

FISHES OF SOUTHEASTERN MASSACHUSETTS

A NANFA Expedition

by Bruce Gebhardt

On Labor Day, I decided to mount a collecting expedition the following Sunday. Calls to Boston-based NANFistas lured Al Anderson, E. Boston, and Dr. Eric Sweet, et fam., Winthrop, MA, to a site I'd found in Middleboro, MA--35 miles south of the Hub and between Providence, RI, and Plymouth, MA.

It's called Peter Oliver's Colonial Mills, a park where the Nemasket River crosses U.S. Rte. 44. The main feature is a stretch of rapids, fairly rare in the Boston vicinity--though, according to Cape Cod's Bill McLarney, less so in SE Mass.

Oliver channeled the tumbling Nemasket into four rock- or wood-lined spillways. Below are a hundred yards of shallow rapids, then some deeper pools before the Nemasket resumes its generally placid course. According to the librarian I called for help, the Nemasket flows north to the Taunton River, which then reverses field, flowing southwest to the sea.

U.S. 44, from MA 25 at the west to MA 58 at the east, is lined and crossed with a diversity of collecting sites--swamps, cranberry bogs, lakes, small creeks, and the Nemasket. Oliver Mills could serve as a staging base to explore the whole stretch, but none of us have left Site One yet.

I have not tested the pH and DH there, but doubtless the water is soft and acid. It is usually clear and amber, and on the day of our expedition, it was plenty warm enough for wading. I hate cold-water wading, but the region's water is usually bearable into late October or early November.

Plants

The plants available at this site themselves warrant the trip. The Cabomba this fall was some of the lushest I've ever seen. Frogspoon grew in both quiet and rapid areas. Hair grass was extremely thick. A rooted, bright green plant with leaves slightly larger than duckweed clung to many rocks in the rapids. It formed mounds like mushroom coral. Fontinalis grew from wooden planking under water. It was very stringy and black, however--neither as high-grade nor as thick as elsewhere in the region, notably the Cape.

A novel plant was a sort of moss clinging to wood and rocks in the fastest currents, just at the water line. It was branched and bright green, like Riccia. It did well as a floater in my outdoor tanks. How it would do indoors is another question.

Even more interesting to me was the watercress--small and fine-leaved. It would have looked attractive in an aquarium, but I thought it looked even better in a salad bowl. It proved both sweet and peppery, a worthy accompaniment to some protein also harvested there.

New England crayfish are surprisingly large. Some at this site top six inches. I've had crayfish suppers after my four collecting trips to Oliver's Mills.

Baby crayfish and gammarus were abundant.

Fish

Now the fish.

The Banded Sunfish (*Enneacanthus obesus*) is the only New England representative of that aristocratic genus (despite a caption accompanying Tom Baugh's recent TFH article in which the photo editor placed Blackbanded Sunfish [*E. chaetodon*] in New England. We only wish!)

With *obesus*, colors differ from stream to stream; and from individual to individual. A typical S.E. Mass. color pattern is light brown and maroon with a fair sparkling of orange-gold sequins over the body, extending into the unpaired fins of the male. This differs considerably from the norm further south, as in the Pine Barrens.

A local color variation is a guacamole colored female with indistinct bands and no indication of speckling. Yet another variation is a light brown or green male with many closely spaced bars and an exceptional number of speckles.

Bandeds were found in all weedy areas. There were comparatively few adults but many young, smaller than an inch.

There weren't many other Centrarchids evident. Bluegills, about 3" long and greenish, were common. There were a few foot-long Largemouths in deeper, slower sections, and smaller ones in the weeds along the shore.

One of the reasons I chose the site was the fin color of the Pickerels--bright red. These were Chain Pickerels (*Esox niger*) rather than the species called Redfin Pickerels (*E. vermiculatus*?).

Eric noticed that quite a number of species at the site exhibited red in their fins. It's hard to say whether this is an evolved adaptation or the direct result of some chemical in the water (cranberry juice?). Bill McLarney reports that some of the waters in the area are quite reddish.

Even a Largemouth and an angler's Bullhead exhibited some ruddiness or rosiness in the fins.

We also caught Creek Chubsuckers (*Erismyzon oblongus*) with rosy fins and heads. Their basic pattern is the dark back, black (but thick) lateral line, and white belly common with cyprinids. The lateral stripe is frequently broken up or faded entirely. In my tank at home, the fish turned generally olive drab. In its shape and changeability, the fish resembles marine Goatfishes.

I had never before found Creek Chubsuckers in New England, so was delighted to find them here. They have always been favorites of mine, ever since the day I found some unidentifiable half-inch slivers in the New Jersey Pine Barrens. I started them on live brine shrimp and crushed Tetra-Min. (That ought to get us an ad.) I kept them for a long time and sold them to a tropical-fish store when they started to outgrow my tanks. Maybe the retailer thought they were big Cherry Barbs, a species they also resemble.

