Tackle, Effingham
Pawtuckaway Trading Post, Raymond
Pinnacle Sports, West Lebanon
Rocky's Ace Hardware, New London
Squam Boat Livery, Holderness
The Loon Center, Moultonborough
The Tackle Shack, Meredith
The Tackle Shack, Newbury

Lead fishing tackle is the leading cause of adult loon mortality in New Hampshire. Loons can ingest lead fishing tackle from a line or attached to a fish. Use only non-lead fishing tackle to protect loons and other wildlife—it's the law! And please dispose of fishing line and tackle properly to prevent entanglement and potential injury or death to loons. For more information on LPC's lead poisoning reduction initiative visit loonsafe.org.

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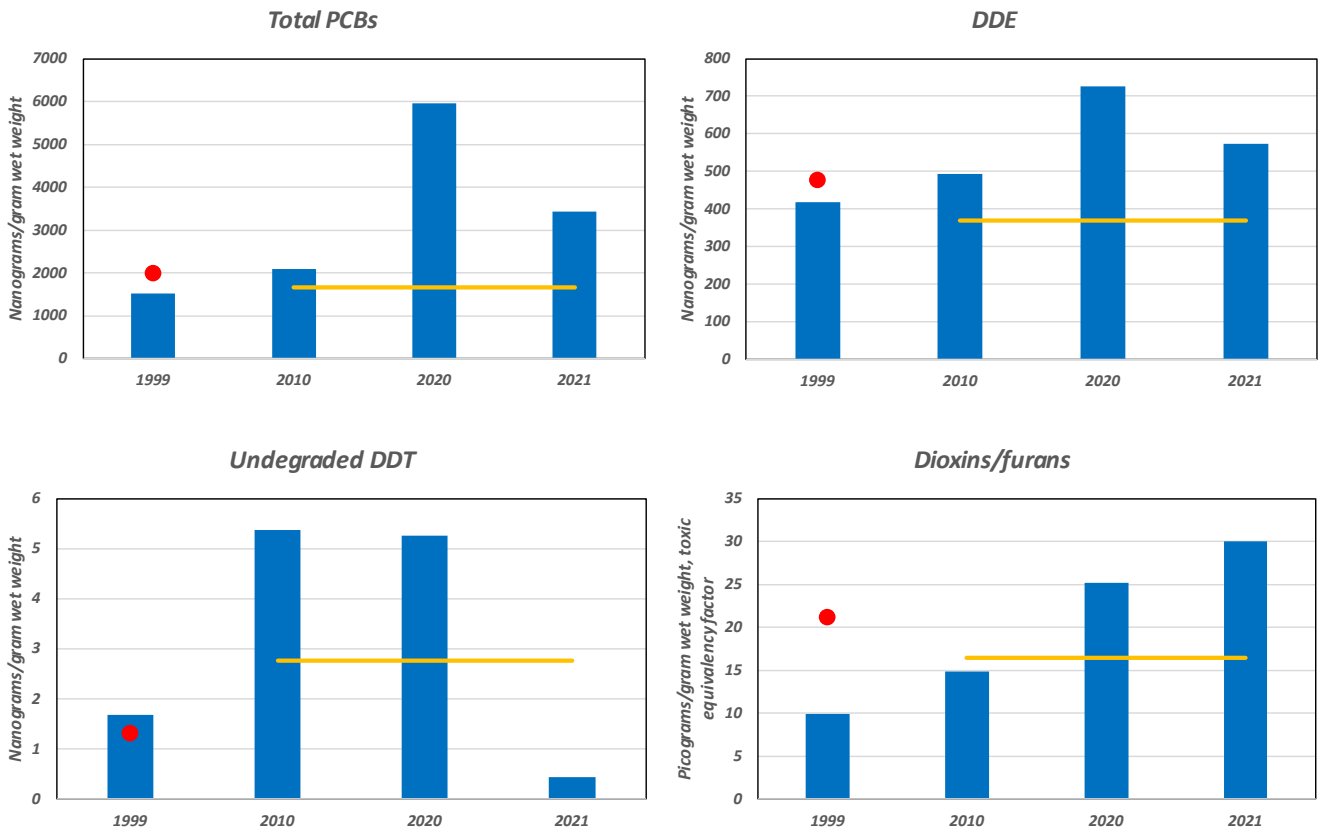


