FISHES OF THE LOWER SUSQUEHANNA and Northern Chesapeake Tributaries, Part V

by William M. Estes, Prospect Park, Pa.

This series, other segments of which were co-authored by Bruce Gebhardt, began in the Oct 86 AC. Earlier installments appeared in the Oct 86, Mar-Apr 87, Jan 88, and Mar-Jun 88 issues.

Many of the species of this area are found over wide ranges from Canada to the mid-South. These articles attempt to give clues as to habitats, supplements as to identification, and suggestions on maintenance.

Rosyface Shiner (Notropis rubellus)

Autumn collecting for the Rosyface Shiner in the lower Susquehanna area can be as aesthetically fulfilling as any collecting experience. It's one of those special bonuses reaped by us, the collectors of native fishes.

Not only are we rewarded with the sight of this sparkling little fish with, at this season, its beautiful rose-colored snout, wonderfully contrasted against the delicate lines of its seemingly fragile body, but so too, in the lower Susquehanna area, we are rewarded with some of the most beautiful scenic vistas to be found anywhere along Pennsylvania's many picturesque waterways.

Statewide in its Pennsylvania distribution and well represented in the lower Susquehanna, the Rosyface Shiner has nevertheless only turned up in our nets in Big Elk Creek, Chester County--an especially beautiful stream in the fall--and the West Branch of the Octoraro Creek, Lancaster County. Both these creeks are rather wide, moderate-to-high gradient streams that the state finds suitable for stocking with trout.

While most of the various Notropis species in our area are easy to confuse, especially when wriggling in the net, the Rosyface Shiner, when not in color, can usually be detected amid other cyprinid species by its delicate streamlining and pointed snout. These traits are shared with the sympatric Comely Shiner (Notropis amoenus); but closer examination in a plastic collecting bag or jar will distinguish the two by the much smaller eye of the Rosyface Shiner. This gives the fish a snout length about the eye's diameter; in the Comely Shiner, snout length is approximately two-thirds the eye's diameter. Still, it is easy to confuse the two on quick examination, and probably we have encountered the species more often than we think.

A helpful fieldmark is a metallic stripe, noticeably "cable-knit," above the mid-lateral; while color largely depends on lighting, it frequently appears reddish gold. Best angle to see this line, which can shine in an aquarium, is from above and to one side of the fish. The lateral line itself dips below the beltline before coming back up to it on the posterior half.

The Rosyface Shiner can often be found in the deep, slackwater areas between riffles where it tends to school with other cyprinid species. It can easily be collected in this situation amid submerged structures such as branches or tree root systems. It can also be found in shallower, faster-moving water, where it is more difficult to collect. Larger specimens may commute in schools from pool to pool.

In the aquarium, the Rosyface Shiner is an active fish that tends to form loose schools, and, depending on the lighting, will exhibit a pleasing metallic-green cast that can be very satisfying to look at. This is in addition to the beautiful rosy hue seasonally found on the heads and sides of males. Even when it is present on freshly caught specimens, however, the rose color may disappear shortly after capture, and not reappear in the aquarium.

This fish eats anything with gusto, and is a peaceful and desirable addition to the community tank.

One caution: Rosyface Shiners frequently do not survive transportation. Therefore, make a point of giving Rosyfaces a lot of room. Further, some cooling system, such as placing a small quantity of ice near but not touching the shiner's bag, is a good idea. Take care also in acclimating the Rosyface to the aquarium. Once established, however, it may be hardy and long-lived.

Bluntnose Minnow (Pimephales notatus)

Cooper (Fishes of Pennsylvania, 1983) considers the Bluntnose Minnow to be "one of the most common minnows in Pennsylvania," and his distribution map suggests that it is well represented in the lower Susquehanna. We have collected it at Kelly Run, a beautiful coldwater stream entering the river just upstream from Holtwood Dam, Lancaster Cy., Pa.; Pequea Creek, at that point a low-gradient, mud-bottomed stream clearly polluted by agricultural runoff, also in Lancaster Cy.; Muddy Creek, a large, fast-flowing stream pouring into the Susquehanna from the York County, Pa. (west) side; and Fishing Creek, a scenic, clear, high-gradient stream with deep, slow pools a few miles below the Holtwood Dam, Lancaster Cy.

