

TIDAL MARSH

The Chesapeake Bay region has extensive marshes that provide winter food and habitats for a variety of geese, ducks, shorebirds, other birds, and mammals. Tidal marsh is the dominant landscape feature at Blackwater Refuge, but since its establishment in 1933, Blackwater has lost more than 7,000 acres of marsh. Most of this loss has occurred in the three-square bulrush brackish marsh at the confluence of the Little Blackwater and Blackwater Rivers. Marsh loss is now progressing both up and down stream. This unusually high rate of wetland loss is thought to be the result of several controversial factors including sea level rise, land subsidence, saltwater intrusion, and plant loss from excessive grazing by native and introduced herbivores (plant eaters) like the exotic nutria.

Blackwater is developing plans to combat marsh loss through a program of marsh restoration and efforts for the control of exotic species. Increasing populations of resident Canada geese and the nutria, rodents introduced from South American to Dorchester County in the 1940s, have severely damaged vegetation in both moist soil impoundments and the tidal marsh. The negative impact of nutria on marsh health is even more dramatic because of its tendency to dig into the marsh organic mat, effectively lowering marsh elevation below the water line and preventing the germination of some plants.

A plaque describing marsh restoration at the visitor's center at the Blackwater National Wildlife Refuge.

Blackwater Refuge Scenes



Members of the MRCSP, University of Maryland, DOE, NETL, and Fish and Wildlife staff put on hip waders to prepare for their visit to a marsh restoration plot in the Blackwater.



En route to the marsh restoration plot in flat bottomed



The group walks over and through newly restored marsh.



The group hears about the progress to date in measuring the marsh, including the amount of carbon stored.



A research student at the University of Maryland drives an augur through the soil.



Research assistants at the University of Maryland examine the findings from the augur, showing different layers of soil, and newly added organic matter.

