LOAN COPY ONLY

NCU-TL 80-001 C3

How to Hang a Gill Net

LOAN COPY ONLY

CIRCULATING COPY

Sac acent Depasitory

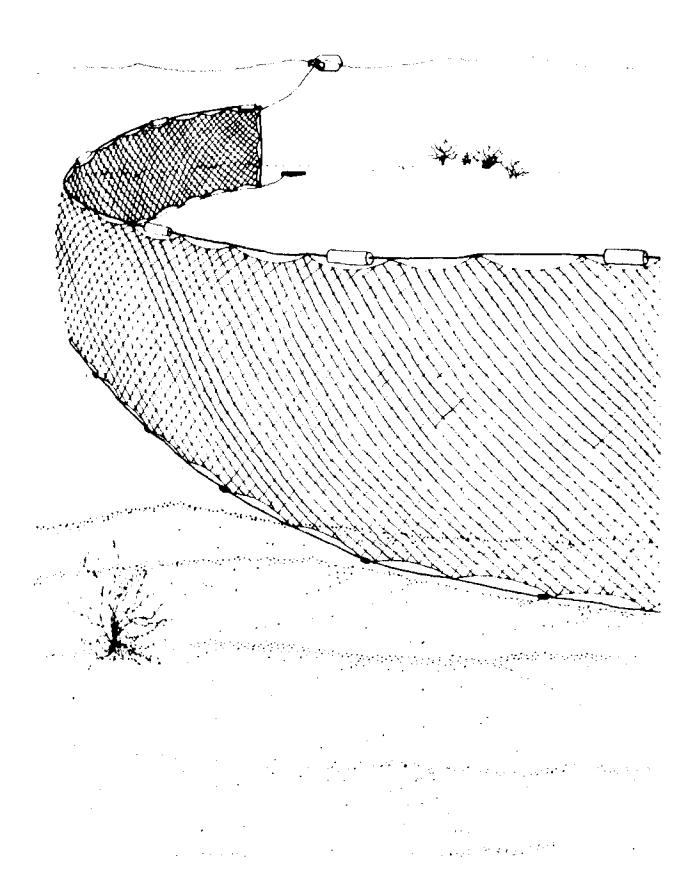


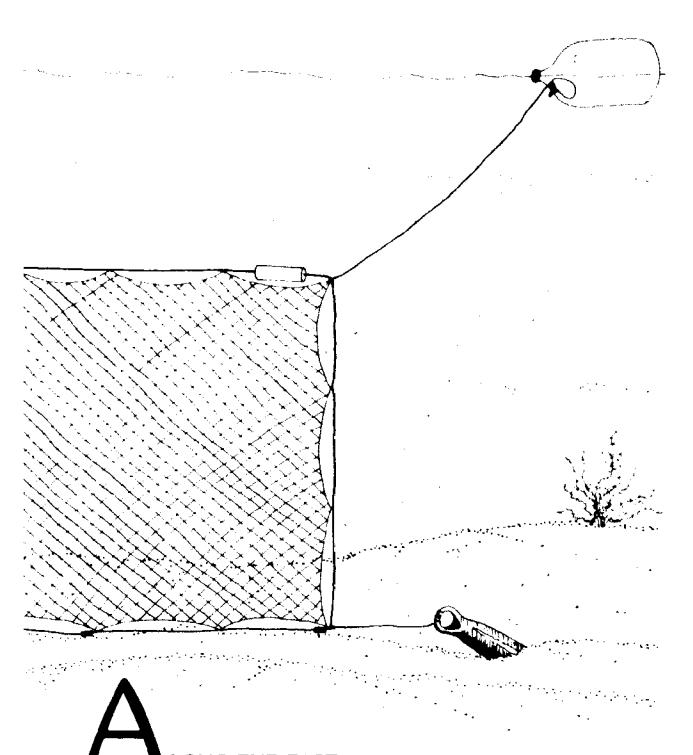
LOAN COPY ONLY

Credits

Written by Jim Bahen and Mary Day Mordecal, UNC Sea Grant College Program, Dave Dow, University of New Hampshire University of Maine Cooperative Institutional Sea Grant Program.

Designed and illustrated by John Kirtz.



