



# Otter Tracks

## Inside

-  Proud Parents, an editorial
-  *Silence of the Songbirds: A review*
-  Vermont Bird Quest Update
-  Arctic Ozone Hole
-  A Neglected Southerner Comes North
-  Impacts of Cat Predation
-  Wisdom and Chick
-  *Lake Champlain Basin Aquatic Invasive Species Guide*



## Big Night on Morgan Road

by Warren King

The forecast was favorable. After confer- ring with Jim Andrews I sent out the alert at 8 AM with fingers crossed to the sixty names on the OCAS amphibian alert email list at 8 AM with fingers crossed. At 6 PM, when I emailed confirmation that there would be amphibians on the move tonight, the skies were overcast but distress- ingly bright. The forecast had gone from 100 percent chance of rain to 80 percent, and the arrival time for showers had moved from 8 to 10 PM. But we had made our decision and would live with it.

Morgan Road crossing at 7:50 was still damp from showers earlier in the day. The shoulders were piled high with dirty, crusty snow. But a wood frog greeted me from the middle of the road, and a blue-spotted sala- mander crawled vigorously toward the snow pile. Maybe we had made the right call.

Car after car arrived just east of the 200- yard stretch of road. We have been escorting amphibians at this crossing for six years now, and many of the volunteers knew the drill from past visits. I greeted each arriving group and passed them on to Jim, who reviewed identification tips with a sample wood frog, spring peeper, blue-spotted salamander, spotted salamander, and four-toed salamander. Three veteran “amphibian escorts” carried clipboards to record everyone’s totals.

At 9 as arrivals slowed, I counted partici- pants, 33 in all, and got a sense of the move- ment, stopping every few steps to move a sala- mander or frog to the shoulder. No rain yet, but the amphibians didn’t seem to care. They had been thinking about reproduction all winter. Their destination was the vernal pools



Kiley Briggs with the year’s first four-toed salamander.\*  
Photo by Chris Fastie

south of the road at the edge of Salisbury Swamp. Everyone I passed was busily moving amphibians, more than enough to go around, to the road shoulder.

Some volunteers had headed home by 10, and, with encouragement from the rainfall coming on cue, all but two or three headed back to their cars. I thought to myself, “Now is when movement REALLY starts.” But the tally for the two hours between 8 and 10 was among our highest totals, 1678 amphibians. We moved 946 blue-spotted salamanders, 335 spotted salamanders, 314 wood frogs, 33 four-toed salamanders, 31 spring peepers, 5 red-backed salamanders and 2 eastern newts. Only three cars passed, accounting for 12 amphibian deaths, a far cry from the treach- erous Monkton-Vergennes Road crossing, where an estimated 640 and 1550 amphibians were killed on successive evenings in 2005. The sooner the wildlife underpasses go in there the better. 🐾

\* Check out Kiley’s herp blog at: [herping.blogspot.com/2011/03/snow-herping.html](http://herping.blogspot.com/2011/03/snow-herping.html)



### OCAS Mission:

To protect birds, other wildlife and their habitats by encouraging a culture of conservation within Addison County.

OTTER CREEK AUDUBON SOCIETY

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2010-2011

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## Vermont County Birding Quest Update

Addison County's number of bird species recorded as of 12 April 2011 is 122. We are in the lead, one ahead of Windham County. Get the latest totals on our website at:

[ottercreekaudubon.org](http://ottercreekaudubon.org)

Addison -- 122  
Windham -- 121  
Chittenden -- 116  
Bennington -- 108  
Rutland -- 101  
Windsor -- 99  
Washington -- 86  
Grand Isle -- 85  
Orleans -- 70  
Lamoille -- 61  
Orange -- 60  
Franklin -- 60  
Caledonia -- 54



## Proud Parents

Editorial by  
Warren King



## VIEWPOINT

Twenty-two years ago Heidi Willis saw how Otter Creek Audubon could help determine, and hopefully improve, the quality of water flowing through Otter Creek into Lake Champlain. At that time parts of the lake had high levels of waterborne nutrients, especially phosphorus, and the potential pathogen *E. coli*. These studies did not go up Champlain's tributary rivers. Heidi reasoned that rigorous sampling of rivers at a variety of sites might lead to an understanding of the sources of pollutants, a crucial first step in reducing them.

She and Middlebury Union High School teacher Davis Lawton convinced the Otter Creek Audubon board to commit funding for sampling equipment. OCAS board members and friends agreed to gather water samples. She talked biology teacher Paul Scaramucci into analyzing water samples, and the Otter Creek River Watch was born. One by one, volunteers concerned about each of Addison County's watersheds joined the effort: Marty Illick and Louis DuPont for the Lewis Creek Association in 1992, Pete Diminico for the New Haven River Anglers in 1993, The Watershed Center for Little Otter Creek in 1997, and a consortium of organizations for the Lemon Fair in 2003.

