FLAT LAND, FAST WATER

by Bruce Gebhardt, Phila., Pa.

Coastal plains are by definition flat. Water flows slowly or just seems to stand there. Running water is rare, yet it does occur in a few places. Sometimes the cause is natural; a sustained period of high water or a flood can cause water to flow fast where it wouldn't normally. Other times the cause is human intervention, as in an outflow from a reservoir or recreational lake, or a place where water is squeezed narrow, deep, and fast to flow under a bridge. Sometimes there are surprisingly long stretches of turbulence; occasionally one finds what must be the only riffle within miles.

The unusual currents create unexpected habitats. Often they seem relatively sterile and produce no or few fish. Sometimes, though, they can foster a special community of fish and other forms of life--similar to what else is around, yet altered from the norm. The presence of plants and reeds is a good sign. If they grow in and abutting the margins, they will provide respite from current for species unaccustomed to it. Thus, the presence of sunlight stimulates the fullest flourishing of this special habitat; but sometimes there is life even in the shade.

A frequent pattern: fewer fish but bigger ones than usual. I go to such places when seeking trophy specimens for trade, breeding, exhibit, photos, or--when I was interested in it-engling. Unfortunately, you may come up with, say, one fish after half an hour's work. A waste of time? Maybe. But that one fish may be a 4"-diameter Blackbanded Sunfish in New Jersey, flashing big flecks of bronze that smaller specimens don't show. You may come up with a 3" Swamp Darter or a 5" Banded Sunfish in Massachusetts or a 2" Leptolucania in Florida-all larger than most books allow for those species.

The place to find the biggest game fish is proverbially a big lake, but some game fishes grow larger than usual in flowing water. Depth may help. In South Jersey, over 20 years, I have never even seen any other angler catch a keeper Chain Pickerel, but I know a fast stream with lots of 20-inchers; once I lost three lures in three casts to three pickerel.

If a fish built for bogs and lakes is to survive in rushing water, it must adapt or be flushed downstream. Consequently, the collector should be alert to well known species filling roles unexpected by species or collector. A notable example in New Jersey is the Mud Sunfish. These rather portly fish indigenous to the coastal plain usually lurk in standing water; nevertheless, they are likely candidates to be found in running water. They've made the transition enthusiastically, playing the roles taken by darters or Rock Bass in upland streams. You may see them sprint cross-stream after you've lifted a board or tire. Mudders also grow large in such settings.

In "Whitesbog" (AC, Jan. '84), I described catching big ones in a spillway created for cranberry and blueberry farming. One day this fall, three of us produced a half-dozen between four and six inches. I had been collecting the species for many years before I knew the species frequently grew that large.

The collector would do well to keep at least a mental file of running-water collecting spots. When there's pressure to see or catch a lot of species and specimens, hit the swamps and lakes typical of the coastal plain; when there's time and curiosity, though, check out those fastwater spots. There may be some surprises.

Learning about what goes on in flatland fast water might be good for quite a few biology term papers and doctoral theses, not to mention AC articles. Presumably some of the same phenomena described above occur in other flat areas besides the coastal plains.

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