



# THE MAINE WOODS

A Publication of the Forest Ecology Network

"In wildness is the preservation of the world." Henry David Thoreau

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Free



## No Compromise When It Comes to Saving Maine's Wild Places and Scenic Beauty

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Looking across Flagstaff Lake to the Bigelow Range.  
*Photo by Jonathan Carter*

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# A Voice in the Wilderness by Jonathan Carter

## DISAPPEARING MONARCHS

I have always been fascinated by the amazing migratory patterns of wildlife. You may recall that I wrote once about the Red Knot, which annually migrates from the Arctic to Terra del Fuego. B95, a tagged individual bird, was sighted again in 2013. B95 has made the trip over 20 times - flying the distance from the Earth to the moon and back. B95 has survived in spite of the human assault on food supply and habitat, as well as the vicissitudes of weather.



photo by Paul Donahue

A southbound Monarch feeding on Seaside Goldenrod along the Maine coast.

In January, I had the opportunity to travel to Mexico to visit with Maine Monarch butterflies that migrate over 2500 miles from Maine to specific high elevation mountain tops in the Sierra Madre. I have always been fascinated by this feat of the Monarchs.

I flew by jet to Mexico - a trip requiring the highest level of human technological capability, from computers to rivets to sophisticated metallurgy (yes - and unfortunately fossil fuels. I plan to plant trees to offset my carbon foot print). Yet this species of *mariposa* (Spanish for butterfly), *Danaus plexippus*, can leave my Maine farm in August or September with never having been to Mexico before - they represent the 4th generation of the previous Spring departure from Mexico - and finds its way to specific high elevation (9 to 11 thousand feet) Oyamel fir trees on specific mountaintops. This feat of travel is accomplished by an organism that has a nine centimeter (three and a half inch) wing span and a brain the size of a pinhead! Human navigational systems are primitive in comparison and we should be humbled by the Monarch's almost incredulous migratory journey. Unfortunately, all is not well with the Monarchs.

Each year, I manage my fields to make sure that the milkweed plant, which is required as a food source and substrate for the life cycle of the Monarch, remains abundant. For the last thirty years I have had a healthy population of Monarchs, but last year I did not see a single one - no eggs, caterpillars, chrysalises, or adults. In 1975, when the Monarch wintering grounds were first discovered, it was estimated that over a billion congregated in the mountains of central Mexico on about 50 hectares (124 acres) of high elevation fir forest. This year, less than a million have returned, covering less than one hectare (two and a half acres).

I have heard the same story about the disappearing Monarch from many folks across Maine. Like the Red Knot, the Monarchs are experiencing a catastrophic population

decline. And yes, climate change may have something to do with it, but the two primary causes appear to be related to deforestation and herbicides. Interestingly, these are two issues FEN has worked diligently to try stop in Maine.

Monsanto's herbicide *Roundup* is sprayed along Maine roadsides by the DOT, on fields by farmers, on lawns by homeowners, and on clearcuts via aerial application. While this inevitably eliminates milkweed plants, and thus the population of fourth generation Monarchs in Maine, the biggest decline comes from the application of *Roundup* on millions of acres in the breadbasket of North America. In the last twenty years, Monsanto has convinced the majority of farmers in the Midwest to grow GMO crops that are resistant to *Roundup*. Monsanto sells the seed and then the herbicide. On millions of acres of crops, industrial farmers are now spraying *Roundup* to kill competing vegetation - not only weeds, but most of the nectar-producing flowers and much of the milkweed. This has spelled disaster for the Monarchs. Not only has the plant substrate necessary for reproduction been removed, but the source of food energy has been vastly reduced as well.

For the few Monarchs that are able to overcome the obstacles of poisonous chemicals created by the human pathogen, they arrive in Mexico only to find their overwintering grounds being deforested. The old growth high elevation fir forests have been officially given protection by the Mexican government through the formation of Mariposa Bio-reserves, but massive illegal logging continues to reduce suitable habitat.

Many scientists feel that the Monarch migration east of the Rockies (which involves 90% of all Monarchs in North America) will end in the next five years. (There is a population west of the Rockies that migrates to central and southern California which seems to be fairly stable.) The thought that this age old migration - not unlike that of the caribou and bison - will end because of human insensitivity and stupidity, but mostly Monsanto greed, is very disturbing. Is the Monarch another "canary in the coal mine"?

Rachel Carson's *Silent Spring* continues. The Monarch is an iconic symbol of faltering biological diversity. In this issue of *The Maine Woods*, FEN confronts the many threats to the forests and wild places here in Maine. The disappearance of the Monarch is symptomatic of the declining health of Maine's biological diversity. When one examines the number of threats from mining, mountaintop industrial wind destruction, the E-W Corridor, oil pipelines, massive water extraction, Plum Creek's urbanization plan for Moosehead, torrefied wood and biomass energy development, increased logging on public lands, etc, it becomes apparent that we can't let down our guard for a second. There is not time for burnout, we must continue to push away and eliminate the threats. The good news is that for those of us who have been fighting the good fight for decades, we are seeing the emergence, not unlike the Monarch emerging from its chrysalis, of yet another generation of determined activists. Several of them have written articles for this issue of *The Maine Woods*. I remain hopeful that with the added energy of this new generation, we will be able to continue to hold off the purveyors of ecological destruction for a while longer.



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# Why Maine Wilderness Matters

by Jym St. Pierre

Because Maine is located half-way between the Equator and the North Pole, because the state stretches from the mountains to the sea, and because people have lived here for millennia, we have a broad range of natural and cultural landscapes. However, our most fundamental natural landscape will be lost if we do not act to protect and restore good examples of the Maine wilderness.

Maine was once entirely wilderness. A vast variety of wild plants and animals thrived in the forests and waters. During the past few centuries, we have built charming towns and cities, and fantastic networks to transport ourselves, our stuff and our ideas. At the same time, increasingly we have come to appreciate the importance of wild nature.

## Wilderness is important

There are numerous reasons why we need wilderness:

- Wilderness areas allow lots of great recreation activities, including hiking, backpacking, picnicking, wildlife study and photography, camping, paddling, fishing, cross-country skiing and snowshoeing.
- Wilderness areas provide essential ecological services, including safeguarding clean water and air, conservation of intact natural communities and native species, preservation of biological diversity, continuation of evolutionary processes, and sanctuary for endangered species.
- Wilderness areas can protect cultural values important to our North Woods legacy, including respecting Native American cultures and celebrating exploration by Henry David Thoreau, Teddy Roosevelt and other early wildlands explorers.

• Wilderness areas offer spiritual benefits. We need some areas where nature comes first, where we celebrate instead of manipulate God's great creation.

• Wilderness areas are a setting for economically valuable activities such as tourism, which already employs more people in Maine than any other economic sector.

## Maine is important in wilderness history

The importance of restoring and preserving the values of wilderness areas is especially significant in Maine. Thoreau was one of the first to understand that wildness should be cherished, not simply feared. He found wilderness deep in the heart of Maine more than 150 years ago. His insights from his wilderness experiences here fundamentally changed how people the world over view wilderness.

Even today, the reputation of Maine as having the largest undeveloped forest landscape in the eastern U.S. is still magic. Maine has used that magic to attract people from across the country and beyond. A few years ago a brochure prepared by the Maine Office of Tourism said, "Most of the state remains as pristine as a primal forest."

In truth, most of the state is not pristine and only a tiny fraction is publicly protected. In fact, by 1878 all of Maine had been privatized, except for a scattering of small public lots. Through the first half of the twentieth century, the pattern of large private ownerships of Maine's wildlands served both the private and public interests fairly well. However, since World War II, the intensification of forest practices, overfishing and overhunting of many species, and the development of fragile areas has accelerated the loss of wildness.



photo by Jym St. Pierre

While Maine has played a significant role in the history of the wilderness idea and the image of the state as containing big wilderness remains powerful, cherished Maine wilderness traditions are in jeopardy. Less than three percent of the land in Maine is permanently protected for its natural character; ninety-seven percent of the land is open to consumptive resource exploitation. And since 94 percent of the state is in private ownership, most of that exploitation occurs on private lands.

The marketplace can provide many important private and public values on working forest lands. However, we cannot rely on the private marketplace to provide the full range of public values traditionally afforded by wilderness lands. Nor can private lands offer assurance the public interest in those areas will be permanently secured.

We need more public lands and more areas on our public lands protected as wilderness.

## Precedents for Maine for wilderness areas

Because Maine is one of the few states with no history of original federal lands, we have very few federal Wilderness Areas. Only 0.09 percent of the land in Maine is federally designated Wilderness.

However, there are numerous precedents for the designation of protected wilderness areas in Maine on state lands. Most of Baxter State Park, for instance, is managed as a wildlife sanctuary where the dominant use is protection of the natural environment.

The law authorizing Maine's state parks explicitly contemplates the creation of wilderness areas: "The Bureau shall establish wilderness or natural areas..."

Similarly, the Land for Maine's Future Program authorizing law specifically says: "...the board shall consider whether the site is of state significance and contains...areas or lands with...wilderness or recreation values..." In fact, the term "wilderness" was deliberately added to the LMF law.

## Cognitive dissonance on wilderness

For generations, there has been a gap between how Maine markets the state on the one hand and the policies it promotes on the other.

Recently, the State of Maine launched a revamped website. The outdoor recreation page proudly asserted: "Few other states in the East can offer the kind of wilderness opportunities that exist in the Pine Tree State." Two of the three photos on the web page featured captions that mention "camping out in the wilderness." The other picture was of Acadia National Park.

Yet, the state has aggressively opposed efforts to designate wilderness areas and to create, or even study, potential new national parks in Maine. Both would be a draw. Both have been ferociously opposed not only by state government — under Democrats, Republicans and Independents — but also by the hunting, snowmobile, ATV and forest industry lobbies.

This disconnect is a serious problem. Many tourists are lured to Maine seeking a wilderness experience. However, when they arrive and see they have been tricked, they leave frustrated. Their tales about being promised wilderness and getting an industrial landscape instead do not help market Maine to other likely visitors.

There is room for both real wilderness and "multiple use" working landscapes. But we need to fix the imbalance by creating more wilderness areas and more public parks in Maine.

*Jym St. Pierre is the Maine Director of RESTORE: The North Woods.*

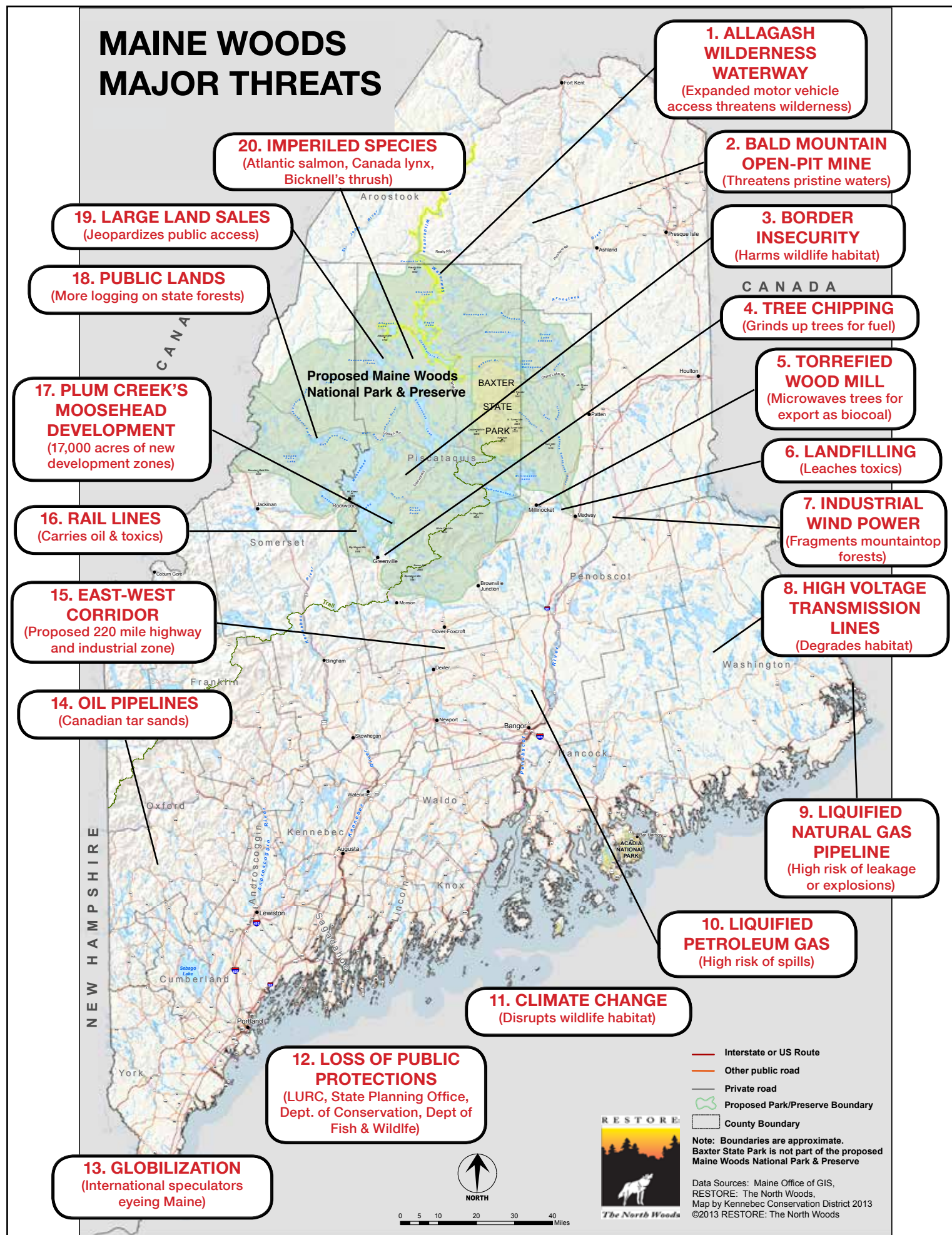


## MAINE WOODS MAJOR THREATS

Maine was once all wilderness. Even after centuries of exploitation and development, expansive landscapes and wild places still define much of the state. However, today less than 3 percent of the land in Maine is permanently protected for its natural character. And many special interests do not want more. For instance, Maine Gov. Paul LePage campaigned on opening three million acres of Maine's wildlands to development. In 2013, Maine is under unprecedented assault.

1. **ALLAGASH WILDERNESS WATERWAY (AWW)**- The legendary Allagash is one of the most iconic federally designated Wild rivers in America, but in most of the AWW only a thin beauty strip along the water is publicly owned and the pressures to increase motorized access, by users in all seasons, are relentless.
2. **BALD MOUNTAIN OPEN-PIT MINE** - To facilitate development of a massive open-pit mine at Bald Mountain proposed by the Canadian conglomerate J.D. Irving to extract gold, copper and other metals, the legislature enacted a bill weakening Maine's mining regulations. The new rules will apply statewide, so new mines across the state would be able to pollute pristine streams and lakes.
3. **BORDER INSECURITY** - The Department of Homeland Security (DHS) is building communications facilities for monitoring America's borders. In 2012, while erecting antennae for DHS, contractors started a fire that damaged one of the state's most valuable ecological reserves.
4. **TREE CHIPPING** - The Maine Woods is being chipped for pulp and for fuel. Nine operating biomass power plants consume chipped trees and branches to produce power. Logging forests to feed power plants harms habitat and burning biomass can worsen climate change.
5. **TORREFIED WOOD MILL** - An investment company that bought the defunct Great Northern Paper mills is building a plant to produce torrefied wood (artificial coal) for the UK and EU countries. The Maine Woods should not be sacrificed to feed power plants in Europe.
6. **LANDFILLING** - To try to save some of the jobs at failed paper mills, the State of Maine took over two massive landfills, Juniper Ridge in Old Town and Dolby in East Millinocket. Juniper Ridge is trying to expand, as is Maine's only commercial landfill, Crossroads in Norridgewock. A lot of out-of-state waste is being brought in to those dumps.
7. **INDUSTRIAL WIND POWER** - Maine's goal of having 3,000 megawatts of new wind power capacity by 2020 and federal tax subsidies are driving a mad rush to build dozens of industrial wind turbines on miles of mountains and ridgelines across the state. While all the environmental costs are in Maine, the electricity generated goes into the New England grid, chiefly for export to other states along the Atlantic seaboard, and the profits flow to out-of-state and foreign corporations.
8. **HIGH VOLTAGE TRANSMISSION LINES** - Central Maine Power Company, a subsidiary of the giant Spanish corporation Iberdrola, is constructing 350 miles of high voltage power transmission lines in western Maine. Bangor Hydro, a subsidiary of the Canadian conglomerate Emera, is building major power line expansions in eastern Maine. Maine Gov. Paul LePage is pushing to import hydropower from Quebec through northern Maine.
9. **LIQUIFIED NATURAL GAS (LNG)** - One major line already runs through Maine to pipe gas from offshore Nova Scotia to southern New England. As hydraulic fracking expands in surrounding areas, pressure is building for more gas pipelines. Several companies have proposed building terminals in Passamaquoddy Bay area to import or export liquefied natural gas.
10. **LIQUIFIED PETROLEUM GAS (LPG)** - A proposal to develop the largest LPG import terminal and storage tank on the East Coast of the U.S. on Penobscot Bay has been withdrawn, but might be revived. Meanwhile, LPG gas may be pumped through an abandoned jet fuel pipeline built during the Cold War. A leak would be catastrophic.
11. **CLIMATE CHANGE** - For years, Maine was a national leader in assessing and addressing the impacts of climate disruption on wildlife habitat, fishing, farming, forestry, and coastal communities. However, the LePage Administration has brought state climate change work to a crashing halt. Climate change will have major impacts on Maine.
12. **LOSS OF PUBLIC PROTECTIONS** - Several key natural resource agencies have been destroyed or damaged. The Maine State Planning Office has been eliminated. The Maine Land Use Regulation Commission has been replaced by a toothless planning agency controlled by county politicians with no land use expertise. The Maine Dept. of Conservation has been merged into the Dept. of Agriculture, the importance of its bureaus vastly diminished. And the Maine Dept. of Inland Fisheries and Wildlife, especially its non-game program, is being financially starved.
13. **GLOBALIZATION** - Promoters say Maine is perfectly positioned at the intersection of exploding global trade routes, but Maine seems caught in the middle of big schemes by international speculators.
14. **OIL PIPELINES** - Oil companies are moving toward shipping tar sands and other types of oil through the old Portland-Montreal pipeline, which cuts through the watershed for Maine's largest public water source. Aside from using existing pipelines, they also want to build thousands of miles of new lines across North America to send millions of barrels of oil a day from the Northern Plains oil fields to global markets.
15. **EAST-WEST CORRIDOR** - This private, 220-mile-long industrial zone would slash across Maine from Calais to Coburn Gore, threatening more than five-dozen significant conservation and recreation areas. Besides a four-lane superhighway, it could include natural gas and oil pipelines, high-voltage transmission lines, bulk water pipelines, cell towers, industrial wind power facilities, and more.
16. **RAIL LINES** - Every day 1.5 million barrels of oil is shipped by rail in the U.S. and Canada. Starting in 2012, rail cars full of oil began crossing Maine to New Brunswick. A devastating train wreck a few miles from the Maine border in July 2013 slowed but did not stop the shipments of oil and other toxics across the state over antiquated rail lines.
17. **PLUM CREEK\_S MOOSEHEAD DEVELOPMENT** - Plum Creek Real Estate Investment Trust has approval for 17,000 acres of new development zones in the Moosehead region around Maine's top-rated wildlands lake. Plum Creek plans to subdivide for thousands of seasonal houses, condos and shoreland MacMansions and to build resorts, golf courses, and commercial businesses.
18. **PUBLIC LANDS** - The State is planning to increase by 93%, nearly doubling, the logging on Maine's state forests over the average annual cut during the 2002 to 2011 reporting period. After years of restoration, heavy logging could again endanger the ecological, scenic, and recreational integrity of these public lands. Hunting, snowmobile, and forest industry lobbyists are working to block an offer by a conservation philanthropist to donate tens of thousands of acres and tens of millions of dollars to create a new national park and recreation area.
19. **LARGE LAND SALES** - Since the late 1990s, more than 10 million acres of forestland have been bought and sold in Maine. Little of this has been brought back into the public domain. While over a quarter of a billion dollars has been spent on conservation, 94% of the land in Maine remains private. As the land is divided into smaller tracts and new landowners have different goals than previous owners, pressures increase to develop wildlands and to limit public access on private lands traditionally open to the public.
20. **IMPERILED SPECIES** - Nearly one in four of the native plants and non-marine mammals in Maine is endangered. Maine has the only remaining wild Atlantic salmon run in the U.S., but the numbers are perilously low. The State is seeking a permit to allow the killing or harming of federally protected Canada lynx when trappers go after coyotes. The State is also supporting the "delisting" of wolves under the Endangered Species Act.

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# The Answer My Friend Is Blowing in the Wind

by Donna Sewall Davidge

*“If the machine of government is of such nature that it requires you to be the agent of injustice to another then I say break the law”* Henry David Thoreau

When I was an infant on the shores of Mattawamkeag Lake something enduring happened. I developed a love for not only nature, but my roots, the ancestry that had settled this small New England town, intentionally chosen on the site of the small island with a falls running by it that led into the expansive and untouched Lake Mattawamkeag.

As a child we found arrow heads on the shores. My great grandfather’s home still had baskets and medicine pouches made by the Native Americans. Fast forward to fifty-six years. I had traveled the world in search of life’s answers and found that my youthful wanderings took me back to Island Falls to purchase my great grandparents’ home at age forty one. The home is listed in the National Registry of Historic Places, though only a handful of people may know this. Andrew Vietze put the town and the story of my great grandfather’s lifelong, and some might say unlikely, friendship with a then young college student from Harvard, a young man of privilege named Theodore Roosevelt, into an award winning book that made some more people aware of this friendship and town and home.

Young Theodore was so impressed with the people and the place that he came back two more times and promised to bring his sons when he became a father, but his life was so full of the presidency and other accomplishments (one fighting the blasting of ridges in Alaska similar to what we are not fighting in Maine) that the last time he saw my great grandfather was on a presidential tour to Bangor, where the first question he asked was “Is old Bill Sewall here?” Of course he was. They got to spend time together, as the last time they had seen each other was when my great grandfather had traveled to Washington D.C. for Roosevelt’s inauguration.

My mother instilled the appreciation of Mattawamkeag Lake by bringing me to the cabin that had been built with the hands of our local relatives Sam Sewall and his father Merrill, who ran my great grandparents’ cabins on the lake. Every summer we were there from the day school was out in Connecticut until the day we had to return.

Two years ago I received an email on one of those especially beautiful September days. We had just spent the night at the cabin, five miles down the lake, only boat accessible unless you choose to hike. I had felt a special appreciation that day. The email, from a well-meaning

fellow landowner John Gates, whom I had met once in passing at our home, informed me that the 40-story high industrial wind turbines that were planned for the tiny nearby town of Island Falls would be visible from eighty per cent of Lake Mattawamkeag. So began a journey I would not have wished on myself or anyone else, the education of the politics and power plays involved in this scam of hysteria about our energy challenges.

The first thing I did was gather the names of other people in the state who had already faced the battle. I spoke with one man who suggested we hire a scenic consultant, so I called a scenic consultant. I was also given the name of various others, whom I contacted. Along the way, I discovered Lynne Williams, the lawyer who has guided us through our process. I also learned about the case in 2010 where Rufus Brown, the other lawyer who has

helped wind warriors, had represented a land trust on the other lake in town, Pleasant Lake. They had lost their case, based on the noise argument. Though the noise argument is a valid one, with people made ill worldwide, and was recently featured in a NY magazine article, there is skepticism as the noise does not affect everyone the same way. I did my own investigation, traveling to Mars Hill to meet Mike Gosselin, who it definitely affected. In his yard he has signs “Wind turbines are noisy”. The day we visited they were not audible but Mike was diligently insulating his garage, showing us his bedroom in which he could no longer sleep. He said even the frogs had disappeared. The moose they used to see on Mars Hill were gone. When I visited Rainer Engle, who had found his dream cabin and came every summer from Switzerland to Lincoln Lakes, the scenic impact from his lakeside home was tragic. He said the beavers had gone.

Lynne suggested that we rally addresses and create a letter to send out to landowners. Island Falls has 3000 taxpayers and 800 residents. They have not one but two pristine highly ranked lakes. Pleasant Lake still has the Roosevelt Camps run by the McAuliffe family and I offer lake stays at our cabin and lake outings to do yoga

and visit Bible Point, where Teddy Roosevelt would trek to read his bible at a peaceful spot at the end of the lake. Here the river once again meets the lake as it does from the island location in town.

Thus began a journey of untold hours and anxiety, ups and downs, hopes and disappointments. With the help of Candy Rupley, whom I had only known in passing before as one of the local vets’ daughters who lived away but summered on Pleasant Lake, a sisterhood was formed. We both went to the town offices and wrote down what addresses we could before departing in the fall. The \$450 it would cost to replicate all the addresses was not in our nonexistent budget so we did what we could by hand, both sending out letters that totaled 150. (Later we would rally support bit by bit to pay Lynne and with the help of FEN as our fiscal sponsor processing payments of over \$100 for tax deductions).

On a Saturday evening I was at home when the phone rang. It was a man whom I had never met before. He lived in Newton, Massachusetts and he was responding to my letter. He suggested that we create a petition online and proceeded to do so. The deadline for DEP comments was near. First Wind had already secured a permit for 34 turbines with the 2010 round. They had now upped it to 50 and larger after winning the first case. No new permit had been granted and though new noise regulations had been instituted by the hard legislative work of Steve Thurson and Monique Aniel, there was no evidence that First Wind would honor these lower sound levels.

I attended the TIF meeting in Oakfield, where 80 people voted in a funding that would benefit the wind company much more than the town. To a town that is struggling, any money looks good. After the money is gone in twenty years, what will then remain of Oakfield and how will our beautiful lakes be ruined and our wildlife destroyed? The man who started the petition suggested starting a Facebook page where we could share all the articles and information we were gathering globally that confirmed all the negative and destructive aspects of this industry. People became abusive on the page, so we had to remove it. These were personal attacks from Oakfield residents.

I reached out anywhere and everywhere possible. Though our petition gathered over 700 signatures in a few weeks, the DEP approved the project. I was unable to attend the BEP hearing. I did attend the State Supreme Court hearing last December in Portland. We had actually thought that because our lakes were historic and highly ranked we might have had more of a chance than the people from Lincoln Lakes, for example, who attended the TIF meeting with me to show photos of red flashing lights on their lakes at night and tell about the noise intrusion. Some of the people threw paper at these speakers. It was good that was all they had to throw.



photo by Jym St. Pierre

There were a few people who actually came up and thanked me for standing up against the slick wind company who had seduced this small town with promises of a better future. They said they were concerned for the eagles and that they lived on the lake that will be nearby the turbines, their retirement haven. Stories of people's lives ruined throughout our nation and all over the world are happening because of wind. We lost our court case because of the expedited wind law- even the First Wind lawyer Juliet Brown said in the Supreme Court hearing that the scenic guidelines were subjective and therefore hard to define. Jim Palmer, State Scenic specialist, said the same at our BEP hearing.