Figure 1. Contaminant levels in the Five Finger Point female loon. The red dot indicates average contaminant levels on Squam Lake from 1993-2004, prior to the apparent spike in contaminants on Squam (2005-2007). The yellow line indicates average contaminant levels on Squam 2008-2021, following the spike.

might expect to find elevated levels of DDT and DDE in the FFP female. After being about on par with the lake average for DDE and DDT in 1999, her DDE levels peaked in 2020 before declining again in 2021 although still above lake averages, similar to the pattern for PCBs and chlordane (Figure 1). Despite the peak in 2020, her DDE levels remain below most levels that have caused health or reproductive effects in other bird species. In contrast to DDE, her DDT levels increased substantially in both 2010 and 2020 before dropping precipitously in 2021 (Figure 1). The reason for this unusual pattern are unclear, but the presence of DDT as opposed to DDE suggests increased inputs of undegraded DDT into the system—something LPC had detected in our sediment testing at this site as well.

In short, after being below lake averages for contaminants in 1999, the FFP female's contaminant levels are now above average across almost all contaminant classes. This, of course, is not good news, but it is heartening to see some declines from her peak levels in 2020. While it is unclear what is driving these patterns, LPC's data suggest that runoff plays a role in contaminant levels in loon eggs, with delays of approximately two years between a runoff event and the presence of contaminants in loon eggs. LPC will be watching for a signal of the rainy summer of 2023 in the eggs of the FFP female and other loons throughout the state in the coming years. Of course, on Squam and throughout New Hampshire, loons are facing many challenges and contaminants are far from the only factor driving survival and breeding success; but, in the case of the FFP female, we have a unique record of the varying contaminant levels in one individual over her long lifetime.

LPC has been learning from the FFP female from the moment we put bands on her in 1998. Her life has taught us about breeding success over a loon's life, survival, changes in contaminant body burdens over twenty years, and the challenges that loon social dynamics on a large, multi-territory lake bring to an individual loon. We have even learned about all these things as well as loon dispersal from her offspring. The

continued on page 18

continued from page 17

FFP female's chick from 1998 has been occupying the opposite side of Squam Lake from her mother for at least the past fifteen years! And now, this past summer, the FFP female had a new chick to care for. May she live many more years to raise more chicks, and we'll be watching to learn more from her that will help us protect New Hampshire's loons in the future!

~Tiffany Grade

ANNUAL LOON CENSUS

On July 15th, LPC held our 44th Annual Loon Census. A total of 440 volunteers took to 121 lakes across New Hampshire to count loons. In total they documented 431 adult loons, 56 loon chicks, and 2 immature loons.

The Loon Census helps LPC to monitor the progress of known loon nests, discover previously unknown nests, check on the survival of chicks that have hatched in the previous weeks, and detect new loon chicks that may have hatched since biologists last surveyed a given water body.

We sincerely thank all of the volunteers who got up early on a Saturday morning to help us count loons!

Lead fishing tackle is the leading cause of adult loon mortality in New Hampshire. Loons can ingest lead fishing tackle from a line or attached to a fish. Use only non-lead fishing tackle to protect loons and other wildlife – it's the law! And please dispose of fishing line and tackle properly to prevent entanglement and potential injury or death to loons. For more information on LPC's lead poisoning reduction initiative visit loonsafe.org.

Late-season rescues included this lead-poisoned loon, beached at the covered bridge on Little Squam Lake in Ashland in early October.

The poisoned loon was lethargic, and easy to handle, permitting a blood sample and lead test at the rescue site, with thanks to Riveredge Marina for an outlet to power the lead analyzer.

Dr. Keenan at Meadow Pond Animal Hospital checks the heart rate of the Little Squam loon. Unfortunately, the lead poisoning was severe and the loon was euthanized.

Eunice Jackson Honored at LPC's 2023 Annual Meeting

The Loon Preservation Committee held its 2023 Annual Meeting at The Loon Center on August 24th. The meeting followed a volunteer appreciation potluck dinner to celebrate and honor our volunteers by coming together in community and sharing a meal and loon stories of the summer. LPC Chair Bob Rotberg opened the meeting with a welcome to members, volunteers, and guests, and some remarks on LPC's accomplishments as a world-leading loon research organization and his own 40-year history with the organization. He thanked LPC staff and volunteers for their work in what was a challenging year for loons and thanked his fellow Trustees, a group of dedicated volunteers working in partnership with the staff to ensure the accomplishment of LPC's mission.

