Spring 2010

The Pickleweed

The Newsletter of the Huntington Beach Wetlands Conservancy, Inc. (A Nonprofit Corporation)

21900 Pacific Coast Highway (PCH at Newland) Huntington Beach, California
Phone: 714-536-0141 Email: hbwetlands@verizon.net Website: www.hbwc.org

A Message from Our Chairperson

By Gordon Smith

As you will see from the articles that follow, the past few months have been eventful indeed for the Conservancy. We've made great strides in our marsh restoration efforts, and we've received awards in recognition of our accomplishments. You'll also see that our efforts have garnered a great deal of attention from the public, the media, and even Congress. Our February 26 opening of the Magnolia Marsh flood control levee drew print media and television crews to witness the first influx of ocean water in more than 100 years. In March, we presented our Magnolia Marsh restoration project as part of a Congressional briefing. And, with the help of our NOAA partners, we held a very successful Earth Day/Grand Opening Festival in April.

We've also had our challenges of late; not all events of the past months have been favorable for us. In January we had to deal with an oil spill that threatened our wetlands. Several barrels of crude oil were illegally flushed into the Huntington Beach storm drain system and from there into the county flood control channel that opens to our marshes. City, state and federal agencies mobilized to respond to the spill, containment booms were deployed, and a cleanup contractor was hired to remove the oil. Although a number of birds were coated with oil, the spill was confined to the channel and none of the oil entered our wetlands. The oil spill incident brought back memories of the 1990 American Trader oil spill off Huntington Beach in which an oil tanker ruptured and leaked 400,000 gallons of oil, some of which entered our Talbert Marsh despite our round-the-clock efforts to prevent it.

Conservancy Receives Awards

The Conservancy has been honored with awards from the National Oceanic and Atmospheric Administration (NOAA) and from the Orange County League of Conservation Voters. The award from the NOAA Restoration Center is for "Excellence in Restoration" in recognition for the Conservancy's work to restore the Magnolia Marsh. League of Conservation Voters named the Conservancy the "Environmental Non-Profit of the Year" for its restoration of the Brookhurst and Magnolia marshes.

Mr. Smith Goes to Washington

The Conservancy was chosen to join two other restoration projects in providing a Congressional briefing in the capitol on March 2. Organized by NOAA, the briefing was intended to showcase the use of federal stimulus funds to create local jobs and restore coastal habitat. Chairperson Gordon Smith gave a presentation on the Magnolia Marsh project to a standing-room-only audience at the U.S. Capitol.

Gordon Smith Speaking at Congressional Briefing

Earth Day Festival a Success

Several hundred visitors enjoyed the April 17 festival organized by the Conservancy and NOAA to celebrate Earth Day and the grand opening of the Magnolia Marsh. Events included marsh and nursery tours, a guest appearance by child actor Will Shadley from "The Spy Next Door," a film on wetlands narrated by Will, and arts and crafts and a "touch tank" for the younger guests. Coconut Productions' steel drum band provided entertainment, and a dozen other local environmental groups joined NOAA and the Conservancy in providing information booths and tables. The event culminated in a ribbon cutting for the new observation deck and boat dock

Rep. Rohrabacher, Mayor Green and NOAA's Margaret Spring join Smith for the Ribbon Cutting

Gorman Leaves Conservancy

Gary Gorman, a founding member and first chairman of the Conservancy, left the organization at the end of March. Gary, a retired firefighter, had been working under contract with the Conservancy to manage building and restoration projects. With the conclusion of the Magnolia Marsh project, Gary decided to pursue travel and other interests. Over the years, Gary has served a key role in the organization as both a tireless volunteer and project manager. The Conservancy board wishes him well in his new endeavors.

Volunteering for the Conservancy

Due to unpredictability in attendance, the Conservancy is discontinuing its second Saturday of the month restoration workdays. Focus will now be on specially scheduled volunteer service events that address particular needs. Each Fall, for example, we will organize a trash cleanup in conjunction with California Coastal Cleanup Day (September 25 this year), and another major cleanup in early March to remove trash from the winter rain storms. Announcements of other volunteer opportunities will go out to our email list and will be available on our website at http://hbwc.org. Inquiries for more information about volunteering can be sent to our email address hbwetlands@verizon.net.

On the subject of volunteering, we would like to thank the volunteers from the LDS church and from Wells Fargo Bank for their recent work in our wetlands. LDS volunteers completed planting of an entire berm in Brookhurst Marsh, as well as working in our nursery and clearing trash in Talbert Marsh. Wells Fargo volunteers removed trash that had washed down the flood channels and provided a generous donation for the purchase of rubber boots.

Post-Restoration Biological Monitoring

By Christine Whitcraft, Bengt Allen, and Chris Lowe

"One fish, two fish, red fish, flatfish"; a modification on a familiar childhood ditty about counting fish. However, it is one summary of the questions we are asking about the wetland habitat in Huntington Beach. "We" are an interdisciplinary team of scientists from California State University Long Beach, working with the Huntington Beach Wetlands Conservancy (HBWC) to determine how well the newly restored wetlands work as fish habitat.