I hoped to educate Island Falls by sponsoring a showing of the award winning documentary *Windfall*, knowing two residents were already leasing their land to First Wind. About twenty people showed. I had another meeting, (this time 50 showed) inviting a man from Dixmont, a town hours away, who had worked long and hard on a wind ordinance, not knowing if his town would approve it. Luckily, they did. Citizens were confused, thinking wind ordinances gave the wind companies the okay to move in when it was actually the opposite. The wind companies play on peoples' ignorance and gullibility. When Matt Kearns from First Wind called me early on in the game and asked what he could do for me, I was clear there was nothing he could do. I am not a trust fund baby, as rumors have spread. I am simply a simple woman who has lived with a lot of uncertainty in my own life choices, including purchasing my great grandfather's home because I believed in upholding his legacy and knew Aroostook County was special enough to do that. Our guests over the past seventeen years have confirmed that, many returning and many have a once in a lifetime experience. One thing is certain. When Matt Kearns said I was not used to change I thought to myself that his PR spin proved he did not know me. Unlike the people who suffered in Mars Hill or the ones who had the first case against Oakfield, I have not been silenced with their gag agreements and bribes. Win or not, I live in the footsteps of my ancestors. I feel certain they would do the same as I am today. Friendships in Island Falls and Oakfield have been severed and strained as always happens when these wind companies come around. I feel certain William Sewall and Theodore Roosevelt's friendship would have held strong on the same path with this battle. My great grandfather always said "This house is built on honor." I have done my human best to uphold that.

In this case, the answer is not blowing in the wind, my friend, the wind is blowing money into the pockets of politicians and the wind company at the expense of the legacy of Maine.

*Donna Sewall Davidge is the great grand-daughter of William and Mary Sewall. William Sewall's parents Levi and Rebecca founded the town of Island Falls in Aroostook County in 1845. William was Teddy Roosevelt's nature guide and lifelong friend.*

[www.sewallhouse.com](http://www.sewallhouse.com)  
[www.protect-our-lakes.org](http://www.protect-our-lakes.org)

For more information:  
 Wind watch  
 Maine Wind Task Force  
 North American Platform Against Wind  
 Save the Eagles ORG  
 And numerous groups online and on Facebook from Scotland to the UK to Australia and more that oppose wind.

## First Wind's Rampage in Maine

by Jonathan Carter

First Wind of Boston is now proposing for the western mountains the largest industrial wind project to date. It will stretch over 25 miles from Bingham to Parkman. The sixty-four 500 foot high turbines First Wind plans for this remote stretch of the Maine Woods will be highly intrusive and visible to large sections of the Appalachian Trail from the Bigelow Preserve to Katahdin, including the wildest section of the Appalachian Trail known as the "100 mile wilderness". The project area is also designated as critical habitat needed for the Atlantic salmon restoration efforts. This project will destroy the vegetation along the banks of 34 perennial streams critical for salmon recovery.

Mainers are being taken to the cleaner by First Wind of Boston. These industrial wind "pig farms" are ruining the "wild" brand that defines Maine and attracts tourists, hikers, and other outdoor enthusiasts.

First Wind's application to the Maine DEP states that "the purpose of the project is to create a commercially viable low impact wind energy project". Nothing could be further from the truth.

It is common knowledge that mountaintop industrial wind is not "commercially feasible". The subsidies from local (TIFs), state (Pine Tree Zones), and federal (Production Tax Credits) governments are the only reason industrial wind projects are economically viable. Not only are taxpayers subsidizing First Wind, but consumers are paying more for electricity due to the high cost of this energy. When these subsidies stop, the wind corporations will disappear, leaving behind a severely impoverished, industrialized landscape. It is a scam being perpetrated on the people of Maine by wind lobbyists and a few "environmental" groups who refuse to get their heads out of the sand and to stop taking the "donations" the wind corporations enjoy passing out.

First Wind of Boston likes to proclaim the Bingham Project as having a capacity of 191 MW – sounds pretty impressive, but this also is a just a remarkable spin job. The turbines will only produce power when the wind is blowing, so the actual power generation will be about 22% of capacity or about 42 MW. If you subtract a 20% curtailment factor (which is First Wind's number - I suspect it is a lot higher), the 9% transmission loss, and the 30% spinning reserve dumping, then the final amount

available is only about 21 MW. Would you buy a furnace that is only 11% efficient?

The application also states that a "wind power project like Bingham Wind Project address

".....greenhouse gases impact on the environment and the health of Maine citizens". This is also not a truthful statement.

Every scientific study I have been able to review comes to exactly the opposite conclusion. Because wind is intermittent, it is necessary to ramp up and down fossil fuel plants (which is totally inefficient) to accommodate the intermittency. This results in greater fuel consumption and more greenhouse gases. It is like driving in stop and go traffic.

When the greenhouse gases generated by construction, the consumption of large amounts of power needed to run the turbines (power not from the turbines), the thousands of gallons of regularly changed lubricants, the destructive mining of rare earth metals in Mongolia, the shipment of turbines, the plastics used in the composites, then this so called "clean energy" is pretty darn dirty. Add to this the loss of forest carbon sequestration due to the clearcutting of forests for turbine pads, roads, and power lines, and mountaintop industrial wind doesn't look so green.

Finally, as far as First Wind's claims that the Bingham Wind project is in the best interest of the "health of Maine citizens", what about the Mainers who have had to move out of their homes because of noise pollution or the pernicious impact of infrasound - a sound often used as a torture technique around the world? Mainers are now being treated with anti-depressants, blood pressure, and insomnia medications as a direct result of industrial wind turbines.

One thing that I have learned over the last five years studying mountaintop industrial wind - and it was a hard fact to face - is that just because something is renewable doesn't make it *de facto* clean and green. First Wind is leaching taxpayer money to build turbines which are dividing communities, blasting off mountaintops, clearcutting forests, killing birds and bats, forcing people out of their homes, negatively impacting the health of Mainers, and destroying the visual beauty of wild Maine. If First Wind's rampage of trashing Maine is allowed to continue, it truly will be a sad day for Maine.

*Jonathan Carter is the executive director of the Forest Ecology Network.*



# 60-Day Notice of Intent to Sue for Violation of Section 7 of the Endangered Species Act

The undersigned counsel represents Donna Davidge, Peter Connelly, Candace Rupley, Protect our Lakes, an association incorporated in the state of Maine, and the **Forest Ecology Network**, a 501(c)(3) incorporated in the state of Maine. On behalf of our clients, we are serving this 60-day notice pursuant to the citizen suit provision of the Endangered Species Act (ESA), 16 U.S.C. § 1540(g)(1)(A).

On June 1, 2013, Defendant Army Corps of Engineers (Corps) violated Section 7(a)(2) by authorizing the issuance of a permit to Evergreen Wind II, LLC and GenLead (collectively “Evergreen”) in order to construct an expanded Oakfield Wind Power project. This is a matter under the Endangered Species Act (ESA), 16 U.S.C. §§ 1531-1544, involving “take” of endangered Atlantic salmon (*Salmo salar*) in violation of the ESA. The unlawful “take” is very likely to occur as a result of defendants’ intrusive installation and long-term operation of an extensive industrial windpower facility known as the Oakfield Wind Power Project (Project) that is to be located in the Town of Oakfield and T4R3 WELS, in Aroostook County, Maine. The transmission lines will extend through multiple towns between the Town of Oakfield and the terminus in the Town of Chester.

Likewise, by moving forward with the Project, without obtaining an Incidental Take Permit (ITP) pursuant to 16 U.S.C. § 1539(a)(1)(B), Defendant Evergreen will unlawfully “take” imperiled Atlantic salmon in numerous ways, including killing, harming, wounding, and harassing members of the species, as well as negatively impacting the species’ critical habitat. 16 U.S.C. § 1532(19).

In enacting the ESA, Congress declared that “the United States has pledged itself as a sovereign state in the international community to conserve to the extent practicable the various species of... wildlife...facing extinction.” 16 U.S.C. § 1531(a)(4). One of the stated purposes of the ESA is “to provide a program for the conservation of ... endangered species and threatened species. Id. § 1531(b).

The ESA defines an “endangered species” as “any species which is in danger of extinction.” Id. § 1532(6).

Section 9 of the ESA prohibits the “taking” of any endangered species. Id. § 1538(a). The Act defines the term “take” very broadly to include “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Id. § 1532(19).

The term “harass” is defined as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.” 50 C.F.R. § 17.3.24.

The term “harm” is defined as “an act which actually kills or injures wildlife, [which]... may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.” Id.

Section 10 of the ESA provides a limited exception to the otherwise strict prohibition against the “taking” of an endangered species, whereby an applicant can apply to the U.S. Fish and Wildlife Service (USFWS) for a permit authorizing a take if such taking is “incidental to, and not the purpose of, carrying out an otherwise lawful activity.” 16 U.S.C. § 1539(a)(1)(B).

The USFWS may not issue an ITP unless certain safeguards for the species are satisfied by the applicant, including the submission of a detailed “con-

servation plan.” Id. § 1539(a)(2)(A). Additionally, an ITP may be issued only after an opportunity for public comment on the application and conservation plan, and after findings by the USFWS that, among other things, the applicant will “minimize and mitigate the impacts of such taking” and “the taking will not appreciably reduce the likelihood of the survival and recovery of the species.” Id. § 1539(a)(2)(B).

## ATLANTIC SALMON

The Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon is listed as a federally endangered species under the joint jurisdiction of the USFWS and the National Marine Fisheries Service (collectively, the Services) (74 FR 29344; June 19, 2009). The Atlantic salmon GOM DPS encompasses all naturally spawned and conservation hatchery populations of anadromous Atlantic salmon whose freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River and wherever these fish occur in the estuarine and marine environment. Also included in the GOM DPS are all associated conservation hatchery populations used to supplement the natural populations.

On June 19, 2009, the Services designated critical habitat for listed Atlantic salmon pursuant to section 4(b)(2) of the ESA. According to the designation, the critical habitat for the GOM DPS includes 45 specific areas occupied by Atlantic salmon at the time of listing that included approximately 19,571 km of perennial river, stream, and estuary habitat and 799 square km of lake habitat within the range of the GOM DPS and within which are found those physical and biological features essential to the conservation of the species. Critical habitat for Atlantic salmon includes two primary constituent elements: spawning and rearing habitat and migration habitat. The designation of critical habitat for Atlantic salmon was revised on August 10, 2009 (74 FR 39903).

According to the USFWS comments on this Project, only a very small portion of the Maine GenLead transmission lines ... is outside of the GOM DPS ... and the entire route is either designated as critical habitat or was specifically “excluded” from designation as critical habitat for economic reasons. [Emphasis added] USFWS Section 7 Consultation, dated January 23, 2013, at 7. The USFWS also notes that “most of this project occurs within the geographic range of the GOM DPS and thus has the potential to affect listed Atlantic salmon through project construction and long-term maintenance and operation activities. Portions of the project also occur within HUC-10 watersheds that are designated as critical habitat for GOM DPS Atlantic salmon, so the project has the potential to affect critical habitat associated with a number of perennial streams, as well.” Id.

Yet, throughout their Consultation report, the USFWS repeatedly states that certain waterbodies probably don’t contain Atlantic salmon, despite the sweeping comments above. However, there is a significant dearth of actual scientific information about where Atlantic

salmon are present because surveys are spotty. (“Information regarding the presence of [sic] absence of Atlantic salmon is only available for a few of the 37 streams crossed by the transmission line ROW. While some of the streams are known to be currently occupied by Atlantic salmon (e.g., East Branch and West Branch Mattawamkeag rivers, Penobscot River, Mattaseunk Stream) and a few others could have Atlantic salmon present in them, many of the streams are unlikely to have Atlantic salmon present due to the distance from known Atlantic salmon locations (including stocking locations) and the very low populations of Atlantic salmon currently present throughout Maine.” Id. at 12. Even the USFWS admits that “not all streams and lakes within a given watershed are necessarily occupied by Atlantic salmon at any given time,” inferring that there is no actual on the ground scientific or survey evidence of where Atlantic salmon are, or are not, at any given time. Id. at 6-7. (“Surveys have not been conducted in any tributaries of the East Branch of the Mattawamkeag River.” Id. At



Sea-Run Atlantic Salmon, *Salmo salar*  
Adult Female in Spawning Colors

9; “This model, however, does not provide information on any of the small, perennial headwater streams within the Oakfield II project; likewise, on-the-ground Atlantic salmon habitat mapping is not available.” Id.)

## TAKE OF ENDANGERED ATLANTIC SALMON

Each death or injury of an endangered species amounts to a “take” under the ESA. 16 U.S.C. §§ 1538(a), 1532(19). While the USFWS and the Corps have concluded that impacts on endangered Atlantic salmon will be “insignificant and discountable,” they admit that there will be impacts, albeit brief and able to be mitigated. Id. at 9, 10, 12, 13, 15. However, nowhere does either agency state that the construction and operation of the project, including the more than 50 miles of transmission lines, will not result in “take” of endangered Atlantic salmon, at the very least, given the temporary and permanent waterway fill required by the project. Rather, the USFWS admits that there could be a risk of take of Atlantic salmon. (“ATV use may not cause any adverse effects to Atlantic salmon or their critical habitat or result in take of Atlantic salmon.” Id. at 5)

As noted above, “take” is statutorily very broadly defined. It is almost inconceivable that the construction of this project will not harass Atlantic salmon “to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

50 C.F.R. § 17.3. The construction of the necessary infrastructure for the Project, including stream crossings and temporary and permanent fill, will inevitably “disrupt,” if not destroy, parts of the Atlantic salmon habitat, as well as impacting the essential behaviors of the Atlantic salmon, including breeding and feeding in the local waterbodies. Such harassment is by definition a “take” under the ESA. 16 U.S.C. §§ 1538(a), 1532(19); 50 C.F.R. § 17.3.

Because of the “take” that will occur during the construction and the lifespan of the project, Evergreen’s

only lawful option for complying with the ESA is to obtain an incidental take permit pursuant to 16 U.S.C. §1539(a)(1)(B), which would allow Evergreen Wind II, LLC to incidentally “take” Atlantic salmon with proper mitigation measures in place. By moving forward with construction and eventual operation without such a permit, Evergreen is in patent violation of the ESA. Likewise, the Army Corps of Engineers is in violation of 16 U.S.C. §§1538(a), 1532(19) for granting the permit to Evergreen under the Clean Water Act Section 404, for construction of the project and transmission lines.

Evergreen has never applied for an ITP under Section 10 of the ESA nor has it adequately surveyed the Atlantic salmon population. Yet, despite the intrusion into the waterways within the Project’s area, the Corps made a determination that the project is not likely to adversely affect endangered Atlantic salmon and its designated critical habitat and the USFWS concurred with this determination. See Environmental Assessment 404(b)(1) Guidelines Evaluation.

According to the USFWS comments, a sizable portion of the summit project is located within the geographic boundary of the GOM DPS, including a portion of the east turbine string, most of the north turbine string, the Operations and Maintenance building, the entire south turbine string, and the substation. All portions of the summit project that are within the GOM DPS are also within HUC-10 watersheds that are designated as critical habitat for Atlantic salmon. USFWS Section 7 Consultation at 7.

The Atlantic salmon population is in critical condition. As the USFWS itself acknowledged, when promulgating the rule listing the Atlantic salmon as endangered, “... the abundance of Atlantic salmon in the GOM DPS is low and either stable or declining. The proportion of fish that are of natural origin ... is continuing to decline.” Likewise, they also note that “productivity of the GOM DPS is low and has not consistently had a replacement rate above 1.0 such that population growth would be expected.” And, lastly, USFWS stated at that time that “the spatial distribution of the GOM DPS has been significantly reduced from historic levels and is currently limited by low abundance of Atlantic salmon.” 74 FR 29352. Three significant measurements of the Atlantic salmon population – abundance, productivity, spatial distribution – all point to an extremely endangered species.

Most importantly, the Atlantic salmon critical habitat is likewise threatened with destruction, modification and curtailment. As the USFWS itself noted in the Federal Register, such threats include the elimination and degradation of spawning and rearing habitat, the reduction of habitat complexity and connectivity, the degradation of water quality and the alteration of water temperatures. The required temporary and permanent fill required by this Project will most certainly exacerbate at least some of these conditions. 74 FR 29366.

#### CONCLUSION

If, within 60 days, the Army Corps of Engineers fails to order Evergreen to apply for an ITP as a condition of the Permit granted to them on June 1, 2013, to construct the expanded Oakfield Wind Project, Donna Davidge, Peter Connelly, Candace Rupley, Protect Our Lakes and the Forest Ecology Network will pursue litigation in federal court. Petitioners will seek injunctive and declaratory relief, as well as attorney’s fees and related costs. Alternatively, Evergreen could choose to voluntarily apply for an ITP, with the commencement of construction contingent on the grant of the ITP.

Thank you for your attention to this matter.  
Sincerely,

Lynne Williams, Esq.

## Lawsuit Filed over First Wind’s Expanded Industrial Wind Project in Oakfield

by Lynne Williams

The Island Falls-based “Protect our Lakes,” along with the **Forest Ecology Network** and individuals living in Island Falls and environs, have filed suit in federal district court appealing the permit granted to First Wind to build an expanded industrial wind project in Oakfield, consisting of 50 mountaintop turbines. The original project was permitted a number of years ago and, though the expanded project almost doubles the number of turbines and adds 59 miles of transmission lines to the project, the Department of Environmental Protection treated it not as a new project with a full review, but merely as an amended application. The suit is brought under the Endangered Species Act, the International Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, and asks that the court send the project back to the Army Corps of Engineers, in conjunction with the U.S. Fish and Wildlife Service, for additional biological studies.

Fish and Wildlife has confirmed the presence of Bald Eagles within one mile of the project location and the evidence is recently piling up that the turbines kill eagles. While it looks as if the blades are turning very slowly, that is deceiving. Some turbines are turning as fast as 220 mph and the eagles are lulled into thinking they can fly through the gap between the blades. The applicant states that post-construction studies will be done after the project is built to determine if, and how many, eagles and other migratory birds are slaughtered by the project. However, once the project is built it will be too late. Following bird deaths, only the frequency and speed of the turbines will be tinkered with, an ineffectual fix.

We are likewise arguing that the construction of the 59 miles of transmission lines threatens Atlantic Salmon, protected under the Endangered Species Act. The Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic Salmon is listed as a federally endangered species under the joint jurisdiction of the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, and encompasses all naturally spawned and conservation hatchery populations of anadromous Atlantic Salmon whose freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River and wherever these fish occur in the estuarine and marine environment.

Critical Habitat has been designated for Atlantic Salmon, within which the fish spawn and rear offspring and migrate. According to Fish and Wildlife’s own comments on this Project, only a very small portion of the transmission lines for this project ... is outside of the Gulf of Maine Distinct Population Segment for the Atlantic salmon, and the entire route is either designated as critical habitat or was specifically “excluded” from designation as critical habitat for economic reasons. Fish and Wildlife also notes that “this project ... has the potential to affect listed Atlantic Salmon through project construction and long-term maintenance and operation activities.”

Yet in their report on this project, Fish and Wildlife repeatedly states that certain waterbodies probably don’t contain Atlantic Salmon, despite the sweeping comments above. However, there is a significant lack of actual scientific information about where Atlantic Salmon are present because surveys are spotty. “Information regard-

ing the presence of [sic] absence of Atlantic Salmon is only available for a few of the 37 streams crossed by the transmission line ROW. While some of the streams are known to be currently occupied by Atlantic salmon (e.g., East Branch and West Branch Mattawamkeag rivers, Penobscot River, Mattaseunk Stream) and a few others could have Atlantic Salmon present in them, many of the streams are unlikely to have Atlantic Salmon present due to the distance from known Atlantic Salmon locations (including stocking locations) and the very low populations of Atlantic salmon currently present throughout Maine.”

As noted above, each death or injury of an endangered species amounts to a “take” under the Endangered Species Act. While Fish and Wildlife and the Army Corps have concluded that impacts on endangered Atlantic Salmon will be “insignificant and discountable,” they admit that there will be impacts, although they will be brief and able to be mitigated. However, nowhere does either agency state that the construction and operation of the project, including the more than 50 miles of transmission lines, will not result in “take” of endangered Atlantic Salmon, at the very least, given the temporary and permanent waterway fill required by the project.

“Take” is statutorily very broadly defined and includes “killing, harming, wounding, and harassing members of the species, as well as negatively impacting the species’ critical habitat.” 16 U.S.C. §1532(19). It is almost inconceivable that the construction of this project will not harass Atlantic Salmon to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The construction of the necessary infrastructure for the Project, including stream crossings and temporary and permanent fill, will inevitably “disrupt,” if not destroy, parts of the Atlantic Salmon habitat, as well as impacting the essential behaviors of the Atlantic Salmon, including breeding and feeding in the local waterbodies. Such harassment is by definition a “take.”

Our lawsuit seeks to compel the U.S. Fish and Wildlife Service and the Army Corps of Engineers to comply with federal law by basing their permit decision on solid statistics about risk to these two species, and their habitats, as well as to the birds that migrate through the project area, rather than upon conjecture about species’ habitat and population. The Atlantic Salmon population is in critical condition. When proposing the rule to list Atlantic Salmon as endangered, Fish and Wildlife itself acknowledged that the population of the species in the GOM DPS is low and either stable or declining. While Bald Eagles are no longer listed under the Endangered Species Act, they continue to be protected under the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act, which also protects all migratory birds. The federal district court should recognize these threats and send the project back to the federal agencies for additional scientific review.



# Maine Audubon's Flawed Wind Study

Friends of Maine's Mountains (FMM) is calling upon Maine Audubon (MAS) to retract the findings of their recently published study attempting to validate the compatibility of wind power and Maine's wildlife populations and the habitats that support them.

FMM recognizes that the MAS has always held itself to a high standard and been at forefront of wildlife advocacy in Maine, but this study clearly falls far short of that tradition and is troubling in its implications for Maine's environment.

According to FMM, the study, *Wind Power & Wildlife in Maine*, is deficient in the necessary scientific rigor required to conclude that industrial wind turbines are not detrimental to Maine's wildlife and their habitats.

FMM also encourages MAS to reconcile the large sums of corporate funding they receive annually from several companies in the wind industry, and if those donors had any influence on their findings. In addition, Mainers need to know if the MAS agrees with the National Audubon Society's (NAS) emphatic challenge to the recently released U.S. Department of the Interior's proposed rule change. The proposed change would give wind energy developers a 30 year exemption from criminal prosecution for killing Bald Eagles and other migratory birds at their wind "farms."

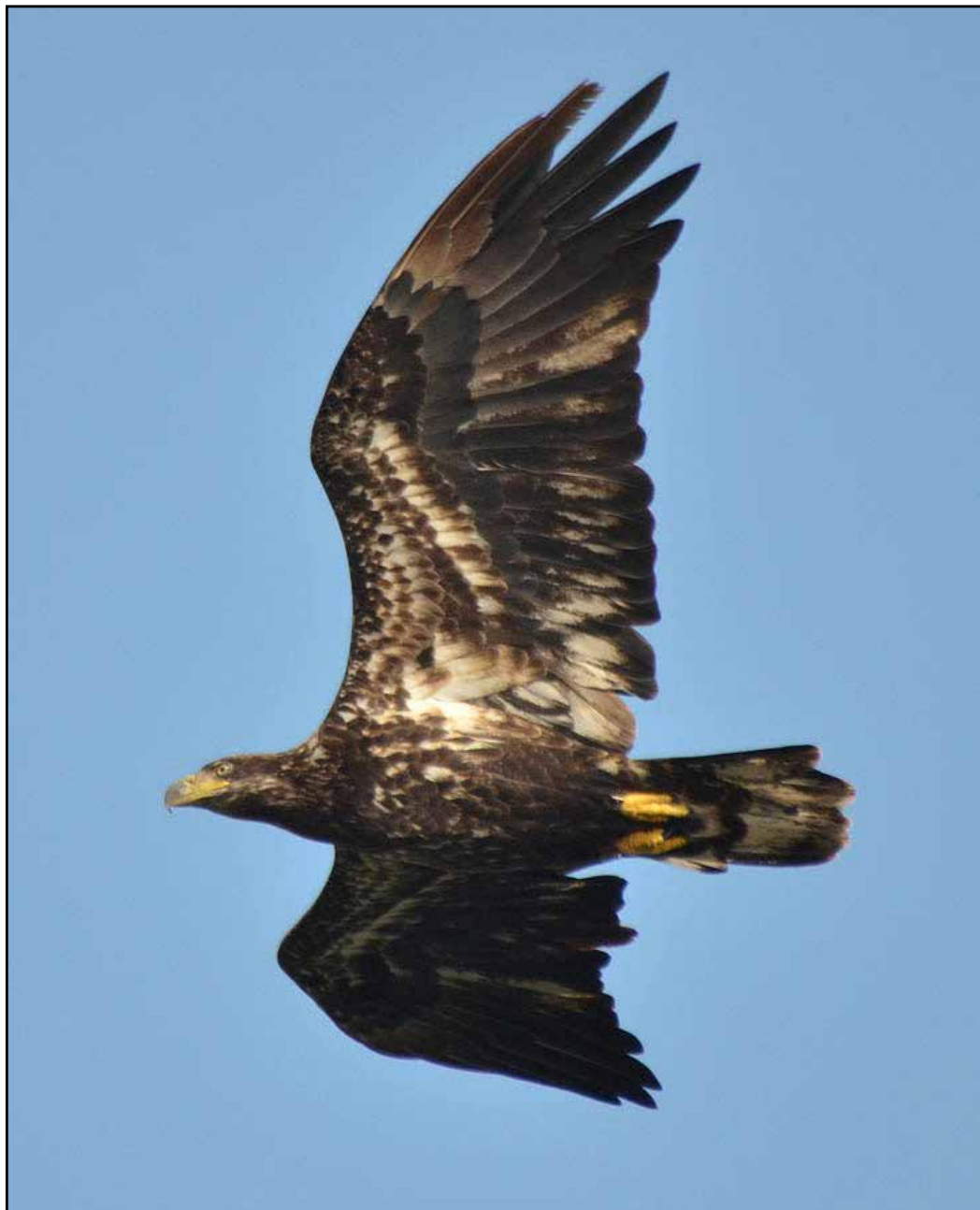
Within 24 hours of the MAS report, 2013 NAS President and CEO David Yarnold offered the following response to Interior's new rule: *"Instead of balancing the need for conservation and renewable energy, Interior wrote the wind industry a blank check. It's outrageous that the government is sanctioning the killing of America's symbol, the Bald Eagle."* The results of the MAS study and their lack of due diligence in this area put them in direct conflict with the NAS.

