# THE PILEATED PRESS

## Western Maine Audubon Society

A CHAPTER OF THE MAINE AUDUBON SOCIETY
P.O. BOX 832, FARMINGTON, MAINE 04938

Volume XLII Number 2

October 2012


## Monthly Programs

## Salmon Restoration

### Wednesday, October 10 at 7 PM

### Room C 23, Roberts Learning Center University of Maine at Farmington

How many of you know that the Sandy River watershed is the focus of the biggest salmon restoration effort in the Northeast? The Sandy and its tributaries have perfect Atlantic salmon habitat and the first returns of fry hatched in its waters are just now coming up the Kennebec. Fisheries Biologist Paul Christman will be presenting the fascinating story of this work that is happening in our local waters. Join us October 10 at Roberts C23, 7PM, University of Maine Farmington. This program is free and open to the public.

## Sunday, October 21: Eagle Talk and Pot Luck

We at Western Maine Audubon are co-sponsoring a talk about EAGLES with the Wilton Fish and Game Association. We will be their guests at their October 21st Pot Luck Supper and educational talk at their Club House on Rt.2 in Wilton. Please come at 5:30 for supper, with the talk by Patrick Keenan to follow shortly. Bring a dish to share, if you'd like, but come even if you can't bring something.

Patrick Keenan is from the Biodiversity Research Institute of Gorham, Maine. He will talk about eagles in western Maine and will also highlight some of their other work with saw-whet owls, common eiders, and peregrine falcons.

Patrick graduated from Colby College with a Degree in Biology and earned an M.S. in Zoology and Physiology from the University of Wyoming. Among other activities at the Biodiversity Research Institute, he manages their exciting wildlife webcam programs and coordinates a wildlife monitoring and bird banding station in Falmouth at River Point Conservation Area.

## Coming Attractions

**Nov 14th, 7:00 The Role of Climate and Carbon Cycling in Shaping Western Maine's Landscape.**

Rusty-weathering black rocks of the Temple Stream Formation illustrate how, over time and powered by solar energy, the earth has become a planet-scale fuel cell, with oxidized exterior and reduced interior. . Variations in the concentration of atmospheric carbon dioxide (CO2) have driven climate changes repeatedly through earth's history. We are oxidizing reduced carbon in fossil fuels at a rate one million times faster than it took to "charge the battery," a rate which is geologically unprecedented. If efforts to cut CO2 emissions do not occur soon, it is almost inevitable that Earth's climate will respond in a way that is foreign to the experience of the human and other species.
Come to the talk in November to hear and understand more about this from Prof. Doug Reusch.

Dr. Reusch is an Associate Professor of Geology at the University of Maine at Farmington. He is interested in the origins and significance of mountains, notably the New England Appalachians, and also how tectonic processes affect carbon cycling and Earth's climate. He has participated in Antarctic research, Ocean Drilling, and mapping projects in Maine, and Newfoundland.


It is the fall equinox, and we had light frost this morning. For the second fall, now, our most common bird around the gardens is the Blue Bird! A small flock of 12-14 male and female Blue Birds seem to enjoy perching on the fence around our garden. What a treat to see that flash of blue as they flit about. We had one nesting pair in the spring with a pair of tree swallows occupying the nearby box. We should probably put up more boxes for next year, but, boxes or not, they are with us in numbers.

After a year's absence, a Kestrel pair returned to the kestrel box on the side of the barn, laid eggs, but again failed to fledge any young. Perhaps they nested successfully elsewhere on the property as they were present all summer, usually enjoying their perch in an old dead elm overlooking the gardens and fields.

Now that the fields are mown the wild turkey flock has returned. I had planned to mow early, before 5/31, and then late, at least 65 days later so as to allow any grassland birds time to nest and fledge their young. Noah Perlut discussed grassland birds with us at one of our talks last spring. The mowing schedule is one which has worked successfully in Vermont. Alas, with our wet spring, it was impossible to mow early. We were excited, however, to have seen a pair or two of Bobolinks on the property in the early spring, and thought they might be nesting in an area that we don't mow. By the time we did our first mowing in the main field, however, we had not seen them for more than a week or two. We do hope they nested successfully somewhere nearby. Next year we will try again to mow early.

