



Friends of Merrymeeting Bay

Friends of Merrymeeting Bay is a 501(c)(3) non-profit organization. Our mission is to preserve, protect and improve the unique ecosystems of the Bay through:

Education

Conservation & Stewardship

Research & Advocacy

Member Events

Support comes from members' tax-deductible donations and gifts.

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

For more information call:
Ed Friedman
Chair of Steering Committee
666-3372



Read more about our Safe Passage! Campaign on Page 6

Moving Fish!

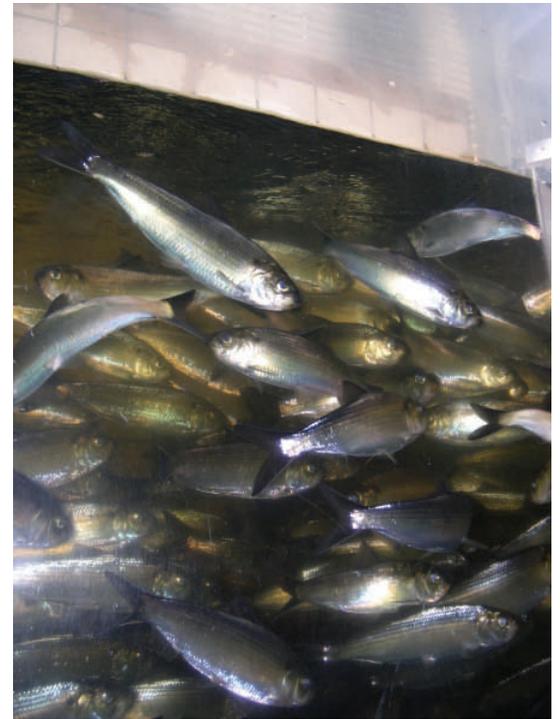
This spring was a banner season for alewives in mid coast rivers. These important forage fish are blocked from most of their spawning habitat [fairly shallow inland ponds] by our many dams. At the Florida Power & Light Energy [FPLE] Ft. Halifax dam located where the Sebasticook River meets the Kennebec in Waterville/Winslow and at the FPLE Brunswick-Topsham dam on the Androscoggin, Maine Department of Marine Resources restoration biologists Nate Gray and Mike Brown respectively, go into 14 hours/day, 7 days/week overdrive with their teams to move as many fish as possible.

Fish are moved first to certain stocking ponds within the watersheds and then trapped and trucked to various locations around Maine. Forage species like the alewives and other river herring, are key to the health of the Gulf of Maine fishery and though artificial passage moves only a fraction of the fish and not without mortality, these dedicated crews do their very best. This year about 500,000 fish were passed through at Ft. Halifax and about 70,000 in Brunswick.

Ed Friedman



The Brunswick fish ladder.



Some of the 70,000 Brunswick alewives headed for the trap.



In Russian roulette, only one chamber has a bullet. At FPLE's Brunswick dam, downstream fish passage [small pipe at waterline] is sandwiched between multiple turbines. Just the opposite of the hand gun-gamble. Turbines here, of course, remain unscreened.

Our experts are finally admitting it: human activities have become the dominant influence on the shape of the earth.

Some insights from the late Bruce Trigger are recalled:

A fascinating story that caught my eye on the front pages this week was about a group of British geologists who have suggested that the Holocene — covering the last 11,700 years of the planet's natural history — should be modified to account for the recent predominance of human activities in shaping our Earth.

An Introduction to the Anthropocene Era

Several years ago I mentioned in one of my columns the recent book by friend and former glaciology professor Paul Mayewski on increasing rapid climate change events. Paul having worked extensively on ice cores from Antarctica to Greenland is an expert on the subject and is seeing first-hand, historical evidence of dramatic climate changes. Kicking off our 2007-2008 Speaker Series was mountaineer, physicist and author Mark Bowen who spoke of Lonnie Thompson, a well respected climatologist specializing in tropical ice cores.

The evidence has become overwhelming, even though we first became aware of the problem in the 1800s. We are changing the planet's climate, probably not for the better, and extremely rapidly.

While the 12,000 or so year period since the last continental glaciation has historically been known to geologists as the Holocene Era, there is now a growing movement to mark recent centuries as the Anthropocene Epoch [see Boyce Richardson article on this page] referring to the era of dominant technology and its attendant problems, when the activities of the human race first began to have a significant global impact on the Earth's climate and ecosystems. The term was coined in 2000 by the Nobel Prize winning scientist Paul Crutzen, who regards the influence of human behavior on the Earth in recent centuries as so significant as to constitute a new geological era. While most scientists tend to think of this period as beginning in the 19th century, some feel it began as early as 8,000 years ago with mankind's first efforts at large scale farming.