At their December 4th Falmouth presentation, MAS disclosed that the study did not rely on direct investigations or field work to determine mortality rates of birds and bats from turbine collisions or any evaluation of mortality rates for migratory birds. The report acknowledges the paucity of data:

*"We have very little information about either bat migration or resident bat populations (locations and numbers) in Maine. Bird migration routes have been poorly studied, and we know very little about migratory pathways through the state. Maine's Important Bird Area project is incomplete, especially in the northern half of the state, but could provide information about areas more likely to have higher concentrations of migratory birds."*

FMM sees these deficiencies as major red flags that clearly undermine the validity and conclusions of a

report that condones building at least 1000 40+ story bird-killing machines across Maine. Moreover, nowhere in the MAS study is there a quantification of presumed benefits from wind power. No valid impact/benefit analysis can occur without quantification. If Maine installs 3000 megawatts of wind capacity, as the MAS report promotes, it will provide less than five percent additional electricity to the New England grid, and because



An immature Bald Eagle along the Maine coast.

of its physical deficiencies, it will not measurably reduce greenhouse gas emissions.

FMM spokesperson stated, *"The MAS report is troubling and should be withdrawn and re-evaluated. The MAS has an ethical and moral obligation to their members, the people of Maine, and the wildlife they were founded to protect. The conclusions presented to the public in this study are not in keeping with that mandate. MAS needs to rethink its position, open it up to a higher standard of scientific review, and get it right."*

Dr. Rebecca Holberton is a Professor of Biology and Ecology at the University of Maine, Orono. She is an extensively published researcher in the field of bird migration for over a quarter of a century, and in her reaction she agreed with FMM's position on the MAS report:

*"FMM's concerns are at the heart of the weaknesses of the MAS report. The report is not a report of actual findings but is a hypothetical model or hypothesis that would need to be tested and confirmed empirically before anyone could accept its validity. It is troubling that, although the report is replete with disclaimers and acknowledged weakness by the authors themselves regarding the types of information that went into the work and the limitations of any conclusions stemming from it, it has been confidently presented to the public as a tool that would reliably serve as guidelines for siting land-based wind energy development. I'm not aware that during any stage of the project's development that any effort was made by MAS to bring in biologists from academia, as well as state and federal wildlife agencies for input."*

*"Having recently hosted an extensive public talk on the topic by me and my colleagues just a few months ago, I can attest that the leadership of MAS is well-aware of the extensive research in the region on bird and bat migration, having recently hosted an extensive public talk on the topic by me and my colleagues just a few months ago. There is nothing in this document that addresses collision risk taking into account new studies that show that wind energy development may be having a greater impact on birds than previously thought and that higher turbines result in greater collisions. Further, although the main approach in the MAS model focuses solely on habitat characteristics on the ground, there are no studies showing that on the ground habitat characteristics have anything to do with the spatial densities of birds aloft during migration."*

photo by Paul Donahue

*"Regardless of the motivation behind MAS's decision to produce these purported guidelines without seeking knowledgeable resources for input and comment, some may consider it, at best, a catalyst for improving how we approach spatial mapping of wildlife risk, and at worst, a poorly-developed model to be misused by those looking for an open endorsement for wind energy development in the state without being made to consider the true viability of alternative energy sources. How we balance the different ways we impact the environment should be based on factual information, which, when used properly, should lead all folks with different perspectives to the same conclusions. The MAS report fails miserably in that regard."*

FMM says that through a proper investigation, the effects of wildlife degradation due to wind turbine collisions would and should be determined. Michael Bond, a member of FMM's Board of Directors and a nationally recognized author on environmental issues added, *"The wind industry in Maine is being given a free pass. This*

endorsement of industrial wind has no basis in a cost/benefit analysis. They need to reevaluate their association with industrial wind in Maine.”

FMM also sees the study as an attempt to gloss over what many believe is the untold story of wind power in Maine. Richard McDonald, another FMM Board member is concerned that, “In truth, the ratepayers are also an endangered species. The impact on our pocketbooks should make all of us question its value. Wind hasn’t reduced our energy costs and it hasn’t replaced any fossil fuel power plants. In fact, Maine is already one of the country’s leaders when it comes to clean energy, so why is Audubon so willing to accept all the negative impacts of wind? It’s barely useful, and entirely unnecessary.”

## What Eagles Can’t See - Wind Graf

by Brad Blake

The Mission statement of Natural Resources Council of Maine states, in part, that it is a non-profit membership organization protecting, restoring, and conserving Maine’s environment, now and for future generations. In 2011, the NRCM position was “neither for nor against”. What has changed? More money from the wind industry and their cohorts? Surely the facts from First Wind’s production reports to FERC should clearly tell NRCM that destroying Bowers Mt. and ruining the magnificent Downeast Grand Lakes region is not worth supporting if they are true to that mission statement.

FMM welcomes the opportunity to work directly with MAS and other interested parties to clearly define the impact of industrial wind development on Maine’s wild-life and its treasured natural resources.

*Friends of Maine’s Mountains is a nonprofit research and educational organizational whose mission is to research, formulate and promote effective and reliable energy and power solutions that will protect Maine’s natural resources (especially Maine’s mountains), as well as Maine’s industries and private property owners, while also ensuring that those solutions have a positive environmental and economic impact for Maine people and businesses.*

The Maine Chapter of the Sierra Club is simply being hypocritical in the conflicts inherent in their mission statement, which includes verbiage such as: “protect the wild places of the Earth” and “protect Maine’s wilderness heritage”. “For over a century the Sierra Club has been devoted to the conservation of our forests, mountains, rivers, coasts and other natural areas.” By supporting blasting away Bowers Mt. and placing 459 foot tall turbines above lakes that are clearly scenic resources of state or national significance, I don’t believe Sierra Club leaders have ever left their Portland offices and experienced the vast national treasure that are the



An adult Bald Eagle

Did Maine Audubon, when it presented testimony to DEP disclose that First Wind is \$10,000+ Eagle donor? That CMP and Iberdrola, another wind developer is a \$5,000+ Falcon donor? That Reed & Reed that owns the only crane that puts up these gigantic machines is also a Falcon donor? That Patriot Renewables, another wind developer and Sargent Company that did the site work at Rollins in Lincoln Lakes are Osprey level donors? We must discredit Maine Audubon’s support as having been clearly bought. It is a shame that they care more about wind power money than they do eagles, falcons, and ospreys.

Downeast Grand Lakes. The Maine Chapter unabashedly follows the national lead and National Sierra Club has been bought off by the wind industry. It’s too bad, because if Sierra Club founder John Muir were at this hearing, he would vehemently oppose this project. What he wrote in 1912 regarding Hetch Hetchy can be adapted to the destruction of Bowers Mt. and the Downeast Grand Lakes: “These temple-destroyers, devotees of ravaging commercialism, seem to have a perfect contempt for Nature, and instead of lifting their eyes to the God of the mountains, lift them to the Almighty Dollar.”

## Threatened Bats

As a result of White-nose Syndrome (WNS), a newly emerging fungal disease, more than five million cave and mine-hibernating bats in the Northeast have died since 2007. Scientific models predict that the Little Brown Bat may face extinction by 2026 if current trends continue, prompting the U.S. Fish and Wildlife Service to conduct an official review to pursue listing Northern Long-eared and Eastern Small-footed Bats, and consider emergency listing of Little Brown Bats under the Endangered Species Act.



Little Brown Bat

Wind turbine blades are known to kill bats in large numbers. Apparently the turbines attract insects which the bats come to feed on. The listing of these species could help stop the placement of industrial turbines on many Maine mountaintops The Highland Wind Project was determined by Maine Inland Fisheries and Wildlife be a threat to bats. This was a major reason Angus King and Rob Gardiner withdrew their application - not out of concern for the bats, but the recognition that pushing their industrial wind project for the Highland Mts. would be an expensive, long drawn out process involving lots of litigation.

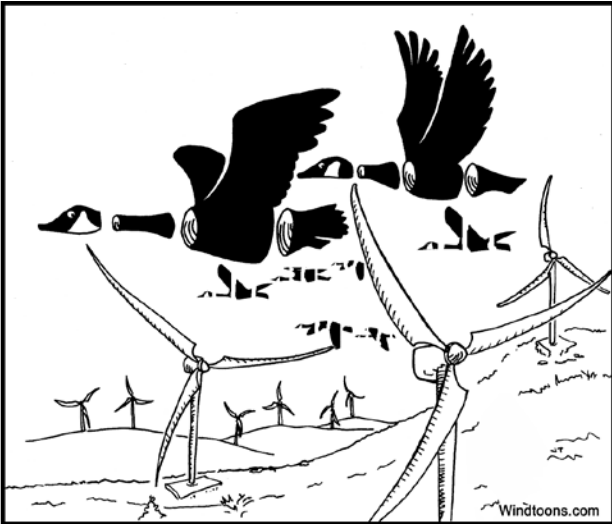


photo by Paul Donahue

# Wind Turbines Still Killing Hundreds of Thousands of Birds

by American Bird Conservancy

A new study shows that in spite of updated designs, U.S. wind turbines are killing hundreds of thousands of birds annually—a number that may balloon to about 1.4 million per year by 2030, when the ongoing industry expansion being encouraged by the federal government is expected to be fully implemented.

The findings were issued in a new study by scientists at the Smithsonian Institution Migratory Bird Center (SMBC), the U.S. Fish and Wildlife Service (FWS) and Oklahoma State University (OSU), published in the December 2013 issue of the journal *Biological Conservation* and authored by Scott Loss (OSU), Tom Will (FWS), and Peter Marra (SMBC).

The study, “Estimates of bird collision mortality at wind facilities in the contiguous United States,” was based on a review of 68 studies that met rigorous inclusion criteria and data derived from 58 bird mortality estimates contained in those studies. The studies represented both peer-reviewed and unpublished industry reports and extracted data to systematically estimate bird collision mortality and mortality correlates.

“The life expectancy for eagles and all raptors just took a big hit. Clearly, when you look at this study and you consider the new 30-year eagle take permits just announced by the Department of Interior, this is a bad month for this country’s iconic birds,” said Dr. Michael Hutchins, National Coordinator of American Bird Conservancy’s (ABC) Bird Smart Wind Energy campaign.

According to George Fenwick, President of ABC: “This study by top scientists says that hundreds of thousands of birds are being killed by the wind industry now, and that the number will escalate dramatically if we continue to do what we have been doing. The biggest impediment to reducing those impacts continues to be wind industry siting and operating guidelines that are only followed on a voluntary basis. No other energy industry gets to pick and choose where they put their facilities and decide how they are going to operate in a manner unconstrained by federal regulation.”

“The industry has been saying for some time that bird mortality would be reduced with the new turbines

compared to the older, lattice structures. According to this study, that does not appear to be the case,” Hutchins pointed out, since the study excluded data from wind developments using older designs.

“The status quo is legally, as well as environmentally, unsustainable,” Hutchins said further. “The federal government is seeking to promote an energy sector in a manner that is in violation of one of the premier federal wildlife protection statutes. In December 2011, we formally petitioned the Department of the Interior to develop mandatory regulations that will safeguard wildlife and reward responsible wind energy development. We continue to believe that is the solution.”

A coalition of more than 60 groups has called for mandatory standards and bird-smart principles in the siting and operation of wind energy installations. The coalition represents a broad cross-section of respected national and local groups. In addition, 20,000 scientists, ornithologists, conservationists, and other concerned citizens have shown their support for mandatory standards for the wind industry.

According to ABC, poorly sited and operated wind projects pose a serious threat to birds, especially birds of prey such as Bald Eagles, Golden Eagles, hawks, and owls; endangered and threatened species such as California Condors and Whooping Cranes; and species of special conservation concern such as the Bicknell’s Thrush, Cerulean Warbler, Tricolored Blackbird, Sprague’s Pipit, and Long-billed Curlew.

One particularly interesting finding of the new study concerned the height of turbines. The scientists found that bird collision mortality increased significantly with increasing hub height. Across a range of turbine heights from 36 to 80 meters, the study predicts a staggering ten-fold increase in bird mortality. This is especially important because the study identifies an apparent trend toward increased turbine height. Further, the study states: “This estimate (1.4 million) assumes that average wind turbine height will not increase. Installation of increasingly larger turbines could result in a greater amount of mortality.” Such an eventuality may be likely given that a Department of Energy report found that the average turbine hub height of U.S. wind turbines has increased 50 percent between 1998 and 2012.

The report offered several additional key observations

about wind energy and bird mortality:

- The mortality rate at wind farms in California was dramatically higher than anywhere else. According to the study: “We estimate that 46.4% of total mortality at monopole wind turbines occurs in California, 23.1% occurs in the Great Plains, 18.8% occurs in the East, and 11.6% occurs in the West.”
- Failure to consider species-specific risks may result in relatively high rates of mortality for some bird species even if total mortality is relatively low.
- Annual mortality estimates derived from a partial year



Whooping Cranes, one of the endangered species potentially impacted by industrial wind operations.

of sampling may substantially underestimate mortality. Pre-construction studies should be conducted for at least one entire year prior to wind facility siting decisions.

- The fatality records in the study identified at least 218 species of birds killed at wind energy installations.
- Conclusions about collision rates and impacts of collisions on bird populations are tentative because most of the mortality data is in industry reports that are not subjected to peer review or available to the public.
- Pre-construction assessment of collision risk at proposed wind facilities has been unreliable with no clear link documented between predicted risk levels and post-construction mortality rates.

“A key issue that was illustrated in this study, and one that we continue to have great concerns about, is data transparency and availability. While some companies may do the right thing and collect bird mortality data and make it available, others may not, especially if it is not in their economic interest,” Hutchins added.

The new study comes just after the Department of Justice announced a settlement on the prosecution of Duke Energy’s wind developments in Wyoming in connection with the deaths of 14 Golden Eagles and 149 other protected birds. That first-ever settlement resulted in \$1 million in fines and mitigation actions and was the first prosecution of a wind company in connection with bird mortality.

*This article was first published by the American Bird Conservancy (ABC), a 501(c)(3) not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas. ABC acts by safeguarding the rarest species, conserving and restoring habitats, and reducing threats, while building capacity in the bird conservation movement.*



Golden Eagles are regular victims of industrial wind operations.

# New Study Says Maine’s Natural Areas Worth Far More Than Most People Think

by Christopher Cousins

Most people have their own criteria for determining the value of nature, ranging from “it’s heaven” to “there are bugs out there,” but a recent study by the Manomet Center for Conservation Science assigns a dollar value.

In Maine, the value of Mother Nature, not counting tourism dollars, natural resource-based businesses or other revenue derived from the outdoors, accounts for more than \$14 billion per year. Many of those values were derived with an eye toward the future, particularly as it relates to things like quality of life and the availability of clean drinking water. For example, recognizing the value of a forest that filters and slows runoff from rain will pay dividends later, according to the study.

“We’re trying to start a conversation about these uncaptured values,” said John Gunn, a forest ecologist and senior program leader with Manomet who is based in the organization’s Brunswick office. “Nature plays a huge role in our economy. When we make decisions in Maine, we need a better way to incorporate the value of natural resources.”

The study, titled “Valuing Maine’s Natural Capital,” was conducted in collaboration with a Vermont-based consultant group called Spatial Informatics Group, LLC. It measured factors such as scenic beauty, natural flood control capacity, the ability of forests to capture greenhouse gases, wildlife habitat, ability of wetlands to filter water, pollination system, recreation opportunities and underground water tables.

Gunn said respecting and protecting natural environments now — even if that means leaving them untouched in the face of pressure from the real estate market and economic development activities — could pay huge dividends in the future if it prevents super-expensive projects like installing public water filtration systems or repairing wide-scale flood damage.

Study author Dr. Austin Troy agreed. “We may never know the exact price of our natural resources,” said Troy. “But assigning some value to natural capital is clearly more accurate than assigning none, as is currently the norm.”

The study ranked all of Maine’s natural areas, whether they’re in the wilds of northwestern Maine or in urban centers such as Portland, and came up with dollar values of what those areas contribute to the state per year. Cumberland County’s natural areas ranked the highest, at between \$1,000 and \$2,500 per acre of value per year. Franklin County ranked the lowest at between \$500 and \$550 per acre per year, which is mostly because much of that county is sparsely populated, said Gunn.

Washington and Penobscot counties also ranked high with per-acre, per-year values of between \$700 and \$1,000.

While the \$14 billion in uncounted value researchers identified may not seem like much to some, the study points out that the state derives about \$6.5 billion per year from forest-based manufacturing, recreation and tourism.

“That beauty is skin deep,” states the study. “There is far greater value to Maine’s natural abundance and wild-

lands than aesthetics and recreation.”

Traditionally, the conversation around the value of the environment, particularly when it involves a group vying to create a conservation easement, is how much the land would be worth for housing or business.

“Doing that calculation begins to capture some of these other values,” said Gunn. “The development values may be limited but some practices might potentially have negative impacts on those values.”

Included in the value of the environment is a forest’s capacity to capture greenhouse gases — which helps fend off the expensive effects of global warming — and natural water filtration systems that help provide one of the necessities of life on Earth.

“What this report shows is that, more than most people realize, society relies on well-functioning natural systems, too,” states the study. “We take [the value of nature] for granted. ... Without that dollar price, nature’s benefits have historically been undervalued or deemed to be zero. The result of that approach isn’t good.”

The study also estimates that about 60 percent of the world’s natural ecosystem benefits have been degraded

or used unsustainably over the past 50 years, and the problem will only get worse as the population grows. Receiving the highest per-acre values were coastal and non-coastal wetlands and urban and suburban forests.

One example in the study is Sebago Lake, which provides drinking water that’s clean enough not to be filtered before it is piped to the 200,000 customers of the Portland Water District. The study estimates the EPA’s filtration waiver — based on the cleanliness of Sebago Lake — has saved taxpayers at least \$146 million, which is the approximate cost of a new water filtration plant. But that expense could come home to taxpayers if the watershed upstream of Sebago is degraded too much to provide adequate protection. The study suggests increasing forest sustainability practices and improving buffers along streams and rivers that cost less than half of what a new filtration plant would cost to build.

Gunn said he hopes the study will help people realize their actions today have consequences that will be felt in the future.

“Since I’ve been with Manomet, which is about four years, we’ve started looking at the carbon marketplace and what needs to be in place to get landowners engaged in that marketplace,” he said. “We wanted to take a step back from that and look more broadly at these other values that we know are out there and are being provided by Maine’s nature, and nature everywhere.”

*This article was first published in the Bangor Daily News.*

## The Value of a Tree



There is a sign, at the Eden Nature Park & Resort in City of Davao, Philippines, that says this:

Of concern to all! A tree is worth \$193,250

According to Professor T. M. Das of the University of Calcutta. A tree living for 50 years will generate \$31,250 worth of oxygen, provide \$62,000 worth of air pollution control, control soil erosion and increase soil fertility to the tune of \$31,250, recycle \$37,500 worth of water and provide a home for animals worth \$31,250. This figure does not include the value of fruits, lumber or beauty derived from trees. Just another sensible reason to take care of our forests.

# Southern New England's Assault on Maine

by Dan Remain

Environmentalists, the Maine media, Maine Audubon, Natural Resource Council of Maine (NRCM), Appalachian Mountain Club, Sportsman's Alliance of Maine (SAM), Sierra Club-Maine, Conservation Law Foundation, and others, where are you? Do you even care? Are corporate sponsors more important than your missions?

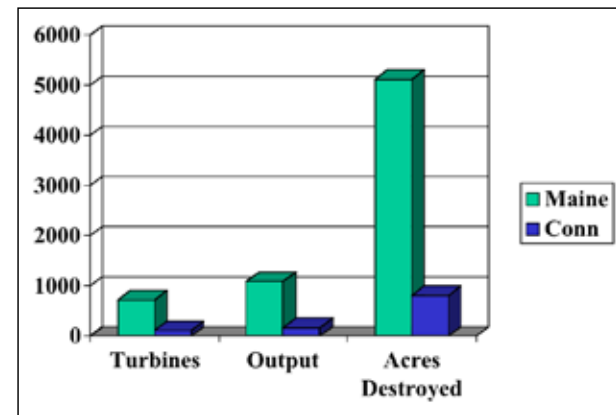
Before wind developers invaded Maine, we used 30% of the power we generated and exported the rest. Maine does not need additional electricity; it needs less expensive electricity.

Below is an illustration of where wind power generated in Maine is going. It is not going to Maine homes as is promoted. It is providing energy to Connecticut, Rhode Island, Massachusetts and now Vermont. Connecticut recently extended their 2011 ban on wind farm development in their state. Why? Because they do not want to sully their state's landscape or affect their citizens for unreliable, unpredictable, and inefficient power.

However, Connecticut has no problem bidding for power from 10 proposed wind farms in Maine. See Fig 2. Connecticut had eight small wind farms proposed with 116

turbines on approximately 800 acres. The 10 wind farms in Maine that Connecticut has bids on would require 731 turbines on over 5,000 acres. So Connecticut is not willing to deforest 800 acres of their landscape but they do not mind the deforestation of over 5,000 acres of our carbon sequestering forests in Maine. Quoting attorney Todd Grisct from the law firm of Preti Flaherty in Portland, "while it's very hard to site a new project in Connecticut, it's much less difficult to do so in Maine. Maine's more permissive siting culture makes Maine an attractive place for wind farm developers". After First Wind's Bowers application was denied twice, once by LURC and once by DEP, they had the arrogance to enter into a long-term contract to sell the electricity from the denied Bowers project to Rhode Island. First Wind also has pre-sold the output of the Oakfield, Bowers and Bingham projects to MA, RI and CT. At present, none of these projects have been built. Oakfield is under appeal. The twice denied Bowers is under appeal. The Bingham application hasn't even been reviewed yet.

Who is selling out our State and why? These recent headlines should infuriate you.



"Despite impending permit denial, First Wind signed contract to sell Bowers Mountain power to Rhode Island"

"First Wind signs deal to sell Hancock Wind electricity to Massachusetts utility"

"Proposed Aroostock wind farm signs long-term power purchase agreements with Connecticut utilities"

"CT DEEP issues notices for bids on ten proposed Maine wind farms"

"First Wind signs deal to send Hancock County wind farm electricity to Vermont"

All environmental groups and all Maine citizens should be asking:

Why does Maine need the minuscule energy from wind farms when we export over 50% of our generated electricity?

Why are we allowing the destruction of thousands of acres of carbon sequestering forest for energy we do not need?

Why are Maine citizens being denied their due process rights?

Why are the pleas of harmed citizens are being ignored?

Why isn't the false and misrepresented preamble of the Wind Act (LD 2283) being corrected?

Why has there not been a Public Benefit Determination or a cost/benefit analysis?

Why has decommissioning not been given more scrutiny?

Why are ratepayers paying for the transmission of this exported wind power?

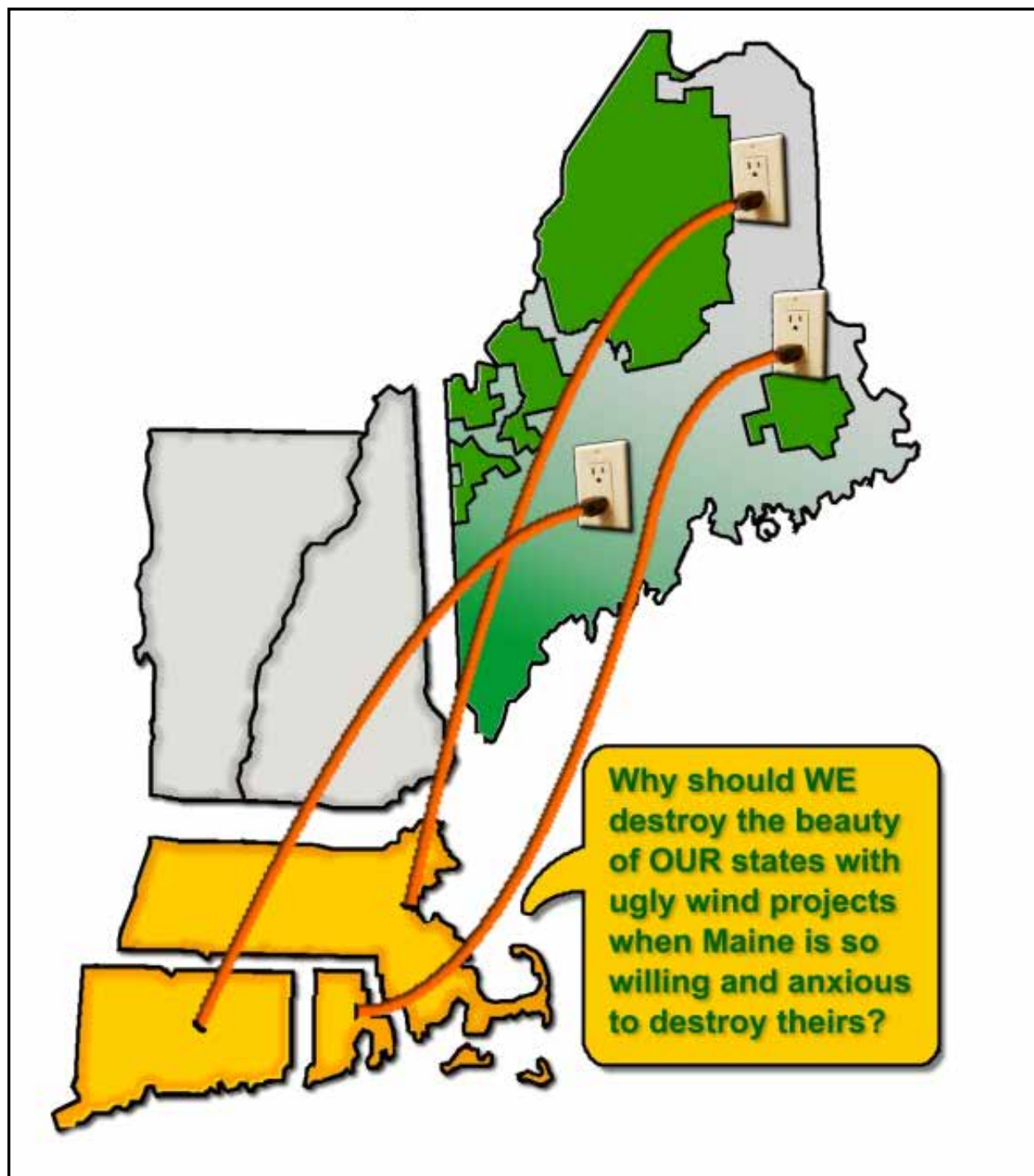
Why was 2/3 of our state rezoned for only the wind industry?

Why is citizen input being limited?

Why does the media seldom question the input and releases of proponents?

Why will decommissioning of two small turbines in Massachusetts cost \$500,000, yet the larger Maine turbines would cost only \$36,000.each?

Why are hearings not mandatory so that all testimony could be examined?





Is this what you want for Maine, so that southern New England states can satisfy their portfolios without affecting their citizens or spoiling the looks of their states?

Why the 25 recommendations in the OEIS report, commissioned by the 125th Legislature, are not being reviewed and addressed?

Why aren't the citizens in rural Maine given the same rights as other Mainers?

Why do the organizations that support the wind industry also have large donors from that industry?

Why haven't the wind industry claims and alleged benefits ever been substantiated?

Why are TIFs being used to help finance these wind projects?

Why aren't the wind developers required to document the need for additional electricity for Maine?

Why aren't the wind developer's claims for CO2 reduction ever substantiated?

Why aren't scientific methods being used to evaluate wind proponent claims?

Why do wind proponents refuse to publicly debate the so-called benefits of wind power?

Why is the number of jobs created not verified?

