



# Chesapeake Bay National Estuarine Research Reserve Maryland

## 2008-2009 Accomplishments



Osprey banding

The Chesapeake Bay National Estuarine Research Reserve in Maryland (CBNERR) protects close to 5,000 acres at three estuarine sites for use as living classrooms and living laboratories.

**MISSION:** Improve coastal resource management by increasing scientific understanding of estuarine systems and making estuarine research relevant, meaningful, and accessible to managers and stakeholders.



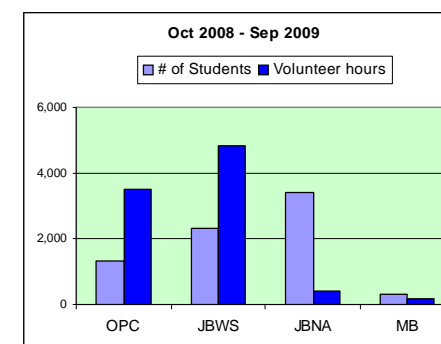
The Chesapeake Bay National Estuarine Research Reserve in Maryland (CBNERR) is a federal, state, and local partnership between the National Oceanic and Atmospheric Administration, the Maryland Department of Natural Resources, and four local partners: Harford County, the Izaak Walton League of America (Harford County Chapter), Prince George's County/Maryland-National Park and Planning Commission, and Anne Arundel County. Call 410-260-8720 or see website below for more info.

### Accomplishment Highlights

- CBNERR a national demonstration Climate Change Sentinel Site
- Sellman property acquired at Jug Bay
- *Going Green Downtown* guide developed by Coastal Training Program
- 20 Coastal Training Program workshops
- Two teacher trainings on Estuaries 101
- Wild rice restoration a national model



Climate change research



### Annual Statistics (Oct 2008-Sep 2009)

- 4,949 acres continue to be protected
- 28 research programs
- 7,361 students served by 317 education programs
- 8,900 volunteer hours delivered
- 3,003 training hours to decision-makers delivered via 20 Coastal Training Program workshops

See [www.dnr.state.md.us/bay/cbnerr](http://www.dnr.state.md.us/bay/cbnerr)  
 publications for detailed List of Accomplishments

**Sound Science...Finding Solutions...Wise Decisions**



*Is the marsh keeping up with sea level rise?*

## Research

- CBNERR a national Climate Change sentinel site with:
  - Real-time weather and water quality data
  - Marsh accretion and erosion studies
  - Marsh plant and bay grass monitoring to see if plant communities are changing with climate change and sea level rise
- Jug Bay Site Manager contributed to freshwater tidal wetlands book and—together with CBNERR Research Coordinator—initiated and organized fresh tidal wetlands session for Coastal & Estuarine Research Fed. meeting in 2009
- Biomonitoring for bay grasses, fish, amphibians, reptiles, and birds continued



*Blue grosbeak*

## Otter Point Creek (Harford County Anita C. Leight Estuary Center and Izaak Walton League Bosely Conservancy)

- Hosted two large events: 2009 Annual NOAA Restoration Day for over 150 volunteers and Upper Western Shore Wade-In for over 300 attendees
- Started a new student-driven beaver study in the marsh
- Introduced a public kill-a-watt meter rental program for home assessments
- Installed a new Sensory Trail around the visitors center



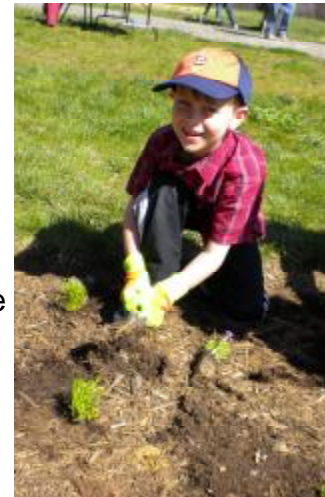
*Sensory trail*



*Teacher training*

## Education and Coastal Training

- *Going Green Downtown*—a sustainability guide for Maryland's Main Street developed by Coastal Training Program in collaboration with the Department of Housing and Community Development
- 20 coastal training workshops addressing climate change, restoration, urban/suburban development, conservation communication, and green communities
- Two teacher trainings on Estuaries 101 and Chesapeake Bay 102
- Ongoing student and public education programs



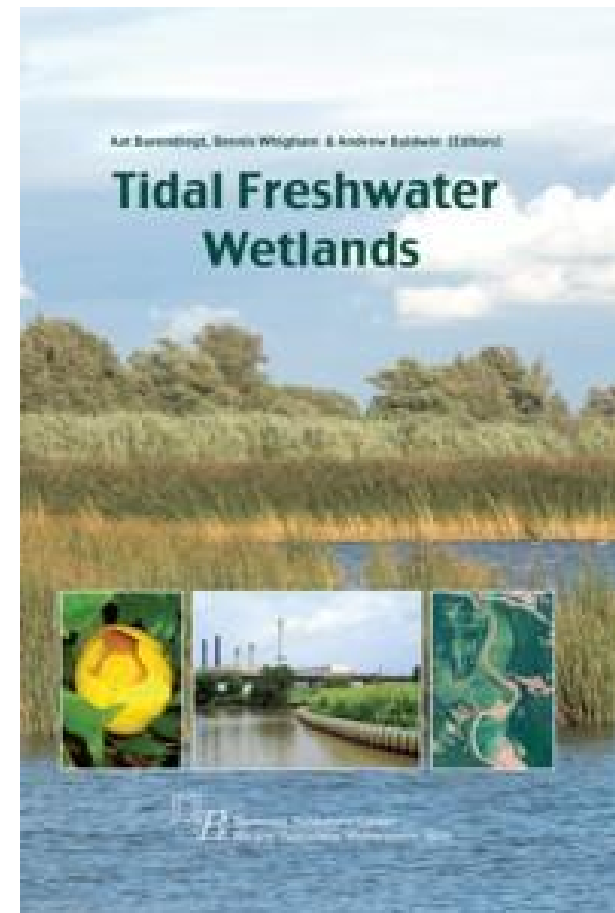
*Bayscaping workshop*

## Stewardship

- Sellman property added to Jug Bay with NOAA Coastal and Estuarine Land Conservation Program funds
- Volunteer monitoring
- Wild rice restoration project
  - Invasive species removal
  - fencing
  - planting
  - resident Canada geese control
- Worked with Civic Justice Corps. CJC volunteers removed the invasive species purple loosestrife



*Volunteer fish sampling*



*Chris Swarth authored two chapters*

## Monie Bay

- Provided estuarine education to 300 4th graders at the 16th Annual Wetlands and Wildlife Field Day
- Continued vegetation monitoring

## Jug Bay Natural Area/ Patuxent River Park

- Conducted first Bioblitz at Jug Bay Natural Area
- Conducted river clean up activity with over 30 volunteers collecting over 2,000 pounds of trash
- Interpretive programs and conservation projects with the Civil Justice Corps
- Sponsored Big Bubba Fishing Rodeo with grant from the National Recreation and Parks Association and the Recreational Boating Federation

## Jug Bay Wetlands Sanctuary/ Anne Arundel County

- Added 43 acres to the Sanctuary (Petrie-Chaney; Dorr; and Krause parcels)
- Upgraded JBWS web site with funds from the Friends of Jug Bay ([www.jugbay.org](http://www.jugbay.org))
- Organized and held second JBWS BioBlitz
- Presented five papers at conferences (Atlantic Estuarine Research Society; American Ornithologists' Union; American Geophysical Union; Maryland Association for Environmental and Outdoor Education)
- Published two chapters in *Freshwater Tidal Wetlands* reference book