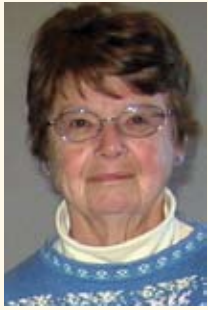


President's Corner



The Board of Trustees for the Great Bay Stewards meets monthly to discuss ways to support the Discovery Center's education programs, ongoing research regarding the state of Great Bay and

ways that our volunteer organization can promote community awareness and conservation of our watershed.

Our financial support helps bring the Gundalow to Sandy Point every September for two months. We are pleased to help underwrite the Great Bay Discovery Center's outstanding educational programs in the spring, featuring natural history and in the fall, cultural history, as well as small group programs during the winter and summer.

Through a competitive application process, each year the Stewards award at least two graduate research

grants for projects involving the Great Bay and its watershed. We also give at least two scholarships each year to deserving high school students in the Great Bay area. Besides co-funding several stewardship projects we are pleased to help publish Great Bay Matters as, indeed, it does matter.

To implement our mission statement of supporting education, research, stewardship and land protection we have several annual fundraising activities. Our Great Bay 5k Race, under the leadership of Board vice-president Jay Diener and his wife, Carolyn, is part of the Seacoast series and, last year, had 998 registered runners. Many runners tell us that this is the most organized race with the best course and the best food and prizes. The race this year will be held October 24.

On August 4th we're invited by Flatbread Pizza in Portsmouth to share in the profits of one of their Tuesday community nights supporting non-profit organizations. Lots of Great Bay Stewards members and friends come out

to make this a delicious evening. We hope you will come too.

The fifth annual Art of Great Bay show and sale is changing its name. Because the Great Bay Estuary is an integral part of the Gulf of Maine, and to celebrate the Reserve's 20th anniversary, we are going to rename the show as "The Art of Great Bay and Gulf of Maine". We hope to include a wider range of two and three dimensional works with the theme of 'anything marine', to include flora, fauna and people at work and play in and around the waterways. We will welcome fine pottery, sculpture, jewelry and fabric art as well as paintings and photographs. This year's show will take place Friday night, Saturday and Sunday, November 6, 7 and 8, 2009. Also new this year is a show for young artists, middle and high school age. This show will be held Saturday and Sunday in the Discovery Center and follow the same theme. For more information visit www.greatbaystewards.org or email info@greatbaystewards.org.

Many of you enter our 5k Race and/or enjoy our art show and comment that you never realized the extent of the facilities and grounds of the Great Bay Discovery Center as well as the wide range of activities for children and adults. I urge all of you to spread the word among your friends and acquaintances. Some call the Great Bay 'the hidden jewel of the Seacoast.' Yes, it is a jewel but it certainly should not be hidden.

Come and enjoy.

Nancy Cauvet
President, Great Bay Stewards



PLEASE JOIN US!

All interested parties are cordially invited to become Great Bay Stewards. Members receive Great Bay Matters and other pertinent mailings.

Annual dues may be paid by check made payable to the **Great Bay Stewards** and sent to: Membership Committee, 89 Depot Road, Greenland, NH 03840

- Guardian \$150 Protector \$75
- Steward/Family \$35 Student \$20 Other \$ _____

name _____

address _____

town _____

state _____ zip _____

email _____

Focus on Floodplains

Floodplain forests are unique and critical habitats found along approximately 1.9% of New Hampshire's land area, and are associated with larger rivers. In southeastern New Hampshire, the most significant floodplain occurs in the Lamprey River Watershed.

Floodplains occur along river channels prone to seasonal and periodic flooding. Also referred to as riparian zones, they support a diversity of flora and fauna, and provide many ecological services not easily duplicated by man-made facilities.

During heavy rainfall events, floodplains divert, store, and slow water flow to reduce flood damage, thereby protecting surface water quality, recharging groundwater and reducing erosion and sedimentation downstream. When protected, floodplain wetlands improve the quality and function of our natural ecosystem.

In addition to providing critical water quality functions, floodplain forests are a transitional habitat between a river or stream and the upland, and serve as wildlife corridors between habitats. Studies have shown that spring floods can thaw soils earlier in the year than surrounding lands, providing insects and food sooner for birds, who will then feed and follow floodplain corri-

dors during early spring migration.

