Merrymeeting News

Summer 2012 VOLUME XXII, No. 3

The Newsletter of Friends of Merrymeeting Bay • Box 233 • Richmond Maine 04357 • www.friendsofmerrymeetingbay.org

Friends of Merrymeeting Bay

Friends of Merrymeeting Bay (FOMB) mission is to preserve, protect and improve the unique ecosystems of the Bay through:

Education

Conservation & Stewardship

Research & Advocacy

Member Events

FOMB is 501(c)(3) non-profit organization and support comes from members' tax-deductible donations and gifts.

Merrymeeting News is published by FOMB seasonally and is sent to FOMB members and other friends of the Bay.

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FOMB Wins St. Croix Alewife Dispute with EPA

Mud Lake Stream, St Croix Watershed: At this location is a 4,000 year old archaeology site where alewife bones are present. This site is approximately 66 miles above present head of tide.

On July 10, the US Environmental Protection Agency ruled a Maine law banning native alewives from living in the St. Croix River violates the U.S. Clean Water Act. In the wake of a lawsuit by Friends of Merrymeeting Bay, Doug Watts and Kathleen McGee against the state of Maine over a law designed to extirpate alewives from the St. Croix, the federal agency sent a letter to Maine's Attorney General stating the Maine law represents an illegal lowering of water quality the agency cannot and will not approve. Our legal actions asserted Maine and the EPA violated the Clean Water Act by enacting and refusing to strike down a 2008 Maine law eliminating alewife access to more than 95% their necessary spawning habitat located above Grand Falls Dam near Princeton.

In their finding, the EPA states:

"EPA is not aware of any sound scientific rationale for excluding indigenous river herring (or other migratory species) from the St. Croix River. . . . To address EPA's disapproval and protect designated and existing uses, Maine should take appropriate action to authorize passage of river herring to the portions of the St. Croix River above the Grand Falls Dam."

In a phone call to Roger Fleming, one of the Earthjustice attorneys representing FOMB, Watts and McGee; the EPA noted their decision was in response to the well-written Notice of Intent [NOI] to sue letter received from FOMB and from the decision in a recent Oregon case the NOI cited. Fleming, praising the EPA decision, noted: "this is a good example of how the 'citizen suit' provision of the Clean Water Act should work, with a well-crafted notice letter informing the agency of a problem, and in turn preventing an unnecessary (second) lawsuit. I give credit to the EPA for their response to our clients' letter and reaching a well-reasoned decision."

Maine's law prevents a native run of 21 million alewives, the largest on Earth, from ever being restored to the St. Croix. This is a huge victory not only for us plaintiffs but for all Mainers and for the Gulf of Maine. FOMB, Watts and McGee took action on the St. Croix since no one else would and because of the importance of the Gulf of Maine alewife population to the Merrymeeting Bay watershed. How the Maine AG, Governor and legislature respond will determine if further legal action on our part is needed, but there is legal precedent in a situation like this for the pre-existing bad law to be automatically nullified.

Merrymeeting Bay Area Eagle Report for 2012

For the 5th consecutive year, FOMB partnered with MDIFW to monitor nesting and productivity of bald eagles in the Merrymeeting Bay vicinity. No other locality in Maine is so well monitored after delisting (removal from the list of Threatened and Endangered Species) of eagles in 2009. Portions of Maine's eagle population are monitored intermittently for special research or environmental reviews during recent years, but Merrymeeting Bay vicinity eagles have been watched steadily since 1962.

Failed eagle egg recovered June 1st at a nest in Auburn on the Androscoggin River

Pilot Ed Friedman, biologist/observer Charlie Todd, and several FOMB volunteers collaborated on the aerial surveys of traditional nests in 2012. We patrol the lower Androscoggin River downriver from Auburn, the lower Kennebec downriver from Winslow, Merrymeeting Bay and its other tributaries, as well as several lakes in the nearby sub-drainages along our flight path through central Maine. Along with eagles, we observed several heronries including one on the west side of Cobboseecontee Lake with approximately 42 nests.

"Eagle productivity was outstanding in both Merrymeeting Bay (13 eagle pairs) and the lower Kennebec (16 eagle pairs). The mean rate in the combined subpopulations was 1.4 fledglings per nesting pair: almost double the productivity level of the statewide population."
-Charlie Todd, Biologist

A total of 44 eagle nesting territories were checked in 2012. First nesting began between February 10 and March 11 and our final flight was on July 3. We saw nesting pairs at 38 locations, single adult eagles at three inactive nests, and three nests that were unoccupied by eagles. (Great-horned owls nested in one empty eagle nest in Dresden.) Successful nesting occurred at 27 active nests (71%) and 48 fledgling eaglets took flight in the region during 2012.

