The Merrymeeting News

Spring/Summer 2006 VOLUME XVI, No. 2

The Newsletter of Friends of Merrymeeting Bay • Box 233 • Richmond Maine 04357

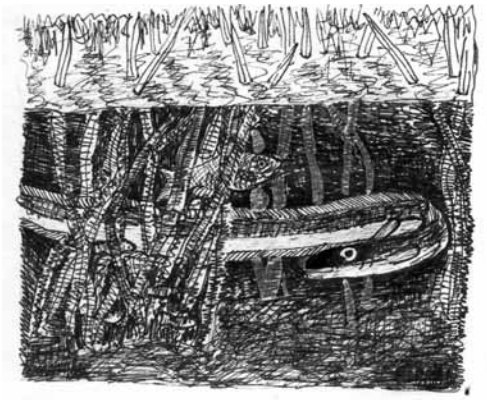

Illustration: Pippa Stanley

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

Membership Events

Research & Advocacy

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

www.friendsofmerrymeetingbay.org

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

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FOMB Opposes Chops Tidal Energy Project as Proposed

Early this summer Oceana Energy submitted to the Federal Energy Regulatory Commission about 9 identical proposals for hydro-electric projects at high energy tidal sites on the Atlantic and Pacific coasts. One site was the Chops in the Kennebec. While very vague, the proposal suggested turbines of a propeller type design, 20-50 feet across and in a field of up to 50 units…

Lines Island seal haulout. Chop Pt. School in background. *Photo: Ed Friedman*

Following is the "summary" section of our motion to intervene in opposition to the tidal energy project proposed for the Chops. Our complete comments, as well as those of other parties, have been submitted to the Federal Energy Regulatory Commission and may be viewed in the "Cybrary" section of the FOMB website.

Merrymeeting Bay, for which the Chops is the only point of ingress and egress from and to the Gulf of Maine, is a noted resource of international significance due to its migratory waterfowl, diadromous fish, rare plants and bald eagle populations. Approximately 38% of Maine's water drains through the Chops. The Merrymeeting Bay and lower Kennebec River freshwater tidal riverine estuary system is the second highest priority area in the state [after Cobscook Bay] for federal and state wetland protection efforts aimed at preserving waterfowl and diadromous fish habitat. Friends of Merrymeeting Bay [FOMB], has reviewed the permit application and strongly objects to the issuance of the proposed preliminary permit. While FOMB seldom takes positions on issues beyond those which directly or indirectly affect Merrymeeting Bay and the watershed which feeds it, many of our members are environmentalists with a global perspective and are concerned with the impacts of global warming. Consequently, many of us are individually prone to look with favor upon sources of energy which are based on renewable resources and which may displace fossil-fuel based electrical generation plants. It is entirely possible that tidal in-stream turbines and other developing technologies may someday prove to be the environmentally benign sources of renewable energy which we would favor.

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Bay Day - Spring 2006

In cooperation with our hosts at the Chop Pt. School, FOMB treated 160 students from area schools and as far away as Bangor to another magical Bay Day on May 23. Fourth and fifth graders from Bowdoinham, Brunswick, Bowdoin, Chop Pt., and even immersion French students from L'Ecole Francaise in Freeport enjoyed the day as did 30 home schoolers from nearly everywhere.

Volunteers Sarah Cowperthwaite and Kathleen McGee teach students about the diadromous fish species of Merrymeeting Bay through the art of Gyotaku (fish printing)

Our format for Bay Day changed this year, allowing students to arrive a bit later (easing bus conflicts), and participate in slightly longer sessions and a picnic lunch. Hands-on activities included wildlife ecology, tree and bird walks; macro invertebrates, Merrymeeting Bay watershed modeling, non-point source pollution, archaeology, geology, diadromous fish and fish printing, anadromous fish with beach seining and sampling techniques; and wildlife mounts and touch basket.

