



THE 2011 BREEDING STATUS OF COMMON LOONS IN VERMONT

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ABSTRACT: The Vermont Loon Recovery Project, a program of the Vermont Center for Ecostudies and the Vermont Fish and Wildlife Department, documented 72 nesting loon pairs and 98 territorial pairs statewide. Of the 72 pairs that attempted nesting, 52 successfully hatched 76 eggs, with 60 chicks surviving through August (chick survival rate 79%, 0.61 chicks surviving per territorial pair). Two new nesting pairs and 6 new potential territorial pair were identified. Seventeen pairs that have nested in recent years did not nest in 2011 because of intruder loon activity, high water, or lack of suitable nest sites. Of 24 pairs whose first nest attempts failed and 1 pair that lost their chicks in mid-June, 7 re-nested, and 5 were successful. Causes of nest failure included flooding (4 nests) and depredation (at least 2 nests). The remaining failed nests were abandoned for unknown reasons, although intruder loons, water level draw down, flooding, predators, and human disturbance may have been contributing factors. The causes of mortality of most chicks were unknown. At least 2 chicks disappeared after interactions with intruder loons (and possibly 7 or more), and 1 was likely taken by a snapping turtle. Three adult loons were entangled in and/or ingested fishing line; 2 of these were rescued. Seven adult loons were rescued and released after crashing on roads (2), landing on ponds too small to fly from (2), going over dam spillways (2), or becoming stuck on ice-over lakes (1). Three adults were found dead of which 2 were highly decomposed and 1 was sent to Tufts University for a necropsy. About 200 volunteers surveyed lakes throughout Vermont on 16 July as part of the Loonwatch program, an annual statewide loon count. Loons were observed on 102 of 162 surveyed lakes, where observers counted 271 adults, 52 chicks, and 7 subadult loons. The total number of adult loons increased substantially from previous years because of greater survey effort, more loons utilizing small ponds, and more loons congregating on larger lakes. To provide a historical perspective, volunteers counted 135 and 191 adult loons in 2000 and 2005, respectively. Twenty-three of the 71 breeding pairs nested on nesting rafts, 23 on islands, and 26 on shorelines. Thirty-eight nesting rafts were placed on known or potential nesting waterbodies. Warning sign buoys were placed around 35 of the 71 nests. Volunteers provided technical assistance through the placement and maintenance of nest warning signs and/or nesting rafts on 35 lakes as part of the adopt-a-lake program. Fourteen loon conservation programs were presented to over 600 people statewide.

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INTRODUCTION

In 1977, the Vermont Loon Recovery Project (VLRP) was initiated to assess the status of Common Loons (*Gavia immer*) in Vermont and found that the breeding population had significantly declined (Laughlin 1977). As a result, the VLRP began a loon monitoring and management program in 1978. Numbers of breeding pairs peaked at 19 in 1982, and then dropped sharply to 7 pairs in 1983 for unknown reasons. From 1983 to 1989, Vermont's breeding loon population gradually increased at an average rate of 1 pair per year, stabilized between 1989 and 1994 at 14-16 breeding pairs, and then experienced a marked increase over the subsequent 16 years to 72 in 2011. The VLRP is a program of the Vermont Center for Ecostudies (VCE) and the Vermont Fish and Wildlife Department (VFWD).

A major accomplishment was reached in 2005 with the removal of the Common Loon from the Vermont Endangered and Threatened Species list. Thirty-four years of Common Loon conservation and education by many groups and individuals enabled the achievement of this milestone. Through the guidance of VCE and VFWD, monitoring and management programs were implemented throughout the 1980s and 1990s. In 1998, the Vermont Loon Recovery Plan (Borden and Rimmer 1998) was recommended for approval by the Vermont Scientific Advisory Group (SAG) on Birds and the Vermont Endangered Species Committee (ESC), and approved by the Vermont Agency of Natural Resources (ANR). The recovery plan recommended actions on management, monitoring, research, and education programs to promote the recovery of the species. The Common Loon was designated a state endangered species in 1987 following documentation of its population decline in the early 1980's. The target level to de-list as written in the Vermont Loon Recovery Plan was "40 nesting pairs averaged over 5 consecutive years", with a minimum of 5 nesting pairs in "2 geographically discrete areas." From 2000-2004, the average number of nesting loon pairs was 41, and 6 pairs nested in the southern half of Vermont.

Since the mid-1980's, the VLRP has been a joint program between VCE and VFWD. The Nongame Wildlife Fund has been the primary funding source for the VLRP (35-40% of budget) for many years, and VFWD has provided technical, law enforcement, and logistical support. Starting in 2006, the VFWD began utilizing federal State Wildlife Grant funding for the VLRP through a nongame bird project grant. VCE annually hires the VLRP biologist, provides staff support, and raises the remaining VLRP budget through donations and grants.