Eagle productivity was outstanding in both Merrymeeting Bay (13 eagle pairs) and the lower Kennebec (16 eagle pairs). The mean rate in the combined subpopulations was 1.4 fledglings per nesting pair: almost double the productivity level of the statewide population. The smaller population in the lower Androscoggin had an off year compared to stellar results there in 2011. Of nine nests monitored, only three fledged chicks. An addled eagle egg was recovered from an abandoned nest along the Androscoggin in Lewiston and submitted to analytical labs for contaminant testing with funding from FOMB.

Merrymeeting Bay, one of the premier strongholds for nesting bald eagles during the late-1800's, nearly lost its entire nesting eagle population by the late-1970s. Widespread nest failures were largely attributed to high levels of DDE = a long-lasting by-product of the insecticide DDT. In the Merrymeeting Bay region, only 1 eaglet fledged from nests during the period from 1963 – 1978. Rachel Carson wrote her classic "Silent Spring" fifty years ago to warn of environmental threats from such contaminants. There is no better example of eagle recovery in Maine from this problem than our region.

The prolific recovering run of alewives and blue-backed herring again attracted large numbers of eagles to the lower Sebasticook River in 2012. On May 22, we tallied ~ 50 eagles in a 6-mile stretch of the river in Winslow and Benton. This population is largely comprised of non-breeding eagles, and the actual number that visits the vicinity of the Benton Falls Dam fish lift over the course of the season is undoubtedly much higher!

- Charlie Todd, Biologist - Maine Department of Inland Fisheries & Wildlife

Bald eagles nests are among the largest in the world. These sturdy structures are "framed" with large sticks and lined with any available soft material (grass, moss, seaweed, etc.). An average size bald eagle nest weighs close to 1000 pounds and is typically 4-6 feet in diameter and three feet tall. However, the largest bald eagle nest ever recorded was found in St. Petersburg, Florida. This nest weighed more than two tons and measured 9.5 feet wide and 20 feet high!

In this picture, Chris Persico of the Biodiversity Research Institute looks into an average-sized bald eagle nest on the lower portion of the Androscoggin River. The purpose of this climb was to recover a failed egg. FOMB will send this egg to the lab to test for contaminants.

Endangered Species Lawsuit-Working to Protect the Salmon

It was a busy spring in FOMB's lawsuits to enforce the Endangered Species Act against the owners of Kennebec and Androscoggin River hydroelectric dams. The lawsuits allege a total of seven dams, owned by NextEra, Brookfield Power, Miller Hydro, and Topsham Hydro, are illegally "taking" endangered Atlantic salmon by killing and injuring them with turbines, blocking migration routes, and altering habitat. The case is before Judge George Z. Singal in United States District Court.

More than 15 pre-trial depositions were taken, including depositions of expert witnesses and a deposition of FOMB's Ed Friedman. FOMB filed three "summary judgment" motions asking the judge to rule that dam owners are violating the Endangered Species Act. If FOMB prevails, there would be trial in which FOMB would ask the court to order an injunction halting the violations. The dam owners filed their own summary judgment motions, asking Judge Singal to dismiss the cases. All parties also filed motions asking the judge to exclude various expert witness testimony. All told, FOMB' s lawyers handled 22 motions in a three-month period.

FOMB and its partner in the lawsuits, National Environmental Law Center/Environment Maine, are now waiting for the outcome of these motions, which is expected some time in the coming months. Any trial would not be scheduled until after Judge Singal rules on the motions.

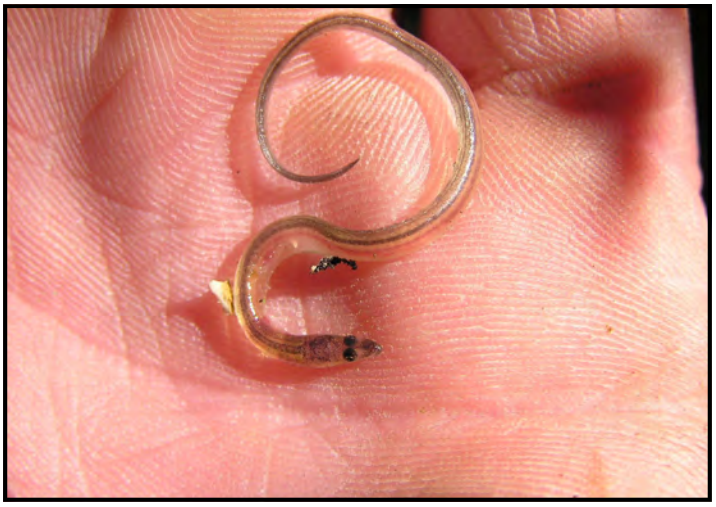
- David Nichols, Esq.

