Seine Advice for Collecting Killies

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by

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At the 1998 American Killifish Association convention in Syracuse, several folks asked me where they could buy seines and other nets, made to individual specifications. Evidently, native killies are getting more popular, or the fish fauna of Africa or South America is about to be explored on an unprecedented scale. Two such companies that I have dealt with over the years are:

Memphis Net & Twine Company
2481 Matthews Ave.
Memphis, TN 38108
(901) 458-2656
(901) 458-1601 (fax)
E-mail: memnet@netten.net

Nylon Net, Inc
615 East Bodley Ave.
Memphis, TN 38106
(901) 774-1500
(901) 775-5374 (fax)
Web: www.nylonnet.com

Nylon Net's Web page is worth visiting to get a quick education on the various types of nets and their functions.

Here's some unsolicited and highly idiosyncratic advice on seines for collecting killies (but does not necessarily apply to fish sampling in general).

• You can buy burlap "common sense" seines quite cheaply in many sporting goods shops. These work well, but unless special care is taken, tend to rot, particularly if used in salt water. Nylon netting is better for the long haul. Expect to pay between $20 and $35 for a net in the 10' length range.

• For killies, a 6' tall net (standard for boat- or beach-seining) is seldom worth the extra effort of dragging it through the water; 4' tall nets usually work very well.

• Likewise, most of your collecting will be in waters where a 10-12' seine will be more than adequate in length. In small inshore habitats I've had great luck with a 6' long seine, even though some of my colleagues (who are general fish collectors) have scoffed at it.

• Unless you're specifically looking for tiny fishes, a 3/16" mesh is small enough (I often use a 1/4" mesh). A day of dragging an 1/8" mesh net through the water will set your teeth on edge and not do very much for your mood. Bags in your seine are seldom worth the effort of dragging them unless you're dealing with exceptionally smart or wary fishes.

• Several mesh styles are usually available. Three of the most common are: "ace," "delta" and "king." Generally, the last is a bit cheaper per foot. The other two types seem to be a bit tougher and snag-resistant. The "delta" style is listed in some catalogs as being about 40% stronger, length for length, than the "ace" (typically 35 lb vs. 24 lb break strength). In my experience, this doesn't make a lot of difference in the field, but I can think of situations, such as accidentally seining up a large rock, where it might be important. Memphis Net and Twine Co. lists a "heavy delta" construction, made of polyester, with a 44 lb break strength, but I have no experience with this particular type.

• I'm a great believer in keeping the net as close to the bottom as possible. I like "double weighted" seines (beloved of catfish farmers) and sometimes even supplement them with additional "crimp on" weights. Over soft mud substrates, though, this can be a real "drag" (in both senses of the word) as the net sinks through the muck—and it's no fun sifting your fish out of mud either. Recently, a "many ends mudline" has become available that is supposed to solve this problem, but I haven't tried it yet as of this writing. "Lead core" lines are also available, but
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these don't give me the flexibility I like, and I find them tougher to tie to the poles.

• Net coatings are worth the expense. They make the net last longer and, equally important, tend to hide the white color which can be very conspicuous under water. I will go to some lengths to eliminate this white color, for I think that fish can see it a mile away. "Netcoat" produces a blackish color that I like, but makes the net tarry and tacky and a bit inflexible. "Plastinet" results in a more flexible net but one that is generally lighter in color than I like. It's something of a trade-off.

• The side poles of a seine are called "brails," but almost no one seems to actually use the term. Mop or broom handles make good brails for 4' tall nets, but heavy dowels (say 1-1/2" diamater) are less prone to snap during hard use. If you go the mop handle route, you can make a stronger brail by lashing two of these together and binding them with construction wire (tape over the ends of the wire so you don't cut yourself on them in the water). Many of my colleagues who do general fish collecting secure the seine to the brails by the use of dog leash clips; these are secured to the ropes with knots and are attached to eye hooks set in the brails themselves. This arrangement is very convenient, especially for changing nets very quickly. However, it does have some disadvantages, for it tends to set the end of the seine and the brail some distance apart, and if you roll the net back onto the brail, you risk tearing it with the clips. I prefer to have the bottom of the net flush with the bottom of the brail, and the bottom corner up against the brail itself. There are many ways one can do this, e.g., by putting a shallow slit on the bottom of the brail and running the rope into it before tying, etc. Rolling the net on the brail so that it catches the bottom works too, but it can tear the net rather quickly unless you're very careful.

• *Always* have extra seines with you on any trip. Despite all your care, they can get ripped during heavy use. They can also get ripped off, especially in places where people do a lot of bait fishing. I've even had one disappear down the road trailing on a bicycle, unfurled and with brails attached.

The North American Native Fish Keeper's Bookshelf

Two Recently Published Titles

Fish keepers who sample the brackish waters of the Mid-Atlantic coast may want to check out **The First Year in the Life of Estuarine Fishes in the Middle Atlantic Bight** by Kenneth W. Able and Michael P. Fahay (1998, Rutgers University Press, xiii + 342 p., $67 hardcover). This book describes the early life history —from egg to larvae to juvenile—of 70 fish species for which the bight (a curve in the coast line) between Cape Cod and Cape Hatteras provides essential nursery habitat; as such, it can serve as an identification guide for collectors who occasionally turn up larvae in their nets, but have difficulty making an I.D. with field guides that show only adults. Nine commonly kept aquarium fishes (American eel, sheepshead minnow, mummichog, spotfin killie, striped killie, rainwater killie, eastern mosquitofish, fourspine stickleback, and threespine stickleback) are included.

No sooner did I read and review the recently published second edition of *Fishes of the Gulf of Mexico, Texas, Louisiana, and Adjacent Waters* (Winter 1999 *AC*), when another, bigger book on the same region shows up—**Fishes of the Gulf of Mexico Volume 1: Myxiniformes to Gasterosteiformes** by John D. McEachran and Janice D. Fechhelm (1998, University of Texas Press, viii + 1112 p., $125 hardcover). The coverage here is far more comprehensive, including many more deep-sea and southern Gulf fishes. Whereas the above-mentioned book covers 540 species, this one covers 769, and that's only volume one (hagfishes through pipefishes). The design is sharp and easy on the eye. Each species gets its own page (resulting in a lot of white space if the write-up is short). All but 92 species are illustrated, showing either the entire fish, or a key diagnostic feature (e.g., chin barbels in the scaleless dragonfishes). The illustrations themselves (by Fechhelm) are neat and finely crafted in pen-and-ink, although a few seem hurried and tentative. (One glaring example: Where are the tarpon's scales?) The text consists almost entirely of keys and technical descriptive passages, with only the briefest mentions of natural history (when known). When volume two is published, these books bid fair to be the definitive identification reference on all fish species from what is the ninth largest body of water in the world. *Christopher Scharpf*