Ed Friedman

They say that our current era of dominant technology and its attendant problems should be renamed the Anthropocene in recognition of the changes that human-driven technology has wrought in the shape of the Earth.

As readers of this site will probably know, I was friendly with the remarkable, recently deceased McGill University professor Bruce Trigger, who, from his differing viewpoint as an anthropologist and archaeologist produced some fascinating insights into this very question, particularly in a lecture he gave in November 1986, on *Archaeology and the Future*.

Trigger --- who at his death was widely considered to be the world's leading expert in the history of archaeology --- in his lecture divided human history into three stages. The first was the one in which nature was dominant. It was characterized by small-scale, egalitarian societies based either on hunting or gathering. People had a short life-span, population densities remained low allowing for considerable leisure time and flexible work schedules, although long-term planning became more important as reliance on stored foods increased.

In Trigger's view, the archaeological record reveals that co-operation rather than conflict was the dominant theme in these societies in which people survived, not as ruthless predators (as depicted in modern right-wing mythology), but as "effective co-operators." Decisions were normally reached through consensus, and the prestige derived from generosity "was a major stimulus for aspiring leaders to work hard and keep little for themselves." Finally, at that time, nature was believed to be "animated by spirits that resembled, but in many cases were more powerful than human beings, and hence were able to influence human destiny in important ways."

Trigger's second stage of human development he called the "pre-industrial civilizations." These began in the Near East 5,000 years ago and ended in Europe "only in the last (meaning 19th) century." These were characterized by coercive political structures by which rulers dominated and exploited the vast majority of their subjects. Great temples, tombs and palaces were constructed. Individual political units embraced tens of thousands to millions of people, at higher population densities, with a complex division of labour and a class structure that "concentrated wealth and powers in the hands of a small, privileged and archeologically highly visible elite."

These structures led to a hierarchical society dominated by rulers who relied on force to suppress opposition. "Poverty, exploitation

and outright slavery became the lot of vast numbers of people,” wrote Trigger, and concepts of dominance and obedience, authority and submission pervaded the whole of society. “Rewards and punishments were believed to be sanctioned by heavenly rulers and contrasted sharply with the social values of egalitarian societies.”

Technology, however, was rudimentary, and conspicuous consumption of wealth was what marked the behaviour of elites in this period.

The third period— through which we are now living— Trigger called, “modern industrial civilizations a stage of human history when technology is dominant.”

The number of food producers has declined rapidly, as farming has become “more efficient than nineteenth-century economists ever imagined possible.” And the exploitation of an “ever-expanding range of natural resources” has caused industrial economies to spread into every part of the world, “terminating the independence of all the surviving band and tribal societies.” Education has led to societies with wide diversities of skills, and medical advances have allowed “a vast world-wide increase in population. Although there has been a significant increase in the quality of life for most people, Trigger said technological and medical advances “have generated a vast number of new problems.” He named over-population and depletion of non-renewable resources as the greatest of these, leading to “growing concern” that the higher populations, combined with higher levels of personal consumption, will outstrip the available resources of the planet.

Trigger listed pollution— unsafe disposal of industrial waste, misuse of chemicals, acid rain, nuclear accidents, and the greenhouse effect (only then emerging) as growing dangers— with growing concern over the effects of genetic engineering and mind-controlling devices “that can be used by governments to manipulate human behaviour.” In short, these problems could become so severe on the health and prosperity of populations that they “could result in the destruction of civilization.”

On the possibility of controlling this technology, Trigger did not mince words: the nation state “is unable to provide regulation on a scale adequate to control the harmful use of modern technology.” Internationally, we lack effective instruments of control; while even within nation states, planning and control is inadequate to the task.

“The survival of humanity now depends on its ability to predict the long-term environmental and social impacts of

technology, and to eliminate or modify technologies that in the long run threaten human welfare.”

Trigger ran through a number of possible solutions, for example, slowing down, or even eliminating technological growth, but rejected them as likely to lead to repressive controls and regimentation. His more favored solution he

posited as “wide-scale and detailed planning”, which would necessitate “the fullest possible utilization of humanity’s potential as well as realized intellectual resources.”