The work had become county-wide, in acknowledgement of which the organization took on the name Addison County Water Shed Collaborative (ACWSC). Linda Hentzel, Chris Lacey and Sheila Schwaneflugel coordinated the action in turn. And in the meantime the Addison County Regional Planning Commission, Middlebury Union High School, the U.S. Natural Resource Conservation Service, Weybridge Conservation Commission, the Otter Creek Natural Resources Conservation District, Vermont's Otter Creek Watershed Coordinator and the state government's LaRosa Laboratory in Waterbury joined the team. For many years Otter Creek Audubon funded much of the equipment and sample analysis.

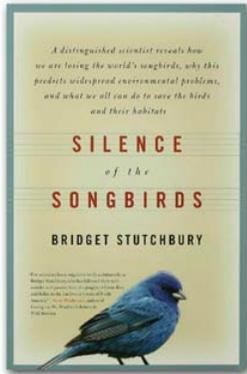
Understanding the movement of waterborne pollutants through the county's watersheds has gone from nonexistent to perhaps the most comprehensive in the state. Quality control is now dealt with by comprehensive training of samplers. Blind tests ensure analysis rigor. The LaRosa Laboratory, having survived the risk of termination due to budget constraints in 2008, now provides reliable sample analysis. Many of the samplers have been at it for years, some since the beginning. The goals of the collaborative are worth noting:

1. To monitor and assess the condition and uses of our local rivers, creeks, and streams over time.
2. To raise public awareness of and commitment to the ecological, economic, and social values and functions of our local rivers, creeks, and streams.
3. To support and praise actions by landowners that improve the health and quality of our local rivers, creeks, and streams.

With financial and technical support from federal, state and county agencies, problem sites identified by ACWSC have been cleaned up. One or more of the six subwatersheds in the county are spotlighted each year with the full monitoring array. Meanwhile, the other subwatersheds are monitored less intensively but sufficiently to preserve their data continuity.

From humble beginnings as Otter Creek River Watch the ACWSC has become an essential and irreplaceable steward of Addison County's rivers and their contribution to the pollution load of Lake Champlain. And Heidi is still its central figure. We salute you, Heidi. 🐾





**Book Review:**

## **Silence of the Songbirds**

**by Bridget Stutchbury**

**Illustrations by Julie Zickefoose**

**Forward by John Flicker**

**Walker and Company, 2007, 226 pp.**

**Review by Barbara Brosnan**

**T**he title echoes Rachel Carson and for good reason. Bridget Stutchbury guides us along the migration trails of the songbirds of the Americas in order to understand the disturbing disappearance of so many of these birds. While the news is not good, she is not altogether a pessimist.

Stutchbury, a highly credentialed scientist who happens also to be a fine writer, first takes us into the fragile ecosystem of Gamboa, Panama, where we are greeted by Bay-breasted, Chestnut-sided, and Black-and-white Warblers. Yes, *our* birds, the ones that migrate through and/or breed in Vermont. Her studies reveal that most split up from their Vermont mates, set up small territories, and become fruit eaters. Later we are privy to the shocking details of philandering Scarlet Tanagers, Purple Martins and Hooded Warblers, among others, as they breed all around us in the Northeast. Those very same birds many of us who worked on the Vermont Breeding Bird Atlas had confirmed as successfully breeding may, in fact, have been raising some other male's chicks! Alas!

However, the focus of this book is her presentation of the alarming numbers of songbirds, our "canaries in the mine," that have disappeared. The causes are multiple. Stutchbury shows us first-hand the effects of deforestation, fragmentation, and pesticides along the migration routes and on wintering and summer breeding grounds. Add to that examples of the disastrous effects of cowbirds, cats, towers, tall buildings, and big city lights, and we can be tempted to assume that all is lost. A man with a butterfly net in Toronto goes around in the early morning and scoops up dead or dying White-throated Sparrows, Ovenbirds, Wood Thrushes and other birds that have become disoriented by lights or have crashed into buildings. He then takes birds with a chance of survival to High Park for later release.

Stutchbury concludes that, while we cannot recover what we have lost, if we act quickly we might be able to stop these terrible losses. That man in Toronto? He works with an organization called FLAP, the Fatal Light Awareness Program, and they have encouraged some of our major cities to establish a "lights out" program during migration. Other organizations such as Audubon's "Project Safe Flight" monitor bird casualties, shade-grown coffee farmers search for markets, and every scientist and citizen scientist out there is helping.