METHODS

Monitoring of lakes with breeding and territorial loons

The VLRP biologist, a VLRP intern, VFWD biologists and game wardens, and volunteers surveyed approximately 135 lakes with known histories of loon nesting, occupancy by territorial pairs, or high levels of loon activity on a regular basis (weekly to monthly). Over 190 adopt-a-lake volunteers provided technical assistance in this intensive monitoring effort.

Vermont Loonwatch day was initiated in 1983 to provide a mid-summer estimate of the statewide loon population. On the third Saturday in July each year, volunteers survey assigned lakes, ponds, and reservoirs from 8:00 to 9:00 a.m., recording the number of adult loons, subadult loons (1-2 year olds), and loon chicks on the water body, as well as relevant human and wildlife activity. The information has provided an annual statewide population estimate, an estimate of the number of non-breeding loons, and a check on lakes with previously undetected breeding pairs.

Management

Loon management practices included: 1) stabilization of water levels during the nesting period through cooperation with hydroelectric companies and others who control water levels; 2) placement of artificial nesting rafts in appropriate sites; 3) placement of warning sign buoys to discourage human intrusion at

nest sites; 4) responding to all reports of distressed or dead loons, and 5) providing technical assistance to regulatory agencies. Volunteers provided important technical support for the first 4 of these practices.

The 8 hydroelectric companies and 3 agencies that regulate water levels on lakes where loons have historically nested were contacted in April by VFWD staff. Each company was requested to stabilize water levels during the nesting period so that nests would not be flooded by rising water levels or left stranded by water drawdowns.

Thirty-eight artificial nesting rafts were placed on 34 lakes. These rafts provided an alternative nest site to natural sites where predation from terrestrial mammals and/or fluctuating water levels had caused nests to fail in previous years. Rafts were placed on some lakes with presumed territorial loon pairs, but where natural habitat is lacking (e.g., no suitable islands and/or marshes, highly developed shorelines). In cases where a potential pair is present and natural nest sites exist, rafts will not be considered unless the pair fails to nest after 4 or 5 consecutive years of occupancy. Rafts are considered on lakes where natural nests have failed 3 consecutive times, and the VLRP deems that rafts might prove beneficial. Adopt-a-lake volunteers maintained or helped with 21 rafts.

Warning sign buoys were placed around 35 of the 71 active nest sites to discourage human intrusion close to nests. These signs were also placed around 4 other nest sites where loons ultimately did not nest in 2011. Sign buoys were used in areas where repeated human disturbance was likely to occur. In 2011, in an effort to reduce management needs, signs were not placed around several nest sites where they had been used in previous years.

The VLRP biologist coordinated responses to loons in distress with volunteers, VFWD game wardens, wildlife rehab personnel, and veterinarians (e.g., caught in monofilament, injured, road crashes, landed on ponds too small to fly from, caught in ice, other).

Education

Public education continued to be a vital part of loon management efforts. The VLRP biologist contacted landowners of new nesting sites as soon as nesting was suspected or observed. Fourteen slide lectures, discussions, and outings on loon biology, conservation, and research were presented to audiences at lake associations, school groups, state parks, and other organizations (libraries, conservation groups, Road Scholar). Approximately 605 adults and 28 children attended these programs. Several radio and television interviews were conducted. A sign informing boaters and anglers how to help nesting loons was placed at lake access areas. Another sign cautioning boaters to be alert for loon chicks and to watch loons from a distance was also placed at some access areas. Biologists, staff educators, and the project's volunteer network regularly informed camp owners and other lake users about loon conservation measures. The *Loon Caller* newsletter and a loon fact sheet were distributed at all programs. We are in the process of updating the fact sheet directed at 1) boaters and 2) lakeshore owners. There was a feature article on loon conservation in the northeast United States in *Yankee* magazine July/August edition.

Contaminant sampling

Abandoned eggs were collected and delivered to BioDiversity Research Institute (BRI, 19 Flagg Meadow Road, Gorham, ME 04038-1203) for methylmercury (MeHg) analysis (Evers et al. 1999). Twelve eggs were collected in 2011. We are waiting for results of mercury sampling on eggs collected over the past several years. Cooperators on this research include the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, BRI, the Vermont Department of Environmental Conservation, and several other state agencies, private organizations, and universities.

RESULTS AND DISCUSSION

Description of loon activity on individual lakes in 2011

Lake and loon activity descriptions are provided for nesting pairs, known and potential territorial pairs, and lakes with high levels of loon activity in Table 1. Territorial pairs have nested in recent years and were present during most surveys. Lakes where 2 adult loons were observed through much of the summer but had no recent history of nesting were considered potential territories.

Distribution of territorial and nesting pairs

There were 98 known and potential territorial loon pairs, 72 of which were confirmed to nest on 63 lakes (Fig. 1, Table 1). Nesting was recorded for the first time on Nelson Pond in Woodbury. A nest on Flagg Pond in Wheelock was confirmed for the first time, but it is likely the pair nested in recent years. Six new potential territories were identified in 2011, including Lowell L., Metcalf P., Mollys P., L. Morey, L. Parker, and L. Salem. The new potential pair from 2010 on Miller Pond in Strafford was no longer consistently present.

