

President's Corner



In early November I had the opportunity to spend five days at the annual NERRS conference in Coronado Bay, CA. The Friends and Foundations Network consists of fifteen support groups to the Reserves including our Great Bay Stewards. During the conference we discussed mutual concerns, successes and means to further our mission statements. All Reserves are partially funded by NOAA and most depend on various state governmental organizations for major funds. In New Hampshire this revenue comes from the Fish and Game Department. With the present economy all the Reserves are extremely grateful for the fiscal support of their Friends' groups.

During the week we were given a unique opportunity to visit the host Reserve and to travel through its watershed.

The Tijuana River NERR is located in Imperial Beach, CA right on the border with Mexico. We had breakfast hosted by the Reserve's Friends group at their beautiful center, walked the grounds and then were bused to the high mesa on the U.S. side to view the sediment collection ponds, the marsh restoration area and the new wall built to keep out illegal immigrants. Surrounding the wall, actually three walls, is a wide swath of canyon now being seeded and controlled with erosion barriers. Border patrol, lights and radar are part of the landscape. During lunch on a high bluff overlooking the Pacific Ocean we were allowed, twenty-five of us at a time, to cross through the wall and walk one hundred feet into Mexico to view the friendship monument dedicated by the Mexican and U.S. presidents. The border patrol carefully counted us through the wall.

Later, accompanied by five motorcycled policemen, we crossed the border into Mexico where three fourths of the Reserve watershed is located. We stopped in San Bernardino in Los

Laureles Canyon in Tijuana. The canyon is home to 40,000 squatters perched in makeshift houses on its steep slopes. During the rainy season the roads are impassable for many days. This area, denuded of any vegetation, drains directly into the Tijuana River. Oscar Romo, the Coastal Training Program Coordinator for the Reserve, explained his initiative, begun in 2005, of a holistic approach to improve the living standards of these impoverished people. He has become the catalyst of a bi-national exchange of academics and researchers to create a model for sustainable development. They have identified community leaders to inspire the residents to build porous pavers for erosion control and to work to create sanitation facilities. We were astounded to see tires being used everywhere as retaining walls. Unfortunately, during rainstorms, the tires and other trash wash down into the sediment pools and overflow into the river. When we asked the source of all these tires, the answer was the U.S. Standing near the top of Los Laureles Canyon one has a clear view of the shining buildings of San Diego to the north.

As a startling contrast to the afternoon's visit, we motored to Tecate, Mexico for a fine dinner in a lovely restaurant before journeying back to the U.S. Oscar Romo said he wanted us to taste and feel the jarring sights of this memorable day.

Every Estuarine Reserve has unique issues dealing with sustainability but the day spent with the Tijuana Reserve gave me a new perspective on the possibilities for change.

Let's support GBNERR's Coastal Training Program Coordinator, Steve Miller, in his efforts to make Great Bay a sustainable estuary.

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 _____

Fleeting Frigid Habitat

The bleak skies and frigid winds of winter bring temperatures that change Great Bay into frozen ground, an ephemeral habitat that adds hundreds of acres of new “land” available to wildlife during the coldest winter months. What is seasonally open brackish water, supporting a variety of aquatic habitats and species, becomes a frozen extension of the upland, an easily accessible expanse of open space. Species like the eastern coyote, the American crow, river otter and the bald eagle use the ice to their advantage as they hunt and scavenge for food.

As food like mice and voles become more difficult to find, eastern coyotes will hunt larger prey such as white-tailed deer. When hunting deer, coyotes hunt in packs. One or more coyotes will chase a deer while the others wait, then the next group will pick up the chase. Working in teams like this, coyotes will exhaust a deer, making it easier to kill. As the pack drives the deer onto the ice, it becomes next to impossible for the deer to escape. A deer’s hooves are no match for the clawed paws and agility of an aggressive pack of coyotes.