I found this a difficult yet fascinating book, certainly one worth reading. The techniques used by Stutchbury and other scientists were especially captivating. While the horrifying losses make her suggestions of what we as consumers and activists can do seem paltry, her descriptions of American Redstarts trying to find enough food to fatten up for migration, of hundreds of thousands of birds waiting on the shore of the Yucatan for the right night to head out over open water, or of a pair of Blue-headed Vireos trying to avoid predators here in our back yards make us realize that we should at least keep trying. 🐾

## **Ozone Hole Back in the News**

**T**hought the Montreal Protocol was the last word on ozone depletion? The Montreal Protocol was adopted in 1987 to restore stratospheric ozone levels back to pre-carbon fluorocarbon (CFC) norms by 2050. Stratospheric ozone protects life on earth from the destructive effects of the sun's ultraviolet (UV) radiation. Following the phasing out of CFC the size of the ozone hole over the Antarctic reached its maximum in 2006 and is slowly decreasing.

But unexpectedly low stratospheric temperatures over the Arctic the last few winters has led to depletion of about half the ozone there. Researcher Markus Rex of the Alfred Wegener Institute for Polar and Marine Research expects further depletion to occur since the conditions for low temperatures are persisting. As arctic air masses gradually move south in spring over more populated areas, the risk of heightened UV radiation increases.

In the stratosphere 20 kilometers up, the coldest arctic winters appear to be getting colder, notes Rex, providing ideal conditions for ozone destruction by CFC. An unexpected connection between ozone depletion and climate change appears to be to blame. Carbon dioxide and most other greenhouse gases concentrate at levels well below the stratosphere, where they reflect heat radiated from the earth back toward the earth. Less heat escapes as far up as the stratosphere, hence the cooling effect there. While the level of ozone-destroying CFC in the atmosphere gradually decreases, UV radiation in the North may become an increasingly serious problem. In early April UV radiation was elevated in southern Finland. The air mass associated with the depleted ozone then moved east over Russia and China in mid-April. Stock up on sun-block and cover up this spring. 🐾

### **Membership Renewal Information**

**To help you with membership renewal we have highlighted the due date on your label.**

**It's handy to renew over the phone at the National Audubon membership center:**

**800/274-4201**

**Please check the "Join Us" tab on our webpage: [ottercreekaudubon.org](http://ottercreekaudubon.org). We've prepared a membership FAQ, listing questions we often hear from OCAS members. If your label doesn't have an expiration date, it means we are sending it as a gift. Please check the FAQ.**

# A Neglected Southerner Comes North

by Warren King

Slowly moving north during the last two centuries from the New World tropics, opossums, our only marsupials, have been in New England for barely a hundred years. Initially recorded in Vermont around 1920, the opossum moved first into the Connecticut River and Champlain valleys. Under cover of darkness these strictly nocturnal omnivores satisfy their broadly opportunistic diet in human settlements, agricultural land and woodlands. They eat small mammals, birds and their eggs, amphibians, invertebrates, carrion, and a variety of plants, nuts and seeds.

Opossums can raise two litters a year, the first in the dead of winter, the second in early summer. Females carry their embryos only 13 days. From 5 to 13 young are born, still embryo-like and the size of honeybees, but with strong forelimbs that propel them up mom's belly and into her marsupium, the pouch within which are two rows of nipples, where the young will remain and nurse for 50 to 65 days.

Opossums are preyed on by dogs, foxes, bobcats, hawks, Great Horned Owls, and particularly automobiles. They have small brains and are not known for their brilliance. They often respond to a threat by "playing possum", remaining limp and motionless with their lips drawn back in a toothy drooling grin. This condition can persist for minutes or several hours. Predators are sometimes put off by the notion of preying on a "dead" animal. They lack a commercially valuable pelt, have inferior meat, and their ratty appearance has left them largely ignored by the general public. In 1612 in Virginia Captain John Smith noted, "An Opossum hath a head like a Swine, & a Taile like a Rat, and is of the Bignes of a Cat. Under her belly shee hath a bagge, wherein shee lodgeth, carrieth, and sucketh her young."



Ripton's first opossum Photo by Isabel Purdum

Opossums' spread through Vermont has been slowed by our challenging winters. They do not have a waterproof fur coat with thick underfur as do other Vermont furbearers. They rely more on a thick layer of fat acquired in autumn. During intense cold snaps they remain in their nest or in a burrow previously dug by another mammal. But the cold has consequences in the form of ragged frostbitten ears and shortened tails, neither of which is furred. They are clearly pushing their northern limit in Vermont.