Why won't wind developers disclose their net power generation?

Why has not even one fossil fire power plant been shut down because of wind farm energy?

Why has wind energy not reduced our cost of electricity?

Why does hydropower become a non-renewable after 100mw?

Why isn't the effect on our #1 industry, tourism, questioned?

Why have we not achieved the energy independence promised by the wind industry?

Why do so-called tangible benefits of wind energy accrue mostly to the developer?

Why was the emergency legislation seen as immediately necessary for the preservation of the public peace, health and safety?

What will be the effect on our ecosystem from wind turbine destruction of our bird and bat populations?

Why has wind energy not reduced greenhouse gases?

## Sisk Mtn. Industrial Wind Lawsuit Update

by Bob Weingarten

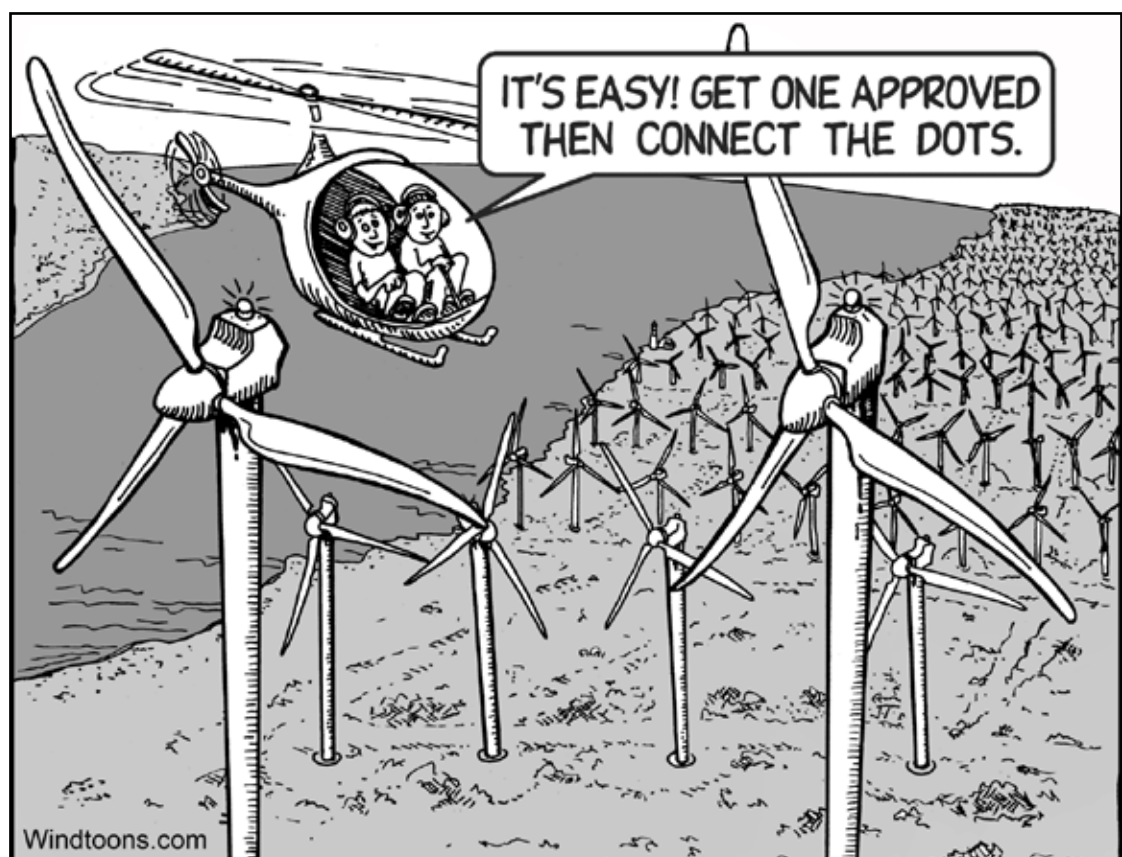
As far as the lawsuit, its winding its tortuous way through the legal system, After a 4 month wait (in any event helping TransCanada miss another building season, yippee!!!) the judge ruled against our motion to supplement the official legal record with studies and documents that are favorable to the existence of the Golden Eagle and Bicknell's thrush (both species of wilderness, by the way), rather than accept the corrupted record that the Army Corps of Engineers has put forth containing mostly documents favorable to TransCanada and which completely ignores the substantial risks to these species from wind power.

So now we are working on the Motion for Summary Judgment, which puts forth all our arguments within the context of the existing record. Then the US Attorney gets to reply and file a Summary Judgment motion on behalf of the Corps, then we respond, etc. The prediction is that the judge won't rule until early 2014 after all is said and done.

Why was the Wind Energy Task Force not transparent in its deliberations?

Why are the so-called environmental organizations not concerned about abandonment of these wind farms?

Mainers will not know what they have lost until they have lost it. Avian mortality caused by wind turbines, may soon create a real "Silent Spring"; except for wind turbine noise. At this point, the only way we will change the flawed wind legislation is to maybe change some of our Legislators.



# An East-West Wind Way?

by Hillary Lister

In 1760 British Lieutenant John Montresor hired Abenaki guides to help him make two trips between Quebec and the Kennebec River. He was surveying their trails in the area to map out suitable east-west military travel routes between Canada and Maine.

In 1764, Massachusetts Governor Bernard sent an expedition to study the feasibility of building a road from the Penobscot River to Quebec. When the surveyors met with local guides at Penobscot Island in Old Town they were told they would not be allowed to make maps of the trails. Montresor's less-than-complete maps of the journey across numerous mountains, hills, ridges, lakes, rivers, and streams, and bogs were used by Benedict Arnold's company in their ill-fated march to Quebec.

Despite the early challenges to finding an easy-to-travel east-west road from Canada to Maine, the proposal has resurfaced throughout the years. The Maine legislature considered a proposal for an East West highway in the 1930's and again in the 1960's. Routes 2, 9, 16 and 201 have served to varying degrees in the role of east-west highways, and expansion of those routes was studied by the Maine DOT in the 1990s. The most recent proposal for an East West Corridor (EWC) was introduced in 2008, promoted by Cianbro CEO Pete Vigue, former DEP Commissioner Darrell Brown, Canadian-megalith Irving, and assorted lawmakers in Maine and the Maritimes.

The path for the corridor has continued to be a subject of controversy and incomplete maps. No route has been unveiled showing any detail of the proposed corridor. Based on statements by EWC promoters, combined with limited information being received by local planning board members, selectmen, legislators, and county commissioners, the route for this proposed East West Corridor would appear to come into Maine from the west by Lac Megantic, passing through the Boundary Mountains and Bigelow range, crossing the Kennebec somewhere south of the Forks but north of Madison, running roughly parallel to Route 16, staying just south of the Piscataquis River and the Appalachian Trail, crossing the Penobscot somewhere north of Old Town, then running between Route 9 and the Golden Road east to Calais, or a bit north, where it would cross into New Brunswick.

The 2008 version of an East West Highway includes more than just a transportation corridor, with plans for a utility and pipeline corridor running parallel to the highway being central to the proposal.

In 2012, the Maine legislature voted to pull funding for a Feasibility Study on the Highway. Following the vote, momentum behind the highway proposal appeared to wane. While the official position of Vigue and Brown is that a highway is still imminent, talk among legislators and investors close to the project is that the highway proposal is a long way off, and no investor is currently

interested in funding a transportation corridor.

There is much more investor interest in funding a utility corridor, however, with government funding available for "green energy" utilities and gas pipeline construction. In 2009, First Wind LLC of Boston announced plans to build the largest wind utility corridor in New England, running from the Kennebec to Piscataquis River watersheds. It would run parallel to the Appalachian Trail only 6.5 miles to the north. It also happens to be directly in line with the route being sought by developers for an East West Corridor.

First Wind's proposed "Bingham Wind" corridor would include at least 62 turbines, and run almost 20 miles east-west, spanning Somerset and Piscataquis County. Seventeen miles of 100-foot wide corridors are required for the generator lead line alone. Most of the land for the proposed corridor is owned by Linkletter & Sons Forestry, E.D. Bessey, and Plum Creek. Equipment staging for the wind corridor would take place at the former

cally used in Maine by Golden Eagles, and is far enough away from their likely locations."

Throughout the application, First Wind emphasizes that the area impacted would be "edges" of habitat, ignoring the fact that the edges are home to some of the most diverse mix of plants and wildlife, and essential habitat to many species. It also ignores the impact of drift and runoff from herbicide application. Aerial herbicide application has already taken place to clear large swaths of ridgetop land for meteorological towers. The terms of the corridor easement would allow ground and aerial herbicide application to maintain the right of way.

The proposed corridor would run along ridgelines where numerous water sources originate, feeding area wells and town water supplies, and providing fertile spawning grounds for cold water fisheries. The generator lead alone would require clearing 206 acres, passing over at least 34 streams, running close to streams that provide habitat for Northern Spring Salamanders, and including 24 streams designated as Atlantic Salmon critical habitat.

On August 29, Maine Inland Fisheries and Wildlife biologist Charles Todd sent a letter to the DEP about the project stating, "Biologists in this Department continue to have genuine concerns regarding potentially significant impacts to aquatic resources in headwater streams. ...The extent and scale of the Project are substantial. Ecologically, the region's marked interspersed streams with mountainous terrain elevates concern for aquatic resources to a greater extent than many wind energy installations in Maine."

The letter continues, "Stream surveys focused only on waters in the Project footprint without apparent regard to nearby, downslope streams potentially vulnerable to stormwater or altered hydrology. Each of the five watersheds in the Project area contain Brook Trout, while two contain unique populations of wild reproducing Rainbow Trout (Gulf Stream, Austin Stream). Northern Spring Salamanders and several rare mayflies

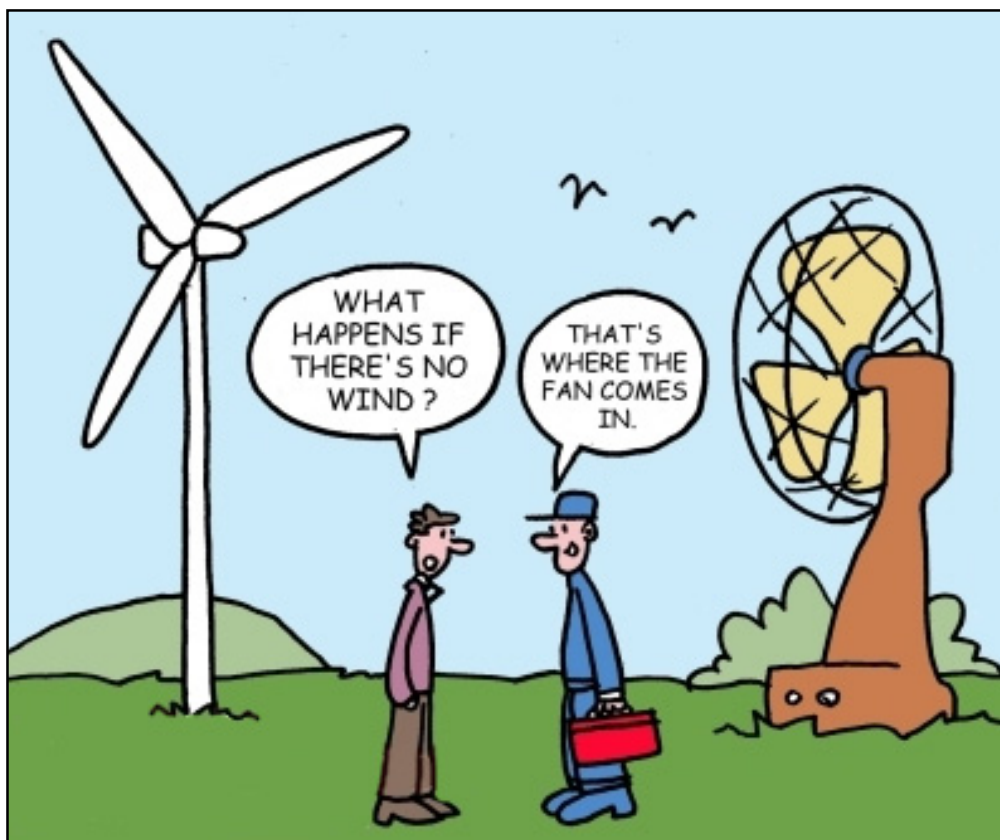
are Wildlife Division concerns that also frequent clear, cool, high-gradient streams."

Todd's letter emphasizes that it is difficult for the Department to determine the full impact of First Wind's proposal since, "Stream locations are not evident on any Project plan."

Stream locations are only one of many key pieces of information missing from First Wind's plan.

First Wind plans to blast millions of tons of rock, crush and pack it into 40+ 3.5 acre sites and 17 miles of ridge top roads that will have to handle hundreds of heavy, long loads. There is extremely limited information on the proposed blast sites, with only one test hole and one core sample from Johnson Mountain.

A letter to the DEP from Brighton Planning Board member Michael Vernon, who lives downstream of the proposed corridor, states, "As a licensed site evaluator familiar with soil types and topographic geology, I do not think the applicant has done anything close to an adequate job in evaluating and testing areas where blasting is planned."



radar site in Moscow that is now owned by Cianbro.

Approval of First Wind's application was delayed in December due to the presence of threatened bats in the area. Little Brown Bats and northern Long-eared Bats are currently being evaluated for listing under the Maine Endangered Species Act and the U.S. Endangered Species Act, and are threatened by White Nose Syndrome (WNS), a rapidly spreading fungal disease that has made its way to Maine. First Wind claims that its development would not harm local bats since the majority of documented bat fatalities at its other turbines sites are migratory species, while the species most affected by WNS hibernate in the local area, so would be less likely to be by the turbines during migration.

In response to concerns about impacts on known eagles in the area, First Wind's application states that, "Although there are confirmed Bald and Golden Eagles in the area, the distance to the Bald Eagle nest is far enough to minimize any potential hazard. The known Golden Eagle in the area has been found deceased in Canada. Although there may be other Golden Eagles in the area, we believe the project is on the edge of the core area typi-

Local residents know that the mountain and ridges contain heavy metals, copper oxide, iron oxide, oily carbon black, and other minerals. As the millions of tons of crushed rock are leached by rain, wind, snow, freeze, and thaw, the currently high quality groundwater and streams will suffer the effects.

The IF&W letter also points out that the clearing necessary for blasting and construction will result in a loss of shade and increase in water temperature, “directly impacting resident and downstream coldwater fisheries. ...Trees will have difficulty taking root in compacted soils and on blast rock, especially where soil depth and the sub-layer of rock already hinder establishment of woody vegetation. Reclaimed areas will also have significantly altered capacities for infiltration. Areas of compacted soils will resist water movements to soil depths and runoff volumes will increase as will the potential for shear slope failures. Areas of loamed blast rock may unnaturally increase infiltration.”

Old mines exist all along the proposed East West Corridor, and that fact has not escaped notice of investors, especially with Maine’s mining rules being relaxed. First Wind’s proposed corridor contains several old slate and other mining sites, and it appears that the company will gain mineral rights to any materials it blasts and removes while building the corridor.

All of the proposed turbines are within Maine’s “Expedited Permitting Area,” and the DEP has thus far refused to grant a legally-binding Public Hearing on the project, despite multiple requests from area residents and landowners. First Wind has stated that it can only secure necessary investors if it receives at least 30% of construction costs from public funding. It originally sought funding from Federal Production Tax Credits, but with that source uncertain, the company is securing tax-breaks from local towns and counties, and seeking contracts with Massachusetts and Connecticut to purchase the majority of their mandated “Renewable Energy” from First Wind’s proposed developments in Maine.

If approved, First Wind’s corridor could be easily expanded to include pipelines or a highway. Maine’s laws governing Utility Right of Ways and Corridors enable a corridor developer to easily expand allowed uses, gain land by eminent domain, and block local people from having any significant say in decisions around how the project develops. At a February 2013 town meeting to approve a tax break for First Wind in Parkman, First Wind representative Dave Fowler admitted that the terms of the easement could allow expansion from a utility corridor to a pipeline or transportation corridor.

With so many unanswered questions, and so much at stake, local people are circulating petitions calling for the DEP to slow down approval of this project, and grant a Public Hearing where these concerns could receive needed attention. So far, neither the Appalachian Mountain Club nor the Maine Appalachian Trail Club is opposing this project, and Maine Audubon has partnered with First Wind to promote their plans, with the company recently becoming a top donor, gaining in “Eagle” status. If you are a member of any of these groups and have concerns about this project, it is important they hear from you.

More information on First Wind’s proposed corridor can be found at: <http://eastwestwindway.wordpress.com/> or by writing: Hillary Lister, PO Box 129, Athens, Maine 04912

## Potential Forest Fire Threat: Four Million Dollar Turbine Fire at Trans Canada’s Kibby Mountain Industrial Wind Facility



A fire destroyed a multimillion-dollar wind turbine at the Kibby Mountain wind farm in northern Franklin County, which has generated concern about the safety and reliability of turbines, and the process by which these fires are reported to government officials and the public.

### Number 9 Mountain Range under Threat of Massive Industrial Wind Project

An Industrial Wind facility first proposed in southern Aroostook County in 2007 is back on the table. EDP Renewables North America LLC, based in Houston, is pursuing development of a 250-megawatt wind farm roughly nine miles west of Bridgewater. The company calls it the Number Nine Wind Farm. At 250 megawatts, the wind farm, if approved, would be the largest in New England when measured by capacity. Currently, the largest wind farm in the region is TransCanada’s Kibby Mountain wind farm in northern Franklin County, which has the capacity to generate 132 megawatts. EDP Renewables North America’s plans were revealed in late September when Connecticut Governor Dannel Malloy announced that the company had signed long-term power purchase agreements with the state’s two major electric utilities - Connecticut Light and Power and United Illuminating. While the farm’s capacity will be 250 megawatts, the number of turbines used to generate that amount is still undetermined. The company is considering turbines that can generate between 2.5 and 3 megawatts apiece, which would mean the total number of

turbines needed could range between 83 and 100. The company has leased over 2 square miles land from a timberland company where it wants to build the farm. The company has not begun the permitting process. It plans to begin that process next fall, once all its environmental studies are complete, Chapman said. The timeline calls for construction to begin in 2015 to have the wind farm become operational in 2016. Massachusetts renewable portfolio standards call for 15 percent of electricity to be provided by new renewable resources by 2020, while Connecticut’s renewable portfolio standards require 20 percent of consumed power be provided by new renewable resources by 2020, Griset said. These statutory requirements increase demand for wind projects in the region. While it’s “very hard to site a new project in Connecticut,” it’s much less difficult to do so in Maine. A combination of Maine’s abundant resources and a “more permissive siting culture” make Maine the best place to build out industrial wind in New England.

*This article originally appeared in the Portland Press Herald.*

# Free Trade Agreements Exacerbate Threat of East-West Corridor

*While Cianbro remains elusive and international threats build, communities work to take back their fundamental rights*

by Chris Buchanan

Are you familiar with the Trans-Pacific Partnership free trade agreement (TPP)? What about the Transatlantic Trade and Investment Partnership (TTIP) between the United States and the European Union? Both are so-called free trade agreements currently being pushed forward by President Barack Obama that would dramatically increase global influence of transnational corporations by lowering “barriers” to trade. These barriers are no longer just tariffs, but include a wide range of rules and regulations governing the economy.

The TPP is being negotiated almost entirely in secret between the United States and Australia, Brunei Darussalam, Chile, Malaysia, New Zealand, Peru, Singapore, Japan, Mexico, Canada and Vietnam. That is, secret from you and me, our local governments, and even from the US Congress until very recently, when members were allowed to read certain sections but not discuss them, but not from the hundreds of powerful corporations that are sitting at the negotiating table.

Dubbed “NAFTA on steroids,” after the North American Free Trade Agreement, the TPP would promote “regulatory coherence,” lowering labor standards to the least common denominator such as those in Vietnam and weakening environmental standards that would expose Maine’s natural resources to environmentally destructive, low cost extraction and quick consumption in the global marketplace.

Of great significance are the rights that the TPP would give to transnational corporations based in participating countries. Under the “investor to state” rule, corporations could use a quasi-secret “trade tribunal” to challenge a member country if its national or local laws or regulations violate TPP provisions. They could then demand compensation, even for future “lost” profits, if the law or regulation is not revoked. This may include environmental regulations, buy-local laws, or food-labeling laws, to name a few. While this rule already exists under NAFTA and other bilateral trade agreements with the US, the TPP would extend these corporate rights to many more countries while also covering additional areas of the economy. Therefore, in many ways, the TPP would elevate the rights of corporations even more above domestic laws. The TPP also has a “docking” provision to encourage more countries to join once the TPP is in place.

Why would the United States choose to undermine its environment and jobs? Great question. Probably because corporations enjoy a strangle-hold on the United States government. Fortunately some resistance is building in Congress to the TPP.

But what do existing and pending free trade agreements have to do with the East-West Corridor proposal? A great deal. In sum, the East-West Corridor is the enabling infrastructure for increasing free trade in the northeast United States and for all of Canada.

## Background

For nearly two years, people who live in Maine have

been facing the threat of a “private” East-West Transportation, Communications, and Utility Corridor - a vision of significant infrastructure development to connect the Canadian provinces of Quebec and New Brunswick with highly secure travel, transmission, and piping of resources. The proposal has been spearheaded by the Cianbro Corporation, and behind the scenes, regional-free trade promoters like the Atlantica Group. The unnamed



elephant in the room seems to be J.D. Irving Inc., with the largest oil refinery on the East Coast in St. Johns, New Brunswick. Irving Woodlands is the largest private landowner in Maine, with over 1.25 million acres, \$23.9 million in estimated annual sales, and about 180 employees. Irving is currently lobbying for loosening Maine’s mining rules to pursue a gold mine on Bald Mountain in Aroostook County, and has partnered with TransCanada to create a tar sands export terminal on the Bay Fundy.

As a privately owned and operated consolidated utility corridor up to 2000 feet in width from Calais to Coburn Gore, the corridor would profit its investors most by maximizing uses. Therefore, we could expect not only a noisy toll highway with different regulations than public roads, but also a tar sands pipeline, natural gas pipeline, crude oil pipeline, communication cables, DC electric cables, bulk water lines, and more. Despite the destructive footprint of this fenced, half-mile swath, we would additionally be inviting significant threats to currently pristine aquifers, sensitive ecosystems, wildlife movement, recreation opportunities, traditional land use, local economies, local control, and the magical, mystical character of Maine itself. These features make Maine unique, and a kind of outpost for less development compared to the rest of the eastern United States, especially along the proposed Corridor route.

Even worse, unbeknownst to most taxpayers, we’re expected to be on the hook. To be profitable for one or several of 22 potential international investors that fund this kind of mega-infrastructure project, Cianbro projects that the development would require up to 50% public subsidy, and at least some of the aforementioned “utilities.”

Interestingly enough, in 2010 Cianbro’s lobbyist worked with the Maine Department of Transportation to draft and support Maine’s first Public-Private-Partnership (PPP) law. That law not only allowed for 50% public subsidy of significant infrastructure projects, but also made all PPP information confidential. Additionally, it created a legal pathway for Cianbro to develop a “private” toll highway. Last year, members of Stop the East-West Corridor fought for the confidentiality provision to be lifted, with success. However, the fact remains that, under Maine law, the only legal avenue for Cianbro to develop a private toll highway is as a PPP, putting the taxpayers unknowingly on the hook for a largely undefined international zone, controlled by international investors.

## The Great Wall of Cianbro...or maybe China.

Effectively, we’re looking at a privately owned, controlled, and secured Super-Corridor, permanently dividing land that has been accessible to people and animals for time immemorial, from foreign border to foreign border, designed to benefit transnational corporations involved in various resource extraction processes that are major players in the global economy. By nature, it is a Free Trade Corridor, envisioned to maximize movement of globally traded products to and from Canadian ports. Dreams by most Maine entrepreneurs may be dashed when they learn that the Corridor may cost \$100 to \$200 for one-way truck passage, \$25 for a passenger vehicle, or whatever Corridor owners desire. Additionally, only six interchanges are proposed along this route, which is all very rural, except for Old Town.

Can your business compete in the global market place against Vietnamese labor costs, Chinese energy costs, New Zealand milk, or even industrial agribusinesses in the United States heartland? Unless you’re providing a niche product or a wealthy transnational corporation yourself, my guess is probably not. And it’s not your fault, it’s the nature of the global trade rules being written in trade agreements like NAFTA and the TPP, and of federal and state regulations written and upheld to allow large corporations to operate profitably without arousing too much public opposition.

## What can we do?

Now that you may be thoroughly alarmed and depressed, one must ask, is there anything we can do about this? How can these kinds of things happen, affecting all of us, without some kind of public protection?

Although the situation is critical, it is not too late to get involved. Simply educating yourself further about these issues is one place to begin, and then start informing others about what you learn in all kinds of ways. Then if you want to take action, start exploring TPP Free Zones, a strategy initiated by the Alliance for Democracy, which can be either a resolution or a law passed at the local level setting out the problems with the TPP and why your town opposes it and will consider non-compliance if it is passed. In October, Dane County Wisconsin passed a resolution declaring itself a TPP Free Zone and a similar one is coming before the Berkeley, California City Council.

Rights-Based-Ordinances, otherwise known as Community Bill of Rights Ordinances, are another powerful tool that have been used around the country since 1998 to prevent corporations from causing specific harms to the people and ecological systems of a community. Simply, these are local civil rights laws that elevate the rights of

people and nature in your community above the rights of the corporation(s) that would harm your town, city, or county in a specific way: for example, building a private or public-private transportation and distribution corridor, extracting water for export, or hydrofracking.

The Community Environmental Legal Defense Fund (CELDF), a public interest law firm, works with communities across the country that want to protect themselves from specific corporate harms. These laws challenge “settled law” derived from US Supreme Court rulings giving corporations rights under the US Constitution. Just as with women being denied the right to vote, settled law can be changed when it is challenged by enough people. The ordinances also acknowledge and protect the right of ecosystems to thrive by protecting them against corporate harm.

In the case of the East-West Corridor, with guidance from CELDF, the Town of Sangerville and the Town of Parkman have both passed rights-based ordinances prohibiting the development of a private or public-private transportation and distribution corridor, and legally asserting the fundamental rights listed in the Maine State Constitution. More towns are working towards this end to protect themselves. There is a vibrant and active community rights group of local people supporting each other through this effort.

Whether it’s a corporation from Canada or Japan suing the United States claiming that the town of Parkman’s rights-based ordinance takes away their right to profit from the Corridor under NAFTA or the TPP, or Cianbro suing Sangerville directly in US Courts to assert its right to build an East-West Corridor, the end result of a legal challenge to an RBO would be very illuminating. In the TPP/NAFTA scenario, the case would go to an international tribunal and most likely be deemed contrary to the free trade agreement. In that case, the feds would either pressure the state to pull Parkman into line or pay the company for their lost profit. In the Cianbro scenario, the RBO would be tried as a civil rights case and the question would be, “Does the community have these fundamental rights, or not?” In either case, if the answer is “no, they don’t have these rights,” there could be a lot of angry people out there who would have a deeper understanding of the need to build rights for people and nature into our domestic and international laws.