LPC Vice Chair Brenda Stowe presented LPC's slate of officers for the coming year: Bob Rotberg, Chair; Brenda Stowe, Vice Chair; and Bob Varney, Treasurer. She then introduced Michael Fenollosa and Daniel Nye and asked the LPC membership to ratify them as LPC's newest Trustees. LPC's membership welcomed and ratified the two Trustees. Bob Rotberg thanked and celebrated the many achievements of retiring Trustee and former Chair Kristen Begor and retiring Trustee and Treasurer Glyn Green, and noted with sadness, including a moment of silence, the passing of former LPC Trustee Eric Taussig.

Incoming Treasurer Bob Varney reported that LPC finished its Fiscal Year Ended March 31st of 2023 in the black with a net increase in assets of $150,000 and a clean audit, and noted that LPC continues to do an exceptional job of stewarding funds and using its resources to further its mission. He thanked members and donors for their support which had allowed LPC to carry on its good work for loons while remaining financially sound. LPC's audited financial statements and IRS Form 990 can be found on its website at loon.org.

The Loon Preservation Committee was thrilled to present the 2023 Spirit of the Loon Award to Eunice Jackson.

Development Committee Chair Tom Deans thanked LPC's volunteers and members for their ongoing support and remarked on the generosity that had allowed continued growth of LPC's operations as well as a successful capital campaign to expand and renovate The Loon Center and build the Kittie and John Wilson Field Operations Center. He noted that 100% of pledges to the capital campaign had been fulfilled. Tom thanked donors for their support of the Squam Lake Loon Initiative and the Lead Tackle Buyback Program as well as LPC's state-wide monitoring, research, management, and education to protect and recover New Hampshire's loons. He also asked supporters to consider including LPC in their estate planning to ensure LPC's ability to continue and expand its work for loons in the future.

Eunice Jackson Honored with Spirit of The Loon Award

A highlight of the Annual Meeting was the presentation of the 16th Annual "Spirit of the Loon" Award, created to honor LPC's founder Rawson Wood by recognizing individuals who exemplify outstanding volunteer service to loons and the Loon Preservation Committee. LPC was thrilled to present the 2023 Spirit of the Loon Award to Eunice Jackson. Eunice's contributions to loon conservation have been far-reaching and significant. She and her husband Jerry have been members of LPC, and Eunice has volunteered for LPC, since 2018. As a Loon Center greeter Eunice has put her career as a high school science teacher to good use to engage Loon Center visitors and recruit new members and volunteers. She helps with mailings and preparing The Loon Center and

continued on page 20

continued from page 19

the Kittie and John Wilson Field Operations Center for special events as well as regular maintenance and cleaning. She was instrumental in helping to pack up The Loon Center in 2020 before construction to expand the center and to carefully unpack and organize office supplies, field supplies, and biological samples, including the mammoth undertaking of organizing and boxing all of LPC's loon eggshells dating back to the 1970s. Eunice helped with our rescue of 10 iced-in loons from Winnipesaukee in 2022 by staying long into the night to feed tired and hungry LPC staff and hold loons while we took blood samples. Eunice also serves as a key LPC volunteer on Wakondah Pond. She provides her boat to survey the lake for loons, shares LPC's educational posts to the Wakondah Facebook page, and encourages others on the pond to report loon sightings and support LPC. Eunice and Jerry organized a sign building workday at their house to replace their old "Loon Nesting Area" signs and Eunice has helped to set up the Loon Cam, as well as storing LPC's loon nest raft and helping to float and retrieve it every year. She demonstrates in many ways how much she cares for LPC's staff and our work to help loons and she spends so much time volunteering for us that she is for all practical purposes a year-round, unpaid employee of LPC. Eunice has been an important partner in LPC's efforts to protect and recover loons in New Hampshire. LPC and all of us who value loons and wildlife owe her a debt of gratitude for her volunteer work, and LPC was very pleased to make her our Spirit of the Loon Award recipient for this year.

Senior Biologist/Executive Director Harry Vogel followed the Spirit of The Loon presentation with a report on LPC's monitoring, research, management and educational programs in 2023, and the results of those efforts in safeguarding New Hampshire's loons. The evening ended with a presentation of images and videos of loons by noted wildlife photographer and long-time LPC volunteer and member John Rockwood. Thank you to all who attended LPC's 2023 Annual Meeting in person or virtually to help us celebrate another year of good work in recovering New Hampshire's loon population!