Over the last 20 years I have had no reports of opossums in Ripton, but in December of 2010 one appeared at a nearby house. The site is 1300 feet above and significantly colder than the Champlain Valley. It moved into a woodshed, ate birdseed, and died on a nearby road a week after arriving. Endeavors into new territory sometimes end in failure, true for opossums as for people. However climate change is on the opossum's side. The recent Ripton opossum will likely not be our last. Far from suffering from neglect, opossums appear to thrive, or at least survive, on it. 🐾



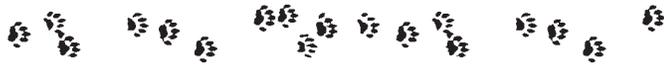
## Impacts of Cat Predation

A peer-reviewed study published in the Journal of Ornithology documented that domestic and feral house cats had a significant impact on the survival of Grey Catbirds in a Washington D.C. suburb. The cause of mortality of eighty percent of the catbirds was predation, 47 percent of which was caused by cats. Dr. Peter Marra of the Smithsonian Institution, one of the authors of the study, noted, "Cats are way up there in terms of

threats to birds – they are a formidable force in driving out native species."

Cats are estimated to kill 500 million birds annually, half killed by domestic cats, half by feral cats, one thousand times more than are killed by wind turbines annually, according to U.S. Fish and Wildlife Service estimates. Dr. Marra said, "They are like gypsy moths and kudzu – they cause major ecological disruption. 🐾"

## OCAS Calendar of Events May – July 2011



**SUNDAY, MAY 8**  
**7:30 - 10:30 AM**

**WARBLER WARM UP:** Ron Payne and Warren King will lead a search for newly arrived spring migrants. Hone your birding identification skills before leaf-out. Co-sponsored by the Watershed Center. Meet at the Bristol Waterworks, Plank Road east of North Street, Bristol. Call Warren at 388-4082 if in doubt about the weather.

**FRIDAY, JUNE 3**  
**7 PM**

**TWENTY-FIVE YEARS OF BIRD BANDING ALONG OTTER CREEK.**  
An event of the 2011 Vermont County Birding Quest. Presented by Steve Trombulak. Downstairs at Ilsley Library, 75 Main Street, Middlebury.

**SATURDAY, JUNE 4**  
**8 AM**

**BIRD WALK** at the Middlebury College bird banding site, led by Steve Trombulak and Ron Payne, co-captains of the Addison County Birding Quest team. Meet at the parking lot across from the Middlebury College baseball field, South Street, Middlebury.

**SATURDAY, JULY 9**  
**10 AM-NOON**

**FAMILY BIRD QUEST AT WRIGHT PARK.** Cosponsored by MALT. In Middlebury turn onto Seymour Street Extension, north from Seymour Street just before Pulp Mill covered bridge, drive to end for park entrance and parking. Call MALT at 388-1007 for information.

### Recent Contributions to OCAS

**O**tter Creek Audubon gratefully acknowledges a gift from the Muffintops Middlebury Swim Team in memory of Mr. Solomon.

Also, gifts from George and Carol Ramsayer, Marcia and Jeremiah Parker, Barry and Warren King, Kathy and Gary Starr, Gale Hurd and Abbott Fenn, augmented by a grant from the collaborative grants program of Audubon Vermont, enabled the purchase of twelve pairs of Eagle Optics 6.5 x 32 binoculars, which have already been in use with school groups and field trips.

And we also acknowledge an anonymous gift to OCAS' Zach Osborne Fund, to offset the cost of school field trips that have an environmental component, in memory of an inspirational teacher and OCAS board member. OCAS extends our thanks to the donors of all these gifts. 🐾

### MARSH, MEADOW AND GRASSLAND WILDLIFE WALKS

A monthly joint OCAS-MALT event. We invite community members to help us survey birds and other wildlife at Otter View Park and Hurd Grassland. Meet at Otter View Park parking area, Weybridge Street and Pulp Mill Bridge Road, Middlebury. Shorter and longer routes possible. For information call 388-1007 or 388-6829.

