

EVENTS

These programs are free and open to the public:

Fall campfire at Constitution Beach.

Friday, October 1, 6 - 9 PM.

Information: DCR Park Ranger Enzo Polcaro, 781-485-2803 ext. 109. Meet at Constitution Beach bathhouse, Zero Barnes Ave., East Boston. Co-sponsored with YMCA of East Boston.



Forum: Birds on the Beach.

Monday, October 18, 7:30 PM.

Discussion leaders: Susannah Corona and Heather Warchalowski. Call for details: 617-567-5072.



Forum: Chris Klein on Boston Harbor Islands.

Monday, November 15, 7:30 PM.

Call for details: 617-567-5072.



TASL Harbor bird census.

Sunday November 21, 8 AM - NOON.

Call leader for details: 781-863-2392.



Stargazing: Geminid meteor shower.

Monday, December 13, 9 PM.

Leader: Mr. Farnsworth. Meet at Hannaford Park, Winthrop.

INSIDE

Walking the Dog3

Silent Springs4

President's Report.6

THE CHILDREN'S CORNER7

Harvest Festival 📅 **October 3, 1 - 3 PM**
see page 8



Belle Isle News

Published by Friends of Belle Isle Marsh

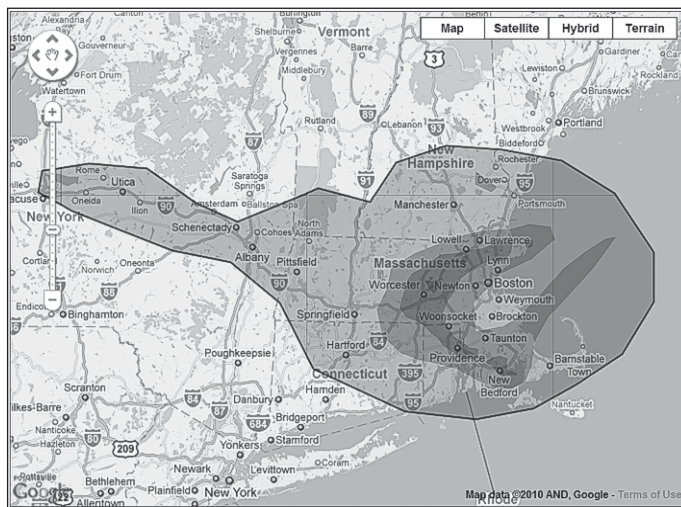
Number 83

September 2010

Gulf Oil Spill: Forcing the Media's Hand

As the media ignores the atrocities here in the Gulf and moves on to more important issues like Roger Clemens committing perjury, I have been at my wits end trying to figure out a way to help the people and the wildlife of the Gulf. Massive amounts of oil remain on the beaches of the Gulf, and since the clean up efforts have been pared down to almost nothing, ... more oil is on the beaches now than ever before...

...I contacted the media and showed them all of my irrefutable evidence of the oil, and BP's lack of effort to clean it up, and also publicized the fact that they were contacted and now know about this... At least you know now that



What if the spill were here? Here is a map that shows that scenario. You can see it yourself at

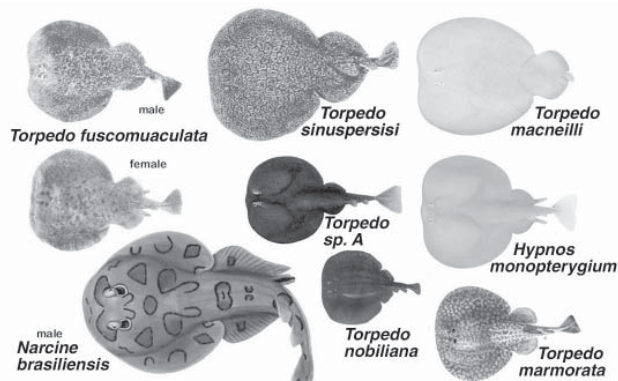
<http://www.ifitweremyhome.com/disasters/bp>

all of the media knows exactly what is going on down here and we can just hope that the amount of money BP has paid to run their advertisements constantly isn't enough to buy off real journalism.

Drew Wheelan

The American Birding Association

Read Drew's blog on the Gulf oil spill at <http://www.aba.org/gulf>.