Population levels and breeding success

The number of nesting pairs remained the same and the number of territorial pairs increased from 2010. Of the 72 pairs that attempted nesting, 52 successfully hatched 75 eggs, with 60 chicks surviving through August (Fig. 2, Table 2). There were 88 known territorial pairs on water bodies where nesting had occurred within the last 3 years, and 10 potential territorial pairs, each of which was observed consistently for 6 weeks or more. Seventeen pairs that have nested in at least 1 year from 2006-2010 did not nest, possibly because of intraspecific competition, water fluctuation, or lack of suitable nesting sites.

Of 24 pairs whose first nest attempts failed and 1 pair that lost their chicks in mid-June, 7 re-nested, and 5 were successful. Most failed nests were abandoned for unknown reasons although possible causes include flooding, depredation, intruder loons, disturbance, and water drawdowns.

The chick survival rate through August was 79% with 0.61 chicks surviving per territorial pair in 2011. Since 1979, the average chick survival rate is 83% with 0.71 chicks per territorial pair. The causes of mortality of most of the 16 lost chicks were unknown. Two chicks disappeared after interactions with intruder loons (Ninevah, Sunset), and 5 others disappeared on ponds where intruder loons were frequently observed. Three adults were found dead of which 2 were highly decomposed and 1 was sent to Tufts University for a necropsy.

Management Results: artificial nesting rafts and nest warning sign buoys

Of the 72 known nests, 23 were on artificial nesting rafts (83% successful), 23 on islands (70% successful), and 26 were on shorelines (65% successful). The new pair on Nelson Pond had a failed shoreline nest. The new pair on Flagg Pond had a successful marsh nest but the chicks disappeared.

Nests with warning sign buoys had a 79% success rate compared to 64% for nests without signs. However, warning sign buoys are more frequently used for islands and rafts which tend to have higher success rates than shoreline nests where fewer signs are used.

Vermont Loonwatch Day

Vermont Loonwatch day was conducted on 16 July when over 200 volunteers counted 271 adult loons, 52 chicks, and 7 subadults (Table 2, Fig. 3). Loons were observed on 102 of the 162 lakes surveyed. The total number of adult loons increased substantially from previous years because of greater survey effort, more loons utilizing small ponds, and more loons congregating on larger lakes. The largest increases in

loon numbers were observed in north central Vermont with an increase of 25-30 adults in the region from 2009 and 2010 counts. High counts of adult loons in 2011 were obtained on Peacham Pond and Lake

Table 1. Summary of Common Loon breeding activity in Vermont, 2011

Nesting pairs: 72 Known territorial pairs: 88 Potential territorial pairs: 10 **Total territorial pairs: 98**

Chicks hatched: 75 Chicks surviving through August: 60

Lake list divided into sections: 1) nesting pairs, 2) known and potential territorial pairs, and 3) loon active lakes.

Loonwatch Count 16 July 2011: Adult loons - 271 New nesting pairs: 2 New territorial pairs: 6

