Common Name: SUWANNEE BASS

Scientific Name: *Micropterus notius* Bailey and Hubbs

Other Commonly Used Names: none

Previously Used Scientific Names: none

Family: Centrarchidae

Rarity Ranks: G3/S2

State Legal Status: Rare

Federal Legal Status: none

Description: The Suwannee bass is a deep-bodied, relatively small black bass that attains a maximum length of about 420 mm (16.5 in). It has a relatively large mouth with the upper jaw extending under the eye, but not past the eye. There are scales on the bases of the soft dorsal and anal fins and a circular patch of teeth on the tongue. The body color is brown overall, with about 12 olive lateral blotches on the sides. Anteriorly, these blotches are wider than the interspaces between them; they fuse together on the caudal peduncle to form a lateral band. There is a large caudal spot that is obviously bordered by a light area, especially in smaller specimens. Young also have boldly mottled soft dorsal, caudal, and anal fins. During the breeding season, adults develop bright turquoise blue on the cheek, breast, and belly.

Similar Species: The Suwannee bass occurs sympatricaly with the largemouth bass (*Micropterus salmoides*) and has a similar body shape. The largemouth bass differs in having a deeply notched dorsal fin (vs.shallowly notched), lacking a tooth patch on the tongue, and lacking scales on the bases of the soft dorsal and anal fins.

Habitat: Suwannee bass occupy a wide range of habitats, including rocky shoals, runs, pools, large springs, and spring runs. They are often associated with woody debris. This species is apparently absent from the more acidic portions of the river drainages they occur in, for example in the upper Suwannee River in Georgia. Habitat selection for adult Suwannee bass does appear to differ from adult largemouth bass in atleast one of the rivers examined in Florida, the Withlacoochee River.

Diet: The Suwannee bass preys heavily on crayfishes, but also eats fishes and aquatic insects. Blue crabs are included in the diet in estuarine areas.

Life History: Spawning occurs from February through May, with peak spawning occurring in April and May, when water temperatures range from 18-19°C (64-66°F). Nest preparation, spawning and parental care is similar to that of other sunfishes. Eggs are deposited and fertilized in circular depressions swept out near stream margins. Males guard the incubating eggs until they hatch. Suwannee bass are a relatively small bass in comparison to the largemouth bass. They do show evidence of gender-specific growth rates with females growing more rapidly and obtaining a larger size than males. Males rarely exceed 13 inches but females have been known to exceed 16inches. Females can live up to 12 years but males have not been known to exceed age 9.

Survey Recommendations: Hook and line sampling, boat electrofishing, and backpack electrofishing are effective methods.

Range: The Suwannee bass is endemic to the Suwannee and Ochlockonee river drainages in Georgia and Florida. They occur in the Ichetucknee, Santa Fe, St. Marks, Suwannee, Wacissa and Wakulla rivers of Florida, and in the Alapaha, Ochlockonee and Withlacoochee rivers of Florida and Georgia Populations are believed to be introduced in the St. Marks and Wacissa river systems of Florida. All three populations of Suwannee bass in Georgia can be characterized as having relatively low abundances in comparisonto Florida's populations. The largest population in Georgia occurs in the Ochlockonee drainage. It is believed by researchers that the relative scarcity of this fish is due to a lack of crayfish abundance where water quality parameters are not suitable for crayfish. Check the Fishes of Georgia Webpage for a watershed-level distribution map.

Threats: The Suwannee bass has the most restricted range of all the black basses. A good sports fishery exists in the Ochlockonee River drainage in Georgia, and to some extent in the Withlacoochee and Alapaha river systems. A long history of fish kills exists for the Ochlockonee River in Georgia, and more recently the Alapahoochee river, a tributary of the Alapaha river, due to poor water quality as influenced by industrial discharges and improper use of pesticides. The primary threat to the Suwannee bass is poor water quality. More recently, the introduced flathead catfish *Pylodictis olivaris* were found to occur in the Ochlockonee River of Florida. This invasive predator has been known to negatively affect native fish populations. At this time, the flathead catfish has not been confirmed in the Georgia waters of the Ochlockonee but may indeed exist. Also, hybridization with largemouth bass has not been thoroughly examined with

this species but has been speculated by fisheries biologist to exist in atleast one of the Florida populations.

Georgia Conservation Status: The conservation status of the Suwannee bass has not been rigorously assessed. Georgia portions of the Suwannee and Ochlockonee drainages have received limited sampling compared to other drainages due to poor accessibility during low water conditions. Recently, Suwannee bass populations were confirmed below the Statenville bridge in the Alapaha River, but none were recovered North of the bridge.

Conservation and Management Recommendations: Conserving populations of the Suwannee bass while managing this unique sports fishery will require periodic monitoring of populations and harvest rates, as well as adopting land management practices that ensure good stream habitat. Habitat loss through pollution, drainage and hydrologic alteration of Coastal Plain swamps and rivers must be avoided. Poor land use practices causing erosion and siltation of the limestone outcroppings existing on the Alapaha and Withlacoochee rivers could threaten this species. Maintaining natural stream flow patterns by preventing excessive water withdrawal or unnaturally flashy runoff (such as from urban storm water runoff) also is an essential element of protecting riverine habitat quality. Research has confirmed that genetic differences do exist between Suwannee bass populations in Florida. If supplemental stocking is ever used to manage populations in Georgia, these genetic differences must be taken into account and more thoroughly evaluated for Georgia populations. With the recent development of a Ws equation and standard length categories, fisheries biologists in Georgia and Florida can now quickly evaluate and assess the condition and size structure of Suwannee bass populations in a non-lethal manner.

