

## Returning to its natural glory



PHOTO BY CLAY OWENS Calling it "his office," Jan Reese helps monitor the many species of birds calling Poplar Island home. Here, he is seen watching the double-crested cormorants feeding.

By CLAY OWENS Staff Writer

Published: Sunday, August 3, 2008 8:17 AM CDT

POPLAR ISLAND If the restoration goes as expected, Poplar Island in 2014 will look similar to its appearance in 1847, except for the small community that called it home.

Work on the Paul S. Sarbanes Ecosystem Restoration Project on Poplar Island (as the project is formally known) began in 1998. Ten years later, the island's outline has been restored and sections of the island lost to erosion over the course of 150 years are becoming again the home for many different animals.

The island was first settled in the 1650s. During most of the 19th century through the early part

of the 20th, Poplar Island (measuring roughly 1,140 acres) was a small but thriving community with its own school, hotel, church, post office and saw mill. But as erosion, exacerbated by the trees being cut down, caused the Chesapeake Bay to reclaim the island, the inhabitants moved to new homes. By the time the restoration started, the site had been reduced to four small islets.

From, nearby Jefferson Island, the site of a hunting lodge, presidents Franklin Delano Roosevelt and Harry S. Truman frequently used the remnants of Poplar Island as a spot to hunt for deer and other animals. Coaches' Island, where many of the deer now live, is close enough that they can cross over when the tide is low. Jefferson Island currently is for sale and Coaches' Island has an owner that visits occasionally. Both could face the same fate as Poplar Island appeared to have before restoration.

On a limited basis, tours of the island are now available and leave from the Maryland Environmental Services' facility on Tilghman Island. On average, 3,000 people visit Poplar Island each year that are interested in seeing the wildlife which has returned to the island and how the restoration, which has never before been attempted on such a large scale, is going.

"It's all word-of-mouth. It's pretty amazing," said Robin Armetta, an environmental specialist with MES who conducts tours on the island. While tours are generally not advertised, she hopes more people will learn about the work being done and will want to visit the island.

Funding will be the major determining factor for the project's estimated completion date of 2014, said Project Manager Dave Bibo of the Port of Baltimore.

Along with MES, the U.S. Army Corps of Engineers (which is paying for 75 percent of the project), Maryland Port Administration and several other agencies have contributed to the \$407 million project, with many others actively monitoring the work and the animals and vegetation now calling Poplar Island home.

The project benefits not only the wildlife already returning to the island, but also the state's economy. Rocks, stones and sand were used to create a perimeter resembling the island's original shape and the infill which will become the island is actually material dredged from the shipping channels going into Baltimore. The material is delivered to the island between November and March when the animals are not as numerous or likely to be disturbed.

Because the channels have to be dredged regularly to allow large commercial ships to access the port, and the dredged material must be disposed of in a safe manner, Poplar Island became the beneficiary. Eventually, 40 million cubic yards will be used in the project.

Instead of doing everything at once, the island has been sectioned off into six "cells," with each being in different stages of completion. The two largest cells on the west side will eventually become highlands with trees and meadows, protecting the rest of the island's low wetlands and marshes and allowing for runoff to be filtered.

When the dredged material is transported to Poplar Island, it is thick, gooey and moist not looking too different from a melted chocolate bar. Before work can begin, the moisture must be

removed, with spillways placed in each cell to allow the water to go back into the Bay after it has been monitored. Once the material is dry, the process is repeated until the cell reaches its specified height.

Once this is done, work can begin to restore vegetation and attract animals. Much of the work is done by volunteers, with groups locally and from across the nation coming to the island to help when they can and learn about the restoration work first-hand.

"A wetland takes a long time to be self-sufficient and self-sustaining. We can design it as we think it should look. Over time, it will be up to nature to decide what it will look like," Bibo said.

Much of the work requiring large earth-moving equipment is on the western side of the island in what Bibo called "Phase Two" of the project. While the northern section has been largely drained of water, the machinery must be careful to work only in certain locations known to be dry or else the equipment would quickly sink and become stuck. Even with giant trucks moving tons of infill, hatchlings frequently are seen scattering around the area.

In the southern part, which was open to the Bay until 2007, water is being drained at a rate of 6 inches a day. When dry, it will be 10 feet below sea level when work begins to fill it.

If the large numbers and varieties of birds and turtles now making the island home or a stop during migrations is an indicator, the work is going well. To encourage this, the island has several areas constructed to encourage the birds to visit, with everything from old Christmas trees, large piles of oyster shells and decoys of various species used to attract them. Casey Carr, who monitors the animals for MES, called the process "adaptive management," saying they were willing to try almost anything they think will attract wildlife.

"We're already attracting animals and we have a long way to go," Carr said.