The Misadventures of a Wayward Biologist Above and Below the Waterline

I've done plenty of stupid things in my life, which I'm sure my wife will vouch for. However, I am usually quite careful and thoughtful underwater. I have completed nearly 400 successful (i.e. I survived) dives to support that assertion. As the saying goes, nobody is perfect, so on July 17, 2005, I did something really stupid. A buddy and I were enjoying a nice dive in Folly Cove in Gloucester, when we came across a sizable stingray on the bottom. In New England, skates, the smaller

Continued on page 2

Misadventures (continued)

cousins of stingrays, are quite common and divers are virtually certain to see one on just about every dive. This animal was approximately 3-4 feet in width and equal in length larger than the average skate. It was content to stay buried and was not perturbed at all by the presence of divers. Skates are generally skittish and will swim away if a diver approaches too closely. Thus, I knew that we were seeing something new here. I traced the outline of the animal in the sediment to get a good idea of the actual size. I then slipped my hands and arms underneath it and gently lifted it off the bottom to get an estimate of its weight. It was quite solid, probably in the 20 pound range. At this point, with an armful of stingray, a flashing warning light went off in my head.

I now recognized this animal as *Torpedo nobiliana* or its more common name the Torpedo Ray. The Torpedo Ray is also known as the electric ray as it possesses organs that can generate an electric charge. These organs can generate a maximum electric shock of 220 volts, though 50 volts is more common. This process is called electrogenesis and there are numerous urban legends of electric rays shocking divers causing their deaths. The impact of an electric shock on the human body is a function of the magnitude (voltage) and the duration. A shock of 200 volts with a duration of 50 milliseconds can cause muscle contractions in the average adult and can result in respiratory distress. A shock of similar magnitude for a duration of 400 milliseconds can disrupt the normal heart rhythm and trigger cardiac problems. The good news is that the torpedo ray is only capable of generating this maximum charge for 5 milliseconds well below the threshold of any serious damage. Of course, I didn't possess this piece of trivia at the time, so I endeavored to put the ray down and back away slowly.

The organs that generate this electric charge are found on the dorsal side of the animal and are used to stun prey. The ray lies inconspicuously on the



Rebuilding the Bridge

Although inspections of Belle Isle Bridge on Saratoga Street in 2002 and 2004 reported the structure to be in fair condition, many boaters and kayakers who observed the pilings more recently from water level reached a different conclusion and are relieved that the bridge reconstruction has high

priority.

The Department of Transportation determined that the condition of the deck, slab, abutments, piles and bracing are approaching structural deficiency. Federal funding for the rebuilding project covers \$4.2 million of the total \$5.3 million total cost.

The idea of planning for global warming was raised by at least one resident who suggested the height of the bridge should be higher to account for the projected rise in sea levels. State officials, however, approved a design which is very similar to the existing structure in width and height. Time will tell...

bottom and as an unsuspecting fish swims close by, the ray generates an electric charge to temporarily stun it. Once stunned the fish is consumed quickly. Torpedo Rays are primarily piscivores, but jellyfish, algae and even eelgrass has been found in their guts.

Torpedo Rays are seasonal visitors to our waters and are frequently found offshore, though I have heard from a number of sources that Folly Cove seems to be one of the few inshore locations where these animals can be found with any regularity. Divers may see 1 or 2 a year, but never any great numbers. Water depths increase pretty quickly in Folly Cove, getting to about 50 feet at the mouth. Thus, water temperatures at depth even in the summer remain pretty constant and generally cooler than most coastal, near shore waters. I suspect the cove's unique geology allows the Torpedo Ray to find this area to be suitable habitat.

After the dive ended, my buddy and I, as is our usual practice, reviewed what went well and what could have gone

better. My dive buddy on this occasion was another experienced biologist, who recognized the Torpedo Ray for what it was immediately. Postdive, back on the beach, you can imagine the questioning I got from him. I admitted a lapse in judgement and made him promise to never tell my wife. She already has enough material.

Phil Colarusso

The author has been at the US Environmental Protection Agency (EPA) since 1989, spending about half of that time under water.





Walking the Dog

We have a new dog and that has changed a lot of things. She and I take long walks in the morning and many shorter trips throughout the day. What's happened is that I spend more time watching birds early in the morning and close to our house than going out in the marsh. Actually I'm always in the marsh in some fashion since all our walks are never more than a half mile from Belle Isle. So the pace is slow and I am discovering more than I would have expected.