Lake Name	Town	Status	Nest Type	Nest Outcome	Nest Warning Sign Buoys	Chicks hatched out	Chicks through August	Chick Mortality Cause	Adult Mortality	Comments	years nested (since 1978)	# years nest success	total # surviving chicks
Baker P.	Barton	nesting	marsh	successful		1 ch	1 ch				7	7	11
Bald Hill P.	Westmore	nesting	shore	abandoned - unknown				unknown - not analyzed		Adult loon found 7/22/2011 highly decomposed; egg found in water.	11	8	8
Bean P.	Sutton	nesting	marsh	successful		2 ch	2 ch				7	7	9
Beaver P.	Holland	nesting	island	successful		1 ch	0 ch			Volunteer found egg shell in nest indicating a successful hatch. Eagles frequent the pond.	30	26	33
Bourn P.	Sunderland	nesting	island	successful		1 ch	1 ch				10	9	8
Brownington P.	Brownington	nesting	marsh	flooded	signs						10	4	6
Bruce P.	Sheffield	nesting	marsh	abandoned - unknown						Pair observed off the nest for long periods.	4	0	
Buck L.	Woodbury	nesting	marsh	abandoned - unknown							6	3	4
Chandler P.	Wheelock	nesting	island	successful		1 ch	1 ch				4	3	3
Chittendon Res.	Chittenden	nesting	raft	successful	signs	1 ch	1 ch			Raft dislodged from island shoreline with incubating loons likely because of high winds. Raft still successful.	7	5	5
Daniels /Rodgers P.	Glover	nesting	marsh	successful		1 ch	1 ch			For the second time in 3 years, the pair nested on Rodgers P. and then moved the chick to Daniels Pond after 1 week. Late summer, the culvert emptying Rodgers was unplugged and water levels dropped substantially making the pond much smaller.	3	2	2
Derby P.	Derby	nesting	marsh	successful		1 ch	1 ch				4	2	2
Dunmore L. / Mud P.	Leicester/ Salisbury	nesting	island	abandoned - unknown (possible disturbance)	signs					Rescue: Road crash 6/9/2011 - found on Rte. 7 Salisbury; released on Dunmore. 6/12/2011 Beached itself, captured, and released on Mud P. Disappeared after a few days. Outcome unknown.	5	4	5
East Long P.	Woodbury	nesting	island	abandoned - unknown; re-nest successful		1 ch	1 ch				31	23	27
Eden L.	Eden	nesting	raft	successful	signs	2 ch	0 ch	unknown - intruders present			8	7	8
Eligo L.	Greensboro	nesting	island	successful	signs	2 ch	2 ch				10	8	10
Flagg P.	Wheelock	nesting	marsh	successful		2 ch	0 ch	unknown - disappeared early			1	0	0
Forest L.	Averill	nesting	raft	successful		2 ch	2 ch			Bald eagles present	18	15	22
Fosters P.	Peacham	nesting	raft	successful		1 ch	1 ch				9	9	12
Great Averill L. - North	Averill	nesting	raft	abandoned - unknown						Both nest and re-nest failed. Egg found in water 6/30/2011; re-nest by 7/15 and no egg shells 8/22.	18	10	12
Great Averill L. - South	Averill	nesting	raft	successful		1 ch	1 ch			First time pair has nested on raft. Raft placed because of flooding events.	2	1	1
Great Hosmer P.	Albany/ Craftsbury	nesting	island	successful	signs	1 ch	1 ch			1-3 extra adults frequently reported and at one time 8 extras.	3	3	4
Green River Res. - NW	Hyde Park	nesting	raft	successful	signs	2 ch	2 ch			First time pair has nested on raft. Raft placed because of flooding events.	33	25	38
Green River Res. - South	Hyde Park	nesting	island	successful	signs	1 ch	1 ch			Monitored loon with possible leg injury in August 2011.	4	3	4
Groton L. - North	Groton	nesting	shore	successful	signs	2 ch	2 ch			Many disturbances to loon family on water.	2	2	3
Groton L. - South	Groton	nesting	raft	successful	signs	1 ch	1 ch				12	11	14
Hardwick L.	Hardwick	nesting	raft	successful		2 ch	2 ch				9	9	13
Harveys L.	Barnet	nesting	shore	successful		1 ch	1 ch				3	1	1
Jobs P.	Westmore	nesting	shore	successful		1 ch	0 ch	unknown - disappeared early		Pair nested on lawn of unoccupied cottage; likely conflict in future years.	6	4	3
Joe's P. - inlet	Cabot/ Danville	nesting	raft	successful	signs	2 ch	2 ch				12	12	15
Joe's P. - 1st Pond	Cabot/ Danville	nesting	shore	flooded							2	1	1
Keiser P.	Danville/ Peacham	nesting	marsh	successful		2 ch	1 ch	unknown - disappeared early			7	7	8
Kent P.	Killington	nesting	island	successful	signs	1 ch	1 ch			First successful nest and surviving chick.	3	1	1
Kettle P.	Groton/ Marshfield	nesting	raft	abandoned - unknown (eggs gone)							22	14	19
Little Averill L. - North	Averill	nesting	shore	successful		2 ch	0 ch	unknown - disappeared early		First successful nest.	2	0	
Little Averill L. - West	Averill	nesting	raft	successful	signs	2 ch	2 ch				25	16	24