As more towns in Maine enact rights-based ordinances, there will be strength in numbers to take on any challenges by corporations like Cianbro. And if towns in Maine stand up to the TPP by declaring themselves TPP free zones, pressure will build on Congress to reject the TPP. Just imagine, if towns actually became empowered to make choices about their futures? This would be a tremendous step towards real democracy in Maine, the United States, or even beyond.

*Chris Buchanan is the Statewide Coordinator of Stop the East-West Corridor, and Coordinator for Defending Water for Life in Maine. Stop the East-West Corridor (STEW) is a coalition of Maine people uncovering facts, requesting transparency, and raising awareness about the East-West Corridor proposal. Defending Water for Life is dedicated to protecting water for people and nature by supporting people who want to keep corporate water mining out of their communities. Chris is funded by grants from private foundations, and currently devotes most time to educating people about the Corridor and supporting STEWC. For more information visit [stopthecorridor.org](http://stopthecorridor.org), [defendingwater.net/maine](http://defendingwater.net/maine), or contact Chris directly: 495-3648*

## Sangerville, Maine Adopts Community Bill of Rights Ordinance to Reject Transportation and Distribution Corridors

### The Community Environmental Legal Defense Fund Media Release

September 18, 2013

Tonight, in Sangerville, Maine, at a Special Town Meeting, the Community Bill of Rights Ordinance was adopted by voters, 86:40.

This marks the first Community Bill of Rights Ordinance to protect a municipality from infrastructure projects built without the consent of voters anywhere in the country, and the fourth Rights-Based Ordinance for the state of Maine.

Sangerville voters approved the Rights Based Ordinance to assert, “the community’s Right to Sustainable Infrastructure which is integrated into the community as part of the Town’s planning processes, which benefits the Town, and does not damage the natural environment.”

Concerned about recent attempts to sell local residents on positive aspects of a project known as the East-West Corridor, local townspeople from across Piscataquis County called the Community Environmental Legal Defense Fund for assistance, because they did not think the plan proposed for their area fit well with their vision of community.

Following several Democracy School trainings to learn how municipalities are considered to be devoid of authority to ban any “legal land use” permitted by the State, residents of Sangerville began working with CELDF organizers to draft a Community Bill of Rights for their Town, to assert the right to local self-government.

The Ordinance bans “land acquisition for, or construction of, transportation and distribution corridors” within the Town and makes it illegal for corporations and government to deny the rights of residents secured by the Ordinance.

The Ordinance goes into effect immediately and is enforceable against private and public actors.

“The RBO has reawakened discussion of shared visions and values in town while empowering the community on an issue where the system was not otherwise working for them. We’ve gone from feeling terrorized by the threat of the EW to being strengthened in many ways,” commented resident, Leigh Wiley, when asked how he felt about the local law.

Several communities, faced with the proposal to bisect the State of Maine with a transportation corridor, are following the lead of Shapleigh and Newfield, Maine and Barnstead, Nottingham, Sugar Hill and four other towns in New Hampshire, where Rights-Based Ordinances were enacted between March 2006 and 2013.

The Sangerville Ordinance is the most recent of all of the CELDF Ordinances to date and follows the fifteen year tradition of working with communities to draft legislation adopted at the municipal level in order to ban unwanted corporate activities that could potentially harm residents, threaten local economies, and damage natural water systems and ecosystems.

Selectwoman, Melissa Randall had this to say, following the vote, “Tonight Sangerville exercised our right to self-governance to protect our homes, our waters and forests, and our way of life. No corridor/ No compromise.”

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603.269.8542  
Interested readers are invited to visit our website to learn more.  
[www.celdf.org](http://www.celdf.org)



## Photographs by Jym St. Pierre





Jym St. Pierre's photos have been widely published, including by National Geographic, People, Orion, Afield, Sierra Club, and numerous newspapers. He has won many awards for his landscape and wildlife photography. In 2006, Jym had a two-person show at the Harlow Gallery in Hallowell, Maine, featuring his Maine Landsc[r]apes series. Jym has served in leadership positions both in public agencies and in nonprofit, public interest organizations at the local, state and national levels. He has been Maine Director of RESTORE: The North Woods, a regional conservation organization, since 1995.

# In Response to the Cianbro East-West Corridor Plan, a Grassroots Organization Thrives in the Hollow Middle of Maine

by Sidney Mitchell

Two years ago, five people in the living room of Peter Brenc and Sidney Mitchell of Dover-Foxcroft, Maine, founded Friends Of The Piscataquis Valley. At the time, one of us had obtained from Cianbro Corporation's website a map that revealed their ideal route for their proposed 'East-West Transportation, Utility and Communications Corridor'. We made multiples of the map, transposed it onto a DeLorme road map, and distributed it widely throughout western Penobscot and southern Piscataquis Counties and beyond, via the internet...and in color! It was eye-catching, detailed and alarming.

Friends Of The Piscataquis Valley (FOTPV) joined others in Augusta on February 14, 2012, to hear our regional state senator, Doug Thomas, pitch a bill he sponsored to have tax dollars applied to a so-called 'feasibility study' of the economic viability (as far as its potential to attract 'investors') of the EWC Cianbro Plan. Thomas claimed that Maine had an obligation to Canada, and New Brunswick, in particular, to allow this EWC plan to go forth - since New Brunswick had already built their section of said corridor (that they, incidentally, call the 'Free Trade Corridor')! Thomas also gave a fairly detailed verbal description of the route that, in part, followed the Piscataquis Valley, crossing the river twice - at South Sebec (or Derby, he said) and at Monson...That day, before the Maine State Legislature's Transportation Committee, Peter Vigue joined Senator Thomas to present his lengthy PowerPoint public relations presentation to the representatives of the people of Maine. Then, testimony was opened to the public...mostly in opposition.

The story unfolds in many ways on many fronts thereafter. At each juncture, Friends Of The Piscataquis Valley was present, participatory and/or playing an organizational role. On March 29, 2012, Sidney and Peter were on the sidewalk in St. Stephen, New Brunswick for four and a half hours displaying protest signs while Peter Vigue of Cianbro Corporation and his cronies, the Maine State Commissioner Bernhardt of the Department of Environmental Protection and another public servant and former Commissioner, to promote this project before the business community of St. Stephen, Canada! The Press was there and, suddenly, our protest signs, with news interviews, were in both Canadian and Maine newspapers, radio and television the next day. Mr. Vigue sent out a messenger reporter to ask of us, "Who are you and where are you from?" We gave our names and residence of Dover-Foxcroft. Within days, the Cianbro promotional team for their EWC announced that the route would not go through Dover-Foxcroft or cross the

Piscataquis River but would, instead, cross the middle of the state on the southern, and more populated, edge of the Piscataquis Valley.

From there, we prevailed upon our Board of Selectmen to arrange for Peter Vigue and the legislative promoter of the plan, Doug Thomas, to attend a public forum so that the ordinary citizens could make their comments and ask their questions directly to the promoters and to their legislators. This was arranged for May 31, 2012 at Foxcroft Academy at which 800 people were in attendance. Fifty

twenty of us inside (due to limited seating) and fifty of us were on the sidewalk with our protest signs.

Both of these events were covered by the press. By the time June 2012 rolled around, Vigue had changed 'the route' twice (going south both times) from the one posted on his EWC website back in January of that year. His ploy was: Whatever you want, we are friendly and can deliver. Let's talk. BUT it will happen with private money and no statewide referendum vote would be 'necessary'...

Friends Of The Piscataquis Valley arranged for a Speakers Bureau Presentation before the Piscataquis County Commissioners that we called 'Arguments Opposing An East-West Corridor From Canada To Canada Through Rural Maine' on June 5th that included eight local speakers, each addressing a particular concern, and was attended by the press. Since then, we have organized two more Speakers Bureau Presentations of the same title before the Penobscot County and Somerset County Commissioners and are planning the same with Hancock, Franklin and Washington Counties in the first half of 2014. These presentations, along with some public forums that included other regional representatives, have been highly effective in keeping our concerns in the realm of public discourse.

Meanwhile, a *Bangor Daily News* blogger, Lindsay Bowker, who read the article with our picture in the paper on the sidewalk of St. Stephen, had much to report - in particular, on the passage, as an 'emergency legislation' measure, around Christmas 2010, of a Public-Private Partnership Law that contained a Confidentiality Clause, Sect. 10 and that was composed and signed by MDOT officials and Cianbro lobbyists. We immediately contacted Lindsay and have been working with her ever since, quite successfully, to have, at least, the non-disclosure language removed from that law and to expose the corporate-governmental complicity in this long-in-the-making plan.

Also, around this time, Lance Tapley of the *Portland Phoenix*, submitted a FOIA request to obtain the text of a Cianbro Feasibility Study conducted by Louis Berger Group in 2008. His efforts were successful and the document has been applied by all of us, again and again, to expose the true nature of the EWC Cianbro Plan. We

have also utilized, to great effect, the MDOT 1999 feasibility study that concludes that such a corridor would have no benefit to Maine to justify its existence.

On June 5, 2012, following our Speakers Bureau Presentation, we organized a large gathering at the Bear's Den in Dover-Foxcroft at which the statewide coalition Stop The East-West Corridor was founded. Friends Of The Piscataquis Valley worked in unison with the coalition in its formative months and has since continued to do its own work locally, regionally and statewide. With the coalition, FOTPV produced three bulletins, called *North Country Commons*, in the late summer and fall of 2012, much of which was published in the Spring 2013



law enforcement officers were present and the mikes for the public were silenced by order of Peter Vigue. Many of those gathered were aware of this microphone curtailment and expressed their dismay publicly. And all present were shocked by the police presence. Vigue claimed we were a mob. He was shaken, indeed, at the obvious dissatisfaction over his plan among what he had thought previously was 'his public'.

Two weeks prior to the May 31st event, the Piscataquis County Commissioners had invited Peter Vigue and Peter Cianchette to present before them their Plan. Vigue attended; Cianchette did not. The Public attended with

issue of the Forest Ecology Network's *The Maine Woods* newspaper. The bulletins were based on mainstream news reports that were cited to support our arguments and reveal the underlying aim of the Cianbro Plan.... despite a global, national, and certainly, state-wide, news blackout on all-things-corporate in regard to these 'public-private partnerships' and rapid land acquisitions for corporate profit.

The Cianbro EWC Promotional team has, this past month of December 2013, stated via the *Bangor Daily News*, that, despite opposition, the Plan is going forward. Cianbro Corporation sees no need to keep the public updated on anything beyond that brief statement. Having failed in making a positive impression publicly, they have, essentially, gone underground and have no comments in this phase of their Plan concerning the route or the acquisition of land to make such a private mega-project possible. Meanwhile, one of their early ideal routes has suddenly become opened due to the oil train explosion causing the deaths of 47 people in Lac Megantic, Quebec in early July - the MM&A rail line rarely passes through an organized territory its entire length.

Lately, Doug Thomas has been making repeated and highly negative public comments on the town-by-town phenomenon of citizens' bill-of-rights ordinances being written and promoted among the local electorate. This direct democracy approach to corporate domination in all our communities nationally is one that FOTPV and others have engaged in from the beginning of this

ongoing no-corridor campaign. Thomas also likes to say publicly that 'Oil pipelines are safer than rail.' And Darryl Brown, shill for the Cianbro Corporation who is an 'expert' attorney at discovering the weaknesses in state environmental protection statutes, likes to say 'The EWC will enable organic farm marketing to reach the rest of the world!'

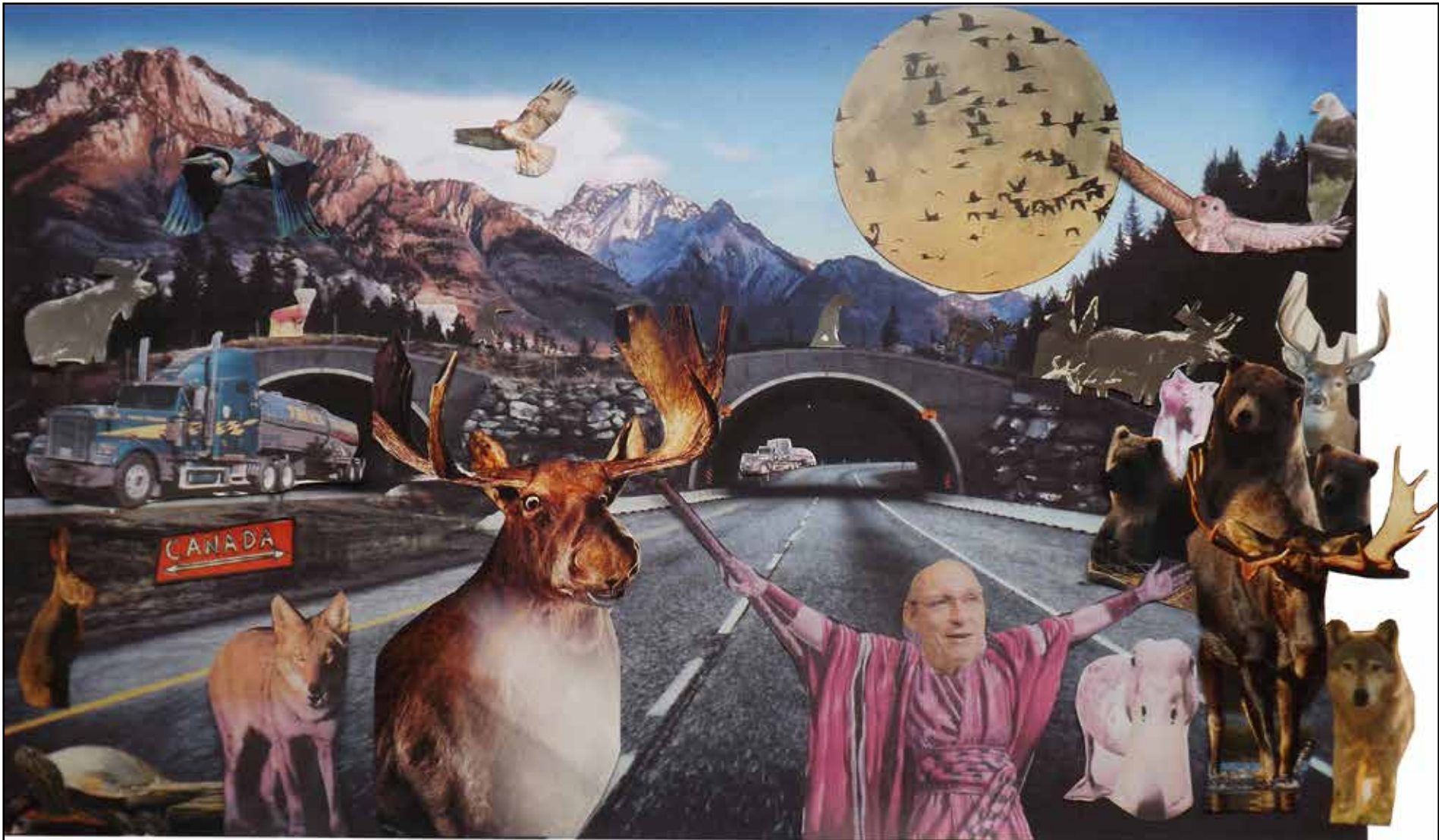
The connections between industrial wind power, the Canadian petroleum boom that requires tanker ships, oil trains and pipelines of every description, mountaintop removal open-pit mining, commercial water extraction, forest liquidation for biomass, toxic waste dumping, container and oil tanker shipping ports in the Canadian Maritimes/coastal Maine, the commercial value of gravel and topsoil and this so-called cargo toll road proposed by Cianbro, are rife. It is obviously, for our little spot on the planet, a wholesale attempt to take the State of Maine for transnational corporate profiteering and is so elaborately outlined and has been in the works for so long that it becomes very difficult to prove without it all sounding like a conspiracy theory. Well, we who wish to remain in Maine in defense of it have our work cut out for us to the end of our days.

Since the beginning and right up to the present, Friends Of The Piscataquis Valley has worked continuously to respond to these developments and to enhance communication among the concerned citizenry with whom we have, so far, reached. We feel great relief that we are not alone as it is evident, all these two years, that there is

much opposition to this Cianbro Plan for many reasons, from many quarters of our society. As time passes, we are convinced, more and more, that Big Oil and Big Mining are, indeed, behind the Cianbro Plan - that may include the biggest corporation in the world - and, therefore, no 'investors' are required as the money is in place and ready to go as soon as the PR job is completed. Maine is ripe for the picking and our Unorganized Territories are the lowest hanging fruit. And that is why FOTPV, based on the southern edge of the Great North Woods, will have a very long life here in our beloved State of Maine.



Black-capped Chickadee by Paul Donahue



**ARTISTS IMPRESSION OF MR. VIGUE SAFELY  
GUIDING THE ANIMALS OVER THE  
E/W WILDLIFE CROSSING**

# Metallic Mining: Maine's Wilderness Foundering for Lack of Political Will and Moral Courage

by Lindsay Newland Bowker

As this spring issue of *The Maine Woods* goes to press, Maine's disastrous mining rules, almost literally dictated by JD Irving's agents Tom Doyle of Pierce Atwood and Anthony Hourihan Aroostook Resources, are headed for the legislature amid rumors and hopes they will be rejected. Even if that should come to pass, it is not clear there is moral or political courage to finally deal head on with the need to rebuild the statute itself from scratch. Our statute is a complete roll back of all environmental law previously applicable to mining. Environment and Natural Resources (ENR) members who claim the protections are there are simply wrong. The truth of our mining statute is that sand and gravel pits are still subject to laws and protections from which mining was exempted.

So why is it that these words have not been spoken? Why has this not been the center of advocacy? And will it get sorted out in time to save the pristine watersheds around Bald Mountain from catastrophic loss? That is not at all clear.

What is our mining statute? The plain and simple truth of our statute is apparent on inspection. It combed through all sections of environmental law in the state of Maine and simply exempted mining. It is all laid out law by law in the list preceding article 9 itself and called An Act To Improve Environmental Oversight and Streamline Permitting for Metallic Mineral Mining in Maine. It is impossible to mistake that. It's right there in plain English. It took very little research and effort to discover that the list of laws rolled back actually emerged out of Pierce Atwood's files serving three prior lease holders at Bald Mountain back to shortly after its discovery by JS Cummings. It was the list of environmental issues that none of Pierce Atwood's prior clients could solve at Bald Mountain, not because the laws were overly strict or unreasonable but because the mountain itself is such a complex high risk deposit compared to other high risk deposits.

Why almost two years later is no one calling it out for what it is, even as Tom Doyle, in his article for the December 2012 issue of *Mining Engineering*, crow's that he delivered a roll back that includes the holy grail of unscrupulous profiteers of allowing on site pollution and discharges to ground and surface waters?

Our statute traded all those statutory protections and attending rules for essentially a promise not to harm natural resources, but with two notable and horrific exceptions to even that general promise - (1) allowing on site pollution of ground and surface waters and (2) allowing off site harm to fisheries and natural habitats. Why in last year's legislative session did no one call for a roll back of at least these two egregious provisions? How did the discussion and consensus instead get to be about four or five addenda (LD1302) that would have done absolutely nothing to correct anything fundamentally wrong with our statute?

I ask these questions not to lay blame, but because I think it is critically important to understand what went wrong and make sure we don't simply continue those mistakes. We have to abandon those old frameworks to get ourselves off the rocks on mining. Entire wilderness water systems are at risk. It's an all hands on deck emergency.

My observation is that mining literally overwhelmed the ENR, the legislature and our network of environmental advocates. The entire system foundered in a storm of misinformation, misdirection hurriedly thrown together to preserve what accountability to the environment a few perceived could make it through the legislature and sustain a gubernatorial veto. We have to get it right and do it right now and that involves more than simply rejecting these horrific JD Irving-dictated rules.

What is needed, in addition to the legislative rejection of these rules, is at least a six month delay in implementation of the statute and a suspension of all rules, 1991 and



Clayton Lake and Bald Mountain.

the draft rules, in effect, a six month moratorium on mining. Sending it back through the same failed system that brought us to this brink will clearly not do. There has to be outside expert guidance. No one involved in mining in Maine now understands the first thing about mining. No effort has been invested in understanding mining basics. You can't write good law and policy for something you nothing about. That's got to be obvious. And, also obvious, there needs to be a more inclusive, transparent statewide process for framing a permanent and modern mining policy from which wise law and regulations can be framed.

Additionally there has to be a commitment on the part of all, commitment meaning resources and treasure from all the environmental groups, to fix the nuts and bolts of how the system works. That's not work that can be easily explained to members in donation campaigns but it is essential work because there is only law and policy to draw on when the unimaginable suddenly looms as mining did two years ago.

Proposals like the mining statute happen because we allow substantive major lawmaking in late session

and often on some inexplicable standing definition of "emergency". I have observed that this is the counted on window of opportunity for corporate lobbyists. We need basic procedural reform to close that door. Major substantive law and policy on something as complex and potentially catastrophic as mining can't be properly addressed in a few hurried end of session extra work sessions. And even with that you have to ask why didn't the ENR simply say, oh ok we'll pass a resolution asking the DEP to evaluate its 1991 rules and make a report to the legislature? You have to ask are these really surprises or is it understood that this is coming and agreed what the outcome will be, as one legislative insider says has been his experience in vetting for committee membership. We need to fix that.

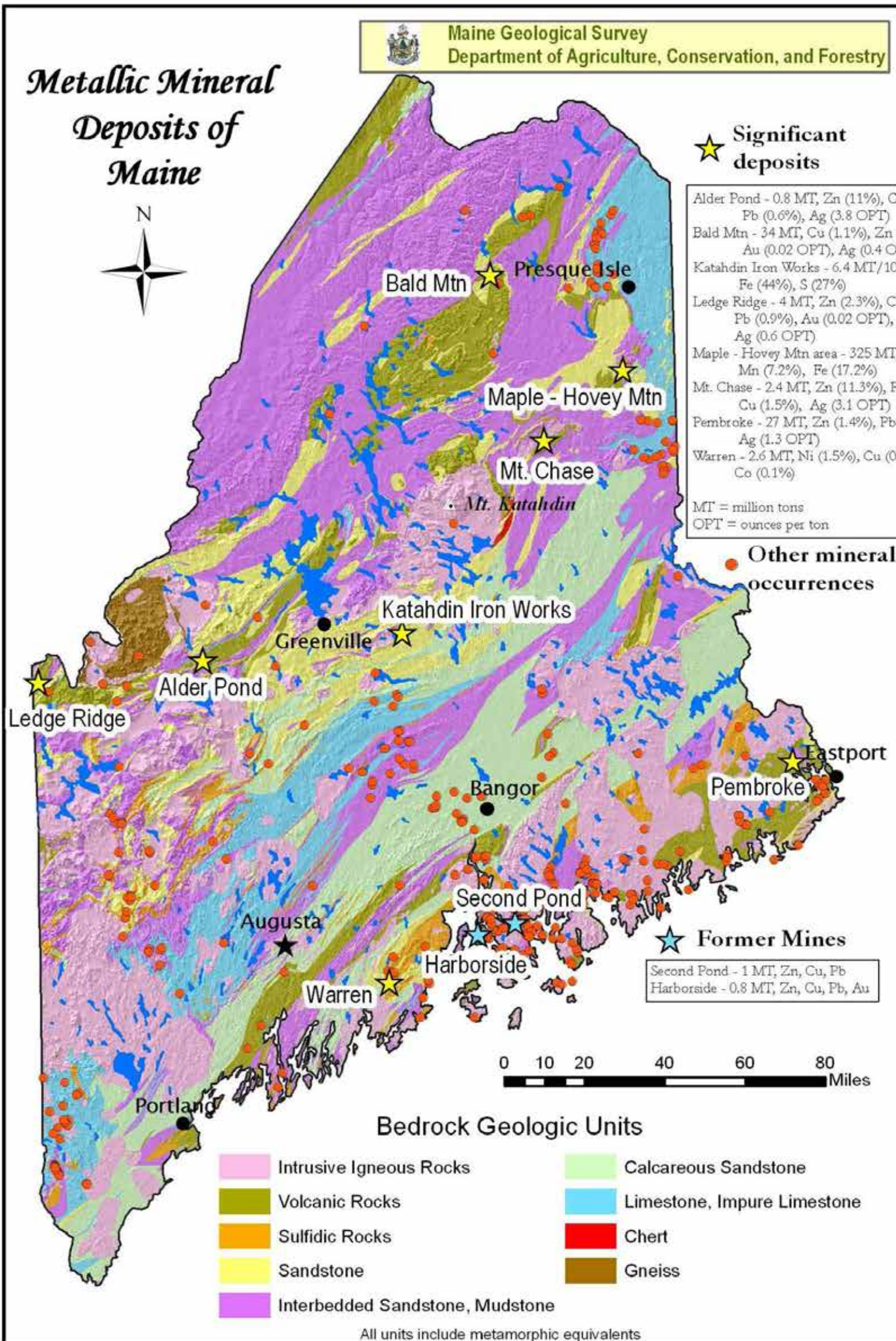
The other "not easy to explain to contributors" nuts and bolts that all environmental advocates have to commit to fixing is to challenge to the governor's executive order that no rule may be issued for public comment until approved by his office. That was an early action, almost day 1. And that means that all the rules we see are political, driven by political agendas and political deals. Hourihan and Doyke haven't even tried to hide that in the posture and tone to LUPC and DEP on every phase of the mining rules. They have had a "we're in charge here" attitude because they actually are in charge. We have allowed that. We have to fix that.

And on our side, amongst us environmental advocates, we need to recognize when an issue is overwhelming and requires outside expert guidance and help. We made a huge mistake taking up mining the same way we take up all other issues. This issue needed more direct primary research, more direct funding and resource commitment than it got. Because this didn't happen, the system of advocates and legislators remains as uninformed and unprepared to make policy for metallic mining as it was the day John Martin brought his proposal to the ENR almost 2 years ago. When there is a massive threat, it has to be all hands on deck day 1 and staying there till the storm has passed. Room has

to be made in the budgets and agendas of every single group. The system of simply leaving it to one lead group and then signing on to consensus doesn't work and where we are in mining proves that. We have to fix that amongst ourselves.

Advocacy on something as dangerous as mining has to have its foundations in a complete mastery of the state of the art of the industry and it has to be constructively aimed at policy building. Campaigns that simply sound the alarm aren't enough. Open pit mining was never forbidden in Maine. The old 1991 rules were just as bad as the new rules. It was never the issue that the new law allowed open pit mining or the old rules offered sound protection. We need to fix that now. We have to get our entire network of advocacy on a better informed, better aimed, more constructive policy track.

Because none of these fundamental systemic errors have been even acknowledged let alone fixed, I will see no victory or hope if all we accomplish this year is a rejection of these rules.



# Bald Mountain Speaks Its Own Truths

by Lindsay Newland Bowker

The heartbreakingly serene, pristine Bald Mountain spoke to us through time this summer telling its own truths, outing the lies and myths on which Maine's mining statute was advanced, and warning us of the extreme dangers to surrounding ground and surface waters should anyone attempt extraction from its ancient sulfide core.