~Harry Vogel

Where would we be without our amazing Loon Center volunteers? There are a lot of moving parts at a visitor center and our small staff couldn't possibly navigate them all alone. But thankfully we have a devoted team of volunteers – some seasonal, some year-round – that help us lighten the load! A big shout out to Len Burrell, Eunice Jackson, Lois Kessin, and Sheila Robusto for their dedicated commitment to volunteering at The Loon Center. The building and grounds are all the more welcoming thanks to their loyal contribution of time and talent!

Remembering Autumn

The Loon Center lost its beloved greeter this fall when Harry's chocolate lab Autumn passed away. No one was more excited to come to work than Autumn, where she made her rounds each morning to greet staff and get her treats. (And boy could she drool!) And she relished the attention she received from Loon Center guests. Like most of our pets, she loved to be in the way, hoping to collect on a random belly rub. She was sweetness and gentleness personified and we miss her dearly.

As fate would have it, there is a new chocolate lab on the block! Harry's puppy Lucy has softened the blow of losing our dear Autumn and keeps us entertained with her puppy antics. We are grateful to Harry for sharing his beautiful dogs with the LPC staff, and the greater Loon Center community.

Another Great Year for the Loon Festival

The 44th Annual Loon Festival was another success story, with a great turnout of 338 guests!

The Meredith Rotary Club (Wendy Bagley, Tim Bergquist, Ted Fodero, Dick Gerken, Carl Johnson, Ron Mahr, Jim McFarlin, and Fred Strader) once again provided hotdogs, chips, beverages and ice cream to Festival guests. Meredith Ben & Jerry's donated ice cream, and Meredith Hannaford and Crystal Geyser Roxanne donated water.

The NH Lakes Association (Gloria Norcross and Claudia Dillon) presented their Watershed Warrior Activity Circuit to kids who wanted to learn how to help keep our lakes clean. Olivia Tatro was our creative Balloonist, Emily Landry our amazing face painter, and The Sweetblood Duo entertained us with their wonderful music. The Science Center (Margaret Gillespie, Jan Deleault and Tina Dussault) provided both the Discovery Table and live animals—an American kestrel, painted turtle, and northern saw whet owl—which were enjoyed by all.

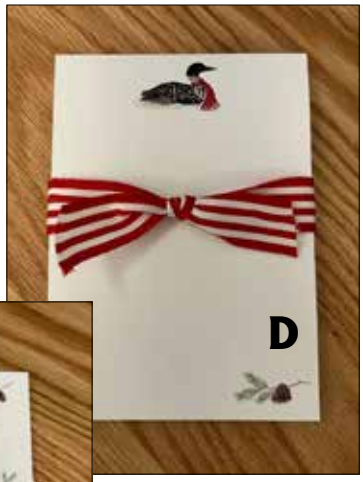
LPC Lead Tackle Buyback Intern Logan Krahn educated Loon Festival guests about the perils of lead fishing tackle to loons – the leading cause of death of loons in New Hampshire. In addition to educational materials, non-lead tackle alternatives were available to Loon Festival patrons.

LPC's seasonal field staff had fun in the dunk tank, as well as helping kids answer questions and directing their throws to dunk another biologist. A couple of large families gathered to help dunk their particular "biologist" son or daughter! There was a loon toss game as well as arts & crafts. Loon presentations were given over the course of the day by LPC's field biologists.

A big thank you to all our LPC volunteers: Eunice Jackson, Steve Fresca, Mike Ruyffelaert, Sue Scudder, Blaine Nelson, Anita DiLullo, Ron and Nan Baker, and LPC Trustee Michael Fenollosa.

~Bette Ruyffelaert

Photo courtesy of Alex Constan



Go LOONY for the holidays and support New Hampshire's loons!