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Lake Name	Town	Status	Nest Type	Nest Outcome	Nest Warning Sign Buoy	Chicks hatched out	Chicks through August	Chick Mortality Cause	Adult Mortality	Comments	#years nested	#years nest success	total # surviving chicks
Little Hosmer P.	Craftsbury	nesting	island	abandoned - unknown	signs					Eggs left in nest.	13	7	6
Long P.	Westmore	nesting	island	abandoned - unknown (eggs gone)	signs						13	11	16
Lower Symes P.	Ryegate	nesting	marsh	abandoned - unknown (eggs gone)							9	8	12
Lyford P.	Walden	nesting	raft	successful		1 ch	0 ch	depredated		Boaters report chick likely taken by snapping turtle - observed commotion when disappeared.	2	2	2
Maidstone L. - SE	Maidstone	nesting	island	abandoned - unknown							3	2	3
Maidstone L. - South	Maidstone	nesting	island	successful	signs	1 ch	0 ch	unknown - disappeared early		Intruder loons often in the area.	30	28	33
Martins P.	Peacham	nesting	raft	successful	signs	2 ch	2 ch				15	15	21
Molly's Falls Res.	Cabot	nesting	raft	re-nest successful	signs	2 ch	2 ch			First nest abandoned for unknown reasons.	17	16	23
Nelson P.	Woodbury	nesting	shore	abandoned - unknown (eggs gone)							1	0	
Newark P.	Newark	nesting	island	successful		2 ch	2 ch			New nest location on east side of island.	22	15	21
Ninevah L.	Mount Holly	nesting	island	successful	signs	1 ch	0 ch	intruder loons		Rescue: Small pond 8/23/2011 - loon found in pool over dam. Brought to VINS with possible spinal cord injury; recovered and released on Connecticut River.	17	15	19
No. 10 P. (Mirror L.)	Calais	nesting	raft	successful	signs	2 ch	2 ch			A bald eagle frequented the pond.	5	5	7
Norton P. - North	Norton	nesting	raft	abandoned - unknown	signs					Both nest and re-nest failed. Egg collected from re-nest.	4	0	0
Norton P. - South	Norton	nesting	raft	abandoned - unknown							12	11	14
Osmore P.	Peacham	nesting	shore	successful		2 ch	2 ch				3	2	2
Peacham P. - North	Peacham	nesting	island	re-nest successful	signs	2 ch	2 ch			First nest flooded.	34	28	35
Peacham P. - SE	Peacham	nesting	marsh	successful		2 ch	2 ch				4	2	3
Peacham P. - SW	Peacham	nesting	marsh	abandoned - unknown						New nest location. Nest 6 feet from water in late July; possible stranding of nest.	25	18	23
Pensioner P.	Charleston	nesting	raft	successful	signs	2 ch	2 ch				5	4	6
Ricker P.	Groton	nesting	raft	successful	signs	2 ch	2 ch			Rescue: Small pond 9/7/2011 - loon chick found in pool over dam. Captured and released. Loon felt thin.	9	8	11
Seymour L. - Winape	Morgan	nesting	raft	re-nest successful	signs	2 ch	2 ch			Chicks from first nest attempted disappeared right away. Pair re-nested by early July.	14	12	17
Shadow L.	Concord	nesting	shore	abandoned - unknown (eggs gone)	signs					Depredation possible.	5	2	2
Somerset Res. - Dandeneau Cove	Somerset	nesting	island	flooded							30	23	28
Somerset Res. - Narrows	Somerset	nesting	island	depredated	signs					New nest location but likely same pair that attempted to nest in the narrows in 2010.	2	0	
Spectacle P.	Brighton	nesting	raft	successful	signs	1 ch	1 ch				17	15	20
Spring L.	Shrewsbury	nesting	raft	successful	signs	2 ch	1 ch	unknown - disappeared early			10	7	9
Stiles Res.	Waterford	nesting	marsh	successful		1 ch	1 ch				10	8	11
Sunset L.	Marlboro	nesting	island	successful	signs	2 ch	0 ch	stuck in egg; intruder loon		1 adult disappeared within a week after the hatch date; intruder loons killed the chick. Disappearance of adult corresponds with loon caught in fishing line on Harriman Res which we have not been able to catch.	3	3	4
Thurman Dix Res.	Orange	nesting	island	abandoned - unknown						Egg found cracked in water.	31	26	30
Wallingford P.	Wallingford	nesting	shore	successful		1 ch	1 ch			Unknown nest location. No late August survey conducted.	12	9	14
Wantastiquet P.	Weston	nesting	island	re-nest successful		1 ch	1 ch			First nest depredated. No late August survey conducted.	3	3	3
West Mountain P.	Maidstone	nesting	shore	successful		1 ch	0 ch	unknown			13	8	6
Wolcott P.	Wolcott	nesting	marsh	successful		1 ch	1 ch		unknown - not analyzed	Adult loon found mid-June 2011 highly decomposed	20	19	25
Woodbury L. (Sabin)	Woodbury	nesting	raft	successful	signs	1 ch	1 ch				5	5	3
Woodward Res.	Plymouth	nesting	island	successful	signs	1 ch	1 ch			Nest on old beaver lodge	5	2	2
Zack Woods P.	Hyde Park	nesting	island	successful	signs	1 ch	1 ch				15	13	21