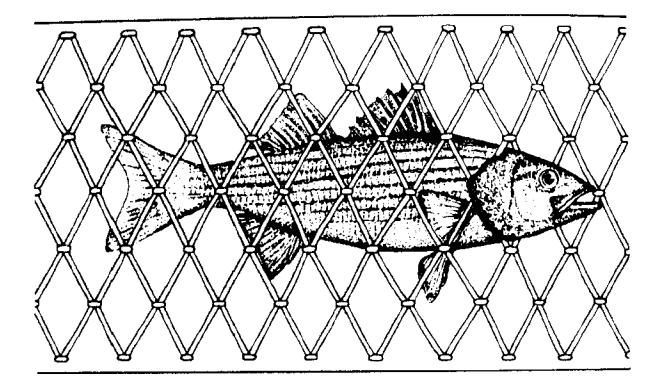


LONG THE EAST Coast, gill nets are among the most popular nets for both commercial and sport fishing. The versatile gill net can be used to catch a variety of fish—from trout to hake and flounder. It can easily

11

be staked, anchored, allowed to drift or pulled by a boat.

Aptly named, the gill net actually gills fish. The meshes are just large enough to allow a fish's head, but not the rest of its body, to pass through. When the fish tries to back out of the net, it gets caught behind the gill covers. Fish suffocate fairly quickly in the net. Service in Beaufort or the state Division of Marine Fisheries in Morehead City. For fishing in Maine, check with the



Regulations

The size of the gill net mesh determines the size of the fish you'll catch. In many states there are regulations governing what mesh size you can use. Licenses are also required for fishing with gill nets in most states. Be sure to check with the National Marine Fisheries Service office or a marine advisory agent in your area before building or using a gill net.

In North Carolina you can get information on gill net regulations from either the National Marine Fisheries National Marine Fisheries Service office in Glouchester, Massachusetts, or the Department of Marine Resources in Augusta, Maine.

BUILDING YOUR OWN NET

Making your own gill net is one easy way to cut down on fishing costs. It usually takes a beginner a full eight-hour day to hang a 100 yard net, but you can save about half the price of a readymade net from a retail store.

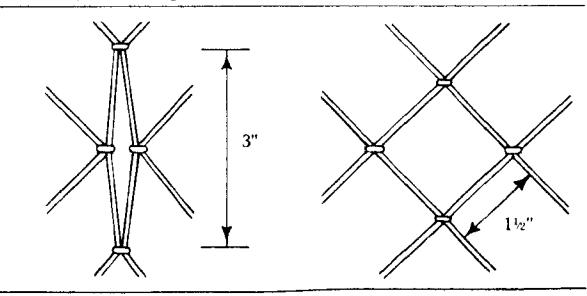
As any fisherman can tell you, hanging a good net is an art. Every netmaker has his own special techniques for making the net fish exactly as he wants it to. This booklet offers a general description of an efficient net. For specific advice, you'll need to consult netmakers or fishermen in your area. With practice, you will develop a style of building nets to suit your individual purposes. you're likely to fish and what fish you are interested in. Those factors will help determine how you will build your net. If you're going to be fishing for spot in a deep channel, for instance, you'll probably want a net that sinks. But if you are planning to fish in extremely deep water or for fish that swim at the surface, you will need a floating net.

Mesh size is the other important factor you must consider before buying webbing. The size of the mesh will determine what size fish you'll catch. Most states have regulations establishing minimum mesh size. These may change every season, so be sure to check with local officials.

Mesh is measured in two ways: by stretch mesh and bar mesh. Stretch mesh is the width of one mesh pulled taut at the sides. Bar mesh is simply half the stretch mesh.

Step one: before you begin

The first step is to decide where



Stretch mesh (left); bar mesh (right)

Step two: buying the supplies

You can get the necessary supplies from any netmaker or fishing supply store. You'll need webbing, leads, floats, line, twine and a net needle.

Here's the lowdown on each one:

WEBBING (or netting): These days almost all webbing is made of synthetic materials. Mono-filament and multi-filament are more popular than natural fiber, which absorbs water and therefore rots faster.

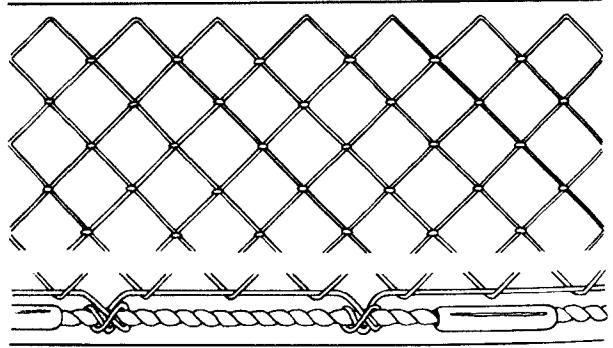
You will need to decide how deep you want your net to be. That varies widely from area to area and depends upon the body of water you plan to fish and the desired catch. In North Carolina, for instance, the average depth of an all-purpose gill net is between six and seven feet. But, in Maine where waterways are deeper, the average gill net reaches about eight to ten feet deep.

