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An ancient fishing method brings twentieth-century anglers excellent results.

Night Stalking Flounder in the Ocean Surf

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INTRODUCTION

Spearing, probably the most ancient of fishing methods, is still practiced by contemporary commercial and sport fishermen. Javelins or spears used for self-protection and for hunting terrestrial animals were probably adopted for fish spearing as early as the upper Paleolithic period, more than 10,000 years ago (Znamierowska-Prüffer, 1966). About 8,000 years later, during the time of the Greeks and Romans, it was known that fish could be detected at night using an artificial light and then speared. Floyd (1966) described the modern day basic gear and technique of gigging (spearing) flounders in shallow protected coastal waters at night. The technique of stalking and gigging flounder while wading in the ocean surf at night with further descriptions of the gear employed are not recorded. The purpose of this report is to provide this documentation with emphasis on the methods and equipment typically used along the central North Carolina coast, south and west of Cape Lookout, and to acquaint fishermen with this novel type of surf fishing.

FISHING METHODS

Night stalking flounder in the ocean surf in North Carolina is done only in the fall of the year, September through November. It is then that flounders of the genus *Paralichthys* migrate from the estuaries to the ocean (Ginsburg, 1952). The first cold front or so-called "mullet blow" of the fall, characterized by decreasing air temperatures and northerly winds, usually signals the advent of flounder movement from the estuaries. After entering the ocean an unknown percentage of flounder move into the nearshore and surf zones where they stay, feeding on the abundant bait fishes, until about mid-November when the decreasing water temperature forces them to seek deeper water.

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Figure 1.—Sport fisherman lifting a gigged flounder out of the surf and preparing to thread the fish on the stringer attached to the gig. (Photo courtesy of Curtis W. Lewis.)

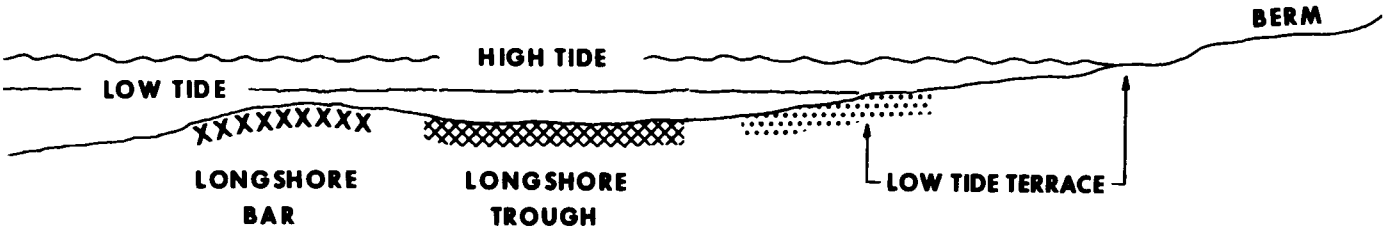

Figure 2.—Beach profile showing portions of the surf zone where flounder stalking is most productive at low tide (good indicated by cross hatching, best by x's) and at high tide (stippled).

General Technique

The basic technique is to wade in water waist-deep or shallower with an underwater light to search for flounders resting on or in the sandy bottom. When a fish is detected the stalker carefully readies his gig directly over the prey and with a quick thrust plunges the gig into the fish. Occasionally flounder may be seen swimming slowly over the bottom and may be gigged on the move. To minimize the damage to the edible portion of the fish, the stalker should attempt to strike the fish in the head region, preferably near the rear edge of the gill cover. After the fish ceases its struggle it is carefully lifted out of the water (Fig. 1) until it can be pushed up the metal gig (described later) and the gig point is threaded through the loop on the end of the stringer, thus securing the first fish. Fish caught subsequently are simply pushed down the stringer and are held on by the first fish. By putting fish on this type of stringer and dragging them along in the water, most of the fish may be kept alive during the fishing.

