

MESHOPPEN TRIP

Collecting in Northeastern Pennsylvania

by Bruce Gebhardt, Phila., Pa.

The Redbellied Daces (Phoxinus eos, the Northern, and P. erythrogaster, the Southern) have always fascinated me, ever since I read an ancient edition of the Axelrod-Schultz Handbook of Tropical Aquarium Fishes. The glowing prose description--almost poetry, it seemed--was unfortunately accompanied by a black-and-white illustration. Indeed, to my knowledge aquarium literature has presented no satisfactory color pictures. A recent Exotic Tropical Fishes supplement on erythrogaster had a color picture, but of an un-red specimen.

My longstanding curiosity about these species was whipped into an obsession by two events during the last couple years. First, the Atlas arrived, revealing that eos had been collected in northeastern Pennsylvania, a driveable distance away. Second, we received a letter from Romanian ichthyologist Vladimir Constantinescu seeking photos and information about the two species. Therefore, when I obtained a sudden windfall in early summer, 1983, I decided to rent a car and make an expedition of it. My decision unfortunately was too late to enable any other members to accompany me.

Now further research had revealed that eos was not only (at one time, anyway) found in northeastern Pennsylvania, it had been discovered there--in the Meshoppen Creek, a tributary of the Susquehanna, in the county of the same name (Susq.). There were only three things wrong with this information: (1), Cope had made his discovery in 1861; (2), his discovery had remained the southeasternmost outpost of the species; and (3), the Meshoppen Creek is a long creek. Further, Cope had only vaguely described the site--a characteristic of his geography, according to member Robert E. Schmidt. And then I learned that eos was listed as "possibly extirpated" in Pennsylvania. The odds against quick re-discovery were piling up!

The Meshoppen flows into the Susquehanna about 30 miles northwest of Scranton in the town of Meshoppen. The town's actually in Wyoming County, I learned, but at the time I thought it was in Susquehanna County. There is a convenient boat landing on the Susquehanna in Meshoppen, but the road to it was flooded, so I sought other in-town sites. The only other accesses were down steep, rubble-strewn banks--not worth the risk to these old bones.

Site One

I reached my actual collecting sites by driving way north. Finally I came to a place where the road crossed the creek. (I passed several sites quite convenient to the creek had I sought and secured permission from a friendly landowner, but I usually seek seclusion.) Upstream from the bridge, alongside the main body of the creek ran a small feeder. There was a

path leading through the woods upstream along the feeder. There turned out to be a number of distractions on the way to the creek. I burned a lot of film on red-orange field lilies, and on burning red bergemont. Blue forget-me-not and big yellow sunflowers also warranted a few frames. At one point that I had passed half a dozen times, I stopped to adjust my load. About eight good-sized Ruffed Grouse flew up, then perched on branches long enough for me to snap an evidentiary (if not artistic) photo. I had never seen so large a group of fairly adult grouse, but my uncle tells me family groups often stay together into the fall.

Unfortunately, the aquatic wildlife was less interesting than the terrestrial. The most common minnow-type in the small feeder was the Common Shiner (Notropis cornutus), from 1" to 5". There were also Blacknosed Dace (Rhinichthys atratulus) and Creek Chubs (Semotilus atromaculatus) and a few suckers, but I'd had enough of the feeder.

My move to the creek itself was no more successful. I tried the downstream side of the bridge. The smartest thing--only smart thing--I did was to toss my wallet onto the bank. I fell three times in about six steps in the 3'-deep water on slippery rocks. The current was too swift for me to fight it with my seine. I did catch some more Blacknoses and my first Meshoppen Longnosed Dace (Rhinichthys cataractae) in shallower rapids, but so what? Hundred-fifty miles on a rented car for stuff available a mile from my home!

Site Two

After a long drive farther north, I finally found another crossing. I was surprised to see a man who'd given me directions in Meshoppen fishing from the bridge. The past favor was to mute my on-site comment, but he was a horrible example of The Fisherman. He hooked a little fish and reeled it up to the bridge. First he handled it with his dry hands. Then he identified his catch, which was a Creek Chub: "It's a bullhead," he announced, but with his brother as consultant he amended the ID: "It's a brookie Brook Trout." Right. They left and I commenced collecting downstream from the bridge. Most of the water was fairly rapid. There were rocks in the middle just down from the bridge, then there were none to speak of for a long stretch. Average center depth was 1½', with two or three holes as deep as 4'.

Suckers were in thick supply. At the time, I felt as though I didn't know what I was doing when it came to identifying suckers. Still don't. But the most common species, if not the only one, I knew to be the White Sucker (Catostomus commersoni). Another fish which I first identified as a sucker, then as a River Chub (Noemius microgogon), I've since pretty much settled on as a Common Stoneroller (Campostoma anomalum)--a long, somewhat suckerlike fish with an orange eye. There was a slight darkening along the horizontal middle. Not colorful, but better looking than I'd expected the species to be.

As with the suckers, I didn't pay too much attention to the minnow-types I caught; if it wasn't a Redbelly, I wasn't interested. Then I caught some cyprinids different from any

I'd ever seen. They were long-bodied, some over 4". The head was tapered, aggressive-looking. The mouth was very large. There was a bright red-orange spot of iridescence in front of the top of the gill slit. The overall color was silver. Since they looked different, I decided to keep them around awhile for further observation. I put them into my yellow collecting bucket, which I placed on a rock 75' downstream from the bridge. I continued to seine upstream towards the span. A highlight of that stretch was some very nice Blacknosed Dace; the best males had very bright red-orange in their pectorals. I caught a few Tesselated Darters (Etheostoma olmstedii); I'd hoped for something a little more exotic. Then I caught a succession of minnows that were new to me.