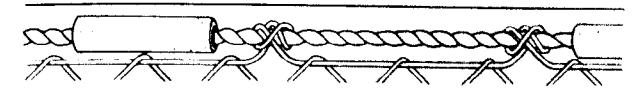
Webbing is usually purchased by the pound and its depth is measured in meshes.

LEADS: These are the weights which must be spaced along the line at the bottom of the net to give it the proper balance. Figure out in advance how many leads and floats will make the net fish the way you want it to. Ask local fishermen for advice. An average ratio of floats to leads for a floating net is three to one.

If you don't want to bother with putting leads on the line, you may buy the equally effective, but much more expensive, lead core line which has weights built into the center of the line.

Webbing (above); leads on line (below)





FLOATS: Floats, which may be either synthetic or cork, should be spaced evenly along the top line. Cork floats are about twice as expensive as synthetic floats. If you'd rather not use floats, you may buy line with Styrofoam sealed inside. Like the lead core line, it is expensive.

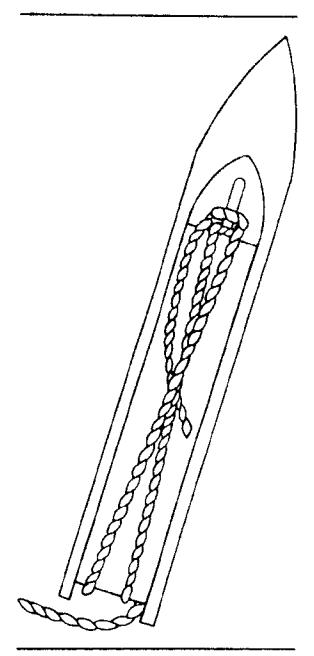
LINE: The line will need to be sturdy and light. Polypropylene is usually preferred over nylon, which absorbs water. Its diameter should be $\frac{1}{160}$ to $\frac{1}{200}$ of an inch. Shad nets are the only exception to this rule. Because these special nets are used along rough river bottoms, they are hung on small diameter twine. The twine will break if the net hangs up on a snag, allowing the net to float free.

Buy enough line to surround the perimeter of your net and make sure that you've got enough left for loops and lashings. For the average 100-yard net, you'll need about 600 feet of line.

TWINE: A good twine or string should be used for attaching the webbing to the line. Tar-coated twine is durable and makes good knots. You'll need about a half-pound of twine for the average 100-yard net.

NET NEEDLE: This is an inexpensive little tool which greatly simplifies net hanging. Most net needles hold about 30 yards of twine at a time.

Floats on line (above)



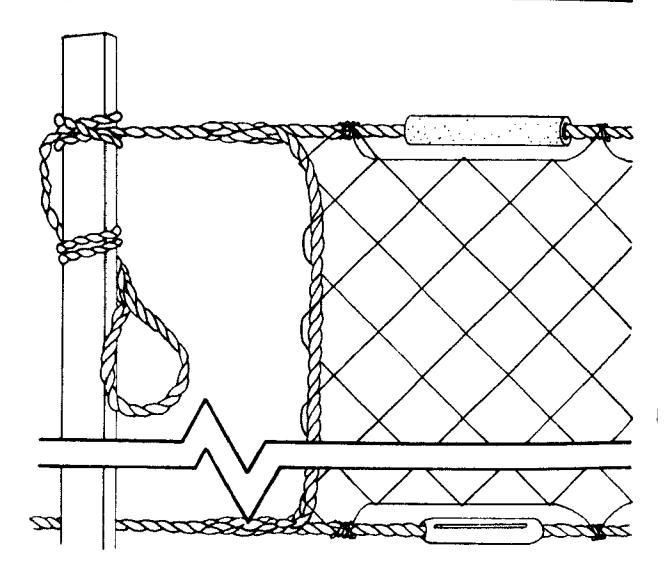
Net needle

Step three: hanging the net

In this discussion, the basic parts of the gill net will be called the float line, the lead line, the loops, the sides and the webbing.