As of August 6, only five salmon had returned to the Kennebec and been captured in the salmon trap at Lockwood Dam in Waterville. There had been zero returns at Brunswick on the Androscoggin River. Further studies are still called for by NMFS and by the hydro industry before taking immediate protective actions to save the last of these fish. Clearly any rationale for further study delays has no basis in science or reality, only greed, power and politics.

Elver Prices Reach All-Time High

Maine is one of only two states where commercial harvesting of elvers is legal and the only state without minimum size restriction. (South Carolina, the other state, has only a small fishery.) As of July 16, preliminary data for total elver catch in Maine showed 19,108 pounds caught. These data are exclusive of eels caught but not reported by some dealers who have left the state and in some cases the country.

This year's record prices for elvers of over $2,000/lb made for a large amount of poaching. Some of the harvest total listed here reflects elvers caught in NH and MA illegally and sold to dealers in Maine. At 2,400 elvers/lb, 19,108 reflects a total number of 45,859,200 elvers caught and sent off to eel farms in places like Asia and Spain to be grown out for the food market, typically unagi in Japanese restaurants. Figured at the $2,000 price [prices fluctuate higher and lower during the season], the harvest income just to fishermen was approximately $38 million. Detrimental cost to other organisms dependent on eels for food: unknown.



A glass eel questions why?

Millennia of Eels

It is early June 2012. The spring river herring run is tailing off. Rather than passing the typical 100,000 fish per day we're down to ten to fifteen thousand. River flows on the Sebasticook are beginning to tail off and the water is warming. I've been working on an eel trap off and on for several days. This trap attaches to the end of the eel ramp attached to the Benton Hydro-power Facility. The ramp is eighteen inches wide and seventy five feet long and covered with a wiry fabric to give the eels traction. The ramp ascends the side of the dam 25 feet to the pond above. The ramp is supplied with water by a pump suspended in the head pond. The water serves to attract the eels to the ramp where in spring and summer they climb, in the dark of night, to the pond above and into the trap. The original trap was undersized. It was also difficult to get the eels out of once they were in there and at times so many eels would use the ramp that the trap would be stuffed to the gills. Pardon the pun. The trap would be an improvement based on ideas we'd generated working with the existing model.

"What (eels) do once they get here is beyond remarkable. It's astounding."

-Nate Gray

These eels are young. Maybe only a few years old. They've entered the Kennebec as glass eels, perfectly clear tiny eels only a few inches long. Their journey from the Sargasso Sea into the Gulfstream then drifting North up the Eastern seaboard to eventually turn left into the Gulf of Maine is remarkable. What they do once they get here is beyond remarkable. It's astounding. In a few months after entering the river they pigment taking on the classic olive green fading to light cream on their bellies. Still only a few inches long they continue to press up the river. As the years pass some eels continue pushing up stream until they either get where they're going or they run up against an obstacle like a dam or a set of falls. Even then the eel may try to ascend further by getting out of the water to go around the obstacle. Another year passes and the eel gets bigger, stronger, and

Sebasticook River Eels: Nate Gray Photo

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smarter. These are the eels that I'm seeing now. Below the dam a small pool with a trickle of water cascading into it has some eels in it. I can see them from the dam head works. Not many but enough to notice. I'm running out of time. Got to get that trap done.

Then the rain came. Lots of it. Buckets full. It rained off and on for a week. The Sebasticook responded as you'd expect. It got huge. The small pool where the eels had ascended became a seething maelstrom of white water. The eels ran for cover and hunkered down anywhere they could. The river herring-run ground to a halt. Water temperatures plummeted and I finished the eel trap with time to spare. In a week the river flows receded and we were ready for the eels.

We installed the eel trap at the top of the ramp and restarted the attraction water pump. My right arm at work, "JV" and I headed over to see how many eels were in the pool to gage the following days catch. We cautiously approached the pool and peered in. Not one eel to be seen. Conditions were perfect for the eels to be in the pool. Just a trickle of water. I stepped closer to the pool and looked very carefully. Every crack, every shadow, every irregularity was crammed full of eels. Most were stacked like cord wood. Perfectly still, perfectly packed. I was stunned. JV had his pocket underwater camera with him so we tried to record some images digitally. And we did get some fair pictures of it. We took turns lying on the bony ledge and sticking the camera in the pool all while trying not to scare the eels. Even the best of the photographs did not do the eels justice.