The rich soils and vernal pools that are found in floodplains provide excellent breeding areas for amphibians, which in turn serve as prey for mammals like mink, otter and raccoon, and reptiles such as ribbon snakes and wood turtles. The abundance and diversity of small mammals and birds provide a good food source for raptors such as coopers and red shouldered hawks.

Floodplains are extremely challenging environments for vegetation. Much like the conditions within a salt marsh, minus the salt, trees, shrubs and plants must be able to withstand being partially covered by water and water-deposited sand and sediments often for weeks or even months at a time.

One plant that has adapted well to life in a flood plain is the fern. Its method for sprouting new leaves is inextricably linked to the threat of unexpected flooding, sedimentation and debris. The rootstocks of ferns grow on or below the ground. Each spring, new leaves emerge from the ground in a tightly coiled form



Wood thrush

© USFWS / STEVE MASLOWSKI PHOTO

commonly referred to as a “fiddlehead”. Often they are covered with soft wooly scales that afford additional protection from flooding and sedimentation. As temperatures warm and the likelihood of flooding is reduced, the fiddlehead uncoils upward and outward, a method of growing called circinate vernation, typical of true ferns.

In the Great Bay Watershed, one of the best ways to experience the diversity and uniqueness of a floodplain habitat is by canoe or kayak. Along the Lamprey River in Newmarket, brilliant cardinal flowers can be seen tucked into dense thickets of ferns and buttonbush. Melodious birds like the veery or wood thrush can be heard, or the observant paddler may even be lucky enough to glimpse a spotted or blanding's turtle along their way. However you choose to explore a floodplain forest, you are likely to have a fascinating experience in a very unique ecosystem.

Kelle Loughlin
Education Coordinator, GBNER
Director, Great Bay Discovery Center



© NHFG / VICTOR YOUNG PHOTO

A diversity of fern species can be found in flood plain.

Destination: *Alaska*

Kachemak Bay National Estuarine Research Reserve

Great Bay National Estuarine Research Reserve is not alone in celebrating a milestone anniversary this year! Great Bay extends a Happy 10th Anniversary to its sister site, Kachemak Bay in Homer, Alaska. Kachemak Bay encompasses approximately 365,000 acres, making it the largest Reserve, and the only fjord in the NERR system.

Thousands of residents, students and tourists flock to Kachemak Bay every year to experience the awe-inspiring beauty of diverse salt marshes, and geological magnetism of snow-dusted mountains, active volcanoes and immense glaciers. The seven glaciers that feed freshwater into the bay form seasonal stratified water columns that shift from a wholly marine environment to a more estuarine system in the summer months, creating a unique habitat for wildlife to thrive.

The Alaska Islands and Ocean Visitor Center, overlooking Bishop's Beach and Beluga Slough, serves as home base for explorers. Stroll through the center and admire stunning, traditional Alaskan art, peruse the bookstore, and bring your spotting scopes out to the trails. The spring migration is coming to a close, and over 190,000 shorebirds have returned to nest. Avid birders are advised to venture out to Fox River Flats, located at the head of the bay. Here, you have the opportunity to spot Wandering Tattlers, Hudsonian Godwits, or Baird's Sandpipers that faithfully complete their 9,300-mile journey in only 5 weeks!

The visitor center also hosts a diverse array of public programs. Family workshops such as "Fire & Ice: Volcanoes & Glaciers", K-12 school programs, and community oriented events like the annual "Shorebird Festival", are just some of the offerings. Programs are directly tied to ongoing Reserve research to increase public awareness and promote stewardship. Currently, staff scientists are developing a comprehensive research program to study the poorly understood interrelation-



A view from the visitors center overlooking Beluga Slough and Kachemak Bay.

ships between oceanic, nearshore and watershed processes. The boundaries of this impressive research extend to the Pye Islands in Kenai Fjords National Park, to Shuyak Island in the Kodiak Archipelago, across Shelikof Strait and Cook Inlet, and to the north as far as Kenai. A catalog of baseline data for current habitat structure is underway. Once complete, the information will serve as a springboard for new research to effectively monitor and manage the Reserve. To find out how this exciting project is progressing, and to participate in their engaging programs, plan a visit to the only fjord in the NERR system! To learn more about traveling to Kachemak Bay, visit their website at: <http://www.habitat.adfg.state.ak.us/geninfo/kbrr/index.html>, and experience firsthand the majesty of Alaska!

Katie Arey
Naturalist, GBNERR