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Berlin P.	Berlin	territory		did not nest 2011						3 and 4 adults observed in May.	9	8	11
Coles P.	Walden	territory		did not nest 2011							13	12	18
Curtis P.	Calais	potential territory											
Echo L. - South	Charleston	territory		did not nest 2011					unknown - not analyzed yet	Pair not monitored closely.	4	2	2
Elmore L.	Elmore	potential territory								Pair present most of time			
Ewell P.	Peacham	territory		did not nest 2011						Pair present	3	3	2
Greenwood L.	Woodbury	territory		did not nest 2011						Pair built nests on east side of big island when water high and then on small north island with camp (likely landowner conflict). No eggs laid.	1	1	1
Holland P. - North	Holland	territory		did not nest 2011						Pair present	2	0	0
Holland P. - South	Holland	territory		did not nest 2011	signs					Pair present	17	10	13
Island P.	Brighton	territory		did not nest 2011	signs					Extra loons all summer. Loon found beaching itself 9/10/2011 on and off for several days. Appeared healthy when swimming and diving. Not observed again.	11	9	11
Lowell L.	Londonderry	potential territory (new)								Rescue: Small pond 8/3/2011 - captured by volunteer when loon crawled out of snowmaking pond at Magic Mtn.; released on Lowell L.			
Maidstone L. - North	Maidstone	territory		did not nest 2011						Pair not monitored closely. Traditional nest location no longer present; hummock fell apart during repair of dam and water levels changes.	5	4	2
May P.	Barton	territory		did not nest 2011						Pair present plus intruders for 3rd year of no nesting.	19	17	24
McConnell P.	Brighton	potential territory								Pair not monitored closely.	15	11	15
Memphramagog L. - John's River	Derby	territory		did not nest 2011						Pair observed near Bell Island twice - unsure if same pair as ones that attempted nesting in Johns River outlet in 2009.	4	2	1
Metcalf P.	Fletcher	potential territory (new)											
Miles P.	Concord	territory		did not nest 2011						Intruder loons often in the area.	18	14	18
Mollys P.	Cabot	potential territory (new)											
Morey L.	Fairlee	potential territory (new)											
Nichols P.	Woodbury	territory		did not nest 2011	signs					A third adult present most of summer.	12	10	10
Norton P. - Island	Norton	territory		did not nest 2011	signs					Pair present.	32	25	32
Parker L.	Glover	potential territory (new)											
Salem L.	Derby	potential territory (new)								Monitored loon with possible leg injury in August 2011.			
Somerset Res. - North Islands	Somerset	territory		did not nest 2011						Pair present.	7	5	6
South P.	Eden	territory		did not nest 2011						Pair present. Intruder loons frequent.	13	11	13
Wallace P.	Canaan	potential territory								Pair possibly present plus extras.			
Carmi L.	Franklin	loon active								Some 2 adult sightings			
Caspian L.	Greensboro	loon active								Some 2 adult sightings	1	0	0
Center P.	Newark	loon active								1-3 adults reported			
Crystal L.	Barton	loon active								Some 2 adult sightings			
Dunmore L. - North	Leicester/Salisbury	loon active								1-3 extra adults reported			
Echo L. - North	Charleston	loon active											
Echo L. (plymouth)	Plymouth	loon active								Occasional loons reported			
Fairlee L.	Fairlee	loon active								0-4 adults reported			
Fern L.		loon active								Occasional loons reported			

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Gale Meadows	Winhall	loon active								Occasional loons reported	2	0	0
Grout P.	Stratton	loon active								1-2 loons consistently reported			
Halls		loon active								Occasional loons reported			
Hardwood P.	Elmore	loon active								Occasional loons reported			
Harriman Res.	Wilmington	loon active								Rescue: Fishing line 6/28/2011 - entangled. Four capture attempts all failed; still on reservoir fall 2011.			
Knapp Brook P.	Reading	loon active								Occasional loons reported			
Lewis P.	Lewis	loon active								2 adults on loonwatch day			
Long P.	Greensboro	loon active								Occasional loons reported			
Long P. (Eden)	Eden	loon active								2 adults on loonwatch day			
Marshfield P.	Marshfield	loon active								Some 2 adult sightings			
Memphramagog L. - Holbrook Bay	Newport	loon active								Occasional loons reported			
Miller P.	Strafford	loon active								Single and 0 loons reported during most surveys; some sightings of 2 adults at end of summer.			
Moore Res. - Roaring Brook	Concord	loon active											
Neal P.	Lunenburg	loon active								1-2 loons reported			
Noyes P.	Groton	loon active								Occasional loons reported	1	0	0
Pigeon P.	Groton	loon active								1-3 loons consistent	1	0	0
Rescue L.	Ludlow	loon active								Occasional loons reported			
Seymour L. - West	Morgan	loon active								Occasional loons reported	1	1	2
Shadow L.	Glover	loon active								Occasional loons reported			
Silver L.	Barnard	loon active								Occasional loons reported			
Silver L.	Salisbury	loon active								Occasional loons reported			
Somerset Res. - South	Somerset	loon active											
Sugar Hill Res.		loon active								Less loon activity reported than in past years			
Turtle P.	Holland	loon active											
Wapanacki P.	Wolcott	loon active								2 adults on loonwatch day			
Warden P.	Barnet	loon active											
Waterbury Res.	Waterbury	loon active								1-2 adults in May/June, and then less activity later in summer			
Willoughby L.	Westmore	loon active								Rescue: Fishing line 6/1/2011 - Entangled in ice fishing line; captured and released. Rescue: Fishing line 6/30/2011 - ingested. Beached itself, captured, and released and monitored on small pond. Not doing well; recaptured and brought to rehabber with pools; successfully released.			