Ruby and I are often up at dawn. A Great Egret sails overhead towards the east. At dusk we've seen several Black-crowned Night Herons floating west towards Chelsea. The constant flow and ebb of large birds overhead is amazing. Now that I am walking at puppy speed, I look up at the sky much more than before. There's a lot to see.

One morning I am amazed to watch an enraged grackle pursue a squirrel across the grass like an avenging angel. The grackle is no Red-tailed Hawk but the squirrel knew that bird meant serious business. He didn't slow down till he was half way up a tall maple. The grackle was clearly out for blood and wasn't happy. It could have been a raid on a nest or simply attempted food theft. Who knows?

Another morning a female Oriole perched on a tree limb right before

my eyes. She was barely five feet away. Orioles are our local equivalent of peacocks. They are so brightly colored that everything else pales in contrast. She sat there looking at the ground and ignored me until Ruby pulled me back to the real business of walking the dog. Then she flew off. The next day, we saw a male and so I hope that means a nesting pair close to home.

I saw a strange bird one morning rooting in the grass. I couldn't figure it out so I looked in Sibley's. I decided that what I'd seen was a Gray-cheeked Thrush. But I wasn't happy with that identification, so I emailed Soheil, our wise man and expert. He reminded me that I wasn't probably seeing a zebra but something more prosaic. So after several mornings study with Ruby, I realized that the strange bird was actually just an immature Starling. Blush, blush, more embarrassment but once again I had to learn the lesson to look closer to home for an answer.

One night, Ruby decided to walk along the track at Suffolk Downs. I noticed a sizeable avian convention under a mulberry tree. The fallen fruit always attracts a busy crew. As we got closer, one small flock was not happy with us and waddled off across the actual dirt track. There were nearly two dozen young mallards between the

rails where ordinarily thoroughbred horses pound past. Of course, sparrows, starlings, pigeons, grackles, crows, and finches are always feeding at the edges of the raceway but this was a first. The ducks just seemed so out of place, shades of Monty Python.

Another favorite has been the bird who wants to be a robin but likes to drill holes in trees. Most mornings, the usual crew of starlings, grackles and robins are in pursuit of worms. All across the grass, the birds are spread out hunting. Several times a larger bird is in the mix. It really doesn't seem possible but there is a woodpecker taking part in the early worm hunt. Then it takes wing and it really is a golden-shafted Northern Flicker, as thrilling a sight as sunrise over Broad Sound. This time Soheil confirms my discovery and delight.

Walking with Ruby has brought me a deeper appreciation of my neighborhood. Still, watching the herons land in a pool as the sun rises over Belle Isle Marsh is my biggest pleasure. So get up early, real early some summer morning, go over to the Sireen Reinstein Boardwalk, and find out for yourself.

George Cumming

George Cumming's blog OrientSee is at <http://www.georgemacumming.com/>.



Photo by George Cumming

Morning herons feeding at the Sireen Reinstein Memorial Boardwalk salt pan

The Nature of Belle Isle



Silent Springs

The world of systemic insecticides is a weird world... where the enchanted forest of the fairy tales has become the poisonous forest in which an insect that chews a leaf or sucks the sap of a plant is doomed. ... It is a world where a bee may carry poisonous nectar back to its hive and presently produce poisonous honey.

Rachel Carson in Silent Spring, 1962

August in the salt marsh. It is my favorite month. The *Spartina* grasses are at their greenest and lushest, the glassworts and arrowweed are starting to turn red, and Sea Lavender is blossoming. To the lavender come bees in the hundreds and Common Wood Nymph butterflies by the dozen. At least, that is how I remember August.

But there has been a change. The marsh is still beautiful, but the bees and butterflies are scarce, sometimes non-existent. The disappearance of Common Wood Nymphs in the salt marsh has been recent and sudden. I'm trying to understand what is happening with insects. It's not just butterflies that are scarce. As many people have noted, the population of American Kestrel, our most colorful and urban of falcons, is on a crash course. There is no consensus among experts on the reason for the crash, but researcher David Bird of

McGill University, Montreal, believes that a likely explanation involves the tremendous decrease in grasshoppers and crickets due to chemical pesticides. Those insects are a major part of the kestrel diet. I've walked through many a field recently and wondered where the grasshoppers are. On the other hand, where there are grasshoppers there seem to be kestrels as well. It is extremely difficult to draw a direct cause and effect conclusion from these casual observations, but is anyone trying to understand this stuff? Are birders the only ones who worry about the demise of kestrels?