**THURSDAY, MAY 12, 8 – 10 AM**  
Leader: Gary Starr

**SATURDAY, JUNE 11, 8 – 10 AM**  
Leader: Ron Payne

**THURSDAY, JULY 7, 8 – 10 AM**  
Leader: TBA

**SATURDAY, AUGUST 13, 8 – 10 AM**  
Leader: TBA

**THURSDAY, SEPTEMBER 8, 8 – 10 AM**  
Leader: TBA



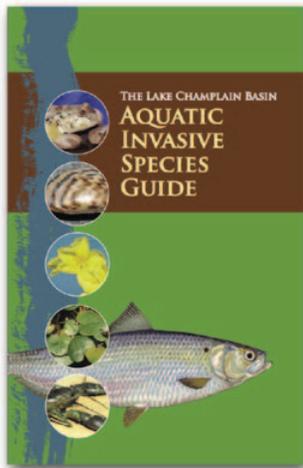
### Wisdom and Chick Survive Tsumami

“Wisdom”, a venerable Laysan Albatross on Midway Atoll in the northwestern Hawaiian Islands, was reported

by the U.S. Fish and Wildlife Service (USFWS) on 8 March not only to be alive at the age of 60, but to be feeding her chick. She was banded in 1956 by Chandler Robbins, longtime USFWS biologist and field guide author, who estimated she was at least five years old at the time, the earliest age at which Laysan Albatrosses are known to breed. The world longevity record for a wild bird, 61.5 years, belongs to “Grandma”, a Royal Albatross from New Zealand, but who was reported missing in action several years ago.

On 23 March the USFWS reported that “Wisdom” was observed feeding her chick on Midway, having survived the 10-11 March tsunami triggered by the recent Japanese 9.0 magnitude earthquake. The USFWS estimated that the 5-foot wave generated by the earthquake washed over portions of several islands of the atoll and killed 2000 adult albatrosses and 110,000 albatross chicks, including both near-threatened Laysan and endangered Black-footed Albatrosses, as well as thousands of other nesting and roosting seabirds.

In December 2010 the vulnerable Short-tailed Albatross was reported to be nesting for the first time on Midway and Kure atolls. While the Kure nest contained two eggs, thought to have been laid by a female-female pair, the Midway nest produced a healthy chick, the first chick hatched away from the home islands off the Japanese coast. The chick survived the tsunami, but was moved a short distance by the surging water. Although the chick was returned the following day to the nest site, there are no reports of either parent returning to feed it following the tsunami. 🐾



**Book Review:**

# The Lake Champlain Basin Aquatic Invasive Species Guide

by The Lake Champlain Basin Program

Review by Warren King

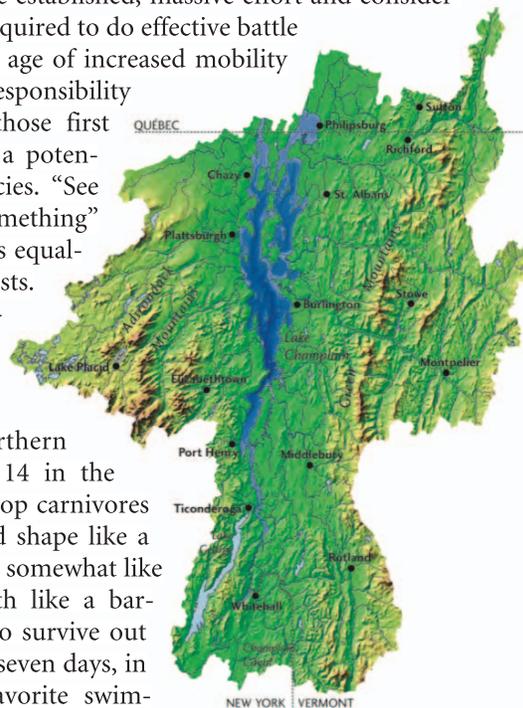
Here's a gruesome piece of work, not because it isn't handsomely produced or because the photos aren't of the highest quality. It's because there are so many invasives in the basin (about 50 currently) that it takes a field guide to identify the priority species. We might be tempted to take some solace in the fact that the Great Lakes have a combined 130 invasives.

The guide's coverage includes 12 priority animals and 11 priority plants that are already established. It also covers 15 animals and 6 plants that are not yet established but are expected to arrive from likely sources. These include one or more of the Great Lakes, the St. Lawrence, the Erie Canal, Delaware River, Illinois River, Richelieu River and Canal, Hudson River and Champlain Canal, ponds in nearby states, and from transported boats and bait.

The only time invasives are vulnerable is when they first arrive in a new site. Once established, massive effort and considerable expense are required to do effective battle with them. In this age of increased mobility it is everyone's responsibility to look out for those first few organisms of a potentially invasive species. "See something, say something" applies to invasives equally well as to terrorists.

One potential result of not acting on this aphorism is the prospect of northern snakeheads, page 14 in the Guide, yard-long top carnivores with a pattern and shape like a northern pike, fins somewhat like a bowfin, a mouth like a barracuda, and able to survive out of water for up to seven days, in your children's favorite swimming spot.

Get your copy of this guide free from the Lake Champlain Basin Program, 54 West Shore Road, Grand Isle VT 05458, 802/372-3213. 🐾



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