It follows that “control of the world ecosystem necessitates a much greater degree of social, economic and political equality within countries and throughout the world, than exists at present. Such conditions may have to be achieved at the cost of some material sacrifice by the more affluent.” From this he concluded that the “now largely abandoned concept of the accelerated promotion of social and political equality is not merely a utopian ideal but a precondition for survival in an environment dominated by an advanced industrial technology.”

He comes to an ironic conclusion: the qualities that we most need to survive today— foresight, personal restraint and co-operation— were essential for Paleolithic hunter-gatherer life. The difference is that these qualities must be applied on an ever-widening scale and with rapidity that precludes further significant inputs from natural selection.”

In other words, we have to learn how to govern ourselves in new ways that will make planning, freedom and equality synonymous for the first time in human history.

Boyce Richardson

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From the Blog of Boyce Richardson January 25, 2008

Boyce Richardson, born 1928 in New Zealand and a Canadian resident for many years is a former journalist, writer and documentary filmmaker. Richardson’s book on the battle of the Cree Indians against Hydro-Quebec, *Strangers Devour the Land*, (first published in 1974) is being re-published this year by Chelsea Green Publishing, of Vermont, with a new introduction. His Blog, *Boyce’s Paper* has been described as “the world’s oldest Blog, got up by the world’s oldest Blogger.” In 2002, Richardson was invested a Member of the Order of Canada, his country’s highest honor. Look for him on the web: brich@magma.ca.

**Higher
populations,
combined
with higher
levels of
personal
consumption,
will outstrip
the available
resources of
the planet.**

Moving Fish! [continued from front page]



A stream full of alewives.

This year about 500,000 fish were passed through Ft. Halifax and about 70,000 in Brunswick.



At the north corner of Ft. Halifax dam, a powerful pump sucks up fish attracted by the flow coming out of the open pipe. Alewives are pulled up to a large holding tank in the parking lot by the powerhouse where they can be discharged to the headpond or transferred to a tank truck for transfer to a spawning pond.



At Brunswick, certain fish species come up the ladder and into a trapping area made from steel grate where they are raised up the vertical shaft (seen in the center rear of this picture) to the raised sorting and counting facility and then released into a center tank full of water.

If they are being passed above the dam they are netted and counted and transferred to the left tank where they then are released through a pipe, falling down to the head pond.

If the alewives are to be trucked, they are counted as moved to the right tank, where they then come out the suspended hose into an aerated tank truck for their journey.

The Wolf is Back

The wolf is back in the northeast, if in fact it was ever gone. The killing of an 85 pound wolf by a western Massachusetts sheep farmer in October 2007 is likely evidence that wolves now range throughout much of the region, from the Adirondacks to northern Maine. The animal was killed just eighty miles from where a wolf was killed in New York in 2001.

A spokesperson for the U.S. Fish and Wildlife Service (USFWS) wrongly claimed that the Massachusetts animal was the first gray wolf found in the northeast since a wolf was killed near Moosehead Lake in 1993. In fact, the Massachusetts animal was at least the eighth DNA confirmed wolf killed south of the St. Lawrence River since 1993.

It is widely believed that wolves were extirpated south of the St. Lawrence River by around the turn of the 20th century as they, their prey and their habitats were destroyed by humans. Although breeding populations may have been eliminated, occasional wolves continued to appear in the northeast U.S., possible dispersers from north of the St. Lawrence.

A wolf was killed in western Massachusetts in 1902 and another wolf was seen in that state in 1918. A pack of wolves was reported to have roamed northwest New York in the 1930's. An animal reported to be a wolf was killed near Cherryfield, Maine in November, 1953. Several other reported wolves were killed in New York in the 1950's and 1960's the skull of one of which is in the Smithsonian.

The closest acknowledged wolf populations to the northeast U.S. are in southern Quebec, some sixty miles from New York and fifty miles from Maine. The Frontenac Axis in southeast Ontario may serve as a wolf dispersal corridor from Canada into the U.S. The Axis extends south from established wolf range, to the north shore of the St. Lawrence River. Moose, fisher, and lynx have been documented crossing the St. Lawrence from New York into Ontario. Wolves are very capable of making the same journey from north to south.

The 2007 Massachusetts wolf was identified by USFWS as an "eastern gray wolf." The wolf was likely a hybrid gray wolf/eastern wolf with a very small percentage of coyote. As a gray wolf hybrid, however, it was protected under the Endangered Species Act. Recent DNA analyses of Maine's 1993 and 1996 wolves indicate that they were primarily gray wolf with smaller percentages of eastern wolf and coyote. They were most genetically similar to gray/eastern wolf hybrids that live in a zone that stretches across Ontario and Quebec.