Understanding if juvenile fish are using the marsh, where they go within the marsh, how long they stay in the marsh, and their activities while in the marsh help us get an idea of whether the newly restored Brookhurst marsh is functioning like a healthy marsh should.

Standard post-restoration monitoring for large-scale wetland restoration projects typically focuses on structural attributes of the restored habitats (for example, counting plants or just counting fish). Recent research has emphasized the importance of evaluations that include ecosystem functions, such as providing habitat for commercially valuable and endangered species, food web support, and regional connectivity among populations of mobile organisms. One species of fish that uses wetland habitats is the California halibut (*Paralichthys californicus*), a commercially important fish species and the focus of our study.

We are combining multiple techniques to evaluate how the marsh is functioning as a restored habitat. First, we are taking standard abundance estimates of halibut using beach seines and hook-and-line fishing. We are also counting fish food, such as worms, plants, and algae. Second, we are combining abundance measurements with behavioral data to understand where the fish are hanging out in the marsh and how long they stay there. We do this with acoustic tagging studies: we tag a fish with a transmitter and follow it from a surface boat for 72 hour periods, making a map of where in the marsh the fish spend time.

What have we learned so far? The best news is that fish are using the new channels in Brookhurst Marsh! Why? We have not yet answered this question, but we have seen changes in the amount and type of food available in the marsh. Pre-restoration, Brookhurst had a limited suite of species (mainly terrestrial pill bugs), but only 6 months after the opening of the levee, Brookhurst Marsh has a more complete invertebrate community (including worms and snails). This indicates that one component of fish habitat is returning. Maybe because of this food or maybe for another reason, the fish are staying for periods of at least ten days (the battery life of our transmitters). Overall, this means the restoration activities are progressing as predicted.

What's next? One upcoming experiment is to classify what the halibut are eating using caging experiments. We also plan to put transmitters on fish that will last a year (instead of ten days); we will place automated listening stations throughout the marshes to see how long the fish stay and continue to use these newly restored habitats. It will be interesting to see how the sizes of the halibut we find change as the wetlands themselves develop. In Southern California wetlands, the restoration and improvement work is never done!

Restoration Project Update

The 62-acre Brookhurst Marsh, located between Brookhurst and Magnolia Streets and opened to full tidal influence last year, is in the final stages of re-vegetation. Two-thirds of the 22 "berms" or islands have now been planted with wetland plants from our nursery. An irrigation system will continue to supply fresh water to aid the establishment of the plants through the summer season. Each berm is designed to always be a couple of feet above the highest high tide to provide nesting sites for the endangered Belding's savannah sparrow. As reported in the accompanying article on monitoring, we are already seeing considerable use of the marsh by birds and fish, including juvenile California halibut.

The Magnolia Marsh between the AES generating station and Magnolia Street was opened to tidal influence in February. Work is still underway on the trail system, and excavated soil is still being dried in order to prepare it for transportation to a landfill. We expect re-vegetation to commence in the Fall of this year.

Opening the Magnolia Marsh Levee

Notable features of the Magnolia Marsh are the observation deck and boat dock completed in April. Along with a planned interpretive trail system and signage around the marsh, the observation deck will be

Magnolia Marsh Observation Deck and Boat Dock

key to making the marsh our educational "showcase" for visitors interested in learning about the role coastal wetlands play in our ecosystem.

The boat dock will be used for our maintenance boat, and perhaps in the future for "on-the-water" docent tours.

For a day-by-day pictorial history of the restoration, a NOAA "earth cam" is available to the public online at http://www.earthcam.com/clients/noaa/magnolia/.

Our other project, which will now get more of our attention, is completion of our interpretive center in the building off Newland Street. The Acorn Group has produced an outstanding design for the center, and fundraising efforts will continue. So far we have received significant donations from AERA Energy and the Wells Fargo Foundation.

Our Board of Directors

Gordon Smith, Chairperson
Kristen Bender, Vice Chairperson
Bill Weisman, Secretary
Ann McCarthy, Treasurer
Jack Kirkorn
Jim Robins
Dick Zembal

WE CAN ONLY RESTORE AND MAINTAIN THESE VITAL WETLANDS WITH YOUR CONTINUING SUPPORT

---------- ----(CUT HERE)----------(CUT HERE)----------

Please join our contributors with your personal donation to wetlands restoration and maintenance activities

With your annual tax deductible contribution you will receive our newsletters, invitations to special events and our thanks for your help with this exceptionally worthy cause.

- o This is a new contribution
- o This is a renewal of my annual contribution
- o Great Egret ($10)
- o Belding's Savannah Sparrow ($25)
- o California Halibut ($50)
- o Least Tern ($100)
- o Brown Pelican ($250)
- o Other Amount ($_____)

Name: _____

Address: _____

City, State, Zip: _____

Phone: _____ E-Mail: _____ (o I prefer to receive regular mail)

My interests include:

- o Docent training
- o Docent walks
- o Wetlands restoration
- o Native plant propagation
- o Newsletter articles
- o Wildlife monitoring
- o Interpretive center staffing
- o Other _____

Please cut this out and mail along with your contribution to:

HBWC, PO Box 5903, Huntington Beach, CA 92615