The deposit itself is located on a ledge, No Name Ridge, near the northwest corner of T12 R8, between the

Officials and players still among us who knew the truth of Bald Mountain were silent as John Martin advanced the lies that Tom Saviello, then chairman of the Joint Standing Committee on Environment and Natural Resources (ENR) and then committee member Troy Jackson endorsed. They welcomed Tom Doyle from Pierce Atwood and other JD Irving lobbyists into our legislative chambers, helping to sell the two-pronged lie

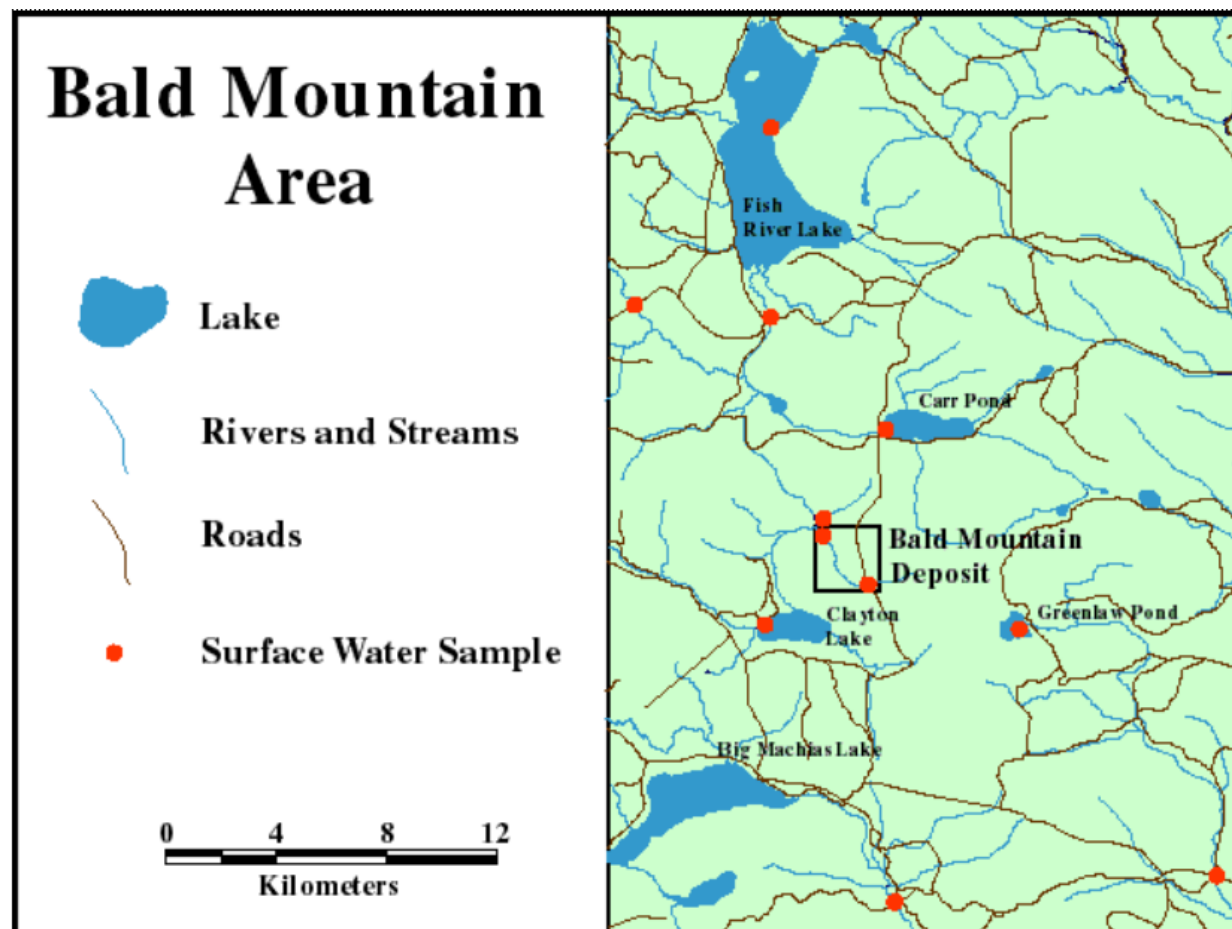
and explorations at Bald Mountain, I decided to pursue original research on the environmental risks of the Bald Mountain deposit. The environmental risk of a deposit is in its ratio of acid producing to neutralizing agents (NP:AP Ratio) and in its hydrogeologic relationship to ground and surface waters. The basic measurements of this from existing drill core is not all that expensive. Through correspondence with Dr. Robert Seal of the USGS, a globally respected scientist who had done work at Bald Mountain during Black Hawks tenure, I was trying to track down the actual drill core and had secured private financing to do an independent analysis of this core. As I was pursuing that I happened to run across an official Maine government document acknowledging that Black Hawk had withdrawn its application in 1997 because of falling prices and the relatively low grade of ore. I presented that in one last request to DEP and finally they admitted there were records for the Black Hawk application, and later, after further pressing, also produced the Boliden permit records. The Black Hawk records were made available to me the morning of June 10th in the dreary bowels of the DEP records room.

I was after the geochemical data, that data at the heart of the inherent risk of a deposit, its total sulphur content, its ratio of acid generating to neutralizing elements, and any kinetic tests (lab experiments which show how the materials will break down over time releasing acid and toxic metals). Literally within seconds of tackling those four big boxes, Bald Mountain told its story. It was as plain as day that the enormously high environmental risk of the deposit itself, and not the 1991 rules, were the reason why the deposit at No Name Ridge at Bald Mountain has never been developed. SRK, probably the world's top mining consultant, laid that out in plain English to Boliden in 1990. In just so many words they said an open pit mine top to bottom could not be accomplished with any known technology without compromising surrounding ground and surface waters. The 1991 rules were not even drafted then and were not adopted until 1992.

The other thing that was immediately apparent and completely shocking was the list of familiar names on the documents I was looking at; Jay Clement from the Army Corps of Engineers, Cynthia Bertocci currently Staff Analyst to the BEP before whom a kangaroo court of rule making is now happening; Mark Stebbins, now making these presentations to BEP and who had actually been the project director for DEP & LUPC on the Black Hawk application. And it was clear that Pierce Atwood had been red tape cutters for both Boliden and Black Hawk, and an earlier leaseholder, as well.

I had been in contact for months with Cynthia Bertocci about my concerns that DEP knew nothing at all about mining, and she had never let on there had been a prior history or that she had been part of it, even though her name was on key documents. Both she and Mark Stebbins still deny any specific recollections of the Black Hawk application. That seems not even plausible given the very colorful and very public coverage of John Cesar's struggle with DEP/LUPC. I could not believe the revelations that leapt out of that box into my hands almost immediately: that Bald Mountain was one of the highest environmental risk deposits of its high risk class, and that so many currently involved knew that very well and said nothing at all publicly during deliberations on the statute.

Only J.S. Cummings, now 83, among the living outside of government who knew the real story, tried to set the record straight, writing both to Troy Jackson and John Martin that Bald Mountain could never be done open pit top to bottom, and of its other huge challenge, it's in-



headwaters of two watershed systems. Carr Pond Rd, an old logging road, runs right over the top of the deposit, which had defied discovery because of its depth under the earth.

It's story is Earth's story, formed from an undersea vent millions of years ago, its spewings of copper and zinc suspended randomly from the violent eruptions, in small concentrations within a mass that would become rock in the characteristic vent shape of a tornado funnel. It's proper geologic designation is "Volcanogenic Massive Sulfide" (VMS).

Although it was not so long ago, 1995, when there was last a mining application at Bald Mountain, and before that nearly two decades of colorful well-publicized rhetoric and debate over mining, that entire two decades of Maine's mining history seemed long forgotten that day when John Martin brought his proposal to our legislature. As I began my own investigation, the story of those two decades from discovery in 1977 by Maine economic geologist J.S. Cummings to Black Hawks 1995 application leaped right out in my first Google searches. Mr. Cummings sent me a reprint of *Downeast* magazine's swashbuckling account of the discovery of Bald Mountain. Bald Mountain had been the statewide "talk of the town" not so very long ago and over a long period of time.

that modern mining through technology is environmentally safe and that but for Maine's outdated 1991 rules, Maine could have been enjoying jobs and prosperity from Bald Mountain and our other lesser valued but known metallic mineral deposits. Mr. Cummings himself wrote to Martin and Troy Jackson while the statute was still being considered to warn that Bald Mountain could never be extracted top to bottom open pit. And this summer, Bald Mountain finally told its own story and set the record straight.

I knew almost immediately in my research from mining industry trade journal announcements that there had, in fact, been a mining application at Bald Mountain in 1995 by Black Hawk and that they had taken over the lease from Boliden, a globally known and respected mining company. From local papers, principally the *Bangor Daily News*, I knew Mr. Cummings had put together a joint venture to explore the deposit and I knew of the successors to that joint venture prior to Boliden's takeover in 1990. In early December 2012 I wrote to William Galbraith at LUPC who said he had found a recorded entry of the transfer from Boliden to Blackhawk and gave me the DEP Permit number, but that he found no other evidence of records.

Although that made no sense in relation to the trade journal articles, which suggested years of permit history

credibly high level of arsenic. Martin and Jackson never shared those letters with other members of the ENR. Stebbins and Bertocci, who could easily have tipped me or NRCM or Lance Tapley to the truth, never did so.

Just to set the record on the 1991 rules perfectly straight, John Cesar, President of Boliden’s Maine office in Portland, wanted the regulations. He said that in writing to DEP’s then Commissioner when he took over the deposit from Chevron in 1989. The legislature had passed a one line mining statute in 1985 directing DEP and LURC to jointly promulgate rules. They both resolutely, systematically avoided that for six years as they saw creating rules as opening a path for mining to which they were whole heartedly opposed.

John Cesar of Boliden forced this issue with appeals to the governor and other legislative leaders. DEP/LURC acquiesced, hiring top consultant Lehman to write the rules Boliden demanded be made official before they proceeded with the expensive proposition of mine development. I have not been able to uncover the truth of what Lehman wrote, but DEP/LURC rejected it and offered instead their own version, our current wacky, uninformed, poorly framed homegrown version. University of Maine Professor Richard Wardwell, who had been actively involved at Bald Mountain for some time, recently confirmed to me via email that he had provided guidance on the 1991 rules. (Wardwell’s name appears on BEP’s interested party list, though he has not offered anything on the official record of public comment.)

Both John Cesar and Mr. Lehman were public about their frustration with the attitudes and lack of professionalism on mining of both DEP and LURC. Those letters are referenced in Mr. Cummings accounts in chapter five and the appendix of his book, *The Lost Promise of Golconda - Metals in the Maine Earth* (2012).

Extreme frustration with DEP/LURC was very real and very public but the actual decision making on the deposit by Boliden had absolutely nothing to do with the rules. It is unequivocally clear in the record that SRK’s 1990 report to Boliden was determinant: that the Bald Mountain deposit could not be done open pit top to bottom with any known technology that would assure protection of surrounding ground and surface waters. At that time, Lehman hadn’t even been hired to undertake the rule making John Cesar himself had forced. John Cesar was a chief mover seeking responsible modern mining rules. He wasn’t running away from them. No question though, lousy rules. Not that they were overly restrictive - they just showed no understanding at all of mining. They were cumbersome and unclear.

While Ernest K Lehman began their work on the rules in 1990, and the final forming of the rules ordered in 1985 was playing out into December of 1991, Cesar was exploring the feasibility of SRK’s 1990 suggestions of a smaller open pit extraction of the sulfide, an underground mine, or a gossan only for the silver and gold (i.e. avoiding the sulfide altogether). But SRK’s second round of work in 1992 ruled out even a smaller open pit, and underground was considered a “no go” on purely economic reasons. Boliden basically stopped all work in 1992, looking for someone willing to take over for the gossan-only exploration. DEP approved a transfer of Boliden’s rights to Black Hawk in 1995, the same year and within months of naming Black Hawk as a potentially responsible party at the Kerramerica mine in Blue Hill. Black Hawk had no relevant actual mining experience except the exploration mess they made at Kerramerica in Blue Hill.

Further details on every element of this history are in Bowker Associates’ open access postings at [lindsaynewlandbowker.wordpress.com](http://lindsaynewlandbowker.wordpress.com). J.S. Cummings, who has received all of the data I have been distributing since June, remains committed to his contention that it was the 1991 rules that drove Boliden away. But the record is very clear and unambiguous that that is not the case.

What Bowker Associates is pursuing now, with funding from North Woods Advocate Charles Fitzgerald, is whether Bald Mountain is still outside the realm of any known technology as respects extraction from the sulfide itself. My sense, as I have reported in e-letters to a very large network of environmental groups, legislators, ENR committee members, journalists and citizens is that Bald Mountain is literally off the charts in its profile of environmental risk and that that there have been no advances in technology that significantly change the bottom line that Boliden confronted in 1992 when they abandoned any prospect of extraction from the sulfide itself.

Bowker Associates is directing and coordinating expert review on what has to me seemed apparent since that first day on June 10th with those boxes in the bowels of DEP.

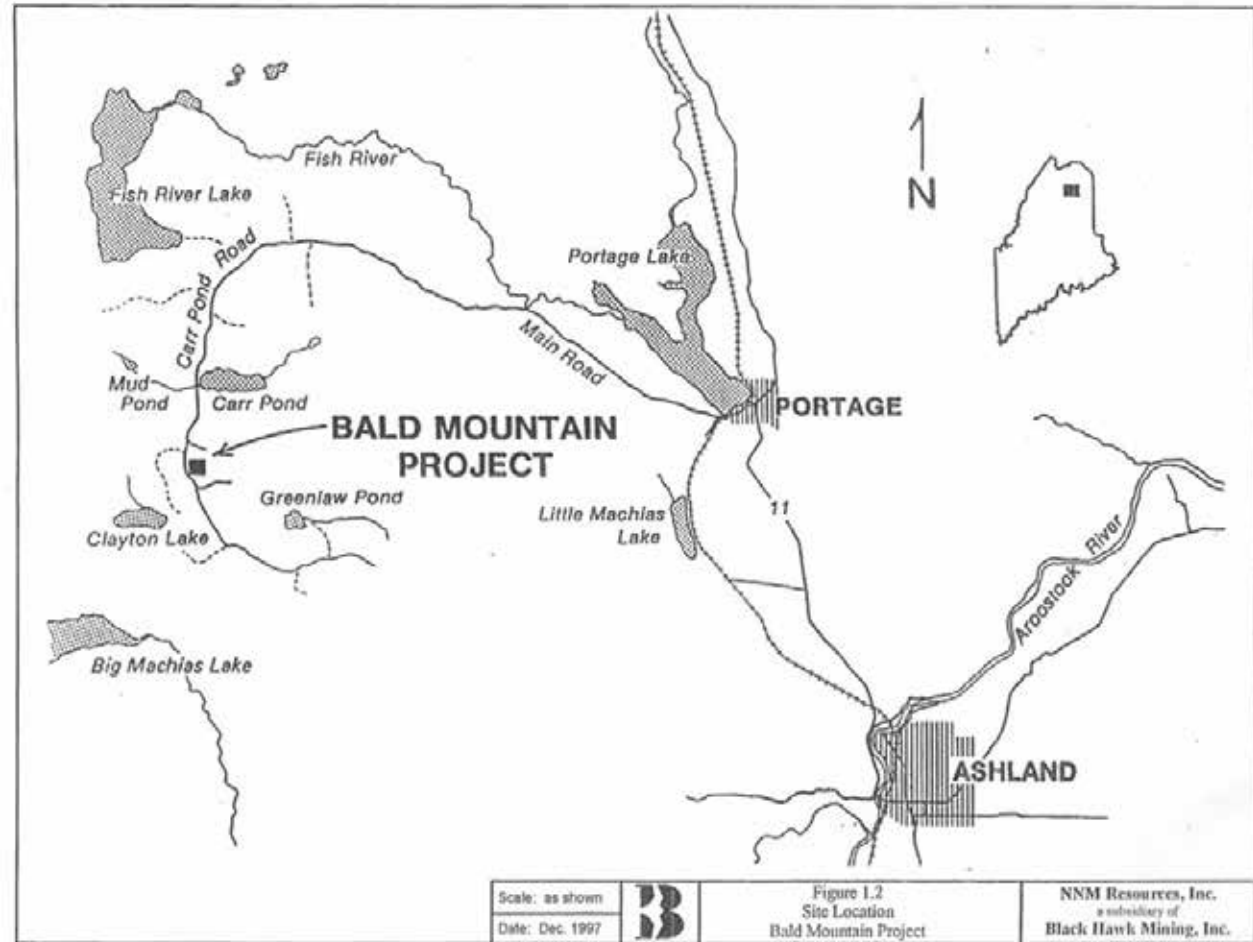
Dr. David Chambers, a globally respected expert whose life is about building wise policy and best practices for mining, will also address as general policy how to identify a deposit where environmental feasibility is still beyond any known and proven technology. Our consideration will focus only on VMS deposits, the kinds of deposits we have with Mt. Chase, Alder Pond, Bald Mountain, and the coastal state waters deposits of current interest.

I have no doubt at all that Dr. Chambers will refute the proposition sold to our legislature that through modern technology any mine can be safely extracted and closed with no environmental damage. That simply isn’t true. Corporations like Rio Tinto have internal fatal flaw analysis criteria that reject deposits as not environmen-

tally feasible with any known technology. It is widely understood every where but Maine, that JD Irving’s contention that modern technology makes it possible to mine any deposit with minimal environmental impact has no merit.

My word as an expert in environmental risk management and my presentation of literally thousands of pages of scientific documentation on that point have not been persuasive. Maine legislators, both Democrat and Republican, choose their own rabbis for their own unaccountable reasons. To all else they are deaf. The same is true among all of Maine’s brand name enviros, whose executives have been receiving this same documentation and analysis since June. Will it make a difference if this analysis is offered by a globally respected expert? Remains to be seen.

A few weeks ago I transmitted all the scientific data I have compiled in the past year to Dr. Chambers. Early feedback confirms that Bald Mountain is almost certainly a perpetual care mine, and that there is no feasible closure that does not involve perpetual water treatment. By modern best practice standard, Bald Mountain is a “NO GO” deposit until and unless technology is further developed that would make that possible.



# Testimony on LD 1772 - An Open Letter

by Jody Spear

*LD 1772: "Resolve, Regarding Legislative Review of Chapter 200: Metallic Mineral Exploration, Advanced Exploration and Mining, a Late-filed Major Substantive Rule of the Department of Environmental Protection"*

I ask that you reject the rules on mining drafted by DEP. Last October 248 persons appeared before the board to protest the damage that would result from the rules put out for public comment. Compelling testimony -- from both concerned residents and environmental scientists with expert knowledge of acid drainage and other adverse effects of open-pit mining -- was disregarded. Instead, DEP officials were influenced by some 16 industry delegates to make the rules even more permissive in their drafting of LD 1772.



Bald Mountain and Clayton Lake.

It is impossible to overstate the arrogance in the agency's responses to precautionary testimony in the record. An agency that is obviously bending the rules to make it easier for the mining industry lacks all credibility in its insistence that stringent environmental protections are in place and that pollution of ground and surface water - which should be prohibited - will be minimized appropriately.

Do Commissioner Aho and her minions really believe they can get away with refusing to submit mining rules to EPA to assure compliance with Clean Water Act requirements that protect water quality?

Do they really think it is acceptable to treat mining waste for more than 30 years -- whatever industry needs -- and define such prolonged treatment as "not in perpetuity"? [Sec. 20 (A) (6)]

Do they really expect Maine taxpayers to agree with shifting cost from the applicant to the public for third-party evaluation of a mining company's financial fitness? [Sec. 17 (A) (7)]

Seriously, will citizens agree that only municipal officials should have intervenor status during the permit-review process? [Sec. 10 (G) (9)]

Could DEP possibly hope that mining on and abutting public land, including LMF preserves, will be considered appropriate by the people of Maine and their legislators? [Sec 20 (B) (3-4)]

These are substantive changes -- changes the public was to have been given opportunity to comment on. To fail to do so, as Attorney Ruprecht and others state, is unlawful.

We know all too well the consequences for public health and the environment that come in the wake of mining operations. I am a close neighbor to the Callahan Mine Superfund site in Harborside and have attended many briefings by EPA and MDEP engineers, who are working with scientists from Dartmouth College to assess the damage and come up with a semblance of a solution. Alarming, levels of toxic metals in fish in the estuary there are high enough to affect larger fish and birds, increasing potential for harm to wildlife and humans

beyond the site. Researchers are still trying to identify sources of heavy-metal contamination that continues to seep out of rock piles and sediment 40 years after the mine closure.

You'll recall Fred Beck testifying at the Feb. 24 hearing that acid drainage had not resulted from operations at the Callahan Mine site. Although I do not possess scientific credentials myself, I submit to you that this statement is subject to challenge. The most likely cause of damage to aquatic organisms documented in Goose Pond sediments (100 percent mortality showing up in sand-dwelling worms and sea urchins examined by U.S. Navy researchers) is heavy metals leaching out of the sulfide-ore deposits mined at Callahan -- this the

chemical reaction that defines AMD. I make the point because Beck -- as some of you know -- was the exploration geologist for the Callahan Mining Company and was the architect of the mine reclamation plan in 1972, a plan that failed with tragic consequences. You would do well to bear this in mind should Beck appear at the work session(s) to offer expert advice on LD 1772.

A history of improprieties on the part of DEP - including suppression of information that would have made a difference before changes to the mining law were enacted last year - is now compounded by eviscerating regulations for water protection and requirements for financial responsibility going forward. DEP -- charged with protection of the environment -- has gone too far. David Chambers, who provided guidance to DEP last year and whose report on metallic mining in Maine (commissioned by Charles Fitzgerald) will be available to you soon, is the kind of third-party expert who should inform the process of developing appropriate regulations -- rules designed to avert acid drainage at every stage of mining operations, including conditions after closure. He advises also on NO-GO sites -- topography that should never be mined. We count on you to make sure mining regulations incorporate these restrictions. LD 1772 lacks them and should be rejected.

Jody Spear  
Harborside, Maine

P.S. In a *Bangor Daily News* op-ed of 24 October 2013,

Senator Saviello makes some observations that call for annotation. "The law [passed in 2012] stipulates," he says, "[that] surface water must not be contaminated directly or indirectly by mining operations ....[and that] water quality must be monitored throughout mining operations...." Regrettably, water monitoring is not mandated in these rules, and reputable scientists argue convincingly that pollution of surface water is inevitable when contaminated groundwater -- specifically allowed throughout the [undefined] mining area -- is discharged beyond the site.

That water would be protected adequately under these rules is -- even according to Boliden's consultant -- inconceivable. The record shows that in 1990 SRK recommended seeking lower water-quality standards so their client could discharge more heavily polluted waste water. (I point this out in my own BDN commentary alongside Saviello's.)

Senator Saviello fails to back up his assertion that "advancements in water treatment and other mining technologies" will make resource extraction at Bald Mountain and elsewhere "safe and responsible." Rather, he would have us take on faith -- considering other technological innovations, such as GPS, Google, etc. -- that there must be new methods for mining without adverse impacts. In fact there are, for water treatment, only reverse osmosis and ion exchange, which have been around for decades and are prohibitively expensive for massive quantities of waste.

Equally absurd is Saviello's contention that "nothing was hidden" by DEP while the streamlining bill was being debated in 2012. The fact is that citizens were demanding access to documents on mining and were prevented from seeing them until FOIA requests were filed.

Most disingenuous: "The current owners of the Bald Mountain deposit [J.D. Irving] have not proposed an open-pit mine ... [or] any mine," says Saviello. Really? Did Irving write the mining bill for another firm?



FEN director Jonathan Carter by an old-growth Sugar Maple on Bald Mountain.

# J.D. Irving Gets Exemption on Maine Clearcutting Rules

by Steve Mistler

**The deal with the state exempts Maine’s largest landowner’s 1.25 million acres of forest land from some regulations.**

State forestry officials have entered into an agreement with J.D. Irving Ltd., Maine’s largest landowner, that allows the company to exempt its 1.25 million acres of forest land from some clear-cutting regulations and other harvesting standards of the Forest Practices Act.

The five-year agreement was signed in May 2012 but wasn’t made public until this month, when the Maine Forest Service gave lawmakers a report on an experimental tree harvesting program known as Outcome Based Forestry.



The program had not drawn any participants since it was established in 2001, but now interest among major timberland owners is on the rise, as word spreads about the deal that allows J.D. Irving to do individual clear-cuts of as much as 250 acres without state approval.

Environmental groups say agreements with major landowners that are largely confidential and push regulatory oversight to a panel appointed by Gov. Paul LePage could endanger the state’s approximately 10 million acres of certified forest land.

Outcome Based Forestry was never intended to be the “bonanza” that the J.D. Irving agreement represents, said Pete Didisheim, advocacy director for the Natural Resources Council of Maine.

“There has been little interest from others before now because I don’t think anybody ever really anticipated that you could get away with this,” he said.

State officials say the agreement with J.D. Irving, and another with the state Bureau of Parks and Lands, will be monitored closely by a panel of experts. They say that there is a scientific rationale for each harvest, and that the aesthetic impact of a cut is reviewed beforehand.

Doug Denico, director of the Maine Forest Service, wrote in a report to the Legislature’s Agriculture, Conservation and Forestry Committee, dated Nov. 13, that there were “intensive” field inspections of harvest sites on J.D. Irving’s land.

Robert Wagner, director of the University of Maine’s School of Forest Resources and Center for Research on Sustainable Forests, is a member of the six-member advisory panel that is overseeing the program. He told the legislative committee Friday that the program will improve forest management practices that have declined since the adoption of the “prescriptive” Forest Practices Act in 1989.

He and other members of the advisory panel said the Outcome Based Forestry program gives landowners more flexibility to effectively manage timberlands, reduce fragmentation between cuts, and increase pest and weed management.

## COMPROMISE FOR INDUSTRY

Conservation groups acknowledge the merits of science-based forest management. But critics say the agreement with J.D. Irving defies the original intent of the Outcome Based Forestry program, which was enacted amid a series of debates over clear-cutting that pitted conservationists against the state’s dominant forest products industry.

The program was seen as a compromise for the industry, which had complained that the Forest Practices Act put politics over science and prohibited landowners from doing effective timber harvesting.

The program originally was limited to “experimental” parcels, with no single harvest area exceeding 100,000 acres and a statewide limit of six areas totaling 200,000 acres. Lawmakers lifted the size limits in 2007 and removed a sunset provision in 2011.

J.D. Irving expressed interest in participating in the program after the acreage cap was removed, but it was unable to strike a deal until 2012, when it signed the five-year plan with the LePage administration.

Ked Coffin, a forester employed by Irving, said the program will raise Irving’s softwood harvest by 70 percent over the next 35 years, has helped to increase contractors’ earnings by 21 percent, and is a factor in the company’s plan, announced in August, to build a \$30 million sawmill in Ashland.

Irving’s harvest level is not subject to public disclosure because state law treats the information as proprietary.

## TIMBER HARVEST INCREASES

According to the Maine Forest Service, the biomass from harvested wood in Maine increased from nearly 485 thousand dry tons in 1995 to nearly 1.2 million dry tons in 2011.