Gray wolves live across much of Canada from Labrador to the Yukon. Eastern wolves are closely related to red wolves and live in southern portions of Ontario and Quebec, most notably in and around Algonquin Park. Eastern wolves are smaller than gray wolves with adult males in Algonquin Park averaging only 65 lbs. The male wolves documented killed in the northeast in recent years have averaged 85-90 lbs.

It is not known how many eastern wolves and female gray wolves have been killed in the northeast, that were simply considered "coyotes" due to their smaller size. The so-called "coyotes" of the northeast U.S. are actually coyote/eastern wolf/gray wolf hybrids with varying percentages of each.

The U.S. and Canadian governments provide virtually no protection for wolves that may be attempting to re-colonize the northeast U.S. from Canada. All of the northeast states allow virtually unlimited killing of "coyotes" and this has resulted in the illegal killing of wolves. There is growing evidence that wolves are attempting to recolonize the northeast U.S. including DNA evidence of a possible breeding population.

As ungulate populations in the northeast grow and expand, the need for natural population checks continues to grow as well. The gray wolf is filling an ecological void. If simply allowed to survive, it will do just that.

John Glowa
Chair, Policy and Government Relations Committee
Maine Wolf Coalition
"Know Wolves"
Website: <http://home.acadia.net/mainewolf/>

**When the animals come to us,
asking for our help,
will we know what they are saying?**

**When the plants speak to us
in their delicate, beautiful language,
will we be able to answer them?**

**When the planet herself
sings to us in her dreams,
will we be able to wake ourselves, and act?**

Gary Lawless

Program Updates: How We're Making a Difference



Kathleen McGee recovers a drifter tracked by air to a location one mile up Spinney Mills Creek from Fiddler's Reach.



Current Study

With a protracted period of snow melt followed by several inches of rain, we had a good season for gathering our high flow field data. This is the final scheduled segment of the study. A few quick snippets since all of our data are not yet analyzed: drifters moved from Augusta to the Bay in a day, some drifters moved to the mouth of the Kennebec from the Chops in a couple of tides, one drifter ended up beneath the South Bath boat ramp [whose sides extend well below water level] and several weeks after our deployments were done, one of our four un-recovered drifters [and we searched the area from the Bay to Monhegan to western Casco Bay] drifted on to a Wellfleet beach in Cape Cod Bay.



Legal

Final briefs in our safe passage appeal to the Maine Supreme Court were submitted on schedule. The Court is scheduled to deliberate on the case in June. In our ESA Salmon case, the feds did not respond with any kind of settlement offer to our 60 day notice of intent to sue, so along with Doug Watts and the Center for Biological Diversity, we filed suit in Portland's Federal Court.

The government has until July 21 to respond to our complaint that they are 2 years past the statutory deadline for making a listing decision on the Kennebec salmon. All legal documents are posted in that section of the "cybrary" on our web site. While receiving lots of print media attention on this subject, we were also interviewed by CBC Radio from maritime Canada.



Land Conservation

Things are moving along well on a number of conservation deals around the Bay, both in fee and easements. **It's official! As of May 22, the conservation tax incentive has been extended through the end of 2009, and retroactive to January 1.** Congress overrode a Presidential veto to pass the Food, Conservation and Energy Act of 2008. In addition to renewing the easement incentive, this bill:

- Provides a total of \$733 million over 5 years for the Farmland Protection Program.
- Re-establishes the Grassland Reserve Program with a goal of 1.22 million acres, funded with an estimated \$300 million.



Education

May 20 we had another great Bay Day with perfect weather at beautiful Chop Pt. School in Woolwich. About 200 students from West Bath, Woolwich, Chop Pt. and Fisher Mitchell schools attended, got dirty, had fun and learned some great information about the Bay. We had to turn away nearly another 100 students from Jordan Acres for lack of room [but made it up to them a little bit with an in-school visit]. During this school year we have worked with over 900 students from pre-school through sixth grade attending 12 schools.



Intern Simon Beirne, and volunteer Jim Gillies with his dog Joy, set off from the Chops to radio track and retrieve, our current study drifters.



Students get their hands dirty during the watershed modeling project at Bay Day.

Friends of Merrymeeting Bay · Box 233 · Richmond, Maine 04357

Membership Levels

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

Name _____

RR# or Street Address _____

Town/State/Zip _____

Phone _____ Email _____

- Renewal New Member Send me information about volunteer opportunities.

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

Friends of Merrymeeting Bay

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 Pippa Stanley (Richmond)
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Thanks to Will Everitt for design and layout of this newsletter edition.