Special thanks go to our hosts at Chop Point School, as well as to Wild Oats Bakery, the Maine Department of Marine Resources-Stock Enhancement Division and Aquarium, Nate Gray, Ed Seidel; our organizers: Tamara Whitmore, Kathleen McGee, Sarah Wolpow, Ed Friedman; our guides: Jack Witham, Steve Eagles, Kent Cooper, Jess Hunter, Erin Crowley, Paul Dumdey, Susan Breau, Tom Bahan, George Sergeant, Nancy Murphy, Jay Robbins, Sarah Cowperthwaite, Kathleen McGee, Keith Sherman and Jane McCarthy; our chaperones: Ed Benedikt, Bill Briggs, Dana Cary, Bill Corkhill, Carole Dyer, Kate Harris, Bruce Gagnon, Joan Llorente, Steve Musica, David and Lynda Wall, and to all of our participants.

Students demonstrate and learn the effects of non-point source pollution under the tutelage of Susan Breau and Tom Bahan of the Maine Rural Water Association.

Our Fall Bay Day takes place Tuesday September 26th at the Merrymeeting Bay Wildlife Management Area in Bowdoinham. If you would like to take part in future Bay Days, please contact our Education Coordinator Grace Cooney at 729-4650.

Keith Sherman, formerly with the Department of Marine Resources, comes out of retirement and down from Belfast to beach seine students, teachers and chaparones.

A perrenial favorite, historian Jay Robbins works with young archaeologists excavating near the site of an old blockhouse.

Photos: Ed Friedman

Turtle Takes A Trip

Turtle was snappish. It was almost the Summer Solstice and getting time for her to lay her eggs – and she was always hungry. Eat, eat, eat. She seemed to do nothing but eat, and she was never satisfied. Her bellyful of eggs grumbled all the time, but nothing she chomped down eased her craving.

It had been a fabulous Spring for Turtle. All that warm CO2 blowing in from up-along was fueling an explosion of green growth, and the succulent river plants were especially lush. Then there had been a bloom of frogs and fish fry riding the tide past Jimmy's docks, Turtles favorite lair. Yum.

Last week Turtle had gone downriver searching for something special. She'd ridden the ebb down past Riverbend, her eyes and nostrils just breaking surface. Turtle had watched hungrily as Osprey dove on Carp, and she'd seen Beaver gnawing on popple saplings along shore. She knew fish wouldn't assuage he strange longings, but what about popple? Turtle snagged a branch Beaver had downed and swam back upriver chewing on it thoughtfully. By the time she was on her home grounds, Turtle knew that definitely wasn't it. She was so frustrated she thrashed around in the swamp grasses with the stick in her mouth, scything off the new growth and grunting angrily.

Turtle made such a racket that Raven came down to the river to see what was going on. You know, Raven and Turtle go way back as fellow carrion-eaters, and Raven is always interested in what the big snapper is up to. But Turtle was just throwing a fit, slashing around with that stick, which was very unusual. Raven is always fascinated by the unusual, so he lit in a big riverside pine and watched Turtle's antics. Eventually the popple snapped where Turtle's beak was grinding it. Turtle kicked the pieces left and right and stood there shaking in frustration.

"Looks like you're about due," Raven observed.

Photo & Sculpture: Bryce Muir

Turtle hadn't seen the big black bird sail into the pine. Now she stared at him with one baleful yellow eye, and hissed, "What's it to you?"

"Temper, temper, Sister Turtle," Raven croaked. "Maybe I can help."

Turtle grunted. "Help? I don't even know what I want. I just crave something."

Raven nodded. "I get the weird munchies now and then, too."

Turtle stopped switching her tail back and forth and clawing in the mud. She turned both eyes on Raven.

"What do you eat then?" Turtle hissed.

"It depends," Raven said thoughtfully. "Sometimes a fresh young nestling will do, and other times I can dig up a treat in the old dump. But you know what never fails?"

Turtle was curling and uncurling her claws in eagerness.

"What's that?" she snapped.

"Mushrooms," Raven croaked.

"Mushrooms" Turtle grunted in disgust. "Mushrooms? All they do is make me sick."

"Not just any mushrooms," Raven said soothingly. "Those orange ones the flies can't stay away from. They're different."

"Huh," Turtle grunted. "Probably won't work for me."

"Maybe not," Raven said. "But if you want to try, there's a circle of them in those hemlocks across the river." And with that Raven dropped from his perch and swooped off into the woods.