In 1995 the saw timber harvest was 1.3 billion board feet and decreased to 718 million board feet.

Didisheim, with the Natural Resources Council, said Irving stands to benefit financially from the program, which was designed to operate on a much smaller scale. He said that there is little accountability and that the program’s advisory panel is stacked with members of the forest products industry. At least four of the current members have, or have had, involvement with the forest products trade group.

“There’s no accountability for their decision making like there is for state employees to uphold the laws of the state,” Didisheim said. “You’re pushing off into this murky area of a voluntary program and volunteers performing what should be a role of the Maine Forest Service.”

Members of the advisory panel tried to ease concerns when they addressed lawmakers Friday. Many said that landowners still must adhere to provisions of the Forest Practices Act.

Nonetheless, a former member of the panel has expressed concerns.

Bill Patterson, a member of The Nature Conservancy, resigned from the advisory panel in August, writing that the agreement with J.D. Irving and loosened participation requirements were a “significant change in state policy” that warranted public review.

*Steve Mistler is a staff writer at the Portland Press Herald, in which this article first appeared. This story has been changed to reflect more accurate timber harvest data.*



# The Indispensable *Castor canadensis* - the North American Beaver

by Rick Hesslein

For North America, beaver influenced watersheds are to the Earth as blood capillaries and kidneys are to our own bodies. Imagine trying to function with only 10% to 30% of your blood capillaries and kidney capacity working to try to supply pure life blood to your various organs, extremities etc. Beaver provide instead the proper flow and distribution of “lifeblood”/ water to the earth and thereby nurture the life forces throughout, ensuring the basic health of our ecology from which all our organisms evolve and thrive! While insufficient planning and foresight has produced 200+ years of human develop-



ment and infrastructure that is often at odds with wetland ecology and thereby presents a severe challenge to wetland restoration, it is also true that these wetlands and, especially, beaver created cyclic wetlands, are crucial for restoring what should be some of the most biologically productive ecosystems known to man!

Unfortunately, throughout the 220 years of modern human colonization of North America much of these critical wetlands were converted and systematically drained for agricultural use and other development at the same time that beaver were exterminated nearly to the point of extinction. The result has been devastation to the biological and hydrological health of the region as characterized by native fish population decline, wildlife habitat degradation, water table and quality reduction and ecological imbalances that have led to various insect and other pest population problems. These missing wetlands have also been a major factor in the continued tremendous soil erosion on the continent and have exacerbated drought and flood effects. The beaver's role would be to recreate these diverse habitats and hydrological benefits by opening forest canopies and diversifying and slowing stream flows on the land to trigger explosions of biological activity which begin entire food chains throughout these wetland systems. They do this by allowing sunlight to stimulate the growth of algae and aquatic plants which support microscopic organisms, in turn consumed by a great variety of invertebrates which in turn attracts myriad amphibians, reptiles, fish, birds and mammals. Grasses, sedges, bushes and saplings appear that provide food and cover for foraging animals and the deep pools and sedimentation control provided by beaver damming increase salmon and trout populations.

These natural, bio-diverse ecosystems that are created by beaver through their evolved role in nature should definitely not be confused with the results produced by artificially maintained “wildlife openings” (as are commonly promoted in our National Forests and other public lands) nor the often touted value of clearcutting or over-harvesting forests that are conceived from a myopic view of extremely limited, valued species. This rationalization of what are usually extremely degenerate forestry practices actually serves to increase biological imbalances and other deterioration that lead to problems like tick infested Moose with brainworm disease and other pestilent outcomes and also contribute to excessive soil erosion and surface water degradation. Beaver managed forest openings and wetland complexes act as natural sponges which store rainwater and slowly release it, reducing downstream flooding and erosion and improve water quality by absorbing dissolved nutrients, processing organic wastes and actually collecting and breaking down toxic runoff of heavy metals, pesticides and fertilizers, thereby serving as “earth kidneys”. Beaver ponds and wetlands also recharge aquifers, stabilize the water table and improve stream flow in the face of drought and are preventative for uncontrolled wildfire, (none of which will ever be accomplished by anything approaching a clearcut or non-sustainable harvest).

Unfortunately as the value of beaver has, in part, been realized and their numbers have fractionally increased there have also been increased conflicts with the human footprint. Not only is the recent historic established infrastructure blocking restoration, but also the continued expansion of development and roads and trails for recreation and forest products are highly problematic for beaver and ecological restoration due to poor planning, lack of understanding and proper regulation. In the State of Maine, beaver wetlands regulation and management is largely overseen by the Dept. of Conservation, Inland Fisheries and Wildlife. This bureaucracy seems to have as its first priority the promotion and sale of hunting (& fishing) and trapping licenses and things ecological are geared mostly toward that end. The Department does not even have the funds to spare to actually monitor beaver populations and certainly not their effective role in our ecology (ironically, the role that would also be key to other game species health as well). In this unfortunate vacuum, decisions are made by calculation

(or perception?) from numbers of beavers trapped vs. “effort” (number of trapping licenses sold?) and also the number of “nuisance” complaints so that the result has become a greatly expanded trapping season, a proposed hunting season and concessions to previously outlawed practices such as trapping on dams and lodges and even permitted shooting of “nuisance” beavers. The commonly heard sentiment from State wildlife managers is that beaver are at, near or beyond the “carrying capacity” or “tolerance” level and there's not enough trapping, yet they have no statistical basis for these conclusions. This is a sad state of affairs which has resulted in the unregulated trapping of beaver even where they would do the most good in non-conflicted areas. This, along



with conflicted site lethal removal, has the real effect of undermining all State efforts to improve and increase not only game animals and birds but also ecological health and restoration in general, to the detriment of both the public good and the effectiveness of public tax and other dollars spent.

As part of my effort to counter and educate about this adverse trend, I am trying to promote the use of engineered structures that can mitigate conflicts between beaver and human activity. These engineered installations such as “Beaver Deceivers”, “Flexible Pond Levelers” and “Culvert Protective Fences” can be utilized to effectively and economically prevent damages from culvert plugging and flooding of roads or property. It should be stressed that the moderating effects of these structures can be reliable, effective and economically viable for



protection, but also potentially degrade to a lesser or greater degree the habitat that is also being (partially) accommodated. It would always be preferable to maximize ecological benefits by using better design and location of infrastructure where possible since we already are too far behind with these lost ecosystems. Instead, we seem to have a rush to access all remaining forests and wildlands with even more poorly designed and located roads and trails for recreation and logging etc., creating excessive and self-defeating conflicts. It is man that has saturated and degraded the landscape, not beavers.

Most recently I was able to collaborate with Regional State Biologist Scott Lindsay and landowner Bill Crain on a pond level control structure on private property in Pownal, Maine. In order to protect the bordering public road from possible flooding we installed a 20 foot x 18 inch diameter. “flex-pipe” polyethylene single wall culvert connected from a cylindrical 6 foot enclosed 6 gauge wire mesh intake cage in the pond to a 1 foot breach in the top of the beaver dam near the road to lower the water level about 1 foot at the road. The 1 foot seems to be a good compromise that will protect the road from damage during high flow rain and melt events, yet, hopefully will maintain adequate water level in the pond to facilitate continued beaver activity and the ecological benefits as much as possible. So far so good, though there has been no real high flow test since the October 4th installation. In this case there was a long history (maybe 20 years or so) of events that led to this hopeful resolution. The landowners had been consistently adamant about protecting the habitat on their property but problems with the road and culverts persisted to the point that the Crain family finally consented to having beaver relocated. This, however, went awry with the accidental drowning of a beaver (only one of many ways in which relocation is usually not the best option). After this incident a newly sympathetic, creative and resourceful town road agent at that time installed a stone barrier upstream of the road to encourage future beaver damming activity away from road culverts. This succeeded but to a point that water level during high flow events could deflect/detour across the road, causing significant erosion. This was mostly, but not always, avoided by the diligence of the landowner manually lowering water level by partially breaching the top of the dam ahead of oncoming storms etc. Another simpler solution might have been to simply ditch and/or raise the road bed just enough to give high water a path back to the ample road culverts instead of across the road, but it seems there was no flexibility in that direction from the current town road officials.

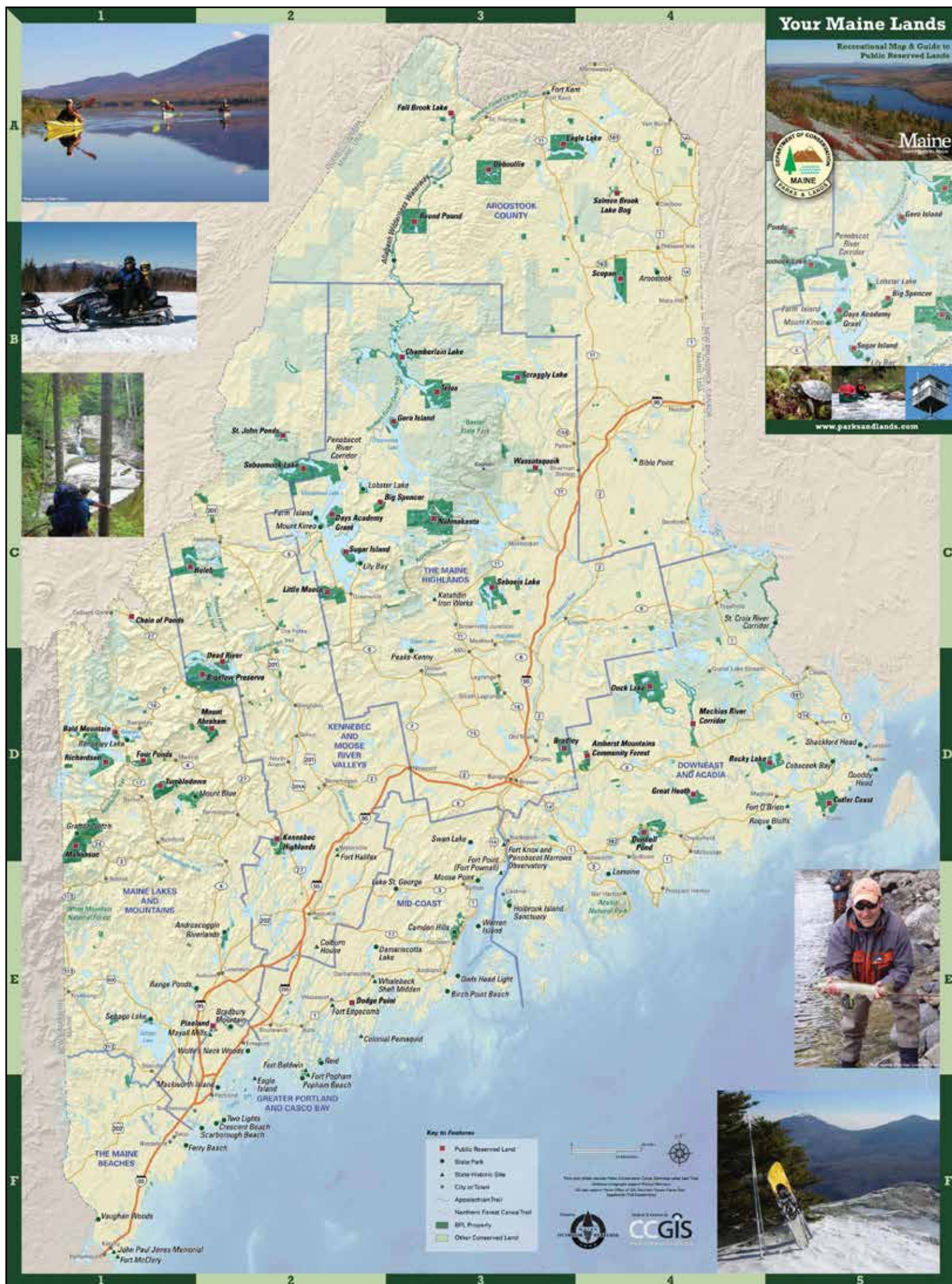
So far the pond leveler seems likely to be successful and has eliminated the stress and worry about damages and the work of continually monitoring and controlling water level by the landowner, though we have yet to hear from town officials. The State Biologist is hopeful that the installation is a success and will serve as an example to be followed more often in future conflict resolutions. He will also be attempting to secure a grant through the Maine Outdoor Heritage Fund (they sell scratch tickets at local markets) to help with funding some of this important work. Hopefully too, now the Crains can relax and enjoy watching wildlife in their terrific wetland habitat.



**North American Porcupine -  
Maine’s Other Large Rodent**

photographs by Paul Donahue





## Maine has more than a half-million acres of public reserved lands.

In comparison to state parks, Maine's Public Reserved Lands are remote, un-staffed lands managed for variety of resource values, including recreation, wildlife, and timber harvesting. The Bureau of Public Lands owns more than 500,000 acres of public lands, organized into 29 units ranging in size from 500 to more than 43,000 acres and many other smaller scattered lots. These lands are available for recreation and offer unique, back-country experiences.

# Maine’s Public Lands Pushes to Cut 40% More Timber on the Hush

by Christine Parrish



Nahmakanta Lake - Maine Public Reserve Land

Last week, a handful of public servants in a quiet back room in Farmington faced a question it appeared they were trying to duck.

Were they planning to ramp up timber harvests on Maine’s publicly owned lands? If so, where? Why? By how much?

The meeting was supposed to be almost pro forma. It was the five-year meeting of advisors who care about the 36,000-acre Bigelow Preserve mountain range in western Maine and the area surrounding it known as the Flagstaff Region. No one seems to disagree that the Bigelow mountain range, with its varied forests, seven peaks, alpine ponds and astonishing views of the western mountains, is a plum of a place. It’s a favorite of hikers, skiers and hunters.

But for days there had been rumors that there was a plan under way to do more intensive timber harvesting on Maine’s Public Lands. There had been no public discussion, however, and it looked like this meeting would provide an opportunity.

Just before 1:30 in the afternoon on Thursday, August 15, the day of the meeting, an email went out to the advisory committee members squelching the idea. Jim Vogel, a planner for the Maine Division of Parks and Public Lands (DPPL), asked attendees to stick to the agenda.

But early in the meeting, someone tossed the agenda aside and asked the question. Was there a plan to cut more trees?

For decades, the half-million acres of Maine Public Reserve Lands have been the quiet darlings of the state conservation system.

The Mahoosuc Mountains, Cutler’s Bold Coast -29 public lands units in all, comprising a half-million acres, are free and open to the public. Best of all, they are self-supporting. In a state that is perpetually fighting over public dollars, that is no small thing. With rare exceptions, public lands don’t cost a thing.

The reason is timber.

Some public lands parcels are ecological reserves, but large segments are managed by teams of public lands foresters who work to get the forest to yield real money from timber harvests, while also providing high-quality habitat to everything from black ducks to moose, deer, bear, and migratory songbirds. Recreation is an equal priority. How much recreation management, how much wildlife, how much timber varies from one public lands unit to the next, but the general goal has been to create a diverse forest of many uses.

The quiet little darling of a system, operating largely under the radar for decades, worked.

Last spring a proposal to cut more trees from Maine’s Public Lands to fund a public heating program failed to gain legislative support, but it fanned a conversation about neglected dollars standing on the stump, waiting to be turned into boards and cords. That prompted the governor’s office to ask the DPPL: how much more wood can you cut?

“The question initiated from the administration asking for a collective response from the Maine Forest Service and Public Lands,” said Tom Morrison, the DPPL operations chief. The governor’s office wanted to know how much more wood could be harvested while still meeting forest industry standards for sustainable forestry, said Morrison.

Morrison said there was no discussion about where the money from timber sales would go. By current law, they are dedicated funds and must be returned to the DPPL.

The harvesting discussion became public on August 15.

*The article first appeared in the Bangor Daily News on 22 August 2013.*

## 12,000 Acres in Western Maine Now in Public Reserved Lands

More than 12,000 acres, including three of Maine’s tallest mountains, are now permanently protected under the Crocker Mountain Unit of Public Reserved Lands.

A \$7.6 million purchase in northwest Franklin County will add recreational development opportunities and protect critical high elevation habitat in the Sugarloaf region.



The Public Reserved Lands include Crocker, South Crocker and Sugarloaf mountains in Carrabassett Valley and buffer a 10-mile stretch of the Appalachian Trail, which traverses the peak of Crocker and South Crocker mountains.

# Silent Fall

by Paul Donahue

*As a long-time grassroots environmental activist and as a creature living in the thrashing endgame of civilization, I am intimately acquainted with the landscape of loss.*

*Derrick Jensen - Santa Cruz, California, 2007*

When I began birding in my teenage years, my first field guide was Roger Tory Peterson's classic work, *A Field Guide to the Birds*. In that book, in a paragraph about the birds he referred to as the "confusing fall warblers", Peterson wrote, "If at the end of ten years of field work you can say you know the fall warblers, you are doing very well." Many birders are justifiably confused by the "confusing fall warblers", preferring these little birds in their boldly patterned spring plumage, but the far less brightly colored fall birds captured my eye, and I took Peterson's statement as a personal challenge. With an artist's eye for recognizing patterns and discerning subtleties of shape, color, and shading, coupled with extraordinary amounts of time in the field, within two or three years I could honestly say that I knew the fall warblers.

Each year I would look forward to the fall migration, when large numbers of these south-bound olive, yellowish, and brownish little birds would fill the woods and hedgerows of my Massachusetts birding haunts. I would spend many, many hours afield tallying species and numbers of this diverse assemblage of birds. When I moved to Maine in the mid 1970's, I continued spending lots of time each fall with the "confusing fall warblers".

In the fall of 1975 I began spending large amounts of time on an island in Maine's Casco Bay. I was there primarily to count migrating raptors - hawks, falcons, ospreys, and eagles - moving southward along the Maine coast, but still devoted considerable time to watching warblers. Over the years, I came to know the fall bird life of this island extremely well, spending virtually all of September and October there since the mid-1980's.

Most small songbirds, including warblers, migrate primarily at night to avoid predators, and in fall, they prefer cool nights with northwest winds. During such nights the contact calls of many warblers could be heard overhead as they moved through the darkness, and in the morning I was always anxious to get out to see what new arrivals came in on the previous night's wind. It was always a little like Christmas morning, discovering what little avian gems had dropped in, pausing on the island for a day or two to rest and feed before continuing their southward journey.

Sadly, in Bob Dylan's words, "the times, they are a changin'", and with the natural world, those changes

are almost never for the better. Twenty-five years ago, after a night of northwest winds, I would step outside in the morning to be greeted by the "chip" notes of many warblers as mixed flocks of them moved through the treetops. These days, after a night of northwest wind, I usually step outside to the sound of silence.

The large mixed flocks of warblers we once saw on the island are mostly a thing of the past, with smaller and smaller numbers of warblers moving through the island every fall. With most of the once common species, I now see as many individuals of the species in a whole season as I used to see in a day. American Redstart, one of the more easily identified fall warblers, used to be quite common. I can remember sifting through them in search of the less common or rare species. Now when I see a single American Redstart on the island it is a special



One of the "confusing fall warblers", an immature Parula Warbler.

event. I am hardly the only birder to have noticed these declines. Life-long birders across the Northeast have been sounding the warning for years.

When they hear of these population declines, many people want to know why it is happening, but the answer is not a simple one. Most of the warblers, as well as other songbirds, that have seen the steepest declines in their numbers are what are known as neotropical migrants, birds that nest in North America, but migrate south to the American tropics (Caribbean, Mexico, Central America, South America) for the winter. Widespread deforestation throughout this region has undoubtedly played an important role in the declines, but the explanation is more complicated than that.

Many of these birds nest in the boreal forests of the northern U.S. and Canada, and this area has also experienced serious deforestation and habitat alteration. South of the boreal forest the landscape has actually seen an increase in its forest cover as former farmland gradually returns to its natural state, but these forests, as in southern New England, are steadily being fragmented by roads, housing developments, and other human infrastructure. While these woods might look great to human

suburbanites, many of these blocks of forest are not sufficiently large to provide adequate nesting habitat for many species of songbirds.

In case the loss of wintering habitat and breeding habitat isn't enough of a blow to these birds, their critically important migratory stopover sites are also under attack from human "development", gradually succumbing to vacation resorts, condominiums, housing tracts, and shopping malls.

In addition to the loss of wintering, breeding, and migratory stopover habitat, these beleaguered birds are subjected to a host of other serious threats to their continued existence. The more valid question is not why are our birds declining, but why we have any left at all.

Outdoor domestic cats are now considered to be the leading cause of death for wild birds and mammals in the United States. According to a recent study conducted by researchers from the Smithsonian Conservation Biology Institute and the U.S. Fish and Wildlife Service, cats are estimated to kill 1.4 billion to 3.7 billion birds each year. That's BILLION, with a B.

Window strikes are estimated to kill between 97 and 976 million birds a year, and cars are estimated to kill another 60 million. Almost 7 million birds in the U.S. each year are estimated to be killed by cell phone and television communication towers, not to mention how the electromagnetic energy they emit could potentially disrupt the navigational ability of migrating birds. Wind turbines are estimated to kill hundreds of thousands

more birds. Pesticides pose yet another huge threat to birds. According to one conservative estimate, 672 million birds in the U.S. are directly exposed each year to pesticides on farmland, and 10% of these birds die as a result of the exposure. In addition to those birds directly killed, the endocrine disrupting effect of most pesticides certainly impacts the breeding success of many birds.

Some of the causes for declines in small insectivorous birds in the Northeast are even more insidious than pesticides. Across northern New England, acid rain, which never really went away, has been responsible for the leaching of calcium from forest soils and directly from the leaves and needles of trees. Less calcium in a tree's foliage means there is less calcium for the production of the exoskeletons of the insects that feed on that foliage. In turn, there is less calcium available for the production of egg shells in the nesting birds that feed on those herbivorous insects, making their eggs fragile and more easily broken.

The concomitant decline in insects in the Northeast is a little discussed factor in the decline of insectivorous birds, including warblers. Do you remember back when your car's windshield would get covered with insects on

photo by Paul Donahue

warm summer evenings? How long has it been since that was a problem? Or how about how a screen door under a porch light would be covered with moths and other insects on those same warm summer nights? For many reasons, data on the decline in insect populations is difficult to come by, but the decline is certainly happening. Less insect food available means fewer birds can be supported by the environment.

The same principle applies as you move up in trophic levels. The Casco Bay island where I have spent so much time in the fall lies along an important migratory path for southbound raptors moving down the coast of Maine. The longest running data set on fall raptor migration in Maine comes from this island, with counts going back to the 1960's. Generally speaking, the most common hawk we see on the island during the fall migration is Sharp-shinned Hawk, a relatively small bird-eating hawk that nests throughout the boreal forest. Small insectivorous birds, like warblers, make up a large part of its diet.

Back on September 22nd, 1975, during my first fall on the island, there was one day when I counted 607 migrating Sharp-shins. I remember the day well, not so much for the tremendous number of hawks seen, but because I was alone, frantically trying to watch the whole sky myself while simultaneously recording my counts. Undoubtedly, many Sharp-shins slipped by uncounted that day. For the past almost 40 years since then, our fall tallies for the species have been dropping fairly steadily. This past fall I was on the island for virtually the whole migration, from the beginning of September through the first week of November. Our season total for Sharp-shinned Hawk was only 436, or 72% of what I saw on that single day in 1975. Insects decline, so the little birds that eat the insects decline, so the hawks that eat the little birds decline. Obviously, the situation is more complex than that, but that is certainly part of the story.

About ten years ago, to escape Maine winters and be closer to my wife Teresa's family, we began a slow motion move to the central California coast. Growing up in the Northeast, one of the things I initially liked about California birding was my lack of experience with how things used to be. Going afield in the Northeast now often pains me as I remember what bird numbers were like in the past, but I didn't have that baggage regarding



A plate of "confusing fall warblers" from Roger Tory Peterson's *A Field Guide to the Birds*.



An adult Sharp-shinned Hawk

California bird populations. Unfortunately, that's now catching up with me. In ten years time, I already can see changes.

In California, we're very fortunate to live right across the coast highway from a mile-long state beach. When I'm here, I walk on that beach about five days a week. I like warblers, and I like raptors, but my favorite birds are shorebirds - plovers, sandpipers, and their relatives. When I first started spending time on our beach, Marbled Godwits, Willets, and Sanderlings were all regulars - birds I saw on the beach through the winter months virtually every time I was there. The beach also hosted more than 20 wintering Snowy Plovers, a species listed as threatened under the federal Endangered Species Act. Now, it's been years since I've seen Marbled Godwits or Willets on the beach, Sanderlings are there only sporadically and in far smaller numbers, and this past winter the beach was home to only seven Snowy Plovers. The pang I have been feeling for some time over the gradual disappearance of birds in New England is now something I am starting to feel here in California.

I would like to think that the declines I am seeing in the numbers of birds are temporary. I would like to believe that if we could just make a few adjustments here and there to our environmental practices, then we could reverse the trend and bird numbers would start to rebound. I also would like to believe in Santa Claus and the Easter Bunny, but I know better, on all counts. I know that the

declines in bird populations will continue, and I know that there is very, very little that I or anybody else can do to significantly change the trend line - and I don't know which of those things makes me feel worse. Because of our species, the natural world is locked in a downward spiral, and there is no guarantee whatsoever that it will pull out before it crashes.

Back in 1962, Rachel Carson, a biologist with the U.S. Fish & Wildlife Service, published her landmark book, *Silent Spring*. In it Carson warned us of a silent future free of bird song if our society didn't change its environmentally destructive course. The book had a huge impact. It was responsible for setting off a wave of environmental legislation and was instrumental in galvanizing the growing environmental movement. Certainly, steps were taken, such as the banning of DDT, that hugely benefited birds. The rebounding of the populations of Bald Eagles and Ospreys were proof of the book's impact.

Unfortunately, however, Carson's book was not enough to seriously alter the trajectory of our society. As important as they were, the actions taken as a result of her book were not nearly enough to halt the coming silence.

Pacifica, California  
07 March 2014

# South Portland Says No to Tar Sands

by Peter Herrick

On December 16th, South Portland did what other towns along the Portland-Montreal Pipeline have not been able to do: they effectively stopped the potential for tar sands to be pumped through Maine. The measure, which is a temporary measure designed to give the city council time to draft a permanent ordinance, may well prompt law suits by Big Oil, but the South Portland city council has heard extensively from citizens who have made it clear this is what South Portland wants.

The conversation about tar sands (aka oil sands, dilbit, synbit, and other industrial names) began more than a year ago when it was discovered that Portland Pipe Line Corporation (a wholly-owned subsidiary of the Portland-Montreal Pipeline) had filed for, and been granted, a permit to install the infrastructure necessary to reverse their pipeline and pump petroleum products south, from Montreal to Maine. For the past six decades, Portland Pipe Line has been pumping petroleum products north, starting during World War II when oil supply to Canada was not strong enough. Ships were docked in South Portland and unloaded into the nearly 100 tanks scattered throughout the city, and then the product was pumped to Montreal for use. In recent years, the current infrastructure has not been used to full capacity.