They proved to be tireless, thorough scavengers. They never displayed the slightest aggressiveness. I then thought of the species as a typical pine-barrens fish, but later I caught some in the limestone-quarrying regions northwest of Philadelphia.

Cyprinids are rare in eastern Massachusetts, but I had expected to find another kind. One of the reasons for the trip was some rasbora-like shiners, silvery with a black lateral stripe and rosy fins. I had seen some boys catch them for bait. Possibly these were young Chubsuckers. We didn't find any this trip, though I didn't see every fish Al and Eric caught.

In a previous AMERICAN CURRENTS, readers saw photos of two contrasting seine methods. On this trip, I worked a one-man seine mounted on poles (the net, not me). Eric and Al used the poleless seine, which requires a man at each end dipping the net and himself into the water.

The only beings hugging the bottom more closely than those two were a profusion of Johnny Darters, mostly quite small. They were nicely colored--yellowish, with that bright green gill cover.

On a later trip, John Ecclestone of Swarthmore, PA, and I caught some three-inch darters without examining them closely. In a still later trip, Swamp Darters (*Etheostoma fusiforme*) were noticed. It is uncertain which species the three-inchers were, at least to me. Maybe John or Al can reply.

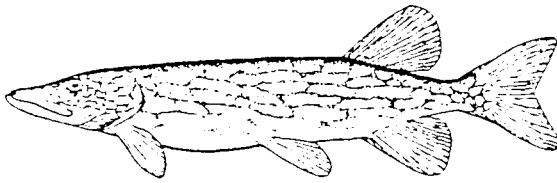
Darters are always fascinating and amusing. Unfortunately, New England is not very richly endowed with them. Bob Schmidt, Fordham U. Environmental Center, Armonk, NY, has written me that Johnnies and Swamp Darters are all New Englanders can expect to find.

Eric and Al discovered a kind of fish we had encountered only once before. It entered the pools directly beneath the spillways, which obviously were fast-moving and well oxygenated.

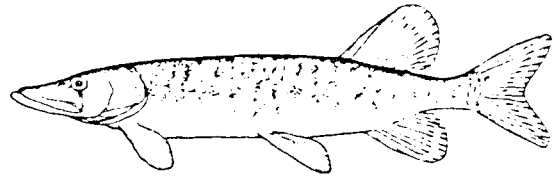
This species is known locally as the Big-Eyed Shiner. In our only previous experience with the fish, a Boston-area pet shop had labelled them Big-Eyed Sharks and charged \$5 a copy!

We did not know the scientific name, but this fish is more likely to be a member of the herring family than of the minnow family.

..... CHAIN PICKEREL,
Esox niger Lesueur



..... REDFIN PICKEREL,
Esox americanus Gmelin



It certainly does shine, however, its basic silver highlighted with other tints. The back, which appears brown in the water, turns deep blue when the fish is netted out (or dead). The eyes, as advertised, are enormous. The most interesting view of the fish is from above. Big-eyed Shiners are extraordinarily long and thin; the eyes protrude; and the caudal lobes fan gracefully back and forth.

If any NANFA member would like to try to identify this species, I have a poorly focused but indicative slide; probably Al Anderson has a better one. In his second trip to the site, Al brought a complete photo-tank setup which he had made. Great fun, and some gratifying results.

R & R

This species was *not* the major discovery of the venture up the spillways, however. Peter Oliver and his successors had completely lined and paved the spillways with boards. Already smooth, they had acquired a coat of algae which made them extremely slippery. Eric and Al--followed by all the kids at the park--discovered that you could climb to the top, sit in the water, and slide down at high speed into the bottom pool.

The site drew great reviews from Eric because of the diversity of species and colorful fishes, and from Al, who said that the expedition had been his best native-fish collecting trip. For him, it was a significant tune-up for a forthcoming African trip to collect killies. (We found no killies here, but some of the lakes in the area are heavily populated by *Fundulus diaphanus*, and nearby brackish water is full of *F. heteroclitus* and *F. majalis*.)

The area around the collecting site varies from deciduous forests and farms around Middleboro to pine barrens near Plymouth, which continue down onto Cape Cod. There are many bogs, lakes, and streams. Water and air are clean, and the area is quite accessible to wherever visiting NANFA members might happen to be headed on business or vacation--Boston, Providence, Cape Cod, or Eastern Connecticut.

NANFA members in the area, besides the Boston contingent, include Dr. Orlo Strunk, Scituate, MA; Bill McLarney, Woods Hole, MA; Don Burch, Hyannis, MA; Ray Coombs, Groton, CT; and Tony Terceira, Cranston, RI.

With such genial hosts and congenial surroundings, Southeastern Massachusetts is a great place for NANFA members to go collecting.

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