"Mushrooms," Turtle muttered, but she was already slipping into the Cathance and starting to paddle across.

By now the Sun had set and it was coming on dusk. The warm wind had died away and the biting bugs were coming out for their evening gorge. Coon and Fox were stirring. The air was full of sweet smells and Sister Skunk was thinking about fresh compost. Deer was up and ghosting through the thickets when Turtle dragged her gravid self up the slope under the hemlocks.

The mushrooms were there all right. A big fairy-ring of Amanita muscaria. Some just poking up like rude umbrellas unfolding, others opened up to the size of dinner plates. It almost seemed they were lit by some inner light, the way they glowed orange in the gloaming, with a glimmer of yellow speckles scattered over their tops. Turtle sat down to catch her breath.

"They do look kind of tasty," she grunted to herself. "Maybe I'll try a little bit."

But Turtle isn't made for nibbling. After a few dainty bites she was wolfing them down by the clawful. At first they didn't seem to satisfy any cravings. Turtle's belly grumbled, and she was so hungry. Then the light began to change in the trees. Turtle stopped gorging and stared in curiosity. Every plant around

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her, big and small, appeared to glow with its own color. The hemlock boughs were tinged with deep purple, glowing redder near the tips. The Jewel-weed shone orange and lemon. Looking back toward the river Turtle saw the marsh grasses all cobalt blue, edged in turquoise – every blade glimmering. Turtle blinked her eyes.

Turtle found herself floating toward the river. Not clawing the ground and dragging her heavy body, but treading ever so lightly, as though swimming through the air. The river itself was a ribbon of coruscating silver, and Turtle felt an electric tingle as she slipped beneath the surface. Turtle blinked her eyes.

It was all very different under water. Instead of the usual murky brownish-green you had to smell your way through, the Cathance had a crystal clarity. It was like an immense hallway lined with silver walls and pillars, stretching way off into the distance. And there was a pulsating brightness coming from the farthest end of the passage. Turtle began to float down-stream toward the light. Turtle blinked her eyes.

Turtle discovered she didn't even have to paddle. She simply willed herself that way, and she flew through the water at a fabulous rate. After coming round a double curve in the shining hallway Turtle rose up and broke through the surface to see an unfamiliar green sky, all strewn with ruby stars. All the constellations were strange. Turtle floated for a spell, lost in the cosmos. Then she noticed pink and purple trees off to her left. They seemed to be the end of Centers Point. Turtle blinked her eyes.

She sank back into the shining hall and sped onward toward the light. The passage was tending downward now, and the shimmering silver walls slowly got brighter and brighter. Turtle began to hear a sibilant music vibrating off the silver walls. She realized, with a shock, the music was the echo of her own singing. She could see waves of sound going out from her, bouncing off the walls, and echoing back. The beckoning light ahead pulsed through the crystal water. Turtle blinked her eyes.

The shimmering silver hall was more like a tunnel now, and it pitched almost straight down. Turtle fell through time. She dropped out into a vast hall filled with light. It was too dazzling to see clearly. Turtle thought there was a mesh of radiant jewels pulsing in the center of the hall. As she approached, they resolved into the huge body of a Great Turtle radiating brilliant light. Turtle blinked her eyes.

The Great Turtle seemed to be asleep as Turtle swam up to her. Then she lifted one eyelid, just a slit, and a shaft of golden light flared out from her eye, freezing Turtle into immobility.

"Welcome," hissed the Great Turtle, and a crescendo of echoing music roiled the water. Turtle trembled.

"You were hungry for something wonderful, and now you've tasted it," the Turtle grunted. "Are you satisfied?"

Turtle was speechless. Too stunned to be hungry, that's for sure – but satisfied?

"I don't understand," Turtle managed to stammer, in a small voice.

"Of course you don't," the Great Turtle hissed. "You can't understand magic. You can only be part of it."

"But who are you?" Turtle asked. She was beginning to feel less intimidated. This might be magic, but she could talk to it.

"I am the before you, and the after you, and the always you," the Great Turtle pronounced.

Turtle shook her head. She'd never been much for introspection, or any sort of mental puzzle. Give her a nice young striper to snap up and she was quick enough, but this "before you, after you" mumbo-jumbo was way too deep. Turtle rolled her eyes.