One looked just like a trout in the shape of its head and mouth and the broad, ill-defined pink horizontal band; I'm sure my friend on the bridge would have proclaimed it a Rainbow (Trout). It was merely a Creek Chub; I'd never seen one so colorful before. Then I caught something with a body somewhat like a Rhinichthys but with only a bit of duskiness where they are likely to have a dark or black band. Its overall body color was a yellowish brown, and in the right light there were little flecks of silver and blue iridescence. From a slide, Robert E. Schmidt later identified it for me as a Cutlips Minnow (Exoglossum maxillingua), reputedly an eye-eater like Haplochromis compressiceps. Bob also identified yet another "mystery fish" as a Fathead Minnow (Pimephales promelas), which I'd read about in AMERICAN CURRENTS but never seen. Bemused by these new discoveries, I returned downstream to my bucket.

Unexpected Payoff

What I saw in the bucket was one of the most amazing--thrilling--sights in all my years of collecting. Those long-bodied, silvery fish with the big mouths nearly all were displaying streaks of fire-engine red on their sides. Some fish had a more salmony color; some remained as silvery as before. The brilliant streak was on the front half of the body, below a metallic gold lateral stripe that was solid towards the front, "cable-knit" towards the rear. The red zone was a thick rectangle, like a piece of ribbon. Other than the red and gold, the rest of the body stayed silver. Later, when the fish had been somewhat acclimated in a home aquarium, the back was dark brown. The small red-orange spot in front of the top of the gill slit remained prominent. It was level with the gold stripe.

This fish turned out to be the Redside Dace (Clinostomus elongatus). The red-orange spot confirmed the ID, since the very next day, 100 miles southwest, I was to see the other Clinostomus funduloides, the Rosyside Dace; it has the same red-orange spot. (See "The Gettysburg Campaign, AC Nov '83.)

I found no Redbellied Dace on the Meshoppen; nor did I on a subsequent visit. But Nature had smiled and furnished a more-than-acceptable substitute.

This article earlier criticized Cope for his vague directions, but it will be noticed that this article isn't too specific either. You see, while the author is inclined to openness,

the fact that a second visit, the following year, found far fewer Redsides commends silence. That second trip, the creek at the same spot was heavily silted. Redsides are well known as an "indicator species"--they don't like water that's not clean and clear.

On the secrecy issue, then, I can understand why Cope played it cozy, and that's what I'll do. But if, next summer, you'll help me flail the creeks of Susquehanna County for the elusive, probably extirpated Redbellied Dace, I might take you to where I found the Redsides.

References

The Audubon Society Field Guide to North American Fishes, Whales & Dolphins (New York: Knopf/Borzoi), 1983, passim. Contains one of few pictures of Redbelly Dace in color (S.). Also text descriptions of various fishes in this article.

AMERICAN CURRENTS, Sept. '84, contains four small articles on "The Redbellied Dace & Their Allies: Four Phoxinus Snapshots." They are Cope's notation of his discovery of P. eos, a note on the yellow coloration found on many Northern R.D., a letter/article by Ken Brunson on "The Frustrations of Photographing Southern Redbellied Dace," and a chart on breeding patterns of six species of Phoxinus by Vladimir Constantinescu. B&w photo of P. eos, p. 19.

Axelrod, Dr. Herbert R. & Leonard P. Schultz, Handbook of Tropical Aquarium Fishes (Neptune City, NJ: TFH Publications, Inc.), 1971 ed., 278 (Southern Redbelly as Chrosomus).

----- et al., Exotic Tropical Fishes

Brunson, Ken, "Little Fish," reprint from Kansas Wildlife, available to NANFA members from the author, Kansas Fish & Game, Box 54A, Rural Rte. 2, Pratt, KS 67124. The text, but not the photos, was reprinted in AC, Mar/Apr '84 and Jun '84. Also, see "AMERICAN CURRENTS," above.

Constantinescu, Vladimir, letter to the editor, AMERICAN CURRENTS, Jun '83, 6. Also, see "AMERICAN CURRENTS," above.

Cooper, Edwin L. Fishes of Pennsylvania (Univ. Pk., PA: Penn State U. Press), 1983, passim.

Cope, E.D. 1862. Proc. Acad. Nat. Sci. Phila. [1861] 13:522-24. Also, see "AMERICAN CURRENTS," above.

Gilbert, G.R. & D.S. Lee on Clinostomus in Lee, et al., Atlas of North American Freshwater Fishes (Raleigh, NC: North Carolina St. Mus. of Nat. Hist.), 148-9.

Phillips, Gary L., William D. Schmid, & James C. Underhill, Fishes of the Minnesota Region (Minneapolis: U. of Minn. Press), 1982, 122-125. Excellent discussion of both spp. Redbellied Dace, with good picture of colored-up Southern, lousy picture of allegedly colored-up Northern.

MESHOPPEN TRIP, conclusion

Schmidt, Konrad P., ed., Specially Protected Fishes, AC May
'84, entire.

Starnes, W.C. & L.B., in Lee et al., op. cit. (Atlas), Southern
Redbelly Dace, 337..

Stasiak, R.H., in Lee et al., op. cit. (Atlas), Northern Redbelly
Dace, 336.