The Monarch butterflies were abundant this summer! While doing some end of the season work with the bush-hog, I had to stop and leave part of the field uncut. The Monarchs were in the field on the milk weed, and feeding on the red clover. They were probably the 4$^{th}$ generation, those adults who will make the long trip south to Mexico for the winter. I figured they needed all the nectar they could gather from the clover before their trip, and who was I to mow that field? For more information about the life cycle and migration pattern of the Monarchs, and for some beautiful pictures, go to: http://www.monarch-butterfly.com/

This fall our talks are centering on topics central to our western Maine area. The first talk detailed the efforts by the Maine Appalachian Trail Land Trust, and others, to conserve and secure the future of undeveloped lands in the "high peaks" area of western Maine. The October talk discusses salmon restoration efforts in the Sandy River watershed. The head waters for the Sandy are in the high peaks area. Our final talk this fall, in November, will be by Doug Reusch, Associate Professor of Geology at UMF. He will highlight some new work and ideas about the geology of Bald Mountain in the Weld area, and some exciting ideas about the earth's role in carbon cycling and what that has meant for the earth's climate both past, and present, and its implications for the future.

Lastly, please join us as guests of the Wilton Fish and Game Association at their Fall Pot Luck supper meeting featuring a talk by Patrick Keenan.

# Conservation Corner

Steve Bien

## A Return for King Salmon

I may have a love affair with Brook trout - they are beautiful, emblematic of good Maine water, and on a good day you can catch them. But Atlantic salmon are the royalty of the salmon family.

Nowadays Atlantic salmon populations in Maine are just this side of extinction, but in their glory days of pre industrial Maine, Atlantic salmon ruled. Once their upstream migrations numbered in the hundreds of thousands as spawning fish teemed up our rivers. These mature, spawning fish averaged 20 pounds and nearly 3 feet long. Small wonder they figured so strongly in colonial era diets.

One might assume that these fish, abundant as they were, were important in the aboriginal diets of Maine's native peoples but salmon are surprisingly hard to find in middens. Is that because they were not eaten or their remains not preserved? We really don't know but it is clear that salmon were central to the diets of European settlers, and salmon may even have been part of the attraction for even earlier Norse contact. Salmon were such a common food source that servants often had a limit on the number of salmon they could be served written into their work contract.

Salmon populations dropped off the cliff in the late 18th and early 19th centuries. First, dams blocked their migrations, then water pollution in the form of debris and silt ruined what was left of their spawning beds. Migratory Atlantic salmon were extinct in the Connecticut and Androscoggin rivers by the early 19th century while they managed to hang on in our downeast rivers. Most restoration efforts have seemed futile: every year millions of salmon fry are released into the Connecticut but few make it out to sea and return. In 2001 41 returned fish were counted.

Then there is salmon farming. Far and away, most Atlantic salmon today are feedlot fish raised in off shore pens. This industry has had a poor history here in Maine. Farmed salmon have frequently escaped to pollute the native salmon gene stock, and these pens and their escapees have been a source of disease for native fish. Then Governor King fought the endangered species listing of salmon to protect the industry but lost out when the wild fish were classified as unique and endangered in 2000.

Salmon may be robust creatures but they are fastidious in their ways. They need clean, cold fresh water, spawning beds with unsilted gravel, and unrestricted access to the open ocean.

Here is where Franklin County comes in. It turns out that the Kennebec watershed, and especially our own Sandy River and its tributaries are ideally suited to salmon. In fact, Franklin County may be the center of the fish's return thanks to the work of our October speaker, fisheries biologist Paul Christman.