Instantly the Great Turtle lunged out her long neck and grabbed Turtle in her gigantic jaws. One quick gulp, and she swallowed Turtle down.

Turtle was terrified. Awash in a sea of churning emotions. Inside, the Great Turtle was filled with liquid golden light, and Turtle spun helplessly round in the pulsing golden fluid. The voice of the Great Turtle filled her head.

"I'm the Golden Turtle who brought you the Land out of the Deep. Before me there was nothing but roiling waters. Then I rose up from the murk to be the Earth for you to stand on. Do you hear me?"

"Yes," whispered Turtle.

"Now you've found your way back to chaos. Are you satisfied?" The Great Turtle rumbled.

Turtle was uncertain how to answer. Squinting her eyes against the golden brilliance, Turtle thought she could see woven walls of light surrounding her. Nets of shining jewels whose colors where constantly shifting. The dazzling array was fascinating, but Turtle's belly was beginning to growl again. No, she wasn't satisfied. All this magic mephisto was a great show, but it didn't butter any parsnips. Turtle blinked her eyes.

Then she began to nibble at the jewels. Each one had a different flavor, and each one seemed to relieve a craving. Turtle gobbled more of the jewels. The net began to unravel.

The voice of the Great Turtle thundered with laughter.

"Yes!" the Great Turtle roared. "Gobble me up. Now it's time for you to bring something out of the deep. Find a place to stand."

With a sudden CLAP the net of jewels dissolved, and Turtle was spinning in a fluid darkness. She clawed her way up and up, until she broke surface under that lurid green sky. It was just beginning to fade toward an ink black. Just ahead of her Turtle saw the loom of something, against the paling ruby

stars. It seemed to be one of the islands in the Kennebec below Chops. But it looked for all the world like the back of a great snapping turtle rising up, gnarled trees growing on her shell. Turtle swam hard against the current, and managed to grab a trailing tree root. Slowly she dragged herself up onto the island. Turtle felt safe at last. The colors were washing out of the shy. Turtle blinked her eyes.

And there she was under the Hemlocks with the remains of Amanita muscaria scattered around her. A young coon was sniffing to see if she was dead, and he jumped a yard in the air when Turtle opened her eyes. The coon scuttled off muttering. Turtle looked up. The sky was all black now, the familiar constellations shimmering points of white.

Turtle lay there wondering what the Great Turtle had meant about bringing something out of nothing, but she was too muddled to think straight. Turtle got to her feet dizzily. At least she wasn't hungry any more. Turtle didn't know about finding a place to stand, either – but her time had come, and she sure needed a place to lay her eggs. Turtle staggered off to find a sandy spot to dig in.

Which is why turtles get snappish around the Summer Solstice. And why each of us must find an island to stand on.

Bryce Muir

Editor's Note: Reprinted from Bryce's book "Local Myths", with permission of the author.

Many thanks to our recent foundation funders:

Bowdoin College Common Good Grant

The Davis Foundation

The Fund for Wild Nature

John Sage Foundation

William Bingham Betterment Fund

The Nine Wicket Foundation

Merrymeeting Bay Cleanup

On May 27, the last day of National River Cleanup Week, six hardy souls gathered on Abbagadasset Pt. in Bowdoinham under the astute leadership of Piers Beirne to wreak havoc upon thousands of pounds of accumulated trash. While it may seem to some like we are playing favorites returning frequently to Abby Point, we do this because the mile long section of state wildlife sanctuary there bears the brunt of trash drifting in on prevailing southwesterlies.

From 9 am to 1pm we tore apart abandoned smelt camps and picked up glass, tires, propane tanks, cans, bottles and other assorted debris. Mark Rideout played a valuable role with his 4WD cart and trailer in moving debris off the shore and up onto Browns Point Rd. Several days later, Maine Department of Inland Fisheries & Wildlife Regional Biologist Jim Connolly was able to come by to load up and cart off over 1200 pounds of debris left in the pile after we had already brought a dozen or so bags of recyclables to the Bowdoinham Recycling Barn. Mark has his eyes on about twenty tires scattered between Abby Pt. and Pork Pt. that one day this summer we will return for.