FOMB Welcomes New Executive Coordinator!

After much consideration and review of approximately thirty applicants, the FOMB Steering Committee is excited to have hired Misty Gorski as our new Executive Coordinator. With good memories of the Bay from childhood, Misty is excited to return here and is passionate about the work we do. She will be living in Richmond when beginning work in mid June. A brief introduction from Misty follows:

I grew up an avid reader of Dr. Seuss' work. His creative, fun, easy to read books were always plentiful in my childhood home. It wasn't until years later, rereading the *The Lorax*, that I realized how important this particular story was. The Lorax was the voice of the flora and the fauna and fought to point out the destruction of greed. It reminded me a lot of what I had seen growing up; forests were clear cut, water sources polluted, and biodiversity decreased. This enlightening story made me realize that I too needed to be a voice for the trees.

Feeling inspired, I was easily drawn towards studying environmental studies and pursuing work in the conservation field.

I received a Bachelor of Science in Environmental Studies from the University of Maine at Machias. Living in Downeast Maine allowed me to experience the struggles between resource use and strengthening their economy. Realizing the need for balance between economic growth and sustainable resource use I went on to pursue a Masters degree at Antioch University New England in Resource Management and Conservation. Through my studies I learned not only hard science but also how to be an agent of change.

Upon finishing my degree this past spring, I found myself searching for the right position that will allow me to be that agent for change. This is what led me to Friends of Merrymeeting Bay.

We need to be more like the Lorax. We are the voices of the trees, the Bay, and all the species that make their homes here. Merrymeeting Bay is a special place that we have been blessed with and it is our responsibility to be good stewards. It is important to conserve what is close to our hearts and allow these ecosystems to sustain themselves so that they will be available for future generations.

I am ecstatic to start working for FOMB as the new Executive Coordinator and look forward to working collaboratively with members and non-members to protect the Bay.

It's like Dr. Seuss wrote: "Unless someone like you, cares a whole awful lot, nothing's going to get better. It's not".

Misty Gorski



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It has been an incredibly busy and productive spring for FOMB. So THANKS!

To Bay Day Guides:

Tom Weddle, Nate Gray, Margaret Chabot, Ann Speers, Jamie Silvestri, Alison Baird, Jay Robbins, Steve Eagles, Kent Cooper, Nancy Murphy, Paul Dumdey, Judy Chute, John McPhedran, Ed Friedman, Kerry Hardy, Sarah Cowperthwaite, Kathleen McGee, and Grace Cooney;

And Bay Day Chaperones:

Pippa Stanley, Milo Stanley, Becca Hamilton, Carla Rensenbrink, Margy Miller, Ruth Gabey, Petey Ambrose, John Ambrose, Bill Briggs, Dick Nickerson, Bev Nickerson, Patty Olds, Fritz Kempner, Steve Musica, Dana Pratt, Tom Walling, Bethany Laursen, Robin Brooks, to Wild Oats Bakery, and to our hosts at Chop Pt. School!;

To In-School Visit Volunteers:

Joan Llorente, Dana Pratt, Tom Walling, Andy Cutko, Wayne Robbins, Kathie Duncan, Kathleen McGee and Ed Friedman;

For help with the Current Study to:

Steve Dexter, Tom Walling, Simon Beirne, Peter & Noreen Ryan, Jim Gillies, Kathleen McGee, Ed Friedman, Scott Allen, Ben Magro, Peter Milholland and Steve Pelletier; Laura Flight, Charlie Culbertson and Greg Stewart from USGS, Curt Fish, Dick Lemont, Mary Earle Rogers and Chop Pt. School;

To Kermit Smyth, Bill Milam, Ruth Innes, John Lichter and our very large band of water quality monitors off to another good start;

To Kent Cooper providing refreshments for most of our 2007-2008 Speaker Series and to Eric Herter and Martha Spiess for their efforts at filming the Series;

And to Steve Musica, David Whittlesey, Pippa Stanley and Kathleen McGee for help with mailings as well as to Stan Moody and Martin McDonough for their continued website work.

FOMB Receives Award!

On April 26, FOMB was honored at the annual Peace Action Maine Awards Dinner.

Peace Action Maine (PAM) has a new initiative called **Reclaim Maine** that hopes to better integrate actions taken towards and groups working towards, improving life in Maine. We received PAM's Peacemaker Award as an organization working holistically to do just this.

In giving us the award, PAM noted that they have been inspired by our work and that they aspire to the high level of work we are doing.

THANK YOU!