

Thermal Refuges for Striped Bass

Partners

Georgia Dept of Natural
Resources

Southeast
Aquatic Resources
Partnership

National Fish Habitat
Action Plan

Location

Southwest Georgia

Watershed

Apalachicola-
Chattahoochee-Flint
River

For More Information:

John Kilpatrick

Georgia Dept of Natural
Resources

john.kilpatrick@
dnr.state.ga.us

Introduction:

Gulf striped bass in the Flint River rely on thermal refuges during warmer months for spawning and growth. In recent years, this species (*Morone saxatilis*) used only eight out of 20 available spring-fed areas of the river because flow had become restricted, denying them access. This project restored access and flow near two springs on the Flint River, increasing available refuge area significantly. Gulf striped bass is anadromous and popular among recreational and commercial fishers. It's native range includes a variety of aquatic habitats such as streams, shores, bays, and estuaries from the Atlantic Coast to Louisiana.

Description of Sites:

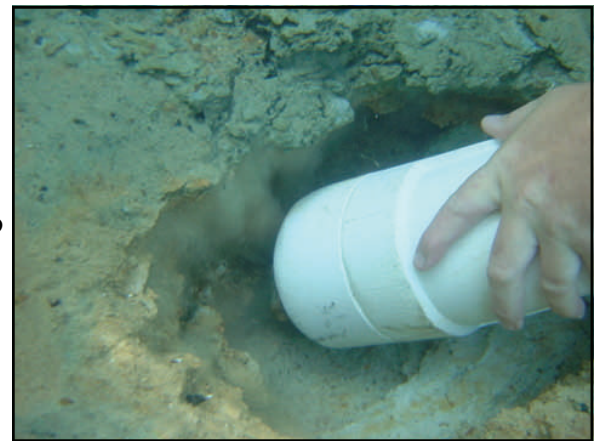
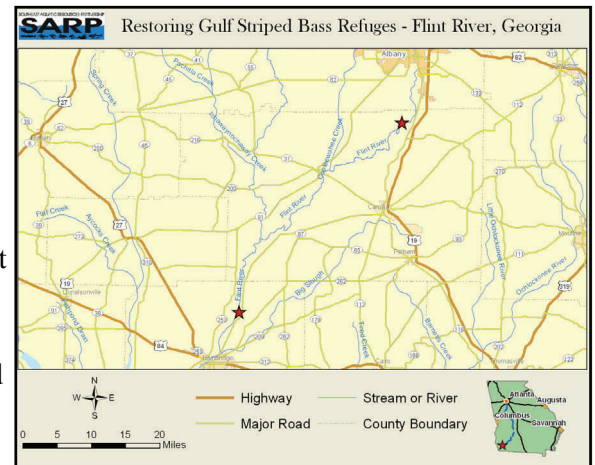
- The mouth of Vine Spring was blocked by approximately 10 yards of accumulated debris.
- Westrick's Spring discharged laterally into the Flint River, making it a poor refuge area.

Problem:

- All work had to be done in the fall, when the fish were not seeking refuge.
- A large volume of debris and sediment had to be removed in a short time.

Strategy:

- Purchase and use a trash pump to assist in removing volume quickly and efficiently.
- Clear the mouth and an area around the mouth of Vine Spring to make a large refuge.
- Remove about three yards of sand from Westrick's Spring, allowing water to enter near the river bottom. The created refuge is now more likely to persist, even with sedimentation common to the Flint River.



A large, commercial pump capable of moving up to 2 -inch sized debris was used to open channels to the springs.



Bass in thermal refuge in spring.

Within a short time after work was completed on Westrick's Spring, divers noticed several small striped bass were occupying the new area. Spring diving will continue to be used to monitor these new refuges and to locate additional renovation priorities because the Flint River regularly transports large amounts of sediment, affecting each available spring differently.