Thanks to Piers and Geraldine Beirne, Mariah Parker, Michael Ebert, Mark Rideout, Jim Connolly, Ed Friedman and the Bowdoinham Recycling Barn staff.

Michael Ebert reduces to rubble the first of 3 abandoned smelt camps which Piers Beirne & Mark Rideout then haul off the shore. Photos: Ed Friedman

American Eel Update

Last year, the Maine Board of Environmental Protection [BEP] received one petition from FOMB requesting a full hearing to consider safe up and downstream passage for eels and anadromous fish around hydro-electric dams on the Kennebec and Androscoggin rivers. They received separate petitions with similar requests from Doug and Tim Watts. The Board decided to consider each river separately.

The BEP voted to give us a full adjudicated hearing on the petitions affecting the Kennebec River, but then in an astounding display of bureaucracy, the Assistant Attorney General [AAG] staffing the Board, and the Board Chair, granted only the dam owners automatic party status and made us petitioners file motions to intervene in our own petitions. We have had one pre-hearing conference but still have no scheduled date for the adjudicated hearing.

The Board rejected our first petitions on the Androscoggin dams. In a blow to democracy, the AAG and Board Chair then withheld a second and separate Androscoggin Petition [this one signed by 60 individuals including virtually the entire Lewiston/Auburn legislative delegation], from the full Board, making a unilateral decision to hold it in abeyance until the resolution of Doug Watts' appeal to Superior Court of the first petition's (arbitrary and capricious) rejection. The AAG has not thus far been able to provide us with any legal justification for her decision, which conflicts with a statute requiring the full Board to review a petition within 30 days.

Meanwhile in Massachusetts, at the regional office of the US Fish & Wildlife Service, a recommendation to Washington on whether or not to list the American Eel as endangered continues to be delayed. At a March meeting in Bowdoinham, USFWS promised us that, without fail, the recommendation would be out of the regional office by May 15. The estimated date is now at the end of August. A decision on listing will be the result of a more than 1-year status review of the species brought on by the Watts brother's citizen's petition to list the eel as an endangered species.

The Prelude of Doug Watts' Motion to Intervene.

As a prelude, here is my ...

Petition to Intervene in my own Petition Poem

What if I am not me?
Is there some way to see?
I have two eyes
What if one is not me?
Or is it mine?
How do I find
If I am actually me?
Perhaps I should ask the Maine BEP!!!

Douglas Watts., 131 Cony Street, Augusta, Maine 04330

Room with a View: Swan Island Eaglet, 4 weeks
Photo: Chris DeSorbo

Duty Bound

Living on Merrymeeting Bay I am daily graced by the site of eagles, and throughout the year there is an ebb and flow of wildlife which also includes osprey, egret, fox, fisher, seal, a plethora of ducks, hawks, Canada geese, sturgeon, and no small number and diversity of fish fry.

Working with Friends of Merrymeeting Bay to help protect this unique eco-system has been a centerpiece and integral part of my life for nearly a decade. While there have been great experiences during my tenure there, none have equaled one I had this year.

Earlier this summer,in the name of science, and protecting the species, Ed Friedman and I accompanied Chris DeSorbo and Chris Niven from BioDiversity Research Institute to an eagle's nest in order to sample a 4 week old eaglet for mercury, organochlorines and possibly other contaminants.

While testing to help assure the long-term health of a threatened species is a laudable goal I had some trepidation. In order to do the testing, the baby had to be lowered from its nest atop an 80 foot tree [for those who've not seen an eagle nest they can be 10 feet wide and long, several feet deep and weigh hundreds of pounds]. Both parents were nearby and, like the eaglet, in great distress.

With mixed emotions I held the eaglet during the process. It became indelibly clear that it wasn't enough to test this baby for chemicals, we are duty-bound to respond and act on what that testing shows otherwise it is just supercilious, feel-good back-patting and there's been enough of that in the scientific world. We have to act on the data we procure.

In the name of "sound science" we oft times lose track of the larger picture; the inter-connectedness of how we get to where we are, and why. Eagles didn't just suddenly become endangered and it wasn't just DDT that got them there.