In 2008, on a hunch, Paul managed to convince a hatchery to stake him to 38,000 hatchery eggs, which he planted in the Sandy River. His hatch results were good enough that he has repeated his efforts in tributaries of the Sandy with more year after year; so as of 2012 almost 2 million eggs have been planted.

There have now been early signs of success. Five hatchery derived fish were trapped earlier this summer below the Lockwood Dam in Waterville. They are believed to be graduates of the Sandy River program that made their way to the ocean and back. This is a complicated journey. 70 miles to the ocean, then on to Iceland or Greenland, where the fish mature for several years before returning to the Kennebec. So these 5 fish have made the cycle. To grasp the odds on this Paul suggests imagine putting a chicken egg in the ground and expecting it to hatch. As we shall hear in his talk, Paul has pioneered a method to blast eggs down tubes into the stream gravel. 36000 eggs were planted in 2008, 2009-130,000, 2010 – 450, 000, 2011- 860 000, and this year over a million. Five fish hardly define a comeback, but are they the start of something much bigger?

The story of the fall and rise of Atlantic salmon is variously tragic and glorious. That our own streams are part of the largest Salmon restoration effort in the eastern United States is a story well worth hearing. I hope you can join us to hear Paul tell it at our October 10th program.

# BACKYARD WIND!

Jim and Muffy Floyd who live in Vienna have sent us some information on the wind turbine they have put up near their house. It is interesting to hear the pros and cons for those who may be considering such a move!

What do we have: **Skystream 3.7 built by Southwest WindPower, Flagstaff AZ**

(3.7 = 3.7 meters for the span of the blades, approx. 12')

Rated to produce 2.4 kwh at sustained wind of 20 miles per hour; requires 8 mph wind to start turning

33 foot mono tower (which is mounted on 3 yards of concrete buried in the ground

Xbee radio communications from generator to a PC – used to upgrade software, monitor operation, get statistics about amount of power produced

Utility inter-tie - excess power is "stored" on the grid, no batteries involved. It also means that if there is a power failure on the grid, the Skystream stops so that there is no backfeed of power into the grid

We have a Net Energy Billing Agreement with Central Maine Power; If the Skystream is producing power and we need power, we get the electrons; if we do not need the power, the electrons go out onto the grid and our meter runs backwards.

Installed July 2007

What have we learned:

Not as windy where we live as we thought

Wind isn't constant even when it's windy

8 mph, 12 mph, 20 mph is really windy - not necessarily pleasant to live in; I would not want to live full time in the conditions that produce the most power

October-April are the windy months. There is almost no power produced May-Sept.

On average, our Skystream produces about 600 kwh per year.

Although it makes some noise when it is producing power, it is not irritating nor loud; it is the turbine that makes the noise not the blades turning

The bluebirds like to sit on the blades - when they are not turning

Are we happy with our Skystream? Absolutely!!

Can't imagine not having it as part of our yard and life; it's sort of like a kinetic garden sculpture that also produces some power

It may not be a cost effective purchase, but it gives us pleasure and helps us walk more gently on the earth.


# Kid's Corner

## Being cool and staying warm.

Christine Blais

As fall arrives and the temperatures drop, many birds begin their migration to warmer places; but some stay behind through the winter. One such bird is our State bird, the chickadee. But how does such a tiny animal stay warm during the cold winter months? First, they fatten up in the fall when there is plenty of food around. This fat gives them energy and helps to keep them warm. They can also fluff their feathers to keep a layer of warm air close to their skin, a lot like your puffy winter jacket does. Sometimes, they even gather with other chickadees and small birds in a hollow tree, huddling together and sharing their heat. When this isn't enough, chickadees have one more cool trick for staying warm, they really do get cool! Much like hibernation in mammals, chickadees can drop their body temperature, slow their heart rate down and enter into a deep sleep. This is called "torpor" and unlike hibernation which lasts all winter, chickadees can do this every night. Being in torpor uses much less energy than in the daytime and helps chickadees get through those long, cold, winter nights by saving fuel for when they really need it. Cool way to stay warm, isn't it?