I see that a new hysteria over mosquito born diseases is brewing. In the early 2000s there was West Nile Virus. Now there is also lots of talk about Eastern Equine Encephalitis. Potent alphabet soup! Between WNV and EEE, a lot of spraying of deadly poisons is being approved by states and municipalities. There isn't money for school teachers, firefighters, policemen, but there sure is money to send to chemical factories which produce insecticides and there is money to pay people to fly airplanes over or for trucks to drive through neighborhoods to spray poison. And what do state and local health people tell us about this? That this stuff is perfectly safe—but just to be really safe, lock yourself up in your house while the spraying is going on and turn off the air-conditioning! Also, bring kids and pets inside! What kind of dummies do they take us for?



The latest magical chemical which is supposed to rid us of undesirable insects and the germs they carry is sumithrin, brand name Anvil[®], marketed by Clarke Corporation,

Roselle, Illinois. Sumithrin is one chemical in a class of low-strength pesticides called pyrethroids. These are synthetic variants of a natural insecticide derived from chrysanthemum flowers. The fact that they are related to a natural product from a familiar plant may make them seem benign, but remember: Chrysanthemums do not fly over your house and spray you or all the other creatures that live nearby. They quietly sit in their corner and discourage insects from chewing on them.

Meanwhile, here are some facts about sumithrin and spray Anvil[®]. First of all, as with other pesticides and insecticides, there is no federal authority that tests material like this for effectiveness or potential for harm. The chemical industry puts out this material, as it did DDT, aldrin, dieldrin, malathion and countless other powerful poisons, and says, in effect, "Trust us." Once enough people get sick, enough birds, fish or mammals die or become sterile, then someone from the government steps in and claims that they've been watching out for public health all along and—gosh, we just didn't know it could be *this* bad. With food and drugs there are federal and state agencies that are mandated to check what is being put out in the market, and despite the fact that anti-regulators and free-marketers have cut out the heart of these regulatory agencies in the past few decades, there is still an expectation and a tradition in this country that, for example, drugs are tested for a serious length of time using rigorous techniques before they are released for public use, and that food is spot-checked for safety. Even though food and drug regulations were weak and further weakened with time, hardly any systematic regulation

Continued on page 5



Silent Springs *(continued)*

at all exists for pesticides and herbicides. If you manufacture something that you can convince someone to buy to kill insects (or other “varmints”) no one is there to regulate you. If you manage to maim or kill animals or people with your product, the government may eventually ban the sale of your product—in which case you simply switch your sales pitch to the rest of the world.

Sumithrin is a contact poison that quickly penetrates the nerve system of an insect. A few minutes after application, the insect cannot move or fly away.

The nervous system disruption function of these poisons works on most living creatures. Fish are quite susceptible and birds are extremely susceptible. Humans have variable reactions. After spraying in New York City in 2000, there were hundreds of calls to the NYC health department from people who said they experienced blurry vision, nausea, itching, coughing, choking and swollen tongue. One woman said “I threw up three days in a row, I really thought I was going to die.” All hearsay, of course. Had anyone bothered to do clinical studies? Some of the worst effects of insecticide poisoning has been in rural areas and in the farm states. Also among mosquito control personnel, where the rate of prostate cancer and prostate cancer recurrence is way up. Even though federal and state law prohibits overdosage by these chemicals, we’ll have to wait for cases of animal or human poisoning and sickness to become overwhelming before any attention is paid by regulatory agencies to the unfolding disaster or action is taken to limit or cut off the use of the poisons.

One of the criteria cited by

a company that is trying to sell environmental groups on the safety of their chemical magic elixir is to talk about the half-life of the stuff in the field. Half-life is defined this way: If you start with 10 pounds of a substance, when its half-life has elapsed half of it is gone. But there are still 5 pounds left in the environment! During the next half-life time-span, half of the 5 pounds disappears. Now we’re down to 2.5 pounds. And so on and so forth. Can you really ever get rid of this poison, once you’ve manufactured it?

The manufacturer of sumithrin says its half-life in water in the presence of light ranges from 9.1 to 13.9 hours depending upon the location. Another source, the sumithrin fact sheet, says the half-life of sumithrin in soil is one day to sixteen weeks, depending on the type of soil.