Friends of Merrymeeting Bay endeavors to be integrated; working on "the whole", if you will. To this end we also work to protect the American eel which is being slaughtered at an ever-increasing rate. Because eels tend to live a very long time and when mature are higher on the food chain, they hold long-sequestered and dangerous toxins [including dioxin and PCB's]. We've seen eagles eating the remnants of eels slaughtered by dams, a double whammy to our ecological balance [the death of eels and subsequent poisoning of eagles, otters and other species].

This is important because we cannot protect our environment in a vacuum, nor concentrate on that which is easier, sexier or more fun.

Because FOMB's work encompasses protection of species, land, water, as well as educating the public and our children [both in the classroom and in the field], and advocating and taking action on those issues, we believe we can have a long-lasting impact and affect change in a holistic way.

It was a great honour to hold that eaglet. It is now imperative to act on what we find.

Kathleen McGee

Editors Note: The level of distress on this visit was unusual according to Chris DeSorbo and in my 4 sampling runs this season, this was the only one where the eaglet appeared distressed and the parents were vocalizing.

Grace with a great blue heron, one of the many critter mounts we can bring into schools. Photo: Ed Friedman

Welcome to our Education Coordinator

FOMB has just taken the large step of hiring a part-time Education Coordinator. From a pool of over 30 well-qualified applicants, our search committee offered the job to Grace Cooney. Grace is a native of Auburn and attended school at Southeastern University, Gallaudet University [Cum Laude and Dean's List] and graduated from Oberlin College with a B.A. and her major in dance and minors in sociology and African American studies.

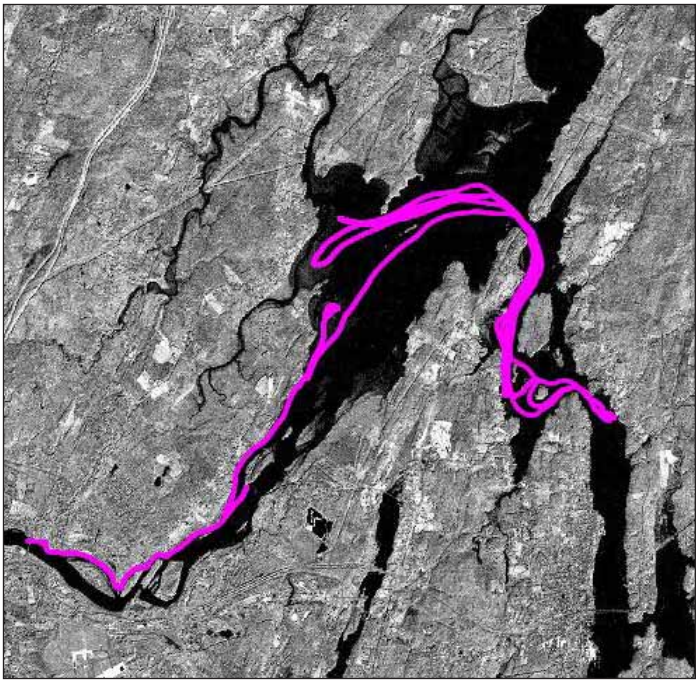
Grace has worked as an environmental educator at the Auburn Land Lab designing and implementing a summer environmental curriculum for students, ages 7-13 emphasizing the watershed, wildlife and general environmental appreciation and also as a substitute teacher in Bath and Auburn schools. She is fluent in Spanish and American Sign Language [ASL] and works as a freelance signer. In the past, Grace has worked as an ASL interpreter for The Deaf and Deaf Blind Committee on Human Rights in Ohio and as a sign language interpreter for the US Department of Education as well.

A new resident of Brunswick, some of Grace's additional interests include gardening, baking, swimming, dancing, photography, travel, the deaf community, and kayaking. Her duties with FOMB will include scheduling and coordinating our Hands Around the Bay program consisting of in-school visits, field trips, and Bay Days. She will be expanding the program and working extensively with volunteers and teachers developing training and curriculum ideas.

Education is an area where immediate rewards are seldom seen and so more and more public agencies have dropped their prior commitment to education/outreach positions in an effort to satisfy budget requirements. At FOMB many of us see the student generation as our last best and possibly only hope for the future of this planet. Where others have withdrawn from the field it is incumbent upon us to further develop this part of our broad mission in combination with our efforts at advocacy, research and land protection that together attempt to protect and improve the Bay today and ensure its future for tomorrow.

