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Expansion Work Has Begun

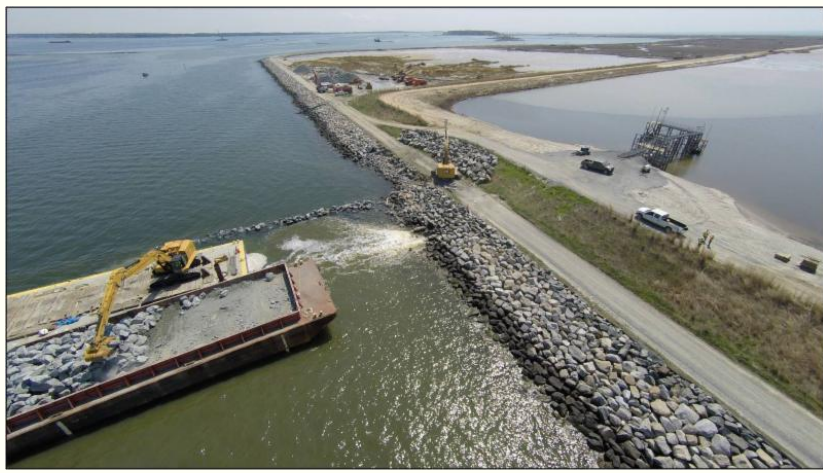
The perimeter dike for Cell 7 is now visible

Work is underway on a 575-acre north east expansion of Poplar Island. This project - which was authorized by the Water Resources Development Act (WRDA) of 2007 - will allow for the placement of an additional 28 million cubic yards of dredged material, and will increase Poplar's size from 1,140 to 1,715 total acres.

This material, which occupies roughly the same volume as 316,000 shipping containers, will be used to create additional critical habitat for wildlife that live, nest, or stopover on Poplar Island. This includes habitat for many rare, threatened, and endangered bird species. The 575-acre area has been divided into different work areas, or "cells," which will be constructed into three different types of habitats.

The expansion will include:

- A 259-acre upland forest cell
- Four additional wetland cells (totaling 206 acres)
- A 110-acre open-water embayment



Rock being placed for the dike construction
photo credit David Gray (U.S. Army Corps of Engineers)

Island restoration starts with the construction of perimeter dikes built of sand armored with boulders for erosion protection. After a perimeter dike is completed, dredged material can then be placed inside the cell. The perimeter dike of Cell 7 will be the first constructed in the expansion, with completion expected in November 2017.

Cell 7 will be used to stockpile sand and stone as expansion continues in other cells on Poplar Island. Ultimately, Cell 7 will add 49 acres of new intertidal wetlands to the project. Intertidal wetlands - areas exposed to air at low tide and submerged at high tide - are crucial Bay habitats and provide countless environmental benefits.



Cell 7 perimeter dike
photo credit David Gray (U.S. Army Corps of Engineers)

Cell 5AB Development

Cell 5AB will be opened to the Chesapeake Bay this winter

There are currently seven developed wetland cells on Poplar Island, totaling 289 acres. The completion of Cell 5AB, located at the southern tip of the island, will add an additional 83 acres of developed wetland habitat to the project.

Wetlands are crucial ecosystems within the Chesapeake Bay, providing important habitat and nesting areas. The expansion of wetland acreage on Poplar Island will benefit numerous species that obtain resources on the island.



A pontoon excavator creating a tidal channel

Transforming Cell 5AB into a wetland first involves grading, or leveling, the land. Inches count when constructing wetlands: if the elevations aren't correct, the cell may not experience proper tidal flow and flooding to support wetland plants that will eventually be planted.

After grading is complete, Cell 5AB will be opened to water flowing from the Bay. This stage of the process is expected to occur this winter, as sections of the perimeter dike will be removed, allowing water to flow in and out with the tide. The flow of water will allow the dredged material to reach a steady level and will add enough water to support wetland vegetation that will be planted in spring 2018.



A bulldozer working in Cell 5AB

Wildlife Update

Poplar Island welcomes new bird species

Organizations including U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), U.S. Geological Survey (USGS), and Ohio University monitor wildlife populations on Poplar Island. Biological assessments, such as species diversity and abundance, allow researchers to gauge the health/success of the island.

With the restoration of Poplar Island, much needed diamondback terrapin habitat is being provided. Diamondback terrapin habitat has continued to decline in the region. Within the first year of operations, terrapin nests were discovered in the sandy areas of the project. These nests are now monitored by Ohio University

under the direction of the U.S. Army Corps of Engineers. Over the past nesting season, 181 terrapin nests were identified, producing 632 terrapin hatchlings to date.



Two terrapin hatchlings from the 2017 nesting season

The waterbird monitoring project conducted by USGS focuses on avian use of restored habitats at Poplar Island. This includes habitat use, breeding population estimation, and assessments of productivity. In 2013, USGS modified the monitoring method with the addition of a mark-resight pilot project to estimate least and common tern productivity. The tern fledglings are fitted with two bands (a metal USGS band and a plastic field-readable band) and their breasts are marked with different color combinations. The color combinations can be seen more easily by field biologists using spotting scopes to identify those chicks multiple times per week. Over the recent nesting season, USGS banded 315 terns: 297 common tern chicks and 18 least tern chicks. In 2017, Poplar Island had the largest successful nesting common tern colony in Maryland. This nesting colony was located in Cell 2C.