Figure 1a. Common Loon Nesting and Territorial Pairs in Vermont

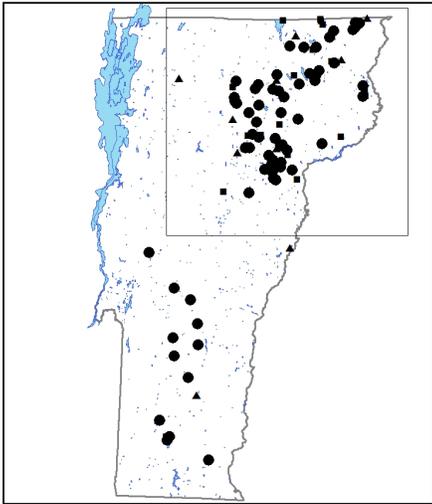
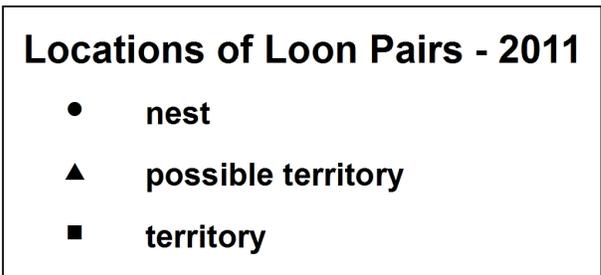
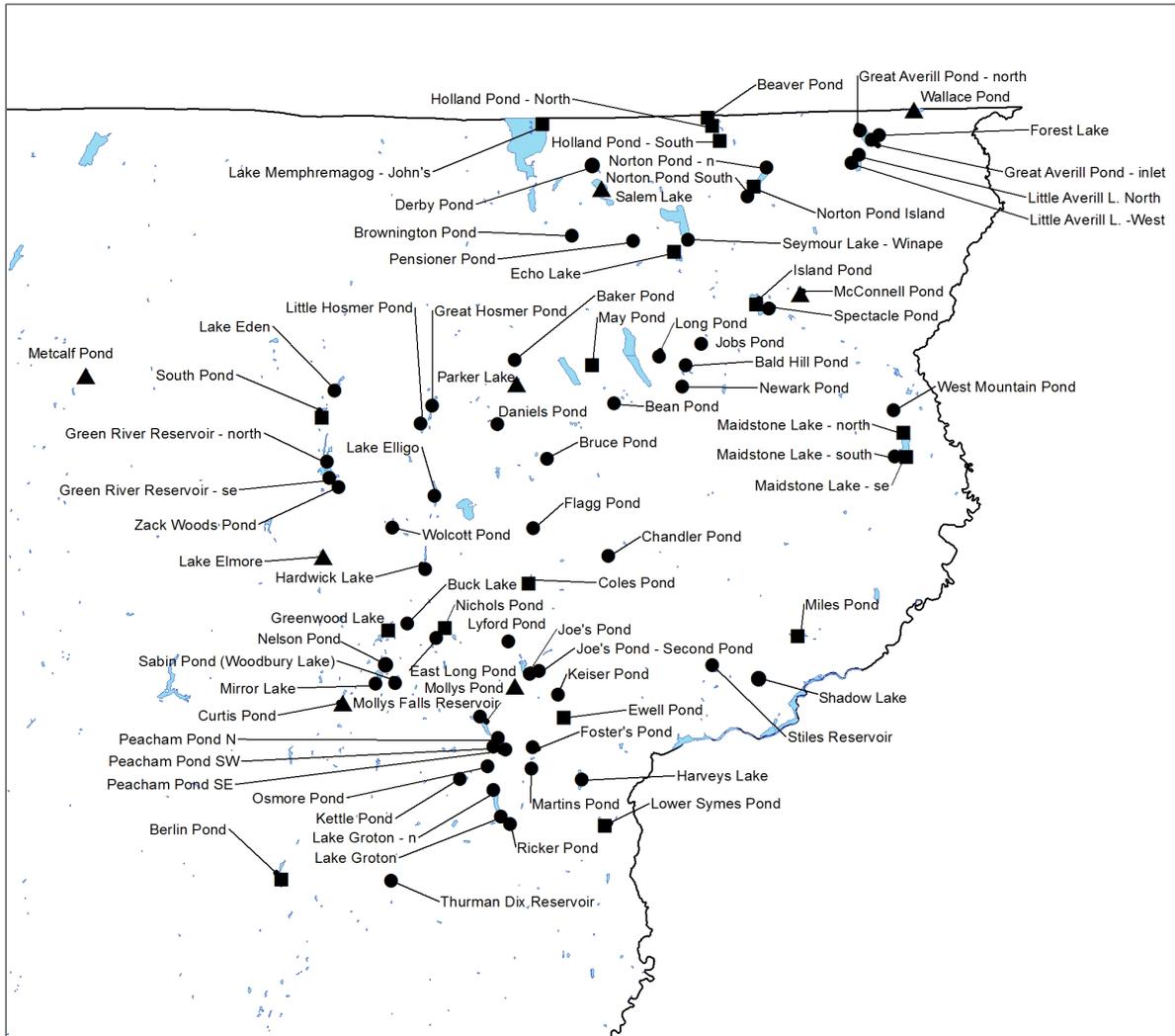
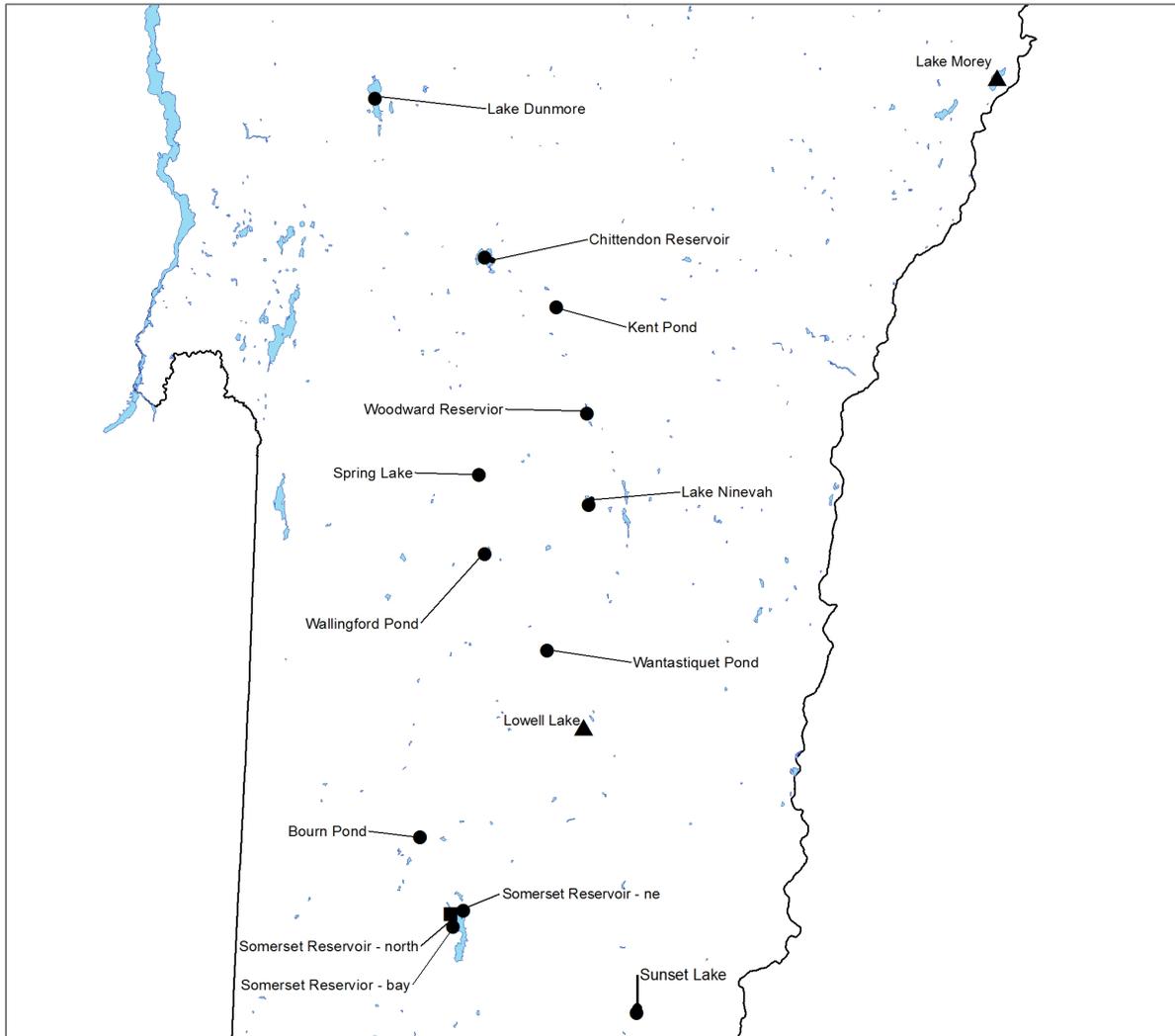


Figure 1b. Common Loon Nesting and Territorial Pairs in Vermont



Locations of Loon Pairs - 2011

- nest
- ▲ possible territory
- territory

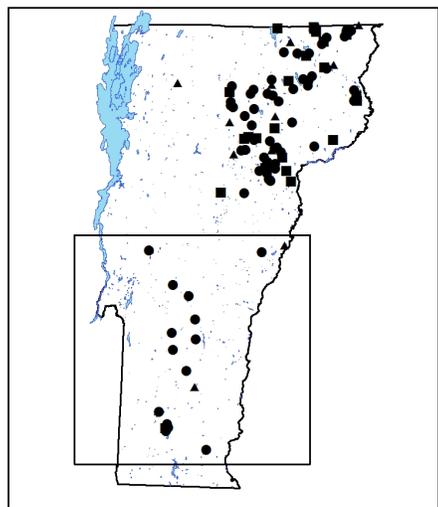


Figure 2. Summary of Common Loon breeding activity in Vermont, 1978-2011