Hanging ratio, the length of webbing hung on a designated amount of line, is the single most important factor in constructing a gill net. Remember that a net which is hung too tightly will not catch fish efficiently. Loose webbing will tangle a fish more easily than tight webbing. Also, the looser the net, the less vibration it will make in the water and the less likely it is to scare fish away.

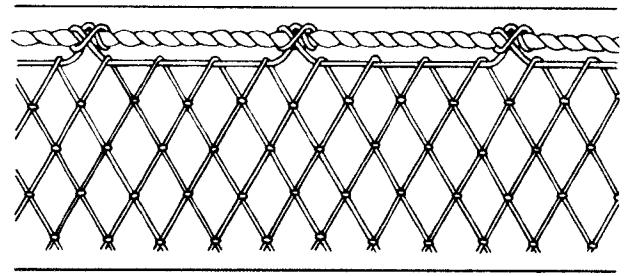
A view of a completed net



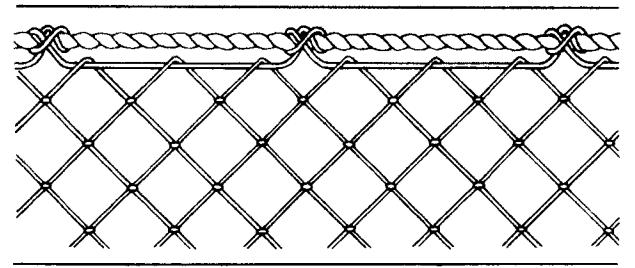
Most nets on the East coast have a hanging ratio of one-half or one-third. When you hang a net on the half, you use twice as much webbing as line. Hanging on the third uses one-third more webbing than line. It's a general practice to mark and tie on the line every six inches if hanging on the half or every four inches if hanging on the third

The most important thing is to be consistent about spacing your knots. It's helpful to mark the line on which the webbing is to be hung. And, if you are planning to hang more than one net, string a copy line directly above the line on which you're hanging the webbing.

Net hung on the half



Net hung on the third



The float line

Once you've marked the float line at the desired intervals, string it with the proper number of floats. You won't need to do that, of course, if you are using Styrofoam-encased line.

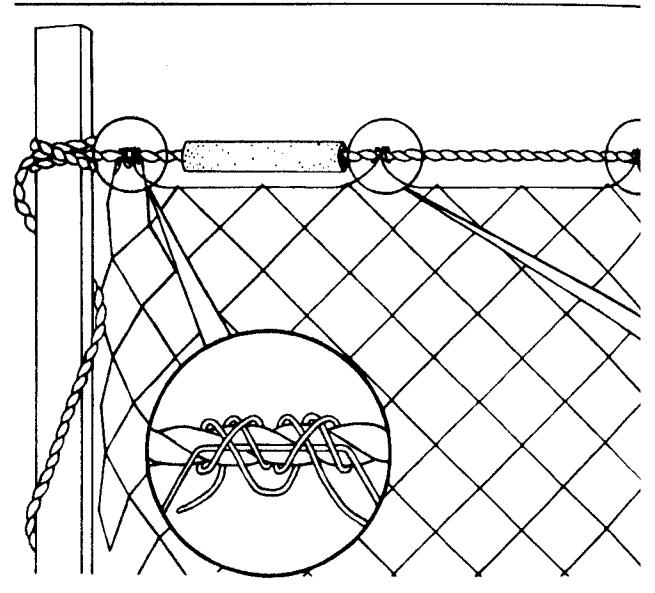
Next, tie the float line at both

ends to stable objects, such as trees, a fence or brace. Leave about four feet of extra line at either end.

Now, inspect the net to make sure that there are no damaged meshes. The ends of the netting should be square.

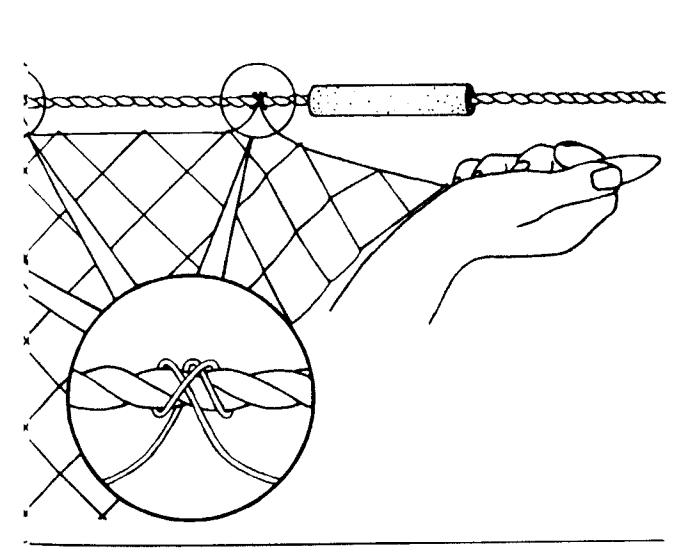
Then tie the first mesh directly to the float line at your first mark. The