Flounders rely on their protective coloration and their ability to remain motionless on the bottom, partially or almost totally covered with sand, to capture food and evade predators. This concealment behavior is exploited by the stalker, who must simply search the bottom for an outline, fragmentary or complete, of a flounder. The stalker is aided by the blinding and possible mesmerizing effect that the artificial light has on the fish, as suggested by Znamierowska-Prüffer (1966).

Stringrays are occasionally encountered in the surf zone while searching for flounders. Virtually all of these rays are small and not aggressive and will very often swim away when the fisherman approaches. A few, however, do not and the fisherman should be alert.

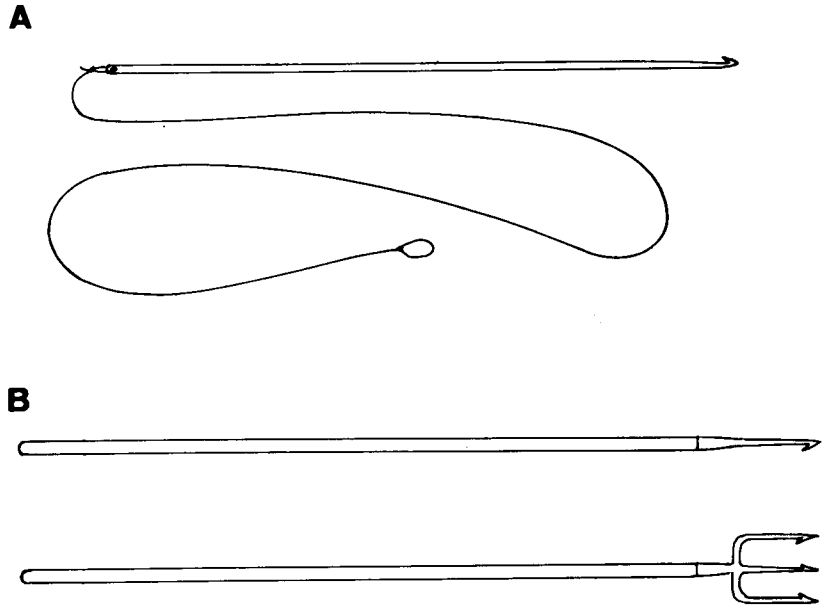

Figure 3.—Configuration of single and multiprong gigs used to spear fish in the ocean surf. A. Popular all metal gig with attached stringer of ⅛-inch nylon twine. B. Single and three-prong (trident) gigs with wood shafts.

Physical Conditions

Night stalking flounder in the ocean surf is possible only a few nights in the fall. On a good fishing night physical conditions must be suitable to allow wading waist deep in the surf and good visibility through the water. The most important physical conditions affecting fishing are described below.

Surf Zone

Successful stalking in the surf requires a knowledge of where to search for flounder. Flounder may be found anywhere in the surf zone in water only a few inches deep to water too deep for wading. However, certain portions of this fishable area are more productive than others. At low tide fish may be found outside the breaking waves beyond the low tide terrace, in the longshore trough (if the beach has one), and on the longshore bar (Fig. 2). The most productive fishing is done on the outer edge of the longshore bar or, when there is no longshore bar, just beyond the breaking waves in knee- to waist-deep water. The areas around rock jetties where flounder apparently concentrate for shelter and feeding are also productive. Stalking is generally less productive at high water because fishing is then necessarily confined to a smaller area (Fig. 2), i.e., the lower portion of the low-tide terrace and the adjacent part of the trough. Flounder are seldom found in areas where rip currents flow seaward (rip channels). Best fishing is done from about 1.5 hours before to 1.5 hours after low tide.

Wind

Wading waist-deep in the surf and at the same time keeping water out of one's waders is only possible when the waves are small, ideally less than 1 foot. Winds blowing from land to the ocean (offshore winds) tend to reduce the wave height and calm the surf.

Several days of moderate offshore winds are usually necessary to reduce the surf after a period of onshore (from ocean to land) winds. The fisherman contemplating a flounder gigging excursion should check the wind direction, speed, and duration as a clue to the condition of the surf or, if possible, make a trip to the beach to inspect wave conditions.