For more information check out:

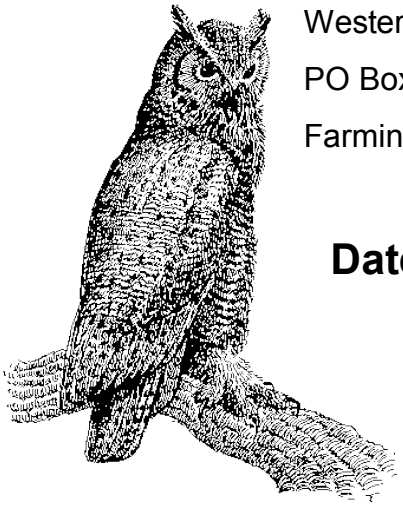
http://birding.about.com/od/birdingbasics/a/howbirdskeepwarm.htm

http://www.bbc.co.uk/nature/adaptations/Torpor

## Sandy River Land Trust

This past summer, Western Maine Audubon contributed to the Sandy River Land Trust's successful development of the Perham Stream Birding Trail in East Madrid. The land trust received major funding thru a TIF grant. This enabled them to hire two interns, Delani Littlefield of Strong, and Sadie James of Avon, both students at Mt. Abram High School last year. Kirsten Burbank, on the faculty at UMF and CMCC, was Project Coordinator. The history of East Madrid was researched, personal interviews conducted, photographs of the trail area taken, and points along the trail plotted using GIS software with the help of Trail Coordinator, Ben Godsoe. Website development was undertaken, and materials and text for a map and brochure developed. The map/ brochure is being put together by Steve Engle at the Community Center for GIS mapping. An informational kiosk is planned. **Western Maine Audubon** donated two pairs of high quality binoculars and two birding guide books to the land trust. The binoculars, which will remain with the land trust, and books, which were given to the interns, were used by the interns all summer. The interns also received basic "birding 101" instruction from Peter McKinley, a wildlife professional. Because of our donation, the land trust was able to redirect $300 of their grant money to enhance the kiosk design, and to incorporate a birding trail logo and some kiosk graphics. Members of Western Maine Audubon will also assist in the development of a checklist of bird species for visitors to consult as they use the trail. Use of the check list, a copy of which will remain with the land trust, will assist in monitoring the different bird species in the five distinct birding habits represented along the trail. The trail will officially open in October, and all work is expected to be completed by snowfall.

For more information visit Maine Trail Finder or the Sandy River Land Trust's website at www.sandyriverlandtrust.org.



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**Maine Audubon and Western Maine Audubon Society Membership Form**

Yes, I want ☐ to **join** or ☐ **renew** my membership with Maine Audubon and the Western Maine Chapter.

**I want to help protect and conserve wildlife habitat and promote environmental education and advocacy in Maine.**

Please send me Maine Audubon's quarterly newsletter, *Habitat,* and *The Pileated Press,* the Western Maine Audubon Society chapter newsletter. I understand that if I join at the Patron level or higher or enclose an additional $10, I will receive *Audubon,* the bimonthly National Audubon magazine. My membership benefits also include discounts on Maine Audubon programs and trips, on products from Maine Audubon's Nature Stores, and at Audubon sanctuaries nationwide.

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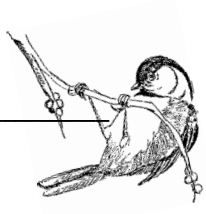
|---|---|---|
| ☐$25 Senior/Volunteer | ☐$65 Contributing | ☐$500 Benefactor |
| ☐$35 Individual | ☐ $100 Patron | ☐ $1,000 Director's Circle |
| ☐$45 Household | ☐ $250 Sustaining | |



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Questions? Call 207/781-2330 x232 or email member@maineaudubon.org.