Stringing the float line: closeup on left shows double clove hitch; on the right, a single clove hitch



clove hitch is the quickest and most common knot used in net hanging.

For the sake of security, it's a good idea to make your first knot a double or triple clove hitch. If you're hanging on the half, loop the twine through four meshes. Loop it through three meshes if you're hanging on the third. (Remember that these are general formulas, which you may wish to vary.) Then tie the second knot to the next mark. Continue this hanging process, tying to each mark and spacing floats evenly, until all the webbing is hung on the line. Finally, tie a double or triple clove hitch so that the last mesh is secure.



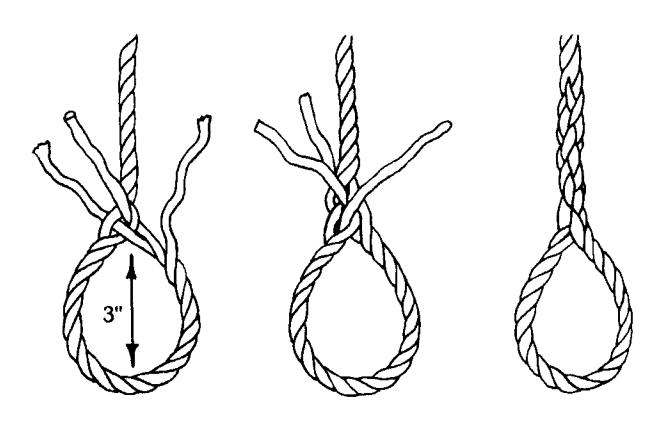
The lead line

Next, mark the lead line and string it with the proper number of leads. You don't need to do this if you are using lead core line. Then untie the float line from the braces and replace it with the lead line. The the lead line to the bottom of the net, following the same procedure you used for securing the float line to the top of the net.

Finishing touches

To secure the ends of the float and lead lines, form loops (about three

Splice used to form loop in lead or float line

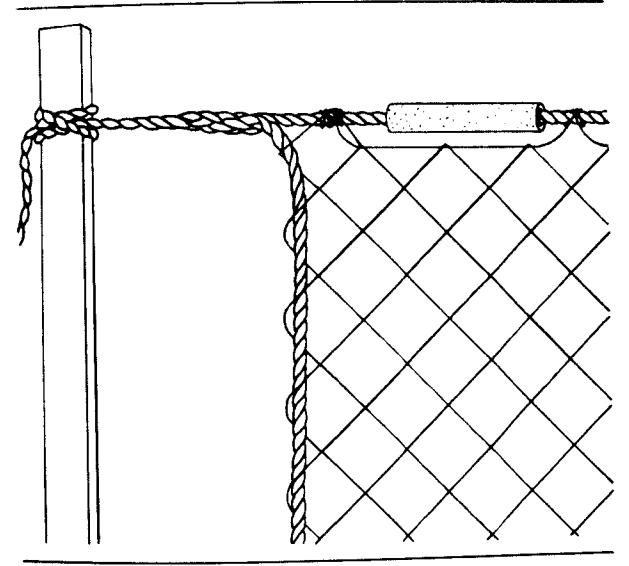


inches in diameter) by splicing, braiding or whipping the line to itself. The loops will come in handy when you're tying to an anchor line or buoy marker.

When the float and lead lines are properly hung and the loops are made, the sides of the net may be finished. Use line at least as strong (at least a quarterinch in diameter) as that you used for the float and lead lines. You will be pulling on the net with these lines, so they need to be tough. Weave the side lines in and out of the webbing. Then splice or whip them to the top and bottom lines.

Unhook the line and you're ready for fishing.

Side line spliced to float line





For a copy of this booklet, write:

UNC Sea Grant College Program

105 1911 Building N.C. State University Raleigh, N.C. 27650