You won't be able to resist these whimsical melamine trays! A perfect dessert or chacuterie platter for your holiday entertaining, these trays evoke the peaceful pleasures of New Hampshire's northwoods.
A. Cozy Winter, or
B. Loon
11.73" x 8.425"; $26.75 plus s&h

The holidays are a time for making lists and sending "thank you" notes! We have you covered with these sweet watercolor images of a loon adorning a red scarf. PERFECT stocking stuffers!
C. Loon Notecard - 6 folded cards and envelopes, blank inside; 4.25" x 5.5"; $17.75 plus s&h
D. Loon Notepad - 50 sheets; 4.25" x 6"; $13.25 plus s&h

Top off your purchase with this festive loon sporting a Santa hat! Perfect for the tree or to top a holiday package!
E. Loon with Santa hat wooden ornament - 6" long; $16.50 plus s&h

Season's Greetings from The Loon's Feather Gift Shop!

Whether you visit us in person or shop online, receive 15% off your purchse of $50 or more*, December 1 - 31!
**Excludes sale and consignment items*

Gift Shop Hours: Thursday - Saturday, 9am - 5pm
(Online shoppers visit www.loon.org and use code HOL2023)

*Share your love of **LOONS** this holiday season!*

HOLIDAY CARDS◆ORNAMENTS◆STOCKING STUFFERS◆APPAREL & MORE!

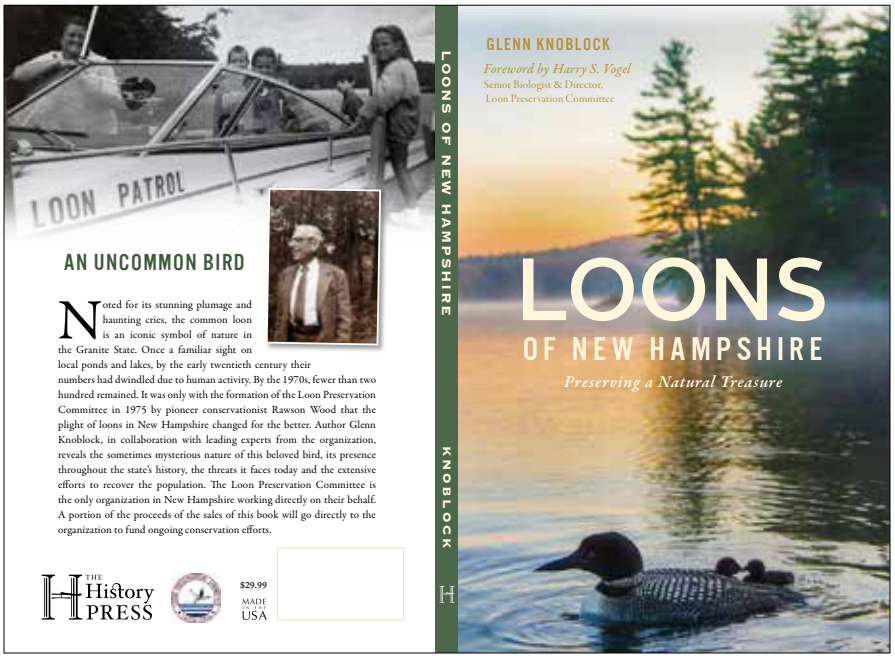
The creation of a thousand forests
is in one acorn.

-Ralph Waldo Emerson

Coming Soon...

Local author and historian, Glenn Knoblock, captures the story of New Hampshire's loons and the Loon Preservation Committee's work to help them. Glenn spent countless hours combing through LPC's archives, interviewing LPC staff – past and present – as well as other key players in the loon recovery effort in the state. The book is an intimate portrait of that journey, and the work started by LPC's founder, Rawson Wood, to preserve this iconic bird.

Once released, *Loons of New Hampshire* will be available in The Loon's Feather Gift Shop as well as on our website at loon.org.



LOON LEADERSHIP CIRCLE

The Loon Leadership Circle was formed in 2021 to honor and thank the many supporters who have donated $1,000+ during a single fiscal year. Gifts may be single donations or multiple donations. Monthly donations may be set up through our website at loon.org/donate.

Loon Leadership Circle members receive a complimentary annual membership, a beautiful lapel pin (shown), invitations to special events, and the satisfaction of knowing that their generous gift has allowed LPC to continue the important work of loon research, management, and outreach in New Hampshire.

Our deepest thank you to our Loon Leadership Circle members, and all of our donors, for your generous support.

Forty-eight years of working to preserve loons and their habitats in New Hampshire

LOON PRESERVATION COMMITTEE
Est. 1975

Loon Preservation Committee
PO Box 604
Moultonborough, NH 03254

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Ray Hennessy Photo