

FISHES OF THE LOWER SUSQUEHANNA and tributaries of the Northern Chesapeake, Part III

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This series began in the Oct 86 AC and was continued in the Mar-Apr 87 issue. It is designed to cover all species the authors have encountered in the area; and to aid in location, identification, and maintenance of the species. The series is proceeding in conventional phylogenetic order (per the Atlas).

CARP (Cyprinus carpio)

Carp--which are actually not natives--are abundant in the lower Susquehanna, especially below the Conowingo Dam. In the spring, they can be seen by the dozens as they forage and probably spawn in the shallows. Their abundance here is further evidenced by the large numbers regularly trapped during the shad surveys.

One day in June, while I (WME) was observing this operation, at least a hundred carp were caught in a single haul being hoisted from the river to the sorting tanks 60-70' above. Many easily exceeded 10 lbs., and their jumping abilities were surprising. The largest could be seen jumping from the ascending tank onto its protective netting, to heights at least twice their lengths.

We have rarely found this fish in the river's principal tributaries, though a five-pounder was seined in Fishing Creek, Lancaster County, Pa. several hundred yards upstream from its mouth. A smaller one (approx. 1-2 lbs.) was seined in Pequea Creek, Bird-in-hand, same county. This creek runs through a farming area. Judging by its strong smell at this point, the creek probably receives a considerable amount of the area's run-off. This might also explain the creek's dark color and soft, silty bottom totally devoid of aquatic vegetation where we collected. This creek is about 20' wide, and on average about 10" deep (but with a channel several feet deep). The current is slow.

Young carp make interesting aquarium fish; older ones probably would too in appropriately-sized aquaria. The young carp with their angular shape, often bronze color, and large scales are surprisingly attractive. They eat anything and mind their own business. They spend most of their time grubbing through the gravel. This is good to the extent that it cleans up uneaten food, but carp tend to make the

tank water dirty through their over-diligent efforts. This is an indication of what they do to streams.

--WMB

SILVERJAW MINNOW (*Ericymba buccata*)--Not Found by Authors in This Drainage

CUTLIPS MINNOW (*Exoglossum maxillina*)

The Cutlips Minnow has a bizarre, sinister reputation among aquarists. If confined, perhaps if underfed ("An Aquascape for North American Stream Dwellers," by William R. Kenney, AC 5/83, 13), it plucks the eyes from other fishes. Cutlips have been known to do this in nature, as when confined with trout after the fall of flood waters. The Cutlips' hit list includes most species kept with it. Further, while the author (BG) was readying a bucketful of Cutlips Minnows for transport, they hit each other. A researcher named Antonios Pappantoniou has reportedly filmed a Cutlips removing the eye of a Goldfish. Now, in accordance with the best of modern sociology, we'll tell you why this felon is really a charming fellow.

Physically, the species is rather drab and nondescript (in the upper Susquehanna, Cutlips with attractive reddish finnage were caught in summer). Unless they are checked closely, they can be confused with various other species. The most distinctive fieldmark is the lower jaw when the fish is inverted. It looks more or less like this:



Underside of Cutlips' snout;
center part of lower jaw
is bony, other lobes are fleshy.

The caudal peduncle is quite stout. The body generally is rather stout. The background color is dull--pinkish gray, yellowish tan, or brown. Occasionally there is a vague, dusky horizontal stripe. Some specimens may have scattered shiny scales on them. Pattern distinctness and fin color distinguish males.

Cutlips have a tall range east of the Appalachians from Quebec to just below the North Carolina border. The Tonguetied Minnow (*E. lauræ*) is the only other Exoglossum. It is found in western Ohio, northwestern Pennsylvania, southwestern New York, and western Virginia and North Carolina. The two species may occur together at places in the last two states. The Tonguetied is not thought to eat eyes. It has a more conservatively shaped lower jaw that presumably makes oculophagy more difficult for it.

would make oculo-phagy much more difficult than for the Cutlips.

