



# Otter Tracks

## Inside

-  Value of Ecosystem Services Rises
-  The Climate Report
-  The "Normal" Extinction Rate
-  Armed and Dangerous: Wild Turkeys
-  American Pipit: Disappearing Act
-  Marine Natural Monument Expands
-  U.S. State of the Birds 2014
-  Calendar of Events
-  VT's Threatened, Endangered and Recovered Birds, 2014

## Bill Crenshaw Awarded Silver Feather

An enthusiastic crowd gathered for the annual dinner and meeting of Otter Creek Audubon at the Middlebury American Legion hall on Thursday, 13 November. President Ron Payne, who was elected for a second two-year term, provided a hearty welcome.

A highlight of the evening was presentation of the Silver Feather. The OCAS board has awarded the Silver Feather annually since 1995 "in honor of notable devotion, dedication and untiring effort on behalf of the preservation and appreciation of the birds, other wildlife, and natural communities of Addison County."

Gary Starr introduced Bill Crenshaw, the 2014 Silver Feather recipient. He received the award for his 35 years of service as the Vermont Waterfowl Biologist for the Vermont Fish and Wildlife Department. Crenshaw spent 15 years as manager of Dead Creek Wildlife Management Area, initially known as Dead Creek Goose Preserve. The preserve's objective was to provide habitat for a non-migratory year-round Canada Goose population. The preserve exceeded all expectations. It also became an alternate migratory staging site for overflow from the huge Greater Snow Goose staging concentration on the St. Lawrence just east of Quebec City. At its peak a decade ago Dead Creek attracted up to 40,000 birds — Vermont's foremost wildlife spectacle. Snow



Bill Crenshaw receives the 2014 Silver Feather from Gary Starr. Photo by John Meakin

Geese are still abundant but are dispersed in many smaller groups in farm fields along the St. Lawrence and Champlain valleys.

Bill guided the creation of the first wetland conservation plan for the Lake Champlain basin and helped implement the plan. He administered the Vermont Waterfowl Stamp Program, which has conserved over 8,500 acres of waterfowl habitat. His cooperative management style and dedication have greatly contributed to conservation efforts within Addison County and throughout Vermont.

Rosalind Renfrew, Conservation Ecologist for the Vermont Center for Ecostudies and editor of the Vermont Breeding Bird Atlas, 2<sup>nd</sup> edition, provided an entertaining and informative presentation titled "The Double Life of the Bobolink". She has worked with Bobolinks on their breeding grounds in Vermont, and she has studied their environmental and human challenges on the grasslands of Argentina and Bolivia. Her work identified their lengthy migratory routes. 🐾



### OCAS Mission:

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

OTTER CREEK AUDUBON SOCIETY

PO Box 938  
Middlebury, VT 05753

Ron Payne, President  
Warren King, Editor  
388-4082

Winslow Colwell, Design and Layout  
www.wcolwell.com

Vol 40, No. 4

www.ottercreekaudubon.org

♻️ Printed on 100% recycled paper

## Otter Creek Audubon Society

**Board of Directors  
2013-2014**

### Officers

Ron Payne **President**  
388-6019

Marcia Parker **Vice-President**  
897-7222

Warren King **Secretary**  
388-4082

Gary Starr **Treasurer**  
388-6552

### Board Members

Diana Carter 999-9232

Alan Coulter 545-2213

John Meakin 545-3008

Barb Otsuka 388-6829

Carol Ramsayer 989-7115

Craig Zondag 453-7237

### Director Emeritus

Abbott Fenn 388-0321

### Audubon Vermont

Jim Shallow

Conservation & Policy Director

## Value of Ecosystem Services Rises

Editorial by  
Warren King



# VIEWPOINT

“Ecosystem services” is the term that encompasses all the natural features and processes from which we benefit but for which we do not have to pay. They include natural storm and erosion protection features like coral reefs, flood plains, coastal marshes and wetlands. Also included are water and air purification from forests, mangroves and grasslands and the decomposition and reutilization of dead plants and animals as nutrient-enriched soil. And don’t forget carbon sequestration.

