FISHES OF THE LOWER SUSQUEHANNA AND UPPER CHESAPEAKE TRIBUTARIES, Part VIII--The Suckers

by William M. Estes, Prospect Park, Pa., & Bruce Gebhardt, Philadelphia, Pa.

## OUILLBACK CARPSUCKER (Carpiodes cyprinus)

The Quillback Carpsucker, though widely distributed in Pennsylvania, is seldom seen. It inhabits the pools of large streams and lakes, usually over a gravel bottom. Lower Susquehanna Quillbacks we've seen were from Conowingo Dam in Harford County, Md., and the spillway at Muddy Run, Lancaster County, Pa.

Until June 26, 1986, I (WME) had never seen this fish dead or alive, so it was with surprise that, at Conowingo Dam, I saw what appeared to be an odd-looking Common Carp carried by a fisherman to his car. The unusual orange hue, strongly compressed sides, noticeably greater depth, and more compressed snout of this approximately 15" fish were apparent even from 20' away. Closer examination revealed the very high anterior rays of the dorsal. The fisherman stated that the fish was caught on a "minnow."

Many people were fishing the downstream side of the dam that day, and many were catching Common Carp (<u>Cyprinus carpio</u>) and Channel Catfish (<u>Ictalurus punctatus</u>). Among the carp catches that I was able to view were at least two other Quillback Carpsuckers, again about 15" in total length.

The spillway at Muddy Run is situated between the upper, very deep recreation lake and the huge, probably much deeper, lower power reservoir operated by the Philadelphia Electric Company. It is made up of a series of gradually descending tiny-to-small pools that channel the overflow from the lake above to the reservoir below. These pools have occasionally produced some interesting fish, e.g., Banded Darter (Etheostoma zonale), Gizzard Shad (Dorosoma cepedianum), and Quillback Carpsucker.

The half-dozen or so Quillbacks taken here were young fish approx. 2" total length. In contrast to the adults seen at Conowingo, these young fish were entirely silver.

In the aquarium, their unusual shape and tendency to swim in loose schools made them interesting to watch as they vacuumed the tank bottom. Although they did feed, they never readily took the frozen foods (brine shrimp, bloodworms, and daphnia) I offered. Flake foods were ignored. Unfortunately, I was able to keep these fish for only a few weeks before they seemed to waste away in quick order. They are said to feed on --Text cont'd p. 22







NORTHERN HOG SUCKER Hypentelium nigricans modified from Atlas



QUILLBACK CARPSUCKER Carpiodes cyprinus modified from Atlas

## ATLAS=Atlas of North American Freshwater Fishes

invertebrates such as insect larvae in nature, and in the aguarium would probably do well on a mixed diet that included plenty of live foods. Unfortunately, providing live foods in abundance is an insurmountable problem for many of us. -WME

CREEK CHUBSUCKER (Erimyzon oblongus) -- Not known by us from this area.

## COMMON SUCKER (White Sucker, Catostomus commersoni)

The dumbly named "White Sucker" rarely shows much white, except on the belly, where many species are white. Allegedly there is some white visible during spawning. Has any reader ever seen the fish when it deserved the name "White Sucker"? "Common Sucker," the traditional name, is quite appropriate, since the fish is often the most common sucker where it is found, and it is found over a vast part of North America, up to farthest northwest Canada.

Small Common Suckers (to 3"-7") are mainly yellowish-gray with dark gray or blackish blotches. Larger specimens become more uniformly brown or brassy, the males with orange fins. The belly, as noted, is white. In shape, the fish resembles the "'Chinese' Algae-eater" sold in tropical-fish stores. The mouth forms a subterminal sucker.

The fish is found in most streams in the Lower Susquehanna area. Most tank specimens, once they become large enough to bang into things, spend a lot of time resting on the bottom, especially in still water. In nature, however, they are active swimmers, often taken swimming among other species.

Common Suckers are inoffensive tank fish. Their passivity inhibits them from getting enough food in a community tank. Indeed, feeding them is the main problem for the sucker enthusiast, if there are any such. Not only is there doubt that most tank specimens eat enough, but there is a question of what kind of food they should have.