A big thank you is due search committee members David W. Chipman, Ed Friedman, Kathleen McGee, Nancy Murphy and Sarah Wolpow who all put a lot of time into this process. The committee was very impressed by Grace's communication skills, presence, flexibility and experience and all of us at FOMB welcome her with open arms. Please contact Grace if you would like to help with any of our educational programs (grace@friendsofmerrymeetingbay.org; 729-4650).

Ed Friedman



Track of Androscoggin River Drifter # 16, April 26-April 29, 2006. Image: LANDSAT, Track Plot: David W. Chipman

Drifting Along

Our circulation study continues to provide us with interesting data on just how the six tributaries enter this "soup bowl" of a Bay and how long they mix before draining. Data from our 2005 low-flow drifter deployments are now on-line and anyone can watch animations of drifters moving in and out and round-about. Medium flow data were gathered this spring and will be animated in the future. We plan to collect high flow data as well when conditions permit.

Under low flow conditions our results seem to indicate that there is a long residence time for water coming into the system and that it is relatively well mixed. It is important to note when viewing our animations that our drifters only approximate the flow of water when they are moving. While we did capture a lot of natural eddy movement, drifters sometimes snagged in Bay grass and got stuck in mud. In FOMB's yellow booklet on the Bay we have long referred to the Bay as a "mixing bowl" and these data appear to bear this out. Most estuaries are linear in nature. Merrymeeting Bay has its two main tributaries entering in opposition. Four additional smaller tributaries and the added restraint of a 280 meter bedrock restriction known as the Chops further magnify residence time and mixing. This goes a long way to making the Bay a very unique body of water worldwide. It may make a lot of sense to think of the four small tributaries under these conditions more as embayments than rivers as they really tend to mostly move up and down and back and forth with the tide while receiving very low inputs much of the year.

With a long residence time, what enters the Bay under these flow regimes would, for better or worse, have more time to act on or be acted upon by the Bay's sediments, vegetation, fish and wildlife. Think phosphorus, dissolved oxygen, wastewater discharges, nitrogen, etc.

When we began this project we thought it would shed light on the biology and hydrology of the Bay and that it might help develop predictive models of where effects of human induced inputs such as sewage, oil spills or invasive plants might be. Earlier this summer the proposed Chops tidal energy project made headlines and suddenly our circulation data became useful in a previously unforeseen manner. One crystal clear result from our data thus far is that in low-flow conditions the same water flows back and forth through the Chops multiple times. Thus, at the least, current-borne organisms like phytoplankton, striped bass larvae and fish fry would encounter multiple exposures to any structure placed in the Chops. Cumulative effects on these organisms are now limited to natural predation by seals and larger fish. We look at the prospects of adding an untested hydro project to this mix with a rather large degree of skepticism.

Volunteers who worked on the study this spring deserve a great deal of thanks. They were Bob Weggel, Jim Gillies, Kathleen McGee, Kermit Smyth, David Whittlesey, Ed Friedman and David W. Chipman. Simon Beirne, our intern from last year was also gainfully re-employed and a hard worker. Our original grant from The Merrymeeting Bay Trust makes this work possible.

David lowers a battery pack into a drifter. Photo: Ed Friedman

Deserving of special mention as the real backbone of this project is volunteer David W. Chipman. David, a retired marine geochemist from Columbia University with a Ph.D. from Harvard, has spent much of his professional career developing instrumentation to measure levels of carbon dioxide dissolved in the oceans and then endured extensive time at sea making these measurements. In his work on the circulation study David researched the use of possible GPS units and means of extending their battery life in the field. David also researched battery types, designed the battery packs and machined the fixtures holding GPS and transmitter units. In addition, David assisted in tracking and has processed all of the data from the loggers prior to the creation of final

animations by Woodlot Alternatives, with which he also assisted.

Unfortunately, health reasons prevent David from continuing with any further data processing. He will be sorely missed. We are therefore looking for several volunteers who can, taken as a group, provide skills in data processing with Excel, have familiarity with GIS, electrical gear, and the use of a PDA with Bluetooth to upload data from the GPS loggers.

