I remember my first experience with darters was seeing them in a friend's aquarium and wondering why anyone would be interested in keeping crippled minnows for a hobby. Darters have since become one of my favorite types of fish to collect and photograph. I began collecting them solely by seining, which worked well on lakes and rivers where there were no logs or rocks to snag the seine. Unfortunately, this type of habitat did not offer a great diversity in species and tended to be dominated by the ever-present Johnny Darter. I have tried seining in boulder-strewn streams, but found that the seine could not be maneuvered in crevices, where I have watched darters smugly staying put as the seine passed over them. I have also tried collecting with two people holding the seine stationary as one person upstream poked into crevices and turned over boulders. This would sometimes produce a Rainbow Darter, but I did not care for the "dredging effect" inflicted upon the stream.

I eventually learned a very simple method from fellow NANFA member Don Richmond, who happened to be even more fanatical about darters than I was. Don found that the same dip nets used to catch fish in an aquarium also worked very well on darters living in stream riffles. We have since pooled our collecting efforts and have learned through trial and error that other aspects should also be considered, such as stream and weather conditions, collecting equipment, and a little patience to master the technique.

The proper stream and weather conditions are very important. We have found that they can make a trip a success or a failure. We have preferred to collect from streams that are crystal clear, because any silt suspended in the water helps camouflage the darter. We generally collect in water less than 18" deep because of the visual distortion that occurs when anything ripples the surface, such as net handles and boulders. The skies should be completely clear, because every ray of light is needed to keep the darter in sight at all times. We have collected on partly cloudy days, but found it very difficult; darters would literally blend into the bottom every time a cloud covered the sun. We have learned from experience to postpone a trip after recent heavy rains; streams in our area will frequently flood, and be laden with silt for several days.

The only equipment required for this method is two 8-10" dip nets found at tropical-fish stores. Waders are optional, but we have used them for spring and fall collecting.

The actual method consists of walking slowly through the relatively flat surface areas below rapids and closely watching the bottom for any darters flushing from their cover. We have found that darters will generally stay put until our feet
come within a few inches of their positions. A darter usually moves only a foot or two and stops. Now its exact location is known and can be slowly surrounded—one net below and the other above. The upstream net is pulled downstream while gently tapping the bottom at the same time. This normally herds the darter into the downstream net. In very tight places such as narrow crevices, the upstream net can be turned sideways and "probed" in the direction of the downstream net that covers the other exit. The exact positioning and maneuvering of the nets can be difficult in the beginning, but should quickly improve with practice.

We have used dip nets in Minnesota, Wisconsin, and the Ozarks of Arkansas and Missouri. The method's effectiveness varies with each species, but has so far produced the following darters: Slenderhead (Percina phoxocephala), Rainbow (Etheostoma caeruleum), Iowa (E. exile), Fantail (E. flabellare), Johnny (E. nigrum), Least (E. micropereca), Stippled (E. punctulatum), Orangethroat (E. spectabile), Redfin (E. whipplei), Arkansas Saddled (E. euzonum), and Greenside (E. blennioides). We have also found that dip nets will work on the following bottom-dwelling fishes: Mottled Sculpin (Cottus bairdi), Banded Sculpin (C. carolinae), Slimy Sculpin (C. cognatus), Common Stoneroller (Campostoma anomalum), Blacknose Dace (Rhinichthys atratulus), Central Mudminnow (Umbra limi), and Burbot (Lota lota).

If anyone is interested in trying this method, I suggest he or she first learn state laws and regulations governing this type of collecting. The four states that I have collected from only require a fishing license, but they also have areas closed to seining and dip-netting, such as designated trout streams that unfortunately contain many interesting darters. Some states will issue special permits for collecting in trout streams. Don and I both have permits for streams in Minnesota, but Wisconsin has informed us they would only grant special permits to public institutions such as schools and museums.

I have one final word of caution to add for anyone who manages to obtain a special permit: Beware of all trout fishermen! They are very possessive of their streams, and will "interrogate" anyone who is doing anything out of the ordinary like swinging dip nets. I once made a big mistake when I told a concerned fisherman I was collecting Rainbow Darters for my aquarium. Of course, the only word he keyed into was "rainbow." I now select my words very carefully when in the presence of trout fishermen.

WILD TROUT SYMPOSIUM

The Federation of Fly Fishers, Trout Unlimited, the U.S. Department of Interior, and the U.S. Dept. of Agriculture will hold this meeting September 24-25, 1984 at Yellowstone Nat'l Park. You can probably obtain more information from Wild Trout III Registration, TWA Services, Inc., Yellowstone Nat'l Park, Wyoming 82190.