



Vermont Loon Recovery Project - Uniting People and Science for Conservation

New Loon Pairs Less Productive Than Established Pairs

Why is it that most new nesting loon pairs either nest less frequently or produce chicks less often? From 2005 to 2008, we documented 25 new nesting pairs in Vermont. The nest success and chick productivity data from these new pairs are quite different compared to those of established nesting pairs which started nesting prior to 2005. We included 51 established pairs in this comparison.

All data from 2005-2008	New Pairs	Established Pairs
% years with nest attempt	72%	87%
% successful nests	66%	85%
Mean # chicks surviving per territorial pair	0.51 (i.e., equivalent of 5 chicks in 10 yr. period)	0.87 (i.e., equivalent of 9 chicks in 10 yr. period)
Nest Location	Shoreline 56% Island / Raft 44%	Shoreline 17% Island / Raft 83%

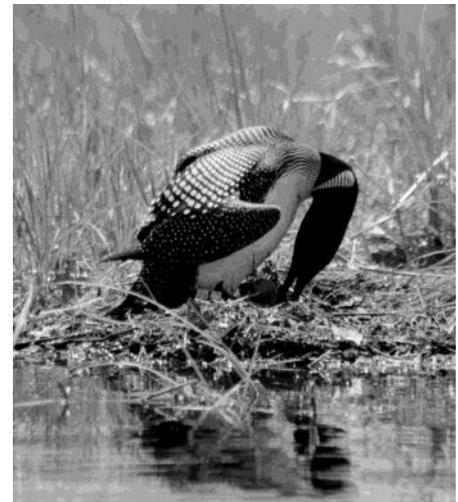
No one answer will suffice in explaining the differences, but here are some ideas.

- Many new pairs are inexperienced both at nesting and chick rearing.** The Chittenden, Woodward, and Shadow Lake pairs did not have a successful nest until their third year of nesting. A corollary is that it will take a pair time and experience to find an optimal nest location. The Shadow Lake pair has now nested in 4 locations in 3 years. However, some new pairs (at new sites) are started by experienced loons who were evicted from another nearby territory. For example, the new Maidstone – North and Somerset – Island pairs were started in part by an experienced breeder evicted from the established territory further south on these lakes.
- The high quality loon territories are already taken.** I think this a major factor. Many of these new pairs are nesting on lakes smaller than 50-60 acres (Baker, Bean, Bruce, Chandler, Ewell, Keiser, Osmore) and/or lakes without good nesting sites, especially islands. Ideal loon nesting lakes are greater than 60-80 acres in size. Also, some of the new pairs inhabit highly developed lakes with little or no nesting habitat left (Dunmore, Echo-Charleston, Harveys, Maidstone – N, Peacham – SE, Seymour-W, Shadow-Concord, Woodbury) or water levels fluctuate (Chittenden, Holland-North, Norton – N). On many of these ponds with “lower quality” nesting habitat, loon pairs are present, but do not nest during many years.

In the near future, we will likely begin to see a leveling off in new pair formation, overall nesting success, and chick survival in Vermont as we see more loon pairs on marginal nesting lakes. Some pairs at high quality sites have recently produced fewer chicks, in part because of intruder loons. For pairs that continually fail, the VLRP will consider placing nesting rafts, but we would much rather see loons nest on natural sites even with a moderate rate of nest failure.

VLRP View

It’s been another exciting loon season in Vermont with several new loon pairs, including 3 in the southern half of the state. Adopt-a-lake and loonwatch volunteers have done a tremendous job in managing and monitoring loons, identifying new loon pairs, following birds in distress, and educating fellow lake users. We’re always saddened by a failed nest or loss of a chick, especially on those lakes where it seems to happen frequently. Hopefully success will come someday, even on these hard-hit lakes. Remember, the loon communities are strong on our lakes – thanks for cultivating that. **Eric Hanson, VLRP Coordinator



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An adult loon rolling the eggs after a nest exchange.