Back in 1997 Dr. Robert Costanza, then director of the Gund Institute at UVM, proposed a figure of \$48.7 trillion (in 2014 dollars) for the gamut of these services. New research has led to greater understanding of these services. Recently Dr. Costanza recalculated the figures and concluded the services are worth three times more than he thought previously, a total of \$142.7 trillion, about twice the value of the world’s economy.

Our failure to provide sound husbandry of these resources is reflected in Costanza’s figures. For example, an acre of living coral reef now provides about \$1 million of services annually. But coral reefs have declined in the last 17 years from 240,000 to 108,000 square miles in extent due to pollution and other mismanagement, reflecting a loss of ecosystem service value of \$23 trillion, one and a half times the gross domestic product of the U.S.

Not everyone agrees with assigning dollar values to ecosystems, nor does everyone agree with Dr. Costanza’s estimations. But even his harshest critics agree that it is worthwhile to call attention to the cost of not caring for the ecosystems upon which all life depends. As the human population increases, we demand more of ecosystem services. It is worth knowing that having less of them will add to the cost of living on Earth. 🐾



Dr. Robert Costanza

## The Climate Report

With considerable fanfare and gratifying recognition from the national press, National Audubon has released an exhaustive study of the potential effects of climate change on our birds. The study is based on projections from the results of three decades of Audubon’s Christmas Bird Counts and the U.S. Fish and Wildlife Service’s Breeding Bird Surveys, both of which depend heavily on the contributions of citizen-scientists. The report projects that climate change will cause a major population decrease for more than half of the bird species in the U.S. and Canada.

The study focuses on projected changes in the distribution of bird species in 2020, 2050 and 2080 by looking at the geography of “climatic suitability” of areas in North America. The result is a series of detailed maps that shows the movement northward of the climate envelope of each of 588 North American bird species. A

total of 314 species will suffer losses of 50 percent of their populations by 2050 or 2080. 126 species, those whose 50 percent loss will come by 2050, are considered “climate endangered”, while 188 species, those whose 50 percent loss will come by 2080, are considered “climate threatened”.

As massive as this loss is projected to be, it does not take into account losses due to climate change on wintering grounds south of the U.S., nor does it take into account the suitability of the habitat of areas to the north, only that the climate to the north will be suitable for these species. Climate suitability won’t necessarily translate into habitat suitability since the vegetation on which birds depend won’t move as readily as the birds themselves.

The study provides information on projected species’ distribution at the flyway and state level as well as at the continental level. By 2080 Vermont will lose

100 percent of our breeding Blackburnian and Black-throated Blue Warblers and at least 90 percent of our breeding Black-throated Green, Nashville and Magnolia warblers, Evening Grosbeaks, American Redstarts, Scarlet Tanagers, Veeries and Hooded Mergansers. Whether there will be suitable habitat for these species farther north is an unanswered question, but the temperature, precipitation and seasonal changes will no longer be suitable for these species in Vermont.

You can see how your favorite species will fare by going to [Audubon.org/climate](http://Audubon.org/climate). The September/October 2014 issue of *Audubon* magazine provides extensive background on this climate change study as well. National Audubon’s chief scientist, Gary Langham, the primary author of the Climate Report, hopes to start work soon on habitat suitability and its relation to climate change. Stay tuned. 🐾

# Armed and Dangerous: Wild Turkeys

By Diana Carter

It was the first week of June this year and two of us were off on a birding trip to Plum Island and Cape Ann. We were staying at a B & B in Rockport when one morning at dawn, having scooted out for an early morning jaunt to Halibut Point, we were confronted on the street by three very large and aggressive wild turkeys.

They were carrying switchblades—their beaks.

Two of the Rockport turkeys placed themselves directly in front of the car, while the third accosted us at the driver's window. You can never appreciate the size, mass, and aggression of a wild turkey until you see it towering above you, directly next to your face. It was a scene straight out of "Jurassic Park".

We managed to find a side street, where we turned and tried to give the turkeys the slip. But when we circled back to the main road, there they were again. They were waiting for us.