As it turns out, sumithrin by itself is detoxified way too quickly by the metabolism of its insect targets, so a second chemical, pipenoryl butoxide, is added to Anvil[®] to make the pesticide more effective by preventing insects from detoxifying sumithrin. The sumithrin fact sheet says “Piperonyl butoxide can cause skin and eye irritation. All the health effects of this chemical have not been fully researched.” But the research that does exist says it is slightly to highly toxic to amphibians and crustaceans and moderately toxic to fish and insects. The European Union lists this chemical as an endocrine disrupter—it disturbs the function of hormones in the body.

Anvil[®] is 10% sumithrin, 10% pipenoryl butoxide and 80% “inert ingredients.” The chemical industry is not required to disclose what that “inert” stuff is—it’s proprietary industrial information. That’s a hell of a

lot of stuff that we don’t even know the name of being sprayed out of airplanes and trucks!

But what about protecting the public health? Aren’t we supposed to “do something?” Don’t politicians get a lot of pressure to take care of these problems? Well, let’s look at facts. First of all, most of the hysteria over biting insects has to do with convenience or comfort. Many marshes and wetlands have been sprayed with insecticides because folks thought they shouldn’t have to put up with being bitten by mosquitoes and whatever else is noxious out there. Now there is a new excuse—we have to eliminate disease carrying insects. But as Carson showed in her book almost 50 years ago, insects keep evolving new survival mechanisms in response to the insecticides and adapt. Here is how that works: Not all of the mosquitoes in a sprayed area are killed. The ones which survive are more tolerant of the poison and go on to produce the next generation which are more resistant overall and can continue to produce yet more resistant strains through the same process of selection. So next year or in 3 years or in 5 years you have to spray more quantity of insecticide for the same effect or you have to develop yet other insecticides for the same effect. The arms race between humans and insects is going to hurt humans more in the long run because insects produce a lot more generations faster and develop resistance faster.

If, instead of indiscriminate spraying, we worked on protecting people who are susceptible to the virus alphabet soup—the ill and the elderly—the results would be safer for most people in the long run. Protecting people can be as simple as making sure they wear

Continued on page 6



Silent Springs (continued)

long-sleeve shirts and long pants, stay indoors at dawn and dusk or use insect repellent. Try the new OFF® without DEET. It's great!



Research at Trent University in Ontario, Canada, on the pesticide content of whale blubber has revealed a significant difference in the concentration of fat-soluble pesticides in male and female whales, with males having far higher concentrations.

While this factoid may seem to be of little relevance to land-based ecosystems such as our towns, cities and marshes, the question that the researchers ask and the conclusion they draw is of interest. Simply, the question is, why do male whales have more pesticides in their tissues than female whales? And the answer, the researchers suggest, is that through the mechanism of lactation, female whales excrete a larger proportion of their fat-soluble toxins than males. Whale milk is known to be very high in fat content, so this detoxifying mechanism suggested by the researchers does not seem far-fetched at all.

And in fact most, if not all, mammalian milk has high fat content and may serve the same detoxifying purpose in females. The corollary, of course, is that the toxins end up in the children. The one group we most want to protect from toxins in our environment, our young, may in fact be more exposed to environmental poisons than other segments of the population. And this could be true even if children are not breast-fed. After all, they are fed some sort of milk product, even if derived from cow's milk. Cow's milk is usually fatter than human milk, and of course our cows in the fields are no more protected from the indiscriminate use of pesticides than we are in our homes.



Here is how to manipulate the public in order to boost corporate profits (these phrases from

Anvil® blurb sheets put out by Clark Corporation):

- Use phrases to scare people: "The country's most high-profile mosquito outbreaks, including environmental disasters and mosquito-borne disease" and "Battle the onset of West Nile Virus in New York City."
- Then rub in the reassuring language: "Should not pose a risk for a healthy pond under sound environmental conditions" and "Little or no risk to soil, plants and the environment in general, if applied in the recommended amounts." Also, "Moderately rapid aerobic and anaerobic soil degradation ... found in the absence of sunlight."
- Finally, soothing words: "your committed partner in mosquito control".

Imagine: People are paid to write this blarney in order to help their bosses convince the scared public into spending state, national or local funds (your money and mine) to buy chemicals and equipment for killing. The killing destroys fish, bats, birds, insects and our health and in the long run increases the mutation of resistant types of mosquitoes or whatever is being targeted. In all cases, the fear mongers win because the long-range effect of their "war" creates more war and fear and yet more hysterical spending. Perfect for higher profits.