Angling Records: Georgia's state record fish was caught by Laverne Norton in the Ochlockonee river in 1984 and weighed 3lbs 9 oz. Florida's state and world record fish was caught by Ronnie Everett in the Suwannee river in 1985 and weighed 3lbs 14 ¼ oz.

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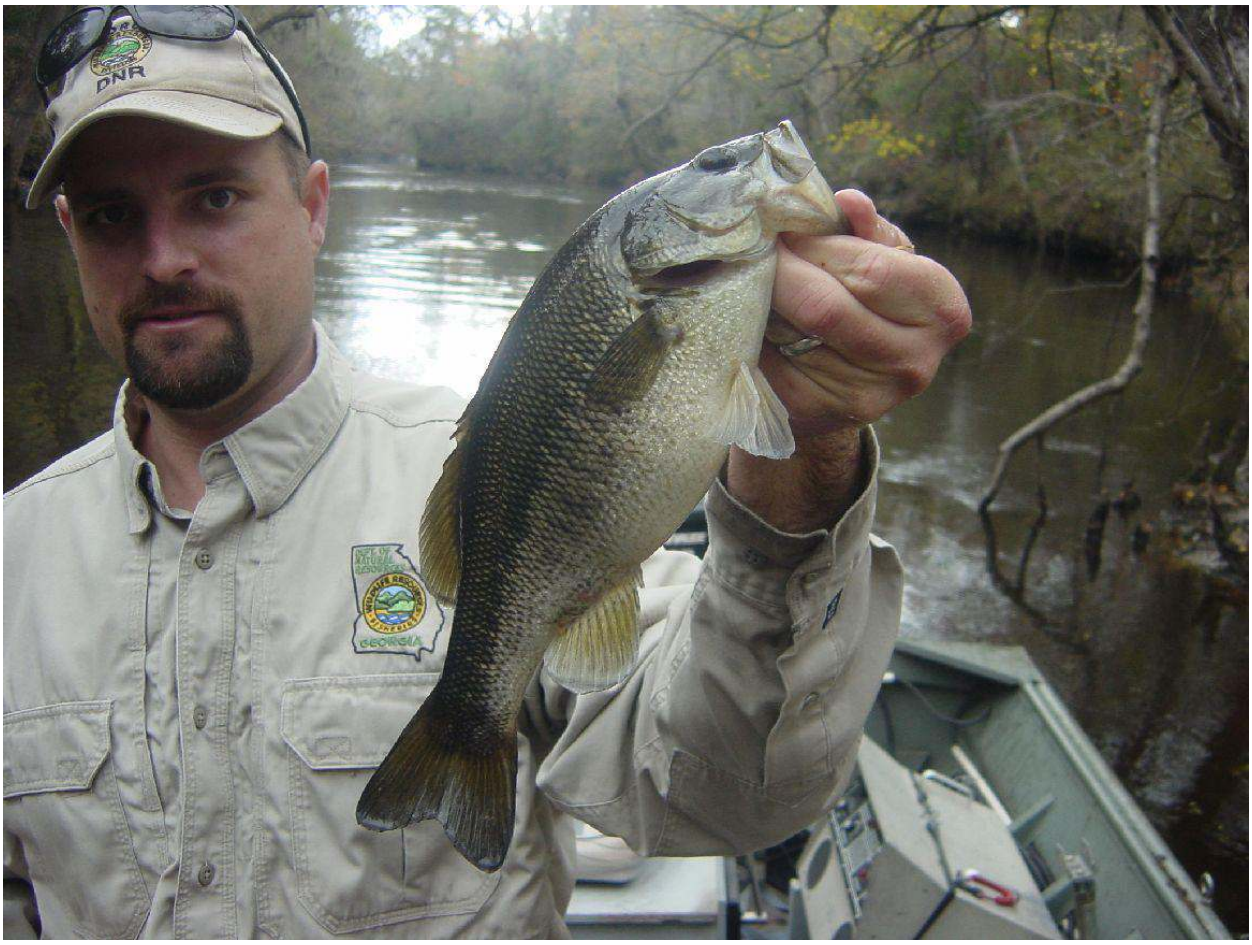
Author of Account: Timothy F. Bonvechio & Byron J. Freeman

Date Compiled or Updated:

B. Freeman, 1999: original account
K. Owers, Jan, 2009: updated status and ranks, added fish atlas link, converted to new format, minor edits to text
B. Albanese, Dec 2009: added photo, similar species, and conservation status.
T. Bonvechio, Dec 2009: general update of entire account
T. Bonvechio, June 2011: incorporation of additional references.

Suwannee bass captured by electrofishing on the Alapaha River in Dec 2009.
This fish is exhibiting drab coloration associated with handling stress. Photo by Tim Bonvechio



Tim Bonvechio holding a Suwannee bass captured on the Alapaha River in Dec 2009.
Photo by Brentz McGhin.