In Vermont we are used to seeing wild turkeys peacefully plodding along the countryside, heads down as if bent in solemn contemplation of a church hymnal. Not so the wild turkeys of Rockport, Massachusetts, and apparently not so the wild turkeys of Brookline, Massachusetts. In both towns residents are fed up with wild turkeys who have turned confrontational—turkeys with an attitude.

In Rockport the post office suspended delivery to some homes because a mail carrier was often harassed and chased by a

group of ten wild turkeys. Dogs also have been attacked.

So what do you do when approached by an aggressive wild turkey? If you are in a car, get your windows up of course, then flash your headlights on and off, honk, and slowly proceed. If you have the luck to be driving a Low Rider with the ability to rock your car up and down, by all means do. If you have a sunroof, this would be an excellent time to stick your head up through the roof, look as tall as you can, shout, and wave your arms. Your aim is to be as intimidating as possible.

The objective of an aggressive wild turkey is to assert superiority and power. The experts say that you should not appear intimidated, that instead you should make yourself look menacing. If you are on foot, open and flash your umbrella toward the turkey as the turkey charges. This might fool the turkey into thinking you are also a dominant male flaring his tail feathers. Since the turkey is trying to assert dominance, you must be more dominant.

Don't feed turkeys. Use bird feeders designed to keep seed off the ground, and clean up any spilled seed daily. Try to discourage wild turkeys from entering suburban neighborhoods, especially yearling males (jakes) who are aggressive and spoiling for a fight.

This year I am particularly looking forward to Thanksgiving. Pass the cranberry sauce please and, yes, an extra helping of turkey. 🐾



## The "Normal" Extinction Rate

In 1989 E.O. Wilson proposed that the current rate of species extinction is 10,000 times the "normal" pre-human background extinction rate. His statement caused scientists to look far more closely at extinction rates.

Since the 1990's scientists have estimated that the rate is about 100 extinctions per million species per year. However, they now believe the "normal" pre-human background rate of extinction is one-tenth of what they used to believe. They have now reduced it from one extinction per million species per year to 0.1 extinction per million species per year. A recent paper in *Science* by Dr. Stuart Pimm expresses the view that the main cause of the elevated current extinction rate is the presence and activity of humans. 🐾

## Pacific Remote Islands Marine Natural Monument Expands

President George W. Bush created the 83,000-square mile Pacific Remote Islands Marine Natural Monument in 2009. The natural monument protected the waters of Wake, Johnston, Howland, Baker, Palmyra, Jarvis islands and Kingman Reef out to 12 miles. President Obama extended protection for these waters, now under NOAA control. He extended fishery-related protection of Howland, Baker, Palmyra and Kingman Reef from 12 to 50 miles and protection of Jarvis, Johnston and Wake out to 200 miles. The land area of Johnston and Wake remain under control of the U.S. Air Force.

President Obama initially proposed an expansion of controlled waters to 782,000 square miles, but, following public comment, he reduced the protected area to 490,343 square miles. It was still sufficient to claim the title of the globe's largest protected area.

The Nature Conservancy (TNC) purchased Palmyra Atoll, one of atolls in the protected area, from private ownership in 2000. At that time an estimated 30,000 rats roamed the atoll killing seabirds and gobbling plant seeds. Of the nearly 700 acres of land, TNC sold 446 acres in 2011 to the U.S. Fish and Wildlife Service (USFWS) for a national wildlife refuge. In 2011 TNC, USFWS and Island Conservation undertook a massive rat control program over the entire island. Annual reports have indicated that the program was entirely successful. Native trees are once again sprouting, invertebrates are multiplying vigorously, and seabirds that have been absent for many years are once more breeding. The third year report confirmed the successful removal of rats that the previous reports indicated. 🐾

