## MINT CHOCOLATE CHIP DARTERS?

by Bruce Gebhardt, Philadelphia, Pennsylvania

Over the last few years, there have been several sets of color darter pictures published. These have made our study much easier and more interesting. Do not conclude that if you have these sources, you've seen it all, however. Individual shots show only individual specimens, and darters vary greatly. Not only are there subspecific differences, but there are differences according to region, population, substrate color, mood, food, and age. Further, some of the published photos aren't so hot--or are too hot to be true!

These things reoccurred to me one March when I caught two young darters in central Tennessee's Buffalo River system. I obviously had a superstar species, but it wasn't one of the famous ones. The Harlequin Darter, one of my objectives? Similar colors, but on the Harlequin (<u>Etheostoma histrio</u>) they're mixed up a lot more. I had to spend some time looking through NANFA member Lawrence M. Page's <u>Handbook of Darters</u>, which I'd taken along with me, before a possible identity emerged. The ID wasn't immediate; what I had didn't exactly resemble what was pictured, probably because mine were young.

I'd caught some beautiful Rainbow Darters in a little 6'wide stream. That night I erroneously concluded that my females had died (overlooked a box). So, for my last stop after two days of collecting, I returned to the little creek about 3:45 next afternoon. Female Rainbows had been annoyingly common on Visit One; fifteen minutes on Visit Two should give me all I could handle.

Wrong. Totally. How could what was so common become so rare? There'd been plenty left, dozens I'd tossed back. Sorry, said the creek. Penalty for screwing up. Zilch. I mined the gravel and turned over rocks with increasing desperation. I never found another.

Soon it was about 4:30, time to be heading back to the Memphis airport 200 miles west. I gloomily persisted. At the top of a long, shallow, rapids sat a small rock. So shallow was the water that it was barely wet. I lifted the downstream edge, then raised my seine to see what had flushed into it. First thing I noticed was a nice female Redline Darter ( $\underline{E}$ , <u>rufilineatum</u>). Then there were two 2" darters like nothing I'd ever seen. I spent two more hours futilely mining that creek, until I caught crayfish and thought they were darters. It then dawned that it was pretty dark. I quit--semi-defeated, but consoled by these two oddballs. Unfortunately, they had to be males. By some law of nature, if only a small number of a species are caught, they're of the same sex.

The background color was parchment. Over the back were three extremely dark, brown-black-green saddles. The sides bore a lot of green iridescence. The lips, the throat, and I believe the anal and ventrals showed <u>vivid</u> blue or turquoise. Black, off-white, iridescent green, blue--ever seen a combination like that? These fish were the trip prizes. Each merited its own bag for the trip east.

After arrival, with my usual promptness and sense of timing, I waited about ten days before I took the darters to the photo tank. By that time, the blue-green on the lips and underside had completely faded. No sense photographing fish in untypical condition, is there?

When finally put in the photo tank, the darters revealed further details through the lens. Most surprising was the pupil shape--like a comma on its side with tail upturned. This did not always appear to be so, since a photo I took doesn't show it. Perhaps only one specimen I had was strange in that regard. Another previously unnoticed detail was a small orange spot on the first dorsal, probably between the first and second spines. This darter proved one of those that doesn't spread its first-dorsal very freely. A third detail was the straight, nearly vertical slope of its nose. That led me to guess that I had Blenny-Darters (Etheostoma blennius).

Realizing astutely that the Latin and English names probably derived from resemblance to blennies, I looked up the latter family in Audubon in order to double-check my ID. The salty/brackish blennies pictured do have rather vertical snouts; the analogy's a good one. If I were starting fresh, though--since non-coastal naturalists might not know what blennies look like--I'd call this fish the Mint Chocolate Chip Darter. Published photos indicate that color will change as the fish matures, however.

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A Tennessee ichthyologist confirmed the identification from a slide, and noted that it was unusual to find these fish in little creeks.

I only have one left. The other jumped out. This species is quite athletic. One of the ways darters can be classified is their way of moving; Blenny Darters are distinctive. No half-darted shuffle, no idling; they accelerate in rapid, decisive bursts, zero-to-top speed in zero seconds.

Never rely entirely on photos in the books. Many fish are different from their pictures; many are a lot neater and better-looking than their photos indicate. I'm the same way.

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