ack D. Bayless Fish Hatchery is a key component of the SCDNR's Freshwater Fisheries Management program. Combined with regional biological survey offices, state public fishing lakes and four other hatcheries, the SCDNR is providing South Carolina's citizens and visitors with the best recreational fishing opportunity possible while protecting and conserving our aquatic resources.



State Fish Hatcheries

- 1 Walhalla 198 Fish Hatchery Rd. Hwy 107N Mt. Rest, SC 29664 864-638-2866
- 4 Cohen Campbell 2726 Fish Hatchery Rd. West Columbia, SC 29172 803-755-2070
- 2 Spring Stevens 5290 Fish Hatchery Rd. Heath Springs, SC 29058 803-273-3306
- 3 Cheraw 433 Fish Hatchery Ln. Cheraw, SC 29520 843-537-7628
- 803-755-2070 5 Dennis Wildlife Center 305 Black Oak Rd. Bonneau, SC 29431 843-825-3387

and

Jack D. Bayless 264 Platt Rd. St Stephen, SC 29749 843-567-3286



For Additional Information, Contact: Hatchery Manager Jack D. Bayless Fish Hatchery 264 Platt Rd. St Stephen, SC 29749 Phone: 843-567-3286

Operated seasonally from mid-March through April. To schedule a tour, call 843-825-3387.



DNR

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South Carolina Fish Hatchery



JACK D. BAYLESS FISH HATCHERY

What We Do

Operated by the South Carolina Department of Natural Resources (SCDNR), this fish hatchery is one of five in South Carolina serving a vital role in the management of our state's fishery resources. The Jack D. Bayless Fish Hatchery is responsible for producing larval stages of striped bass, hybrid striped bass, American shad and incubation of robust redhorse eggs. Striped bass larvae produced at Bayless Hatchery are transported to various SCDNR and U.S. Fish and Wildlife hatcheries for grow out to fingerling size. American shad larvae are stocked as larvae in the Broad and Wateree Rivers. Robust redhorse larvae are stocked in rearing ponds at the Dennis Wildlife Center for harvest in the fall. The Jack D. Bayless Fish Hatchery produces approximately 12 million striped bass/hybrid larvae annually, 2 to 4 million American shad larvae and hatches up to 25,000 robust redhorse larvae.

History

The original striped bass hatchery in South Carolina was located along the Cooper River near Moncks Corner, SC. At this hatchery, hormoneinduced spawning techniques were developed for striped bass in the 1960s. This pioneering research made possible the artificial production of striped bass larvae and eventual stocking of fingerlings in inland reservoirs throughout the United States. South Carolina supplied striped bass larvae to 30 states and several foreign countries. A number of these recipients now possess multi-million dollar striped bass fisheries in their respective states. In the mid-1980s, the U.S. Corps of Engineers Rediversion Project diverted major flows from the Cooper River back to the historical Santee River watershed. In anticipation of a reduction of broodfish available at the Moncks Corner hatchery, a new facility was constructed in 1985

along the banks of the Rediversion Canal below St. Stephen Dam. This hatchery was named after Jack Bayless who worked for the South Carolina Wildlife Department and refined many of the striped bass spawning techniques utilized at the Moncks Corner hatchery. The Bayless Hatchery has been the site of continued research and implementation of innovative methods to advance striped bass production for sport fishing. In 2009, procedures to spawn American shad were investigated at Bayless Hatchery and have been incorporated into annual hatchery protocol. American shad larvae produced at Bayless Hatchery are stocked to augment naturally produced fish near historical spawning grounds of this important anadromous species.

Hatchery Facts

<u>Species Reared:</u> striped bass, hybrid striped bass, American shad and robust redhorse

Fish Holding Tanks: fiberglass broodfish tanks, egg incubation jars and larval rearing tanks

<u>Water Source:</u> Bayless Hatchery water is provided by three wells with a reservoir water storage tank to insure gravity flow and adequate volume in the event of a major power outage.

Hatchery Production Cycle

This facility is the center for all striped bass larvae produced within the state. Each spring, adult striped bass migrate upstream in an attempt to

- access spawning grounds. The Bayless Hatchery staff travel South Carolina's rivers to electrofish
- male and female striped bass. Broodfish are transported back to the hatchery and placed in
- holding tanks. Fisheries staff inject females with the
- hormone HCG (human chorionic gonadotropin) to promote egg development. About 30 hours after injection, a catheter is inserted into the ovary

of the fish and the eggs are examined under a dissecting microscope. From this examination the time till ovulation is predicted. When the female has ovulated and eggs are ripe, the males and females are anesthetized and eggs are stripped and fertilized with milt (sperm) from the males. Eggs are placed into special jars where they are incubated for two days till hatching occurs. Genetic information is collected from fin clips of broodfish to eventually measure stocking success of hatcheryreared fingerlings.

Striped bass larvae are held in tanks till they reach 5 to 7 days old. At that time, they are transported to another hatchery where they are stocked into rearing ponds. Ponds are fertilized throughout the production cycle and water quality maintained. After about a month in rearing ponds, larvae have grown to a 1.5-inch fingerling and are ready to be stocked. Ponds are drained into a catch basin where fish are collected with nets and placed on a hauling truck for transport to a stocking location. Striped bass fingerling stocking occurs during May and into early June. Reservoirs receiving striped bass fingerlings are Moultrie, Marion, Murray, Greenwood and Wateree, Lake Thurmond and Hartwell are stocked with both striped bass and hybrid striped bass.

American shad are produced, at Bayless Fish Hatchery in a similar manner, by implanting a hormone in adults collected by electrofishing or from the St. Stephen Fish Lift. Both males and females are placed in large round tanks where spawning takes place. Eggs drain out of the large tank and into a collection basket for removal. Eggs incubate in jars for 3 to 4 days until hatch. Larvae are OTC (oxytetracycline)-marked at day 3 and stocked into the wild when they reach an age of 4 to 5 days.