Over the last decade, the tar sands fields of Alberta, which were identified as a potent oil supply years ago, have begun to come online as technology has made the tar sands there fiscally feasible to remove and process. ExxonMobil, one of the owners of the Alberta fields, has identified the transport of tar sands out of Canada to international markets as their one major bottleneck. ExxonMobil, through its majority-owned subsidiary Imperial Oil, also purchased a majority (and therefore controlling) interest in the Portland-Montreal Pipeline. ExxonMobil and other partners in the Alberta tar sands fields, including TransCanada and others, have been hard at work on the reversal of various pipelines to be able to pump tar sands out of central North America and to the

oceans, either west, east, or south to the Gulf of Mexico. Pipe 9, leading to Montreal is in the process of being reversed already.

Tar sands is a petroleum product that is heavier than crude oil. It is approximately the consistency of peanut butter at room temperature and a hockey puck at 50 degrees. To get it the consistency that can be pumped through a pipeline, it must be thinned by adding a diluent, such as benzene, which is then evaporated or burned off at the end of the pipeline, releasing substantial VOCs and other chemicals into the end community. The actual diluents used are considered ‘trade secrets’ so the end community does not even know what chemicals are being released. This makes it much more dangerous than regular crude oil for the end community, which is not limited to South Portland, but would hurt air quality for many surrounding towns and cities.

The other risk to tar sands is the risk of spills. Because it is so thick and heavy, when it spills, it separates out as the diluents evaporate or simply float, and the heavy tar sands sink. These tar sands solids are much more sticky than crude oils, so anything they contact must be, essentially, landfilled during the cleanup, including rocks and dirt. A river spill in the Midwest three years ago has still not been cleaned up entirely due to these factors, and the three years of cleaning has recently racked up costs exceeding one billion dollars. Finally, the oil industry, in 1984, pushed a law through Congress defining tar sands

as not crude oil, so they do not pay into the Oil Spill Liability Fund to help pay for these spills.

South Portland residents have been very clear that tar sands and this community are not compatible with each other. After the city council was not able to agree on an ordinance in the spring, a citizens’ referendum was created and put on the ballot called the Waterfront Protection Ordinance, or WPO. The oil industry, sensing a problem with their pipeline plans, pumped money into the community to block this ordinance. With more than



\$600,000 spent (and not a single dollar collected from a resident, only corporations, many from out of state), they effectively shifted the conversation about the WPO away from tar sands to worry locals about the WPO having too broad of an effect. The WPO was narrowly defeated (by 193 votes out of nearly 9000 cast), but citizens were clear that the vote was not about tar sands, it was about the wording of the WPO.

The day after the WPO defeat, the city council, now listening to the citizens, created a moratorium on any new development to reverse the flow of the pipeline. After weeks of citizen hearings, with oil industry representatives (including an attaché from the Canadian government) outnumbered at least 10 to 1, and a letter from the American Petroleum Institute in Washington D.C. threatening to sue if it passed, the city council passed the moratorium on December 16th. They are now collecting resumes to build a three-person committee charged with writing a new, narrowly-focused, and functional ordinance to block tar sands from South Portland.

This will surely not end here, as ExxonMobil and the rest of the oil industry has deep pockets and a strong motivation, with billions of dollars in tar sands to get out of Alberta. They will likely sue, and may attempt other methods for stopping the citizens from speaking, but a broad-based coalition of residents including votesopo.org, Protect South Portland, and 350 Maine will continue fighting to keep these toxic chemicals out of Maine. For more information, please check votesopo.org.



The Alberta tar sands - the most environmentally destructive project on Earth.



# New England on ‘High Alert’ After Canadian Pipeline Reversal Approved

## Environmental Groups Raise Alarm over Potential Transport of Tar

### Sands Oil from Western Regions to New England Coast

by Jacob Chamberlain

Enbridge buried pipeline marker (Adam Scott/Environmental Defense)The tar sands oil industry scored a regulatory victory on Thursday when the Canadian National Energy Board approved a plan by energy giant Enbridge to reverse the flow of Canada’s ‘Line 9’ oil pipeline eastward from Ontario to Montreal.

The decision has regional environmental groups raising the alarms, warning the industry is now one step closer to being able to transport tar sands and other corrosive crude oil from the west, through Ontario and Quebec, over the border into Vermont, and then to the Maine coast for export.

The ruling, which comes four months after the government held public hearings on the proposal, will bring oil from western regions of Canada and the U.S., including tar sands from Alberta and heavy Bakken crude from North Dakota.

Groups such as The Natural Resources Council of Maine, Sierra Club, 350 Maine, 350 Vermont and Environment Maine say the reversal of Line 9 is “the final link” before the Maine-based Portland Pipe Line Corp. reverses its own pipeline that runs through New England, completing “energy giant Enbridge’s path from the oil sands of Alberta to tankers in the Atlantic port of South Portland,” the Bangor Daily News reports.

Fears that the New England pipeline would soon be reversed to transport Canadian tar sands to the Maine coast were sparked last year when oil companies poured hundreds of thousands of dollars into a campaign that ultimately defeated an anti-tar sands referendum in the coastal town of South Portland, Maine. The referendum

would have barred a proposal to construct a tar sands pipeline terminal on the city’s waterfront.

So now, as the Canadian National Energy Board has taken the next step towards bringing tar sands to the New England border, many are alarmed.

“Thursday’s decision brings toxic tar sands oil right to New England’s doorstep, and one step away from flowing south through Vermont, New Hampshire and Maine,” said Dylan Voorhees, clean energy director for the Natural Resources Council of Maine. “This decision should put Maine on high alert for the threat of tar sands transportation through our state. That would be unacceptable. Now is the time for the U.S. State Department to commit to an environmental review of any tar sands project in our state.”

While the pipeline reversal and expansion will only be officially allowed when Enbridge fulfills 30 conditions laid out by the Energy Board, including an emergency response plan, many say a spill within the fragile habitats the pipeline runs through will be inevitable. One dissenting board member raised concern over the possibility of a spill, saying Enbridge should first be required to demonstrate that it has “legally enforceable access to financial resources which are and will continue to be adequate to fund any reasonably foreseeable NEB-regulated obligations which arise as a result of a spill.”

“People have serious concerns about the safety of this pipeline because it’s old and leaky,” said Gillian McEachern, a spokeswoman for Canada’s Environmental Defense. “Our process for reviewing major pipeline projects is seriously broken. This decision puts people

across Ontario and Quebec at serious risk of oil spills. If there is a spill, tar sands oil is much harder to clean up and more expensive to clean up than conventional oil that’s going through it now.”

And as the Bangor Daily News reports, should Enbridge attempt to bring oil through New England, several Maine towns have already passed resolutions “declaring opposition to the transportation of oil sands bitumen across their borders, including Casco, where the pipeline passes near Sebago Lake, the source of drinking water for 15 percent of all Mainers.”

“Tar sands pose the most significant threat to Sebago Lake that I’ve seen in my 34 years of fishing on the lake,” said Eliot Stanley, a board member of the Sebago Lake Anglers Association. “The fact is that a tar sands pipeline spill into the Sebago-Crooked River watershed would devastate the lake, its fisheries and southern Maine’s clean drinking water supply.”

“We cannot permit another Kalamazoo River catastrophe,” said Stanley in reference to Enbridge’s massive 2010 pipeline spill into the Michigan river. “This irresponsible action by the Canadian Energy Board poses a threat to all Maine citizens and public officials.”

Vermonters in more than a dozen towns took similar action this year on “Town Meeting Day,” voting to oppose the reversal of the pipeline.

“Vermonters have already loudly signaled opposition to transporting tar sands across our rivers and farms, alongside lakes, and through communities of the Northeast Kingdom,” said Jim Murphy, National Wildlife Federation Senior Counsel. “A spill would have a devastating impact on our water supplies, wildlife habitat and tourism industry. And any transport of tar sands through Vermont would encourage growth of an industry that contradicts all of our state’s leadership and hard work on moving toward cleaner sources of energy.”

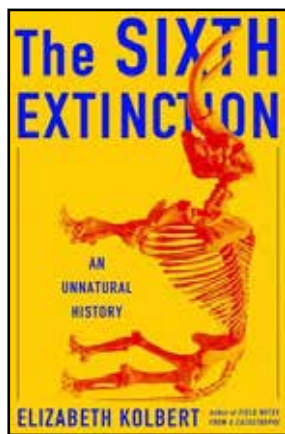
*Jacob Chamberlain is a staff writer for CommonDreams. This article was published on their website on March 7, 2014.*



# The Forest Ecology Network Bookshelf

## The Sixth Extinction: An Unnatural History

by Elizabeth Kolbert  
Hardcover: 336 pages  
February 2014  
Henry Holt and Co.  
ISBN-10: 0805092994



A major book about the future of the world, blending intellectual and natural history and field reporting into a powerful account of the mass extinction unfolding before our eyes.

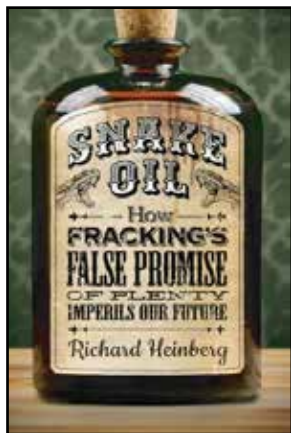
Over the last half a billion years, there have been five mass extinctions, when the diversity of life on earth suddenly and dramatically contracted. Scientists around the world are currently monitoring the sixth extinction, predicted to be the most devastating extinction event since the asteroid impact that wiped out the dinosaurs. This time around, the cataclysm is us. In *The Sixth Extinction*, two-time winner of the National Magazine Award and New Yorker writer Elizabeth Kolbert draws on the work of scores of researchers in half a dozen disciplines, accompanying many of them into the field: geologists who study deep ocean cores, botanists who follow the tree line as it climbs up the Andes, marine biologists who dive off the Great Barrier Reef. She introduces us to a dozen species, some already gone, others facing extinction, including the Panamanian golden frog, staghorn coral, the great auk, and the Sumatran rhino. Through these stories, Kolbert provides a moving account of the disappearances occurring all around us and traces the evolution of extinction as concept, from its first articulation by Georges Cuvier in revolutionary Paris up through the present day. The sixth extinction is likely to be mankind's most lasting legacy; as Kolbert observes, it compels us to rethink the fundamental question of what it means to be human.

### About the Author:

Elizabeth Kolbert is a staff writer at *The New Yorker*. She is the author of *Field Notes from a Catastrophe: Man, Nature, and Climate Change*. She lives in Williamstown, Massachusetts, with her husband and children.

## Snake Oil: How Fracking's False Promise of Plenty Imperils Our Future

by Richard Heinberg  
Paperback: 162 pages  
July 2013  
Post Carbon Institute  
ISBN-10: 0976751097



The rapid spread of hydraulic fracturing ("fracking") has temporarily boosted US natural gas and oil production... and sparked a massive environmental backlash in communities across the country. The fossil fuel industry is trying to sell fracking as the biggest energy development of the century, with slick promises of American energy independence and

benefits to local economies. *Snake Oil* casts a critical eye on the oil-industry hype that has hijacked America's energy conversation. This is the first book to look at fracking from both economic and environmental perspectives, informed by the most thorough analysis of shale gas and oil drilling data ever undertaken. Is fracking the miracle cure-all to our energy ills, or a costly distraction from the necessary work of reducing our fossil fuel dependence? fundamental question of what it means to be human.

Many long-time observers of the world energy scene have been wondering whether claims being made for US shale gas and tight oil are "too good to be true." Here is hard evidence that they are indeed. America will achieve real, long-term energy independence and security only by doing two things: reducing energy demand and developing distributed renewable energy sources.

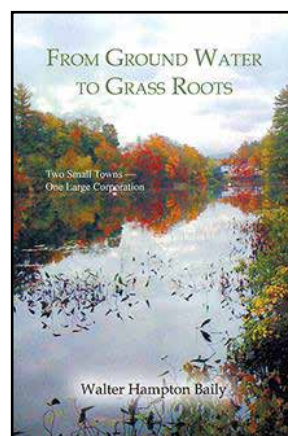
-- Michael Klare, Director of Five College Program in Peace and World Security Studies at Hampshire College, author of *The Race for What's Left*

### About the Author

Richard Heinberg is the award-winning author of ten previous books including *The Party's Over*, *Powerdown*, and *The End of Growth*. A Senior Fellow at the Post Carbon Institute, he is one of the world's foremost energy educators and communicators about the urgent need to transition away from fossil fuels. He is a recipient of the M. King Hubbert award for excellence in energy education and since 2002 has given over five hundred lectures on fossil fuel depletion to audiences around the world. He has been published in *Nature*, the world's premiere scientific journal; he has been quoted in 'Time' magazine and other major publications; and he has been interviewed on national radio and television in seven

## From Ground Water to Grass Roots: Two Small Towns - One Large Corporation

by Walter Hampton Baily  
Paperback: 242 pages  
August 2013  
Xlibris  
ISBN-10: 1479784362



*From Groundwater to Grass Roots* author Walter Baily chronicles the struggle of residents in the rural Maine towns of Newfield and Shapleigh to prevent an international corporation from extracting groundwater. This book highlights residents' actions and developing knowledge as they advocate for protecting groundwater beneath their homes and communities. The issue was not only preservation of an aquifer, but the principle that a resource fundamental to life should not become a commodity for private profit. In addition, this book testifies to the enduring power of democracy. Conflicts in the United States between cities, states, towns and large water extractors are now common over the control, sale and transfer of water. Who owns the water? Should it be privatized? Sites include: the Great lakes; the Colorado River; Florida; California; Massachusetts; Oregon; New Hampshire, and now Maine. This saga reveals the sixteen-month effort of residents to

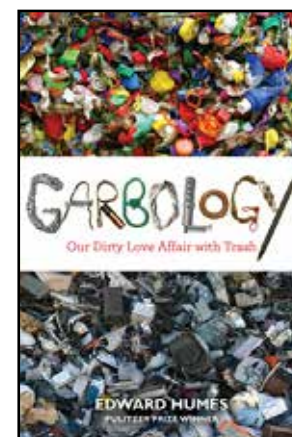
control their groundwater and the quality of their future. Citizens learned of other nearby towns that had already developed ordinances to limit water extraction. Community members, near and far, have expressed similar concerns as Shapleigh and Newfield residents did over water removal, the large-scale waste of plastic bottles that accumulate in landfills and the ocean, and the constant transfer of water in large and heavy tanker trucks along local roads and highways.

### About the Author

Walter H. Baily was a social worker throughout his career in mental health, public health, social planning and children's services. He and his wife, Thelma Falk Baily, also a social worker, collaborated for many years on research and training projects around the country. Baily, who holds a doctorate, has two sons and a daughter and two grandchildren. His commitment to human services has expanded to include environmental protection and now, in his eighties, he lives on an old farm and cares for his family's sustainably-managed forest.

## Garbology: Our Dirty Love Affair with Trash

by Edward Humes  
Paperback: 336 pages  
March 2013  
Avery Trade  
ISBN-10: 1583335234



A Pulitzer Prize-winning journalist takes readers on a surprising tour of America's biggest export, our most prodigious product, and our greatest legacy: our trash

The average American produces 102 tons of garbage across a lifetime and \$50 billion in squandered riches are rolled to the curb each year. But our bins are just the starting point for a strange, impressive, mysterious, and costly journey that may also represent the greatest untapped opportunity of the century.

In *Garbology*, Edward Humes investigates trash—what's in it; how much we pay for it; how we manage to create so much of it; and how some families, communities, and even nations are finding a way back from waste to discover a new kind of prosperity. Along the way, he introduces a collection of garbage denizens unlike anyone you've ever met: the trash-tracking detectives of MIT, the bulldozer-driving sanitation workers building Los Angeles' Garbage Mountain landfill, the artists residing in San Francisco's dump, and the family whose annual trash output fills not a dumpster or a trash can, but a single mason jar.

*Garbology* reveals not just what we throw away, but who we are and where our society is headed. Waste is the one environmental and economic harm that ordinary working Americans have the power to change—and prosper in the process.

*Garbology* is raising awareness of trash consumption and is sparking community-wide action through One City One Book programs around the country. It is becoming an increasingly popular addition to high school and college syllabi and is being adopted by many colleges and universities for First Year Experience programs.

#### About the Author

A Pulitzer Prize-winning journalist and author, Edward Humes are *A Man and His Mountain*, *I Shout: A Year In the Life of Juvenile Court*, *Mississippi Mud*, *Force of Nature: The Unlikely Story of Wal-Mart's Green Revolution*, and *Monkey Girl: Evolution, Education, Religion and the Battle for America's Soul*.

## Plastic-Free: How I Kicked the Plastic Habit and How You Can Too

by Beth Terry  
Hardcover: 352  
pages  
June 2012  
Skyhorse Publishing  
ISBN-10:  
1616086246

A practical guide to ridding your life--and the planet--of plastic!

Like many people, Beth Terry didn't think an individual could have much impact on the environment. But while laid up after surgery, she read an article about the staggering amount of plastic polluting the oceans and decided then and there to kick her plastic habit. Now she wants to teach you how you can too. In her quirky and humorous style - well known to the readers of her popular blog, *My Plastic-Free Life* - Terry provides personal anecdotes, stats about the environmental and health problems related to plastic, and personal solutions and tips on how to limit your plastic footprint. Terry includes handy lists and charts for easy reference, ways to get involved in larger community actions, and profiles of individuals - Plastic-Free Heroes - who have gone beyond personal solutions to create a change on a larger scale. *Plastic-Free* also includes chapters on letting go of eco-guilt, strategies for coping with overwhelming problems, and ways to relate to other people who aren't as far along on the plastic-free path. Both a practical guide and the story of a personal journey from helplessness to empowerment, *Plastic-Free* is a must-read for anyone concerned about the ongoing health and happiness of themselves, their children, and the planet.

#### About the Author

Beth Terry is the author of the popular blog *MyPlasticFreeLife.com*. A founding member of the Plastic Pollution Coalition, Terry gives presentations on living plastic-free and why, despite what some critics assert, our personal changes do make a difference. She spearheaded the successful *Take Back the Filter Brita* recycling campaign in 2008, and her life and work have been profiled in Susan Freinkel's book, *Plastic: A Toxic Love Story*, Captain Charles Moore's *Plastic Ocean*, and the award-winning film *Bag It*. When she's not out fighting plastic pollution, Terry spends her time with her husband and two rascally kitties in Oakland, California.



## The Arctic Ocean, Fossil Fuels, Methane, and Maine's Forests

by John Demos

On November 30th, 2013 the *Fairbanks Daily News-Miner* published an article, "Researchers say Arctic Ocean leaking methane at an alarming rate." The article reported on a new study published by scientists at the University of Fairbanks in the journal *Nature Geoscience*. The scientists presented data proving that the Arctic Ocean was releasing methane twice as fast as had been expected. <http://www.adn.com/2013/11/30/3205668/researchers-say-arctic-ocean-leaking.html>

Methane and carbon dioxide are two greenhouse gases that, when present in our upper atmosphere, act to impede the Earth's reflected heat from escaping into space. As the levels of the gases in the atmosphere rise, the more heat is trapped and the warmer the planet grows. But as a heat trapping blanket, methane is 34 times as potent as carbon dioxide. The short film *Last Hours* (<http://lasthours.org>) does a great job explaining the sources of methane, how they are released into the atmosphere and the grave danger we face if this process continues and accelerates.

Most of the discussion to date has focused on carbon dioxide as the cause of global climate disruption and the absurd arguments made by the climate deniers. "These global warming studies [are] a bunch of snake oil science." - Sarah Palin 2010.

We can set the deniers arguments to the side. These arguments have been highly politicized, and are based on a bad understanding of science, magical thinking, and the dishonest pronouncements made by industries and people who stand to profit from carbon-based fuel use. These ideas will vanish in a puff of coal smoke as the true effects become more obvious.

As to carbon dioxide, it is true that the current climate change we are experiencing is due to the huge increase in our dependence on fossil fuels as our principal source of energy. As happened during the Permian-Triassic extinction (also known as the Great Dying) 252.28 million years ago, carbon dioxide released by massive volcanic eruptions (evidence of which remains today in Russia as the Siberian Traps volcanic deposition) probably started the process, but it was ultimately the release of the methane trapped in the earth that triggered a runaway greenhouse effect. Up to 96% of all marine species and 70% of land-based species were killed off. It is the only major extinction event of insects in Earth's history.

The tundra of the Arctic and the floor of the world's oceans, including the Arctic Ocean, contain trillions of tons of frozen methane that will be liberated if water temperatures continue to rise.

So what can we do?

Some of our fellow citizens will never be convinced that there is either a problem or that mankind is mostly responsible. But many folks can be enlightened and join the rest of us in demanding our leaders take action. We need to embark on a drastic reduction in our carbon-burning, forest-destroying, freshwater-wasting, coastline-fouling ways. Drilling the Arctic National Wildlife Refuge, the Arctic Ocean, tearing up the landscape for tar sands, fracking our nation's heartland and tearing down our mountains for coal are not solutions for our

energy needs. That route will send us farther down the road to ruin.

There is a different path. We can reduce our energy usage dramatically by utilizing the multitude of conservation innovations that already exist. Putting them into practice will also create many local jobs. We also possess the technology to produce clean alternative energy sources. The answers are readily at hand and all that is holding us back is a lack of will and a trust in our own resourcefulness.

Leave the pristine lands and waters alone - be they in Alaska or the Lower 48 - and put the money into regeneration of our natural resources. Here in Maine, and other forested parts of the country, we can initiate programs that are cheap and will have immediate positive impacts. Maine's forests are a great carbon sequestration system that we can invest in and grow much larger.

In the film *Last Hours*, the narrator speaks about an observer present at the beginning of the Permian-Triassic great Dying. That individual wouldn't notice much going on except gradual changes in the weather. We humans now live in such a time. Our winters are shorter; storms are more powerful and frequent, and devastating to life and livelihood. Species like the Polar Bear are threatened with extinction because the Arctic ice is melting and our coastal cities are in danger of inundation.

There is no downside to taking action to limit climate disruption. We can reduce pollution, stop wasting our limited resources and protect the last wilderness areas on Earth. Inaction could be fatal.

#### Polar Bears

Polar Bears are dying because it is getting warmer in the North Pole.. The snow caps are melting so they can't travel on the ice to get food. If I could invent something to help the Polar Bear I would invent a thing that flies into space and fills in the holes.\

Van Horvath

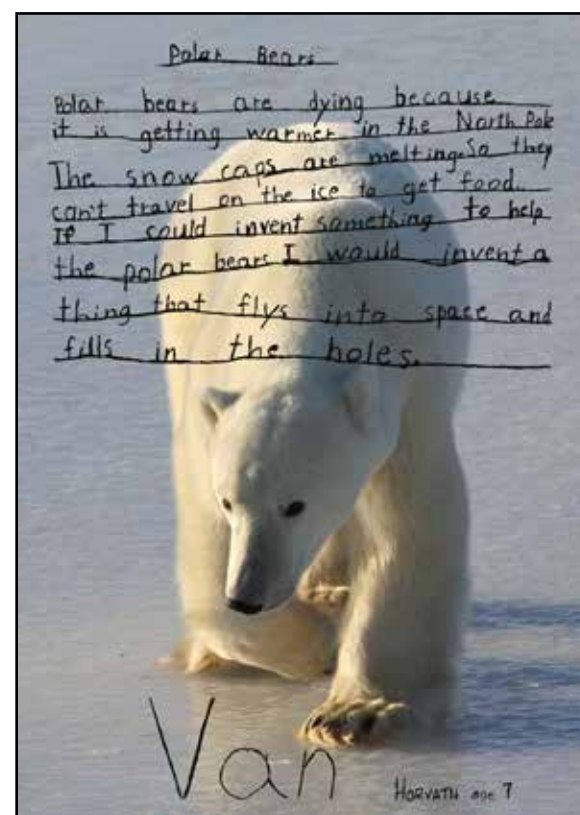


photo © Robert Thorpe

Van Horvath, age seven, was selected as the winner in an essay contest in conjunction with the Galway Public Library in Galway, New York. The subject was polar bears and our planet.

# THE LAST WORD



## 2013 - Another Year of Extreme Weather

January was the hottest month ever experienced in Australia, breaking the records for both mean and maximum temperature.

In February the Northeast experienced a massive snowfall, with Portland, Maine recording the greatest snowfall ever from a single storm.

New Zealand experienced its worst drought in three decades.

Spain experienced its wettest March on record.

In April the central United States experienced extensive flooding, causing rivers to reach record high levels in Illinois, Iowa, and Michigan.

In May in Bangladesh more than one million people evacuated to escape tropical cyclone Mahasan. Almost 50,000 homes were destroyed and another 45,000 were badly damaged.

In May the widest tornado ever observed in the U.S. hit Oklahoma. It's path was 2.6 miles wide.

In June a severe heat wave hit North America. The hottest ever June temperature on Earth was recorded in Death Valley, California - 129.2° F.

Austria experienced its driest July on record.

Florida experienced its wettest July on record. The above average precipitation led to flooding and crop damage in the U.S. Southeast.

In July there was extreme flooding along the U.S. East Coast. Philadelphia experienced its wettest July on record, with 8 inches falling on July 28th, making it the city's rainiest day in record.

August was the warmest on record in both New Zealand and South Korea.

In August eastern Russia experienced its worst flooding in 100 years.

in mid-August the Philippines experienced major flooding.

The U.S. Northeast received 134% of its average precipitation, making it the wettest summer on record.

Nine inches of rain hit Boulder, Colorado on September 12th breaking a record for the city and leading to widespread flooding.

In October an early blizzard killed more than 20,000 cattle in northeastern Wyoming and western South Dakota.

November was the warmest on record globally.

On November 17th Indiana experienced 28 tornados while Illinois experienced 25.

Typhoon Haiyan hit the Philippines, the strongest tropical cyclone on record to hit land. It resulted in 6000 deaths and left millions homeless.

An ice storm in Texas in early December caused \$1 billion in road damages.

Temperatures for November and December were the warmest on record in Russia.

Scotland experienced its wettest December on record.

Australia experienced its warmest year on record, with the average temperature 2.2 degrees above the average.

Drought conditions worsened in the U.S. West. California experienced its driest year on record.



## Join the forest ecology network

**The purpose of the Forest Ecology Network** is to protect the native forest environment of Maine through public awareness, grassroots citizen activism, and education. Your contributions and involvement are essential to the success of our efforts. Membership benefits include a subscription to our newspaper, The Maine Woods and educational field trips and workshops. Contributions to FEN (a 501 [c] [3] non-profit organization) are tax-deductible.

**Membership Categories:** ☐ \$25 Seedling ☐ \$35 Sapling ☐ \$50 Tree ☐ \$100 Grove ☐ \$500 Forest ☐ Other \$\_\_\_\_\_ ☐ Please sign me up for the FEN Action/Email Alert List. I can't afford a donation but would like to be involved.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zipcode: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email address: \_\_\_\_\_

**VISA/MC accepted as payment.**

Charge my VISA/MC # \_\_\_\_\_ Exp. date \_\_\_\_\_

Make checks payable to the Forest Ecology Network or FEN. Please enclose payment and a note describing your interest in FEN. Let us know if you'd like to volunteer. Forest Ecology Network, 336 Back Road, Lexington Township, ME 04961. Phone: 207-628-6404. Email: fen@207me.com Website: <http://www.forestecologynetwork.org>