

FISH IN FOCUS

MUD SUNFISH, *ACANTHARCHUS POMOTIS*



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South Carolina

“So by that rationale, if a pig had a better personality, he would cease to be a filthy animal? Is that true?”

“Well, we’d have to be talkin’ ‘bout one charmin’ [explicative] pig.”

Vincent and Jules in “Pulp Fiction”

In 1855, Spencer Fullerton Baird officially described one charmin’ water pig. Though elusive, drab, and fond of wallowing around in mucky habitats, the Mud Sunfish is one of the most popular pets of North American native fish keepers. Indeed, as far as I can tell from casual observation of chatter on the NANFA forum and other message boards, among sunfishes only Longear (*Lepomis megalotis*) and Warmouth (*L. gulosus*) enjoy as much popularity. Having been lucky enough to have one of these creatures for a short time now, I can attest that personality goes a long way! I tried to write this formally but my fish’s personality constantly butted into my thoughts and sentences. You’ll have to excuse me because I’ve given up and am writing this as if my fish is the only one...

First, some basics. He is an individual from the start, belonging to a species that is the only member of its genus. *Acantharchus pomotis* is a snazzy way of saying “Thorned-anus lid-ear”! Not particularly attractive as names go, but accurate. A Mud Sunfish has four to six solidly developed anal fin spines and a lid (gill cover) where an ear would be, if fishes had external ears.

Field identification is easy. His build is obviously that of a

sunfish, though a little on the long side and chubby, too. He’s got a short head with big eyes that are very good at focusing forward. The mouth is huge for a sunfish—opened wide it looks like a Largemouth Bass (*Micropterus salmoides*). He likes to show this feature off, too. Long, slow, exaggerated yawns are often on display. He likes to strut his stuff head-on to you, and the view down that cavernous mouth, into the throat and out the gills is impressive for a fish that maxes out around six inches in length. His caudal penducle, like the rest of him, is beefy.

The dorsal fin is long and low for a sunfish, with no gap or notch between the spiny and soft rays. The caudal fin is rounded and, along with the anal fin, may have a dark outer edge.

His scales are his most interesting physical feature and make field identification a breeze. The Mud Sunfish is the only one of the sunfishes with cycloid scales, which are scales that lack the tiny backward facing “teeth” that cause your finger to snag and skip if you lightly run it from a fish’s tail to its head. He may be one beefy, big mouthed dude, but he’s still smooth.

Coloration is not flashy. The background is olive to tannish. Three chocolate brown stripes above his jaw run halfway across his gill cover, which has a dark brown spot. Depending on age and mood, the fish may or may not have a dark pattern on its sides. Younger fish sometimes have no markings other than the face stripes and opercular spot. With age, parallel rows of chocolate brown spots develop.



The author’s Mud Sunfish’s coloration when happy (left) and when feeling stressed (right). (Photos by Matt Knepley)



Female Mud Sunfish from Horry County, SC. (Photo by Fritz Rohde)

These “spot rows” later grow into three or four thicker, less defined rows. Many specimens sport some mottling. The darker patterns tend to be bolder in a stressed fish.

To find Mr. and Mrs. Thornanus Lidear in their natural habitat, search the Atlantic Coastal Plain from extreme southern New York to north Florida, and westward across southernmost Georgia and the Florida panhandle. The species is also known from one location in Alabama.

Preferred *Acantharchus pomotis* habitats are swamps, ponds, and sluggish streams. The bottom will likely be silt or mud, sometimes with a layer of decaying plant matter. Cover will be ample and consist of thick vegetation and wood. Some seem to like undercut banks. Although generally thought of as a resident of dark water with acidic pH values as low as 4, it can also be found in clear water and at pHs as high as 9. Mud Sunfish tend to be sedentary within small territories.

As for captive care, I can't speak with authority as I have only had “Meat” for a couple months. I will share my experiences and observations. I acquired him from Grand Bay Wildlife Management Area near Valdosta, Georgia. It was early February, overcast and cold for south Georgia, but he was in water only a few inches deep, in a thick layer of

American Frogbit (*Limnobium spongia*). He was the only Mud Sunfish taken that day, though Flier (*Centrarchus macropterus*), Banded Sunfish (*Enneacanthus obesus*), and Blue-spotted Sunfish (*E. gloriosus*) were caught, along with Golden Topminnow (*Fundulus chrysotus*), Gambusia, and loads of Pygmy Killifish (*Leptolucania ommata*). Oddly enough, no Pirate Perch (*Aphredoderus sayanus*) were taken.

I have been pleased with Meat's transition to captivity. He currently resides in a 20-gallon tall tank with two Bluespotted Sunfish and two Banded Sunfish that were acquired on the same day in the same location. There have been no aggression issues yet but I'm prepared to rehome the *Enneacanthus* to an outdoor stock tank pond if things get chippy in the future.

My tank is filtered by a small hang-on-back power filter and a two-cartridge air driven sponge filter. The substrate is a 1–1.5-inch layer of silt and detritus from his home waters. There is no hardscape. Plant life is almost entirely floating and consists of collection site species: Frogbit, what appears to be an *Utricularia* of some type, and Duck Weed. Lack of rooted plants may account for the fact that I have not seen Meat perform the headstanding, resting behavior Mud Sunfish are known for. Twin 18-inch T-8 fluorescents barely light the tank—detritus keeps the water very brown.

Feeding is easy. He often attacks live foods with apparent rage, as if he's mad at it just for being food! I recall one minnow that must've really agitated him. He hammered it, vigorously chewed it up deep in his throat, and swam around expelling a stream of fine, glittery scales out his gills! When he's in this state, his body turns a brighter shade of tan and his head gets very dark. He hasn't eaten prepared dry food or frozen “formulas.” What he has eaten follows (his favorites in bold). Live foods: **glassworms**, Gambusia and Cyprinids, **eastern grass shrimp**, and **aquatic nymphs**. Frozen foods: **bloodworms**, brine shrimp, mysis shrimp, and plankton. He also eats canned river shrimp sold for turtles.

FISHES OF WISCONSIN POSTERS



The University of Wisconsin Zoological Museum has some amazing fish posters for sale. The 13-foot canvas poster shows all 183 species found in the state, at life size, and costs \$150. Nine smaller posters, each depicting a subset (eight show families: the sunfishes,

the pikes, the perches, the gars, the suckers, the salmonids, the catfishes, and the minnows; “The Little Fishes of Wisconsin” includes 16 families) are also available. The excellent art is by Kandis Elliot, UW-Senior Artist Emerita, and reference photos were provided by NANFA member John Lyons. See <https://charge.wisc.edu/zoology/items.aspx> for more info.