Sebasticook River looking downstream.

JV and I got done taking pictures and I headed home for some supper. I would return later in the evening to meet photographer Heather Perry and recently retired Marine Resources Eel Specialist Skip Zink to film the eels on their nighttime migration up the ramp. Heather brought along a couple of cameras and a pile of appropriate underwater filming equipment that we hauled down to the base of the dam. In the deepening long summer twilight I could see the eels already ascending the ramp. Thousands of them. The pool below the ramp where JV and I were filming in the afternoon was now a writhing mass of eels. Additional eels were climbing the wetted stone surfaces from the river below and joining the throngs of eels in the pool already. You could feel their urgency, their determination. Single minded in their desire to "go up". Heather did a bunch of video recording while we kept her supplied and properly lighted. Every wetted surface had eels on it. All climbing up. Ropes of eels ascending every trickle of water.

Heather filmed for a couple of hours. When she left Skip and I went to the top of the ramp and inspected the trap. As we watched with head lamps the eels were plopping into the trap with rapid clockwork precision. I built the trap extra big. I'm glad I did. We decided to get a weight of the eels already in the trap so we hauled it and dumped the eels in a five gallon pail for a bulk weight. Eighteen point five kilograms or forty-one pounds. Lets see, eighteen thousand five hundred grams divided by three point one grams per eel is…….near six thousand eels and the night is young. We release the eels from the pail to head upstream to the headwaters of the Sebasticook River.

Skip and I sit in the truck and quietly talk eel talk and re-live some of the spectacle we had witnessed this night. We both agreed that seeing the pure intent of an eel is grossly humbling. We mused that if we were lucky we'd live long enough to maybe see some of these eels again as adult silver eels heading to spawn in the Sargasso in the year 2037. The eels will be twenty to twenty five years old by then. I'll be seventy years old and my migration nearing its end.

- Nate Gray, Biologist - Maine Department of Marine Resources

Smart Meter Update

The Spring 2011 issue of Merrymeeting News featured an article by Scarborough Conservation Commission member Sue Foley-Ferguson on the emerging toxics issue of wireless smart electric meters. This was followed by a winter Speaker Series presentation from Sue and three colleagues providing more details on the growing problem.

Why should this matter to FOMB members? Smart meters are radiofrequency (RF) radiation emitting devices whose mandated and untested deployment are unprecedented. Many compare our time lag in knowledge of adverse RF effects to the time it took to understand the dangers of tobacco smoke and asbestos. An increasing population of individuals sensitive to RF is emerging (our coal-mine canaries?), as is a population of EMF/RF refugees. These folks must seek out, with increasing difficulty, areas devoid of or with minimal levels of *electrosmog,* where they might live without pain or disability. Not only does RF microwave radiation from meters affect the health of us all, but it also affects wildlife and in some cases vegetation. FOMB has a long history of activism on toxics issues and a long history of bringing lesser known important issues to the attention of our membership and while we have not (yet) considered a formal position on this issue, it is clearly one worth ensuring our members are aware of.

In the interest of full disclosure, FOMB Chair Ed Friedman is lead plaintiff in this case. Some members appreciate this and some don't, neither of which changes the need for greater awareness of the issue. For more information on smart meters, Ed encourages exploration of the following websites:

www.stopsmartmeters.org
www.smartmeterdangers.org
www.citizensforsafetechnology.org
www.electromagnetichealth.org
www.wirelessafetynetwork.org
www.emfsafetynetwork.org
www.aaemonline.org

Smart meter issues brought to the Maine Public Utilities Commission (PUC) in a complaint filed last year by 19 Central Maine Power ratepayers (including 10 FOMB members) included challenges on health, safety, privacy, cybersecurity and constitutional grounds. When the PUC refused to investigate the well-cited complaint, the group appealed to the Maine Supreme Judicial Court. The same week as FOMB's alewife victory with the EPA, the smart meter appellants were partially victorious in Supreme Court when the Court affirmed the PUC did not ensure the safety of smart meters before mandating their statewide deployment.

By statute, the PUC is obligated to ensure safe, reasonable and adequate service in a non-discriminatory manner. In the complaint appealed to the Court and in previous complaints, the Commission specifically refused to investigate health, safety, privacy, cybersecurity and constitutional issues brought by complainants. In their decision, the Supreme Court refused to look at the constitutional 4th and 5th amendment issues since they were brought through the PUC complaint process (instead of a separate action) and also did not rule on privacy and security, perhaps confusing them with the constitutional issues. The Court's decision also fell short of issuing a stay on opt out fees pending a PUC investigation into health and safety which the Court did order.