At the last-named site, one of the authors (BG) once noted an unusual proportion of large individuals (c. 2½-3").

These streams, as you may have noticed above, vary considerably from one another--in size, substrate, vegetation, gradient, and--most noticeably--obvious visual indications of poor water quality. These observations support Cooper's contention that this fish can be found "tolerating many different habitats and water quality conditions."

The seiner in our area might initially confuse smaller examples of the Bluntnose Minnow with the Swallowtail Shiner (Notropis procne) because of its somewhat similar body shape and rather distinct jagged lateral band. Closer examination will, however, reveal both the Bluntnose Minnow's anterior dorsal spot and its shortened, "notched" first-dorsal ray. Its slightly more robust body shape should also become evident.

The Bluntnose Minnow, despite its rather attractive (if subdued) appearance and gentle manners, has not done as well in my native community tanks as most of its cyprinid cousins. Its relative lack of aggression is reflected in its feeding habits; it does not easily compete with the more active--almost frantic--feeding behavior of most of its cyprinid tankmates, even those originally found with it. Consequently it tends first to assume a gaunt appearance and then to wither away. The Bluntnose Minnow is thus probably best kept in its own tank, or in company with other fish exhibiting similar, tentative feeding habits--the Fathead Minnow, for instance, or the Eastern Mudminnow (Umbra pygmaea).

The Bluntnose Minnow readily accepts prepared foods as well as frozen and live, and is always an interesting and desirable addition to the tanks of the native-fish enthusiast.

The Fathead Minnow (Pimephales promelas)

Although probably not native to our collecting area, the Fathead Minnow now inhabits the Lower Susquehanna. Not as abundant in this area as its closest relative, the Bluntnose Minnow (P. notatus), this fish is just as likely to turn up in the local tropical-fish store as in the collecting net. We have found it on several occasions in major pet stores, where a color variant of the Fathead Minnow is marketed under the name "Rosy Red." Ones we have seen have been gold or pale yellow rather than rosy. Occasionally, standard-color fish accompany the sports, or may be found in stores' goldfish tanks. Fatheads of whatever color are sold as "feeder fish" for Oscars, piranhas, etc. More ominous than pet-store commerce is their sale as bait fish. One of the authors has

already seen a "rosy red" in a creek in the Delaware drainage. Fatheads are not native to that drainage and have never been found in that creek before.

We have collected this fish in the lower Susquehanna drainage in Pequea Creek (we've heard the pronunciation PECK-way) where it crosses Rt. 340 in Bird-in-hand, Lancaster County, Pa. Stream associates collected with it were Carp (Cyprinus carpio), Goldfish (Carassius auratus), White Sucker (Catostomus commersoni), Green Sunfish (Lepomis cyanellus), Bluntnose Minnow, and Tesselated Darter (Etheostoma olmstedi). We have also collected the Fathead in Mill Creek, about five miles west of the Pequea.

The Fathead Minnow exhibits a pleasing golden hue that is quite striking in the collecting bag, especially when reflecting the golden afternoon sun. We first collected these fish in November, and were not surprised that none of the males exhibited the thickened black head characteristic of spawning males of this species. Male Fatheads collected in mid-April in Mill Creek have shown transformation, with swollen, blackened head and body color, the latter interspersed with brown vertical bands; however, Cooper (Fishes of Pennsylvania, 1983) leads us to believe that spawning comes at least a month later.

As an aquarium fish, the Fathead Minnow does about as well in the community tank as the Bluntnose Minnow, and probably is best maintained with it or other species that tend to be unaggressive in their feeding behavior. The Fathead has a reputation of being one of the hardest fishes of all to kill in an aquarium, and often is last to die in a hot, anaerobic pond or one poisoned by a chemical spill.