Water visibility usually increases as a result of the surf being calmed by offshore winds. Occasionally, however, water visibility may not be good even after a day or two of offshore winds because of the large amount of suspended material in the water (referred to as "thick" water). Also, strong winds from any direction may produce surface ripples and spray that hinder visibility.

Moon Phase

All other conditions being equal, stalking flounder is more successful on nights when there is little moonlight. New moon phase and cloudy nights will probably result in better fishing, but the fisherman should not forego fishing on moonlit nights if the other more important conditions described above are favorable. Flounder are apparently more light-adapted on moonlit nights and seem to swim about more. Those that are on the bottom will sometimes flee from the fisherman's light and motion. Floyd (1966) recommends that if gigging is done on moonlit nights the fisherman should move in the direction of the moon to prevent casting a shadow over the search area.

SPECIES CAUGHT

The predominant flounder gigged in the ocean surf in North Carolina below Cape Lookout is the southern flounder (*Paralichthys lethostigma*). The average size of individuals gigged is less than 3 pounds with limits of about 0.5 to 14 pounds. Smaller individuals (less than 2 pounds) are caught more frequently in the early part of the fall while larger ones are more abundant near the end of the fall season. Curiously, the catch of this species in the ocean surf is virtually all females. Of the 46 sexually mature flounder examined by the author in October and November of 1974, all were females. Males may be offshore in deeper water.

The summer flounder (*Paralichthys dentatus*) is gigged occasionally in the ocean surf during the late fall. The pounds of this species caught is probably less than one percent of the total catch of all flounders gigged in the surf. During the fall of 1974 the author caught two small summer flounders (1 pound each) in a total catch of about 300 pounds of flounders. Windowpane flounders (*Scophthalmus aquosus*) may also be seen in the ocean surf but, owing to their small size (about ⅓ pound maximum), are seldom gigged.

FISHING IMPLEMENTS

The equipment required for gigging flounder in the ocean surf zone is simple and relatively inexpensive. The essential gear consists of a gig and an artificial light.

The Gig

The gig or spear is a hand-held implement that is used for stabbing the fish. A simple, useful design (Fig. 3a) is a 3.5- to 5-foot metal rod of either steel or aluminum sharpened to a point on one end. The point is often fashioned with a barb and the opposite end of the rod has a hole drilled for attaching a fish stringer of ⅛-inch twine of nylon or other synthetic material. The rod should have a diameter large enough (about ⅜-inch) so that it can be grasped firmly and be durable enough to withstand the struggles of a large fish but yet small enough (in diameter) so that the fish is not unduly marred or the rod too heavy and unwieldy. Ready-made gigs of aluminum or steel can be purchased for several dollars at fishing supply stores. Home-made gigs can be made from nearly any available metal rod; especially suitable are concrete reinforcing rods which can be cut to the preferred length.

Also in common use are the commercially available single and multiprong gig points pre-welded to a socket which can be affixed to a wood shaft (Fig. 3b) of any desirable quality and length. These gigs are lighter weight than those made entirely of steel and can be used in deeper water but have the distinct disadvantage of not also serving as a fish stringer. The multiprong gigs will also unduly damage the fish.

The Light

The purpose of the light is to provide illumination of the bottom so that flounders may be seen by the stalker. The most efficient lighting of the bottom is by means of a waterproof underwater light powered by a conventional lead-acid battery. Gasoline lanterns are not recommended for use in the surf because saltwater splash will often crack the glass globe of the lantern when in use.

