

Taking egg sample to determine if fish is ready to spawn



Stripping eggs from female striped bass prior to fertilization

**Number of Ponds:**

54 production ponds and 1 reserved for fire protection. Production ponds are comprised of 35, 0.5 acre ponds and 19, 1 acre ponds.

**Water Source:** Dennis Center water is supplied by Lake Moultrie with supplemental well water available. Bayless Hatchery water is provided by wells with a water storage tank to insure volume and flow.

**Acres of Water:** 37.5 acres.

**Reservoir Pond:** 60,000 acre Lake Moultrie.

**Brood Ponds:** Striped bass procedures now in use do not require the use of holding ponds. Brood ponds are used when selected sunfish are produced such as bluegill, redear and smallmouth bass.

**Species Raised:**

- Striped bass
- Hybrid striped bass
- White bass
- Smallmouth bass
- Bluegill
- Robust redhorse suckers



# Dennis Wildlife Center & Jack D. Bayless Fish Hatchery



## The South Carolina Department of Natural Resources Fish Hatcheries

The mission of the Department of Natural Resources' (DNR) fish hatchery program is to propagate those species of fish in sizes required to accomplish fishery management objectives as recommended by the biological staff and approved by administrative personnel, and to provide pond owners, at cost, largemouth bass, redear sunfish and bluegill for private pond management purposes.



DNR



*Hybrid Striped Bass*

**Location:** The Dennis Wildlife Center is located approximately .5 mile west of Bonneau adjacent to Lake Moultrie and Berkley County road 42. The Jack D. Bayless Hatchery is on the northern side of the Santee River Rediversion Canal. The hatchery is located off U.S. 52 on a dirt road serving the St. Stephen Dam.

**Personnel:** Chief of the Dennis Wildlife Center, fishery biologist, hatchery manager, fishery technicians (5) and administrative specialists.

**Background:** The Jack D. Bayless Hatchery was constructed in 1986 as part of a mitigation agreement with the Corps of Engineers related to the Cooper River Rediversion Project. The hatchery replaced an existing facility at the Pinoplis Dam tailrace which was made ineffective by the Cooper River Rediversion Project.

Phase I of Dennis Wildlife Center construction was completed in 1973 with State appropriated funds and Anadromous Fish Funds from the U.S. Fish and Wildlife Service. The first phase included the administrative building, fish holding house, and thirty-five (35) 0.5 acre ponds. Phase II construction was completed in 1978, and included administration building enlargement, maintenance building, dormitory, two residences, and twenty additional ponds, 1.0 acre in size. In addition to the two major construction phases, facilities have undergone renovations as needed or when funds were available and include: one-half (0.5) acre pond restructuring in 1986; repairs of damage resulting from hurricane Hugo in 1988 to the administration building, fish holding, maintenance building, dormitory, and both residences; pump station construction in 1991; new aluminum risers in eight of the half (0.5) acre ponds in 1992 and 1993; refurbishing of dormitory in 1993. Additional upgrading of ponds and building was completed in 2001.

The Dennis Wildlife Center houses many agency functions, but the main objective of the Center is to produce fingerling striped bass and their hybrids for stocking in reservoirs and coastal streams, and to serve as a district office for fisheries, wildlife management and law enforcement operations.

The Tailrace Hatchery and eventually the Bayless Hatchery were constructed for the purpose of producing striped bass and their hybrids for public water stockings. The Tailrace Hatchery was the site for the majority of the pioneering research relating to striped bass propagation. With the construction of the St. Stephen Dam and Rediversion Canal the

Tailrace Hatchery's ability to obtain brood stock was reduced by the changes in river flow in the Cooper River.

Until the construction of the rearing ponds and facilities at the Dennis Wildlife Center, the agency was very limited in its grow-out capabilities. Most of these function were at different hatcheries which led to production and quality control variations.

**Land Acreage of Hatchery:** 200 acres.

**Fish House Construction:** A 3,300 square foot unheated wood-frame building with two (2) concrete troughs holding 1,870 gallons and four (4) concrete troughs holding 935 gallons. Ten (10) portable troughs (200 gallons each) and four (4) circular tanks six feet in diameter can be arranged within each open space as needed.

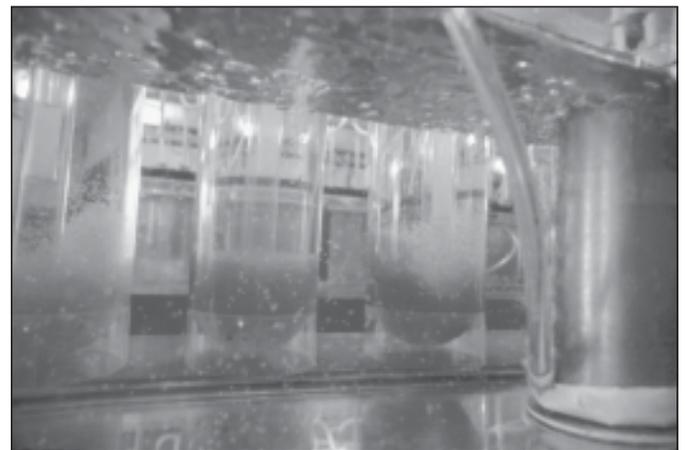
 **All Utilities:** Electrical service, well water, non-potable lake water and aeration.

 **Function:** To hold fish for preparation to ship or stock, research and other fish hatchery practices.

**Hatchery Building Construction:** Wood-frame plywood sided structure placed on a concrete slab. The building contains a laboratory, kitchen, dining room, hatching room, water closet and two rooms for storage and other hatchery functions. Associated with the structure are concrete water troughs and covered work area.

 **Utilities:** Electrical service, central air and heat in selected areas, water closet, potable water and phone service.

 **Function:** Fish spawning, hatching and fry production.



Fertilized Striped bass eggs hatching in McDonald jars