Record Setting Year for Loon Nests in Vermont

Nesting pairs: 66 (previous record 62 in 2007)
Chicks hatched: 81 chicks from 53 nests
new nesting pairs: 6 (Daniels/Rodgers, Great Hosmer, Kent, Little Averill—North, Sunset [Marlboro], Wantistiquet)
Preliminary loonwatch day adult loons counted: 219 (47 in 1989, 127 in 1999, 225 in 2008)
Mortality (as of Aug. 1): 4 adults (1 from fishing line, 1 from fights, 2 unknown)
Rescues: 1 from farm pond (Cabot), 1 from fishing gear (Neal), 6 monitored closely
Bad luck: Peacham Pond—North pair 3 nest and re-nest attempts all failed. Woodbury Lake another lost chick.

Vermont Loon Recovery Project



A program of the Vermont Center for Ecostudies and Vermont Fish and Wildlife Department



Loon Caller

Summer 2009

The Vermont Loon Recovery Project is a program of the Vermont Center for Ecostudies (VCE) and Vermont Fish and Wildlife Department (VFWD). The VLRP's mission is to restore and maintain Vermont's Common Loon population through monitoring, management, education, and research.



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The Vermont Center for Ecostudies (VCE) is a non-profit organization dedicated to the understanding and conservation of birds and other wildlife. With a reach extending from northern New England through the Caribbean to South America, our work unites people and science for conservation.

To make a tax-exempt donation in support of our work, please visit our website, www.vtecostudies.org, or call (802) 649-1431 x7.

Donations of any amount help us achieve our conservation mission.

The *Loon Caller* and VCE's *Field Notes* are free to citizen scientists, donors, and partners.

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Volunteer information and VLRP publications are available at the VCE website. Communications about the VLRP and the *Loon Caller* may be addressed to:

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What Good is a Loon?

Writings by Loon Watchers

Loon Morning

In the cool early dawn you are out in your boat on a pristine pond. The mist is rolling on a still and silent surface, the sun just beginning to dance in the rainbow colors of fall. You stop paddling, drifting, dreaming. A yodeling voice breaks the silence— a primeval sound. An elegant form appears, black and white with a piercing red eye. You are being observed, evaluated: your eyes meet. Yes, a loon will look directly at you. Perhaps if you sit quietly, you will float together for a while. Time stands still, nothing else exists. As you slowly drift apart, there is a dive and a ripple. This moment lives in you now, a priceless gift; a deep sense of honor and gratitude, forever magical, mysterious.

** *Cindy Crawford*

A loon is an indicator of the health of a body of water - like a canary in a coal mine.

A loon is our connection to the prehistoric past of our earth.

A loon provides graphic black and white contrast to nature's colors.

** *Anne Cummings*

A Window to the Past and a Window to the Future.

Lonesome loon calls have pierced the misty air on the darkest of nights, echoed off mountainsides, and spilled down lake valleys since the dawn of man. If you ever find an arrowhead and pluck it from the soil, you'll shiver slightly as you realize that at that instant you're connected directly to the past; to the primitive, bone and wood and fur and stone of our visceral life-and-death-in-a-heartbeat past. Loon calls are the acoustic arrowheads of the lakes. A human heart skips a beat when a loon call cuts the night.

The future without loons is ruled by greed and waste, malice and hypocrisy. Pollution and poisons taint the silent air, the empty waters and the soil. A future without loons means too little remains for too many, that humans have fouled their own earthly nest in blissful ignorance. Wild things, and wild sounds, are pathways to the human soul. A legacy of silent lakes is the path to a broken heart, indeed.

** *Paul L. Hamelin*

A loon is...

* A creature that the common man can still experience, and be privy to in this modern world...one of the few wild creatures that man cannot fully control, domesticate or raise successfully in the wild.

* A creature that teaches man how to keep nature in balance by acting as a barometer for the environment.

* A fearless warrior and excellent parent.

* A loon improves my health, it slows down my blood pressure and brings peace and passion to my life for the beauty it cast upon me and the delightful primeval sounds which stir something deep within my soul.

* A loon is a fellow creature without which many still do not realize how devastating and lonely the world would be.

* A priceless, irreplaceable asset.