# American Pipit: Disappearing Act

By Ron Payne



American Pipit. Photo by Ian Worley

American Pipits are drab nondescript birds that look halfway between sparrows and thrushes. They are transitory visitors to Addison County during spring and fall migration. Nesters of tundra and high-alpine meadows, they visit similar habitats when they are in our area: shorelines, mudflats, harrowed, plowed or stubble fields. Not long ago I was walking a field of recently cut clover and alfalfa in Panton when I heard the namesake “pipit” call of these birds. Normally when one hears this call, one expects to see a handful of Pipits flying overhead in an extremely loose flock. But in this case, there were no birds to be seen in the air. Puzzled, I continued forward, still hearing occasional “pipit” calls when suddenly all around me a group of fifty plus Pipits erupted from the field as if conjured from nothingness. The flock circled overhead once then came down again a few hundred yards away in another part of the field. So effectively did they disappear into the close-cropped cover that no amount of scanning and scrutiny with binoculars could reveal them. Interestingly, later walking in the same field I flushed a smaller Savannah Sparrow and could easily find where it had alit in the grass, leading me to tip my hat to the Pipits as the better illusionists. 🐾

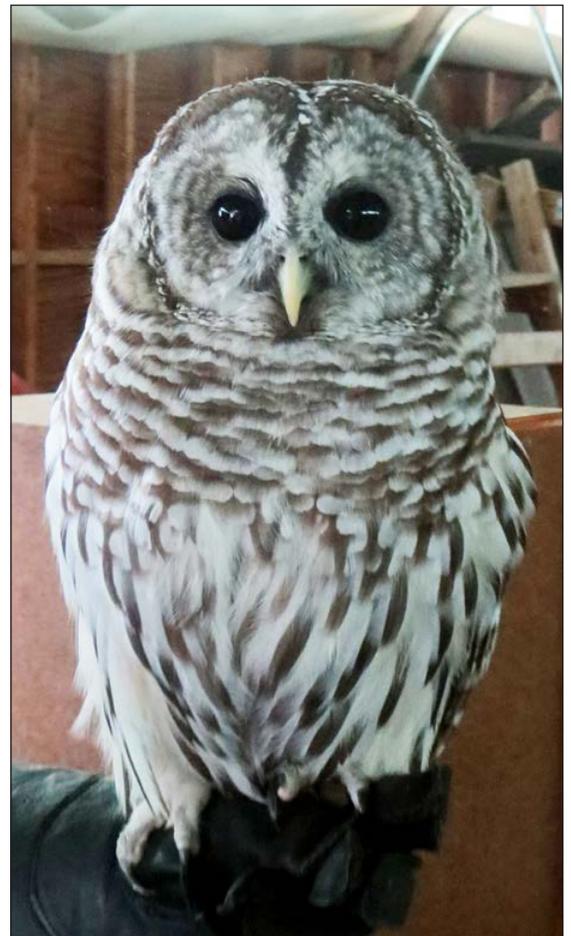
## State of the Birds 2014

Since 2004 BirdLife International, headquartered in Cambridge, England, has provided a broadbrush picture of the health of bird populations around the globe called *State of the World's Birds*. The U.S., Canada and a number of other countries now put together annual State of the Birds reports. The U.S. report is put out by the North American Bird Conservation Initiative (NABCI), a collaboration of the U.S. Fish and Wildlife Service and 23 agencies and organizations, including National Audubon.

The U.S. *State of the Birds* focuses on groups of birds that share similar habitat types, including shrublands, grasslands, forests, wetlands and oceans. The report is based in part on the annual Watch List, presently totaling 233 species, and a list of 33 Common Birds in Steep Decline, both of which NABCI compiles. Birds of aridlands have shown the greatest decline since 2009, followed by forest birds. Birds of wetlands and coastal birds have increased, 17 percent in the case of wetland birds. Hawaiian forest birds, in a category of their own, are *all* either endangered, threatened or on the Watch List. Seven Hawaiian forest birds have gone extinct since their listing as endangered.