Cutlips are widespread in our area of concern. They turn up in small numbers in clean, fast-flowing small streams. Occasionally there is siltation, but this is not the usual condition. A good place to look for larger specimens (3-5") is deep pools in small brooks. Small specimens may occur in shallow, rapid creeks only a few inches deep.

The most amazing thing aquaristically about this species is that it is not such a bad aquarium fish. In the right conditions, it will leave other species alone. It is fairer to say that it will behave in all but the wrong conditions. Both authors have kept Cutlips without mayhem in fairly crowded circumstances, but in clean, well-aerated tanks.

Like most minnows, the Cutlips is an unfussy, capacious eater--live, frozen, freeze-dried, flakes. In a large tank of their own, according to Lawrence M. Page of the Illinois Natural History Survey, large ones constantly chased each other. Males built nests, but no spawning ensued. In community aquaria, relatively small specimens we have kept have not shown much aggression to conspecifics or other species.

It would be beneficial if some aquarists devoted serious attention to this behaviorally outrageous species. If one is keeping species from its area and if there are no irreplaceables in the tank, it is recommended to try the Cutlips Minnow.

--BG

RIVER CHUB (*Nocomis micropogon*)

The River Chub (*Nocomis micropogon*) is probably abundant in all the larger, high-gradient tributaries of the Susquehanna and the river itself. The West Branch of the Octoraro Creek (Lanc. Cy., Pa.), for instance, has a rather high gradient and a rock- to gravel-littered bottom. Muddy Creek about a mile west of the Susquehanna (York Cy., Pa.) is a considerably wider stream with an average depth of about 18". It has a high gradient with a similar bottom, but, in the riffle areas, many of the rocks are carpeted with *Pontinialis*-like aquatic vegetation. If the rocks are flipped, River Chubs will rush into a net held on the downstream side. This may be the best way to catch River Chubs in fast water with a small net. The authors use a 4'x4'--legal maximum with Pa. fishing license.

In view of the fish's obvious large-stream preference, one of the authors (BG, with Lawrence Page) this past

In Little Gunpowder Falls* at Rt. 7, which divides Harford and Baltimore Counties, Md., an autumn collecting trip (BG, with John Eccleston) found small (to 2") River Chubs the most common fish in pools adjacent to rapid areas. (See "Three Tributaries of the Northwestern Chesapeake," Bruce Gebhardt, AC 9/85, 14). Many were distinguished by unusually dark horizontal stripes against brown backs and white bellies. The stripes tend to be less obvious with growth, but sometimes small fish don't show much of one, and sometimes big ones do. Larger ones, even lacking stripes, are often surprisingly attractive when lying in the net, their light-green to subtle-yellow a pleasing combination, particularly on a bright, sunny day. Large males sometimes have orange fins.

Often River Chubs can be seen, usually as little more than a blur, darting up and down the stream, frequently in company with Creek Chubs (Semotilus atromaculatus), Blacknose Dace (Rhinichthys atratulus) and White (or Common) Sucker (Catostomus commersoni).

River Chubs are nest-builders, as excellently described by William O. McLarney in "Fish-watching in the Little Tennessee River, N.C.," AC, 5/85, 12. Males use their mouths to transport the many stones required. Their need for powerful jaw muscles may explain their relatively prominent heads.

In the aquarium, River Chubs do well, though they tend to remain shy for the first couple of weeks. They eventually become very much at home, however. Happily, they tend to get along well with their tankmates, even smaller fish. They are undemanding feeders that take dry flake food readily. Their 5-6" adult length means awkwardness in smaller tanks. Nevertheless, their placid tank behavior, ease of care, and pleasing pastel shades make River Chubs welcome additions to larger native-fish aquaria.

--WMB

*The Big Gunpowder and Little Gunpowder Falls are apparently the names of entire large, rapid creeks.