** *Darlene Sprague*

A Vermont Farmer's View (written in December 2008)

When I retired from farming, I had been on the water no more than half a dozen times in my life. Now that I have met the beautiful loons and become involved with the VLRP, the loon has become a wonderful, wild friend. I'm always amazed how very trusting of us they are. Now that winter is fast approaching, I'm already looking for the day the ice melts and the loons return and welcome us back to their summer home.

** *Gert Lepine*

Tales of Five Nesting Rafts

From 2004 to 2008, 88% of all raft nesting sites in Vermont were successful (chicks hatched out), compared to about 60% of shoreline nests and 80% of island nests. Rafts work, plain and simple. Why don't we place them on any lake experiencing nesting failure or on lakes to "attract" nesting loon pairs? The philosophical discussion begins. The VLRP's official viewpoint, with loons now off the state endangered species list, is that a raft should be considered if a loon nest fails repeatedly over many years or if a first-time natural nest is located in a site of conflicting uses (e.g., on an active beach front). There are exceptions to these guidelines, of course. Benefits exist to having lakes without nesting pairs, especially large lakes, because both non-breeding and breeding loons can congregate on these lakes for feeding and socializing without as much risk of territorial battles.

The VLRP has recently placed some new nesting rafts for different reasons.

Harvey's Lake: Several previous nests attempts failed along the outlet channel (predation and/or flooding). A raft was placed in the only wind-protected section of undeveloped shoreline left on the lake. The loon pair has not utilized it yet, likely because the raft is located nearly a mile away from the previous nest site.

Norton Pond – North: A first-time nest failed in 2008 (depredated by raccoons). A raft was placed in a nearby cove because of shoreline predators, a nearby island with an active camp, and most importantly, because moderate rain events often cause flooding because of the small outlet in the dam. Loons started nesting on the raft in early June, but the nest failed.

Caspian Lake and Lake Rescue: Potential loon pair activity has been observed on both lakes for many years with no documented nest attempts, and most likely nesting spots are near cottages and active beaches. No loon activity has been observed near the rafts. More monitoring is required to determine whether each lake really has a territorial pair, thus more volunteers are needed to document loon activity on these lakes.

Shadow Lake (Concord): The loon pair had 3 failed nests near private camps in 2007 and 2008. The nest failures were most likely caused by flooding rather than disturbance, however. There are no suitable wind-protected and undeveloped coves, thus a raft was placed in a moderately exposed location away from people in 2008. The loons did not show any interest in the raft in 2008 or 2009. Fortunately, the 2009 nesting site was in a more remote location than the previous 3 sites, and it succeeded in hatching chicks in early July. This raft might be removed.

Rafts are not a sure thing to mitigate for shoreline development or flooding, but they are a useful management tool. Only 1 of the 5 new 2009 rafts was utilized. In the early 2000s, more than 10 nesting rafts were removed after years of being repeatedly placed without loons ever using them. In most cases, no territorial loon pair was present and in some cases, good natural nest sites were available. It takes much time, effort, and funding to place, maintain, and monitor loon nesting rafts, thus we must be careful about when and where to use them.



Volunteers placing the raft on Ricker Pond.

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Building nesting rafts provides hands-on conservation activities for volunteers and youth groups, such as the Vermont Youth Conservation Corps members shown here.

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Extreme Preening (Loons at the X-Games)

Most everyone who has spent time watching loons has observed birds preening their feathers, spreading oils about, keeping them waterproof. Occasionally, loons put some serious vigor into their feather maintenance, going the extra mile to flush them of dirt and feather mites. They may extend a wing and bang it on the water. Or, they may dunk themselves repeatedly, doing somersaults and wing-rowing, frothing the water as they go. It looks like the bird is having a seizure or trying to free itself from fishing line. Maybe, however, they're simply enjoying life and relieving that horrendous itch. Ahhh! It's a treat to see as long as you know that the bird is not in trouble. I receive many phone calls every summer from concerned people who have never observed the phenomena. Loons preen more gently every few hours: reaching the uropygial gland at the base of the upper tail for its oily power, spreading the oils on their wings, chest, and belly, and zipping those feathers tight with their bill.



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