Vermont birds on the Steep Decline list include Black Tern, Common Nighthawk, Chimney Swift, Horned Lark, Bank Swallow, Blackpoll Warbler, Field Sparrow, Grasshopper Sparrow, Eastern Meadowlark, Rusty Blackbird, Common Grackle and Pine Siskin. One Vermont breeding species, Bicknell's Thrush, has made the red Watch List, species with extremely high vulnerability. A number of Vermont species, including Eastern Whippoorwill, Wood Thrush, Golden-winged Warbler, Canada Warbler, Bobolink and Evening Grosbeak, are on the yellow Watch List, species with restricted range or with troubling declines or high threat.

The 2014 *U.S. State of the Birds* spotlights the one hundredth anniversary of the Passenger Pigeon's extinction, pointing out that this species went from uncountable abundance to extinction in less than 50 years. This resulted in laws protecting birds, but the current lists show that it will take more than laws to prevent further extinctions. 🐾



Barred Owl from Squam Lake Natural Science Center at Dead Creek Wildlife Day.  
photo by Gary Starr

## OCAS Calendar of Events

### December 2014 – February 2015

#### ADDISON COUNTY CHRISTMAS BIRD COUNTS

Volunteers wanted for feeder watching or in the field!

**SUNDAY, DECEMBER 14**     **MIDDLEBURY CHRISTMAS BIRD COUNT:** Call Jim or Kris Andrews at 352-4734 for details.

**SATURDAY, DECEMBER 20**     **FERRISBURGH CHRISTMAS BIRD COUNT:** Call Mike Winslow at 877-6586 for details.

**SATURDAY, DECEMBER 20**     **MT. ABE CHRISTMAS BIRD COUNT:** Call Randy or Cathy Durand at 453-4370 for details.

**SATURDAY, JANUARY 3**     **HINESBURG CHRISTMAS BIRD COUNT:** Call Paul Wieczorek at 802/434-4216 for details.

**FRI, FEBRUARY 13**     **GREAT BACKYARD BIRD COUNT.**  
**TO MON, FEBRUARY 16**     See [gbbc@cornell.edu](mailto:gbbc@cornell.edu). Watch for article in February *Otter Tracks*.



River study during Steve Flint's fourth grade trout release day.

Photo by Carol Ramsayer

#### SEVENTH ANNUAL CABIN FEVER LECTURE SERIES

(Second Thursdays, January–March)

Downstairs at Ilsley Library, 75 Main Street, Middlebury

**THURSDAY, JANUARY 8, 7 PM**

Sara Zahendra, Vermont Center for Ecostudies:

**THE BUZZ ON BUMBLEBEES:** Learn about life in a bumblebee colony, pollinator decline, and what you can do to help our native pollinators.

**THURSDAY, FEBRUARY 12, 7 PM**

Hank Kaestner:

**BIRDING IN CENTRAL ASIA: A LISTER'S TRIP TO KAZAKHSTAN**

**THURSDAY, MARCH 12, 7 PM**

Mark LaBarr and Margaret Fowle:

**THE BEE, BUZZ, BUZZ ABOUT GOLDEN-WINGED WARBLERS**

### Threatened, Endangered, or Recovered VT Birds

*continued from page 6*

**Bald Eagle:** Eighteen pairs nested in Vermont, including new nests in Dummerston and Panton. Three nests failed. If reproduction continues as it has, the species will be eligible for downlisting to threatened in 2015.

**Spruce Grouse:** No young were seen at Victory, where Vermont Fish and Wildlife introduced a small population several years ago. The Nulhegan population of a few hundred birds will be monitored again in 2015. A significant area of young spruce, now ten feet tall, will give the population a boost when the trees reach thirty feet, the preferred habitat.