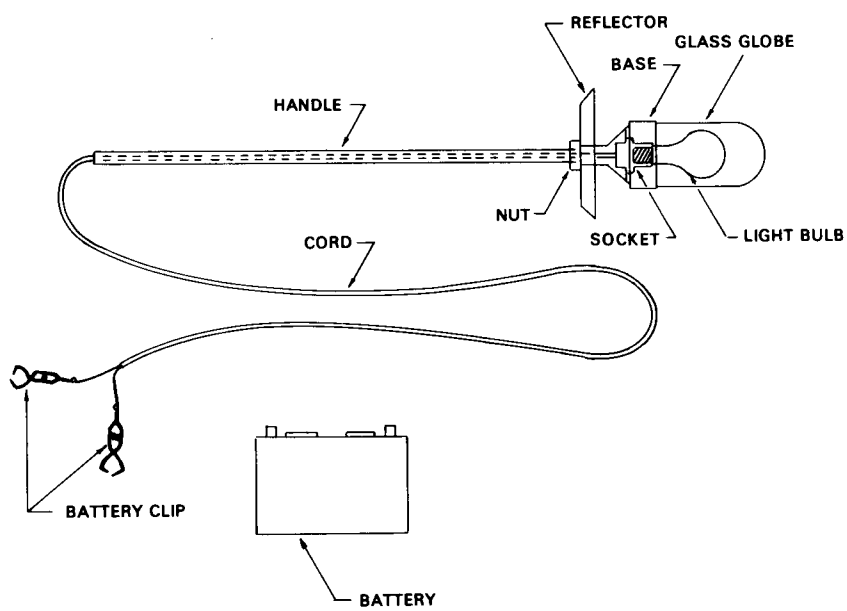

Figure 4.—Diagram of underwater light assembly.

A simple and relatively inexpensive underwater light (Fig. 4) can be constructed from materials available at many hardware or marine supply stores. A 4- or 5-foot section of ¾-inch diameter metal or polyvinyl chloride pipe is used as the shaft or handle. The pipe is threaded on the outside of one end for about 1-inch. A nut is tightened on the threaded end and a reflector, made of a heavy duty pie pan with a hole drilled in the center, is slipped on the pipe and the base tightened down to hold the reflector secure. The 14- or 16-gauge insulated electrical cord is pushed through the handle and the stripped conductor ends are attached to the socket terminals in the base of a vapor-proof interior marine light fixture. A 6- or 12-volt, 50- to 100-watt light bulb is then put in the socket and the heavy duty clear glass globe is screwed into the base. Silicone rubber caulking compound is applied to all joints to keep the assembly watertight. The opposite end of the handle can be wrapped with plastic insulation tape and also coated with the caulking compound. When it is necessary to repair the light the dried caulking compound can be removed with a knife. Finally, large battery pinch-clips are attached to each of the two wire terminals.

Underwater light assemblies resembling the one described above can be purchased in some fishing equipment stores for about a 50 percent higher cost than the above custom model can be made.

The power source for the underwater light is a conventional lead-acid battery; standard automotive, motorcycle, or tractor batteries are used. The voltage of the battery and light bulb must correspond. The battery should be selected for its compactness and weight since it is often carried by the fisherman during the fishing operation. The battery chosen should provide at least 2 hours of peak lighting for the wattage bulb used. The battery should be kept fully charged between fishing trips and seasons.

A side or back-pack of canvas, nylon, or other durable fabric is used to carry the battery during fishing. Military surplus knap-sacks or hiking back-packs are very suitable. The battery may first be placed in a heavy plastic bag then put into the carrying pack. It is desirable that the battery be kept as dry as possible and a top flap on the pack will ensure that saltwater splash is kept off the battery. The battery should be kept upright during fishing to prevent accidental acid spill.

Some fishermen prefer to carry their battery in either a #2 or #3 galvanized tub or a 20-gallon garbage can buoyed up with an automobile tire inner tube. While this portage may be easier than carrying a battery it does not allow the mobility of the back-pack method, and requires two persons to steady the float in the surf and to handle the gear when fish are caught and strung.

The fishing gear described herein is relatively simple and inexpensive to construct or purchase. The value of the catch to the sportsman from several successful nights of gigging can more than equal the modest cost of the equipment. It is not unusual for a person stalking alone in the surf to catch more than 50 pounds of flounder on a successful night.

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