Toward the latter part of last winter, two deer kills were found on the shore in front of the Discovery Center. It was

clear from the tracks in the snow, that a pack had chased a deer onto the ice, circled it and took it down. What was left of the carcass after the coyotes were done became a meal for scavenging bald eagles and crows. When the ice and snows melted, the bones that remained eventually disappeared into the marsh and mudflats. Here the bones are broken down by bacteria and add to the base of the detrital food web driving Great Bay’s complex estuarine ecosystem.

The ice also provides birds such as herring gulls, crows and eagles a platform with direct access to open water. While perched in the trees above the bay, eagles can wait for their preferred winter meal of black duck near the open waters of Furber Strait or at the mouths of the Squamscott and other rivers that empty into the bay. A fresh kill can be taken immediately onto the ice to eat where birds can easily spot potential predators and competitors well before they arrive.

The fact that Great Bay and its tributaries freeze may also be one of the reasons there remains such a diversity and abundance of wildlife throughout the winter. There are relatively few estuaries in the country that actually freeze like Great Bay does.



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Another benefit to this frozen salt water is access for humans. Ice fishing has occurred for centuries throughout the Piscataqua region for species such as rainbow smelt and white perch. Access to these species would be considerably more limited if not impossible for anglers, without this welcomed winter event.

So cross your fingers for another seasonably cold winter, bundle up and come discover fascinating, fleeting, icy Great Bay!

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



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The open ice of Great Bay can serve as a killing field for coyotes looking to hunt down white-tailed deer.



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Destination: *Maine*

Wells National Estuarine Research Reserve

Ward off the icy chill of a traditional New England winter with a crackling fire and toasty cup of cocoa. Outside, trees are glistening and the landscape appears still, but to the trained eye this snowy wonderland is bursting with activity. Discover the mysteries and adventure that winter has to offer by staying close to home this season, and visiting the Wells National Estuarine Research Reserve at Laudholm Farm in Wells, Maine.

Designated in 1984, the 2,250 acre Reserve works with the general public and coastal decision-makers to protect the natural resources and landscape throughout the southern coast of Maine. Reserve scientists expand knowledge of coasts and estuaries with an emphasis on ensuring healthy salt marsh ecosystems, by measuring the affects of non-native plant and animal species, and monitoring land use impacts on coastal watersheds.

Fields, oak-pine forest, freshwater wetlands, salt marsh, dunes and sandy beaches are just a few of the diverse habitats waiting to be explored. Seven miles of trails provide the public with access to and through these habitats. The Wells Reserve manages and protects a diversity of wildlife that depend on these habitats, including threatened and endangered species such as Piping Plover shorebirds, native Slender Blue Flag Iris, and two species of native Joe-Pye Weed, formerly thought to be extinct in Maine.

The 19th-century buildings at Laudholm Farm are rich landmarks on the National Register of Historic Places, which have been renovated to serve the Wells Reserve's 21st century research, education, and stewardship mission. The visitor center, located in the main farmhouse, welcomes tourists and locals alike with educational exhibits, videos, and a range of special seasonal programs. Experience the snow-dusted landscape, spy for signs of animal activity, and enjoy breath-taking vistas on a snowshoe or cross-country ski excursion through the Reserve's trails. If an indoor activity is more appealing, sign-up for the early morning Hatha Yoga classes offered at the Reserve, and center your spirit. Be sure to check the upcoming activity



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schedule for the annual Winter Family Fun Day. Stories, crafts, games, guided walks, and activities for all ages make for a wonderful day with or without snow.

Winter is the perfect time of year to curl up with a good book by the fire. The Dorothy Fish Coastal Resource Library is located at the Reserve, and offers more than 3,500 volumes on coastal environments, estuarine issues, and watershed conservation, audio-visual materials and periodicals for the general public to enjoy.

Save travel time and money this season by planning a relaxing “staycation.” For hours of operation, schedules, and additional information visit the Wells Reserve website at: <http://www.wellsreserve.org/>, and celebrate the frosty beauty of New England.

 *Katie Arey*
Naturalist, GBNERR