Least tern chick (left) and common tern chick (right) banded by USGS

During the monthly bird surveys performed by Maryland Environmental Service, several new and notable bird species were observed on Poplar Island in 2017. Consequently, the observation of multiple new bird species on Poplar Island is both exciting for researchers and birders, and a positive indicator of the valuable habitat Poplar Island is providing. The presence of these birds also gives birders a chance to add new birds to their species lists.

New species sightings include the following:

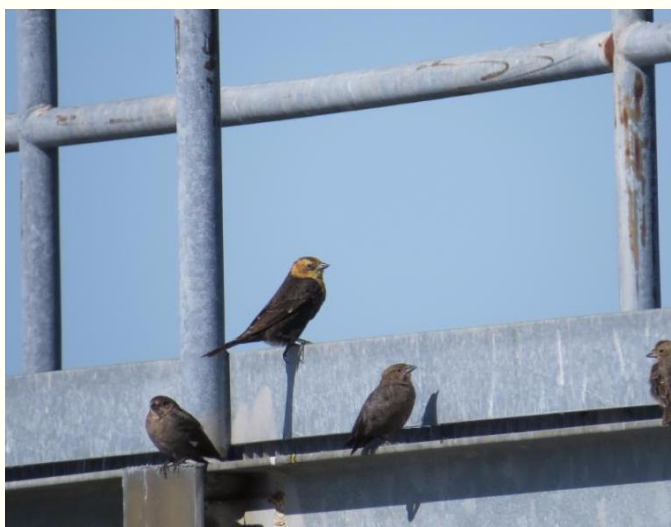
- White-eyed vireo (May 9)
- Sabine's gull (September 8)
- Yellow-headed blackbird (September 8)



White-eyed vireo in Cell 4D
photo credit Tim Carney (Maryland Environmental Service)



Sabine's gull in Cell 2C
photo credit Tim Carney (Maryland Environmental Service)



Yellow-headed blackbird in Cell 2C
photo credit Tim Carney (Maryland Environmental Service)

Other recent notable sightings include:

- Common gallinule
- Northern waterthrush

- Red knot
- Barn owl
- Yellow-crowned night-heron
- Marbled godwit
- Buff-breasted sandpiper
- Long-billed dowitcher

To date, 224 species of birds have been identified and 34 species have been confirmed nesting on Poplar Island. Nesting species include the black-necked stilt, American oystercatcher, And the american black duck.

In addition to multiple notable bird sightings, a new mammal has been recorded on Poplar. An eastern red bat was found roosting in dense grasses in Cell 3C!

Fall Migration and Birding Tours

[Schedule a Poplar Island birding tour and observe fall migrants.](#)

Situated in the heart of the Atlantic Flyway, Poplar Island offers avian enthusiasts an exciting chance to observe migratory bird species as they begin their journeys south.

Cued by seasonal changes in the daylight length, or photoperiod, birds have already begun their journeys south. Following migration paths (flyways) shaped by geographical boundaries (mountains, rivers, and oceans), birds travel extreme distances to reach winter ranges with good resource availability. As this often involves traveling hundreds - if not thousands - of miles, migration starts earlier than one might expect. Highest numbers of migrants are typically seen in August, September, and October, though migration can extend into late fall and early winter.

As migratory birds travel, accessing safe places to rest and refuel is especially critical. Poplar Island serves as one such stopover point for birds as they migrate, providing birds access to good habitat, and birders access to exciting species sightings. Poplar Island welcomes the public to join Maryland Environmental Service staff on guided birding tours.

Tours are offered twice a month from April until the end of October. They are held weekdays and are free of charge. If you are interested in joining an upcoming birding tour, please contact poplartours@menv.com or (410) 770-6503. A current Poplar Island bird species list is also available upon written request.



About Poplar Island

Poplar Island, located in Talbot County, Maryland is estimated to have comprised 1,140 acres in 1847, and supported over 100 human residents and diverse wildlife. Poplar experienced extensive erosion; by the 1990s the island consisted of a mere five acres.

In 1994, a team of federal and state agencies headed by the U.S. Army Corps of Engineers and the Maryland Department of Transportation Maryland Port Administration determined that Poplar Island should be restored to its historic size. This would be accomplished by using dredged material from the Chesapeake Bay shipping channels to rebuild lost land mass.

Today Poplar Island is an international model for the beneficial use of dredged material. Poplar is an official monarch waystation (#12821) providing milkweeds, nectar plants, and shelter for monarchs. Poplar serves as a wintering site, transient stop, and nesting location for local and migratory birds, including many rare, threatened, or endangered species. It also provides shelter and quiet water habitat for wildlife such as diamondback terrapins, crabs, and fish.

Public tours run Monday to Friday, March through October. Registration for the 2018 tour season will begin January 15, 2018. We look forward to seeing you on Poplar Island!

To schedule your visit please contact us at:

poplartours@menv.com

(410) 770-6503