David has for the last couple of years been an outstanding member of the FOMB Steering Committee where, in addition to his contributions on the Research and Advocacy Committee, he has also served on the interview/hiring committee for our new Education Coordinator and has consistently taken part in Bay Day. Although he has resigned from the Steering Committee, David will remain on the Conservation and Stewardship Committee.

Often working in the shadows and perhaps at times not with the public recognition he deserves, David gets a hearty thanks from all of us on the Steering Committee for his contributions to FOMB!

Ed Friedman

FOMB Opposes Chops

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Unfortunately, the proposed project will utilize unspecified new and untested technology for which limited impact data exist and the project is proposed in an area that contains significant natural resources. In fact, from the point of view of estuarine resources unique to the Kennebec/Androscoggin/ Merrymeeting Bay watershed the proposed project location is the one of maximum sensitivity and probable impact. If the applicants, and their sister corporations applying for permits in various locations in hopes of securing pre-emptive energy rights, wanted to pick a site more susceptible from the point of view of biological impacts than this 280 yard slot in the bedrock, they would be hard pressed to do so. Because of the location, the proposed project will likely have significant adverse impacts on fish, marine mammals and other aquatic resources and should not be permitted to proceed further unless and until the turbines are found in well-designed and documented studies by disinterested parties to be environmentally benign in restricted areas of high flows and high density fish migrations.

Friends of Merrymeeting Bay

Thank you to Tom and Martha Mitchell for designing this issue of The MMNews & to all our contributing writers.

Friends of Merrymeeting Bay, P.O.Box 233, Richmond, Maine 04357

MEMBERSHIP LEVELS

☐ $_____Other. ☐ $20 Smelt ☐ $50 Alewife ☐ $100 Shad
☐ $250 Striped Bass ☐ $500 Wild Salmon ☐ $1,000+Sturgeon

Name

RR# or Street Address

Town /State/Zip

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☐ $7.00 enclosed for a copy of Conservation Options: A Guide for Maine Landowners. ($5 for the book, $2 for postage)

☐ Renewal ☐ New Member ☐ Please send me information about volunteer opportunities

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Additional News Briefs

Grant Success and Kudos to Sarah

Congratulations to Executive Coordinator Sarah Wolpow, who hit her stride this winter and spring in the realm of grant writing. Her successful grant proposals and awards have been to the: John Sage Foundation-$1,979 for water quality monitoring; Bowdoin College Common Good-$1,678 for Bay Days; The Betterment Fund-$15,000 over 2 years for General Operating Expenses; Davis Fund-$10,000 for Eel Advocacy; Fund for Wild Nature-$1,500 for Eel Advocacy; and the Nine Wicket Fund-$5,000 for Eel Advocacy for a total of $35,157. A great big thank you to both Sarah and our funders!

Caged Mussels Tell Us More

Our work on the possible endocrine disruptor effects of pulp mill discharges continues in cooperation with the Maine DEP, Environment Canada and Applied Biomonitoring. Preliminary results from last year's caged mussel deployment above and below the SAPPI mill in Hinckley [discharging 26 million gallons a day of wastewater into the Kennebec] again seem to indicate adverse effects to the mussels from their exposure to mill discharges. The actual pattern of effects on the mussels is somewhat different from our initial 2003 deployment but there are a number of variables being considered as we work on a full report. Thanks to the New England Grassroots Fund [$2,000]; Patagonia [$2,500] and a Maine DEP contract [$2,300] for the funding that has allowed this work to move forward.

New Conservation Easement Incentives

In great hot off the press news for the land conservation community, Congress approved and the President signed, a tremendous expansion of the federal tax incentive for conservation easement donations completed in 2006 and 2007!

The new law:

1. Raises the deduction a landowner can take for donating a conservation easement from 30% of their income in any year to 50%;

2. Allows qualifying farmers and ranchers to deduct up to 100% of their income; and

3. Increases the number of years over which a donor can take those deductions from 6 years to 16 years.

Please contact Ed Friedman at 666-3372 or **edfomb@gwi.net** to learn more about protecting your land.