Meanwhile, I wander about the marsh, looking for that one elusive Common Wood Nymph.

Soheil Zende



PRESIDENT'S REPORT

Short Beach project

First, I want to thank our Winthrop Representative and Speaker of the House Bob DeLeo for his support for the Short Beach project. This work is happening because he understands the complex balance between environmental issues and competing demands for funding in this economic downturn. The Friends are always grateful for his advocacy of Belle Isle Marsh and of our beaches.

The most exciting event in many years at Belle Isle is the Short Beach project! Currently the most visible activity is the new seawall cap along Winthrop Parkway which will help control flooding on one of only two routes out of Winthrop. There will be a plaza at the intersection of Revere Street and Upland Road, and a stone dust path and pedestrian bridge are being constructed in the area that was formerly the dumping area known as the Zoppo site. For many of us who have been around for a long time, the park and foot bridge at the Zoppo site were only dreams.

We look forward to next spring when we will be walking on the new Kilmartin Path to a lookout with spectacular views of Belle Isle Marsh looking toward the Mystic River Bridge, a pedestrian bridge across the creek and an area with benches and lighting at the Winthrop end of Short Beach.

Drawings on the next page depict an artist's conception of the new segment of Belle Isle Park.

Stars, birds and more

This summer we added an exciting new program to our annual calendar of events, and I'm pleased to report that *Stargazing—the Perseid Meteor Shower* was a big hit. About 60 people came to Hannaford Park on August 13th to hear Chris Farnsworth talk about the waning moon and the alignment of Venus, Mercury and Mars as well as the many characters in Greek

Continued on page 7

THE CHILDREN'S CORNER

This summer, Friend of Belle Isle Marsh members and neighborhood children created a new garden designed to attract butterflies. With a little research, some basic gardening techniques, and lots of water, you can do it too.

The Butterfly Book (A Kid's Guide to Attracting, Raising, and Keeping Butterflies), by Kersten Hamilton, John Muir Publications, P.O. Box 613, Santa Fe, New Mexico, 87504, 1997.

This informative book is chock full of interesting information about butterflies for school aged children and adults to enjoy. There is an introduction to the life cycle of a butterfly and its habitat. There is a wonderful section on attracting butterflies through proper plantings or by creating your own man made café. The book also has information on how to catch butterflies with nifty directions to a variety of fun contraptions, including making a butterfly house and how to make your own butterfly net. There is information on how to be a butterfly doctor, butterflies in winter, butterfly "sky-dancing", and how to help endangered butterflies. The book's illustrations include photographs, line drawings with easily read directions, and colorful illustrations. This is a great nonfiction book any young naturalist would love to include in his or her library.

What's the Difference Between a Butterfly and a Moth?

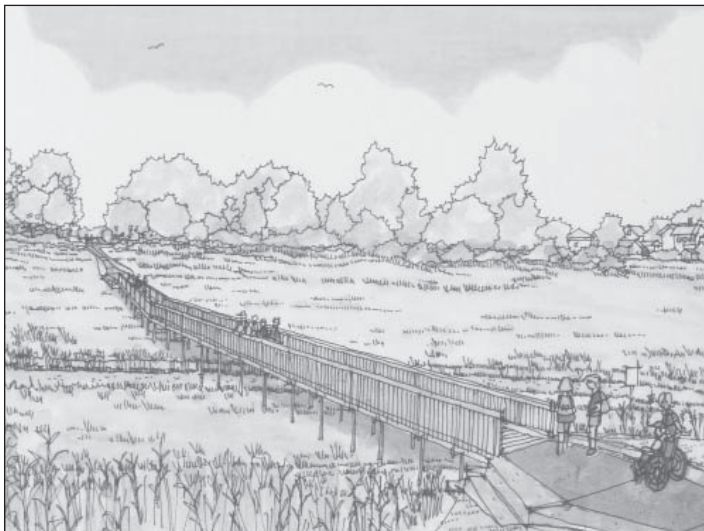
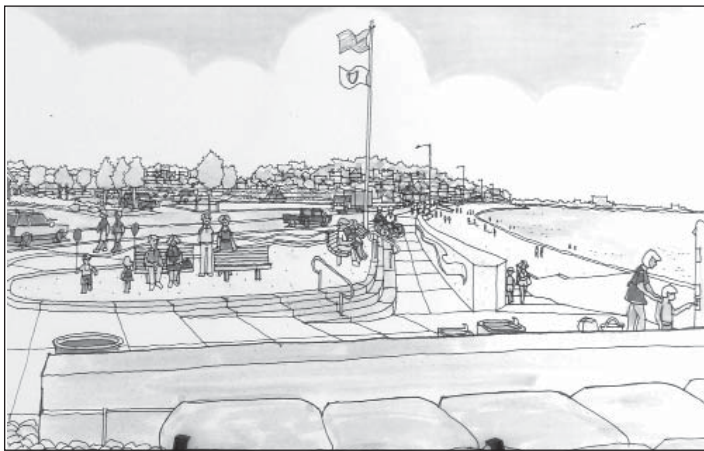
By Robin Koontz, illustrated by Bandelin-Dacey, Picture Window Books, 151 Good Council Drive, P.O. Box 669, Mankato, MN, 56002-0669, 2010.