Because they look like Algae-eaters, there may be a tendency to think of them as herbivores. To a certain extent they probably are, but they probably need a lot of meat too. Live and frozen foods are advised. They seem initially willing to try most foods, including flakes; however, they may not swallow all they sample. Another deceptive phenomenon is that they may show no indication of poor health, then die abruptly.

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To provide top-notch care, there are certain approaches that might be helpful. First, ideally, keep them alone or with non-aggressive or non-bottom-dwelling species. Few aquarists would do the former, because the fish are so plain. Second, while all suckers are problem feeders, it helps if you start with young ones, which are competitive with other small fish and more receptive to different foods. Third, keep them in large tanks, so that they can swim more freely. Fourth, give them adequate aeration and current to swim into.

They're not graceful swimmers. Their swim bladders are evidently not as efficient as those of more mobile species. Current helps them swim.

Suckers should be given special care in transport-neither overcrowded nor overheated--and should be acclimated to their tanks cautiously.

--BG

## NORTHERN HOG SUCKER (Hypentelium nigricans)

In Pennsylvania, the Lower Susguehanna streams where we have found the Northern Hog Sucker include, in Chester County, the Little Elk Creek and the West Branch of Big Elk Creek; in Lancaster County, the Conestoga River, Muddy Run, the West Branch of Octoraro Creek, and Fishing Creek; in York County, Muddy Creek. It is a common fish in all of Pennsylvania's drainages except the Delaware River drainage where it is considered uncommon.

It often reaches sizes approaching 24" in length, and on one collecting trip to Fishing Creek, the authors seined one about 13" long. Usually, however, the fish we collect tend to be in the 4" to 6" range.

Stream size doesn't seem to be particularly important, as we've collected or seen this fish in streams of virtually every size. Gradient and water guality, however, are important factors in the life of this fish. All of our Hog Suckers have been collected in those streams with at least moderate gradient and with clean rock or stone substrates. In Muddy Run, a tiny stream only a few feet across in most sections, we have found young Hog Suckers, between 2 1/2" and 3 1/2" long, in riffles among the larger stones and in water often no more than just a couple of inches deep.

We have never found this fish in water that was overtly polluted either with runoff or with other types of obvious waste.

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The Northern Hog Sucker is an attractively marked fish. Small "hogs," their black dorsolateral bands contrasting markedly against their light brown-to-bronze ground color, are quite striking when collected. These colors do not contrast nearly as distinctly in larger fish on which the ground color and dorsolateral bands tend to blend into simple lighter and darker shades of brown. The Hog Sucker is almost a homebody in that it does not range widely in its daily activities.

In our area the Northern Hog Sucker is not uncommon, but, because it is usually found in those stream sections where the water is deeper and the gradient relatively high, it is often difficult to collect. It is in no way limited to these situations, however. Among the most common locations to find this fish are the pools underneath bridges where the water is usually deeper and the gradient much lower. These pools are usually in the 4'-deep range and occasionally a good bit deeper. It is very difficult to collect in these situations with a 4'x4' seine, the legal maximum in Pennsylvania. In addition, Hog Suckers are powerful swimmers, and often we have only been able to document their presence by a mere brown and black blur, racing usually against the current in high-gradient situations. At these times it can usually be differentiated from the Common Sucker (Catostomus commersoni) and Creek Chubs (Semotilus atromaculatus) with which it sometimes schools, as it makes these mad dashes to get around the collector. More often, however, this fish makes the dash solo.

As an aquarium fish, the Northern Hog Sucker, though attractive, is not vigorous and, at least for me, does not do very well. While it adapts guite well and spends a good deal of time rooting on the bottom, it soon becomes thin, indicating that the frozen food--brine shrimp, blood worms, daphina, and beef heart--that I provide my fish as a mainstay does not meet its requirements. This diet is supplemented to a considerable degree with supermarket "greens" and prepared foods that are often added to regular feedings. Doubtless this fish has been kept by many NANFA members who could provide useful information on the feeding and maintenance requirements of this interesting fish.

--WME

[See letters to editor in October 83, January 84, February 84, March-April 84 AMERICAN CURRENTS--Ed.]

SHORTHEAD REDHORSE (Moxostoma macrolepidotum)--Not known by us from this area.

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