**Common Nighthawk:** This species was newly added to the endangered list this year. No new information is available.

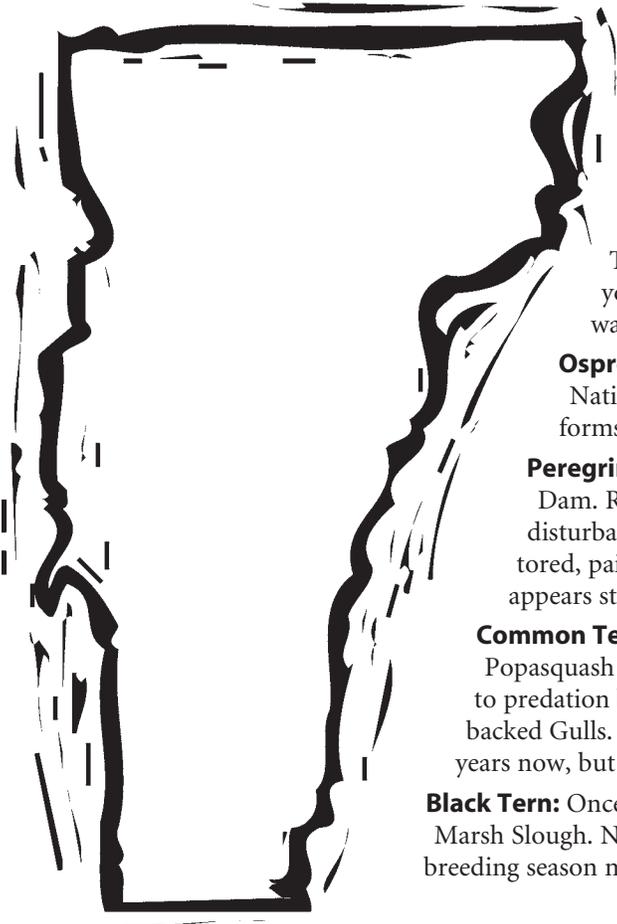
**Rusty Blackbird:** The results of a multi-state monitoring blitz, including Vermont, are not yet available.

**Sedge Wren:** One pair nested successfully in a wet meadow in Addison County, the only nesting reported in Vermont.

**Upland Sandpiper:** Two birds were seen in Highgate, one at Morse's Line, and one at Shelburne Farms. Breeding is doubtful.

**Grasshopper Sparrow:** Researchers documented continued declines at Camp Johnson due to helicopters and cars in the nesting area. None were found at the Ethan Allen Firing Range, and 14 birds were counted at the Franklin County Airport.

**Whippoorwill:** Long-term monitoring in West Haven and Fair Haven, the best Whippoorwill habitat in Vermont, yielded 74 calling birds, presumably indicating breeding pairs. Lesser densities were recorded elsewhere in Vermont. 🐾



## Vermont's Threatened, Endangered and Recovered Birds, 2014

**Common Loon:** Of 110 territorial pairs, 84 pairs nested and produced 93 eggs. Sixty-two chicks hatched from 57 nests, an output of 0.56 chicks per territorial pair. Eight chicks were lost to intruder loons this year, suggesting increasing territorial pressure from a burgeoning loon population. Three loons died from lead poisoning. Lake Dunmore's pair raised one young, as did a pair on Silver Lake, where prior years' attempts failed due to water level fluctuation.

**Osprey:** An estimated 140 pairs nested, including 44 pairs in Missisquoi National Wildlife Refuge and 10 at Sandbar State Park. Eleven new nesting platforms were erected.

**Peregrine Falcon:** New nests were found at Lone Rock Point and North Hartland Dam. Reproductive success was lower than last years, possibly due to Bald Eagle disturbance and to increasing use of less than optimal nest sites. Of 41 sites monitored, pairs nested on 37, producing 50 young, the same as in 2013. The population appears stable.

**Common Tern:** The second highest number of pairs, 234, nested on Audubon's Popasquash and Rock islands but suffered poor reproduction, only 16 fledglings, due to predation by Great Horned Owls, Black-crowned Night Herons and/or Great Black-backed Gulls. The downlisting criterion of 200 pairs has been met for the required five years now, but average reproduction is still below the downlisting requirement.

**Black Tern:** Once again all nests were in Missisquoi National Wildlife Refuge, this year at Big Marsh Slough. Ninety-five pairs nested, slightly fewer than last year. High water during the breeding season meant nesting habitat was scarce.

*cont. on page 5*

Non-Profit  
U.S. Postage  
PAID  
Middlebury, VT  
Permit No. 15



**Otter Tracks**  
Otter Creek Audubon Society  
PO Box 938  
Middlebury, VT 05753