This book was fun to review, because it answered some questions I have thought about from time to time. Did you know that butterflies have thin bodies because they flit around during warm days? Moths, on the other hand, have plump bodies. They need the extra fat to keep them warm as they fly about on cooler nights. Did you know that butterflies point their wings upward when they land? A moth, however, usually lays its wings down flat. Read this book and learn many facts about both butterflies and moths.

Mary Mitchell

*Belle Isle Park
Supervisor
Geoff Wood
planning the
butterfly garden
with parents
and children.*

*Photo by
Barbara Bishop*



Short Beach project drawings courtesy of Department of Conservation and Recreation (DCR)

President's Report *(continued)*

mythology for whom constellations are named, including Perseus. The highlight of the evening was hearing the crowd gasp as we saw a meteor in the sky over Revere Beach.

Our new stargazing programs are funded by a grant from Save the Harbor / Save the Bay which is also underwriting our third annual Birds on the Beach forum. Once again we've shared our local beaches and marsh with Piping Plovers, Least Terns, American Oystercatchers, Osprey, Great Egrets, Snowy Egrets, Great Blue Herons and Black-Crowned Night-Herons. If you've walked near the nesting areas on Revere or Winthrop Beach you may have heard the Piping Plovers' and Least Terns' distinctive calls. Seeing and hearing these beautiful birds makes living here such a privilege. Heather Warchalowski and Susannah Corona from the Department of Conservation and Recreation (DCR) will discuss this spring and summer's residents and our migratory visitors.

Check our web site for times and places for these and other events and forums.

*Barbara Bishop
President
Friends of Belle Isle Marsh*

Friends of Belle Isle Marsh
(FBIM) membership dues:

- Family \$15
- Individual \$10
- Seniors and Youth (under 16) \$5

FBIM is a registered nonprofit corporation; contributions are tax-deductible. Thank you for your continued support.

FBIM is a volunteer organization dedicated to the preservation of this marsh.

We believe that protection ultimately depends on public awareness of the value and beauty of this natural resource. Our focus, therefore, is mainly educational.

For extra newsletters to share or leave on tables at your coffee shop, public library or boat club, etc., call 617-567-5072 or email:

friendsofbelleislemarsh@comcast.net

Our web address:

<http://www.friendsofbelleislemarsh.org>

*This issue was produced by Soheil Zende
with help from Barbara Bishop, Daniela Foley,
Gail Miller and Christine Zende.*

SZ10

*Friends of Belle Isle Marsh
P. O. Box 575
East Boston, MA 02128*

Address service requested

Non-profit Org.
U.S. Postage
PAID
Boston, MA
Permit no. 3225



Harvest Festival 📍 October 3

When: 1 - 3 PM

Where: Belle Isle Park

Park entrance on Bennington Street, East Boston, across the street from Suffolk Downs 📍 Station

- **Horse drawn hayrides**
- **Pumpkin decorating**
- **Live animals from Creature Teachers**
- **Touch tank from Salem State College**
- **Live band "Made in the Shade" back by popular demand**



This event is free and open to the public.

Sponsored by: East Boston Foundation, The Boston Foundation, East Boston Savings Bank, East Boston Neighborhood Health Center, Department of Recreation and Conservation and Friends of Belle Isle Marsh