The Court recognized an error of law in remanding the matter to the PUC based on health and safety and in their decision questioned how the Commission could decide whether opt out fees were unreasonable or non-discriminatory without first deciding the meters were safe. However, the Court essentially invalidated their own decision by not staying fees until the Commission reaches a decision on meter safety. For this reason and the specific exclusion of privacy and security (both also safety issues) the appellants filed a Motion for Reconsideration with the Court to clarify these issues. As a result of our court win, the PUC has launched an investigation into the health and safety of smart meters, the first evidentiary investigation in the nation on these matters by a PUC.

Two days after the Court's decision, the American Academy of Environmental Medicine (AAEM) issued a detailed statement of medical conditions most likely to be adversely affected by the RF radiation emitted by smart meters. That list includes neurological, muscular-skeletal, cardiovascular, pulmonary, gastrointestinal, ocular and dermal conditions and disabilities. Not only has low level RF been demonstrated in peer-reviewed studies to increase permeability of the blood-brain barrier, impact calcium ion movement within and between cells and damage DNA but many studies have also shown impacts to wildlife particularly important pollinators like birds, bees and bats.

While the AAEM statement is one of the latest in a large body of literature (over 2,000 studies) addressing the biological effects of RF, for the most part authorities continue to claim these effects and studies can be ignored since they fall below the level of FCC guidelines; concluding therefore meters, cell phones, routers and other RF emitting devices must be safe. The most fundamental problem aside from the age of those 1996 obsolete guidelines is that in addition to the FCC not being a health agency (as opposed to the EPA or FDA), their guidelines only pertain to thermal RF while the devices in question all produce RF at lower non-thermal microwave levels (sometimes even more likely to create adverse effects). The guidelines we use are inapplicable to the problem we have.

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As we go to press, the PUC has just issued an order prohibiting disconnections (pending results of what will be at least a nine month safety investigation) for utility customers withholding their opt-out fees. While offering some relief, this was no doubt done to avoid the embarrassment "disconnect martyrs" might cause in the press by their withholding of forced payments to avoid harm. The Supreme Court on 8/9 denied the Motion for Reconsideration with no explanation, thus refusing to clarify to the public, issues of safety, privacy and security in their original decision. The Court while recognizing the real issue of safety, refused to act on it ensuring continued needless and widespread exposure to microwave RF radiation for at least another nine months. The sad truth is, we have unleashed a subtle yet potent toxic technology without having adequate safety standards in place.

- Ed Friedman, FOMB Chair

"They Warned Us All . . ."

i think of the drifting canaries, like moths on fire lit to the currents of a river, still flying, still pushing life forward...flames in the dark swirls of the downstream, defiant concordant protest, wild silence sliced deep into the thin static sheath...and the wide chest of calm clarity that opens when the power shifts...when the signal stops...when the dark hand reaches for the burning life...smoothing the flame and holding it to the living stars of night...the stars that can see clearly what life she saves, when all is silent within the wide hum of her hearth...the yellow canary bursts from river - like a pollened phoenix of sweetest song - blown through the seasons in a chant that returns walls to the forests of their souls...and reels the nets heavy with light into spools for the weavers - women beading dew below the surface making webs to bone the dancers skins...to stick the deep song in marrows that will wear the mirror we break.

- Joshua Odonnell

We Need You! Please Support Our Important Work

FOMB Leadership

Our accomplishments are due to the hard work of dedicated volunteers, especially those who serve on our committees. If you want to get involved and serve, please contact the committee chair or Jeff DeRosa. Please join us!

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Membership Levels

❑ $1,000+ Sturgeon
❑ $750 American Eel
❑ $500 Wild Salmon
❑ $250 Striped Bass
❑ $100 Shad
❑ $50 Alewife
❑ $20 Smelt
❑ Other

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❍ $7 Enclosed (optional) for a copy of *Conservation Options: A Guide for Maine Land Owners* [$5 for book, $2 for postage].

❍ Renewal ❍ New Member ❍ Send information about volunteer opportunities.

Friends of Merrymeeting Bay

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Triumph!

On Saturday 8/11, FOMB members Allie [L] and Joss [R] won 1st and 3rd place respectively in the annual Merrymeeting Bay Ducks Unlimited chapter Waterfowl Party retriever competition held in Bowdoinham. Allie, at the human age equivalent of approximately 90, deaf and with limited vision after about 50 yards is a great example of how older FOMB members can continue to play a vital role in our organization. Who knows? There might even be a blue ribbon in it for you!