# Oysters are Habitat Forming

The oyster reef in front of you was built through a partnership between the South Carolina Department of Natural Resources (SC DNR), U. S. Fish and Wildlife Service (USFWS), and local citizens using recycled oyster shell. Because it has been constructed in the **intertidal zone**, the reef is not visible at high tide. By constructing these reefs, natural material is returned to the environment to enhance eastern oyster (*Crassostrea virginica*) populations. An established oyster reef can improve water quality, increase **biodiversity**, and reduce erosion. Efforts such as this help rebuild South Carolina's declining oyster populations as well as provide habitat for estuarine dependent fish and wildlife.


**Oyster reef immediately after construction in June, 2008**



**Red drum, also called spottail bass, produced at Bears Bluff NFH are stocked in the marsh grass at high tide near oyster beds.**

## Fish Production at Bears Bluff NFH

**Estuarine** fish such as red drum (*Scaienops ocellatus*) are produced in the ponds behind you for stock enhancement. Upon release, **fingerlings** search for areas where they can find refuge from predators. Because oyster reefs are three dimensional, they not only provide excellent protection from predators but also increase habitat for other organisms that may serve as food for the fingerlings.



**Red drum, a highly prized recreational species, utilize oyster reefs for a large part of their life cycle**

## Did you Know?

- A single oyster can filter up to 50 gallons of water per day
- Oysters reefs provide essential habitat for fish, shrimp, crabs, birds and other estuarine dependent wildlife
- Oyster reefs serve as natural breakwaters that reduce erosion.
- Oyster populations along the east coast appear to be declining due to disease, pollution, excessive harvesting, and reduced suitable ***substrate***.
- Bears Bluff NFH produces approximately 500,000 red drum fingerlings annually for stocking into the local tributaries of the North Edisto River

## Glossary of Terms

**Biodiversity** Number of different species of organisms in a specific area
**Estuarine** Area where rivers meet the seas/oceans, are influenced by tides, and freshwater mixes with saltwater
**Fingerlings** Small fish, often very young
**Intertidal Zone** Area between high and low tides
**Substrate** The surface on which an organism grows or is attached

DNR