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Fishing Around New York

KNOWLSON & MULLER
EAGLE BUILDING, BROOKLYN, N. Y.
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FISHING AROUND NEW YORK

**WHERE TO FIND THEM
HOW TO RIG
HOW TO CATCH THEM**

**CHART OF HOOKS SHOWING
EXACT SIZES TO USE ETC.**

BY

J. W. MULLER

ARTHUR KNOWLSON, Collaborator

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KNOWLSON AND MULLER

EAGLE BUILDING BROOKLYN, N. Y.

PREFACE.

No man knows all there is to know about fishing. No man ever did know it, since the day of the first hairy man who caught the first fish with his tough hands. Let us hope that no man ever will know it all.

¶ If a man positively knew all about it, he would lose more than half the fun of fishing. In the dark, mysterious water, is a dark mysterious life. Every time we go a-fishing we learn something new and wonderful about it. And we know that the next time we go, we will learn something more.

¶ That is why all good fishermen stay young until they die. Fishing is the only dream of youth that doth not grow stale with age. No man has ever caught so many fish or so big a fish that he does not hope to catch still more and still bigger ones.

¶ Every good man does not go a-fishing; but that is only because every good man, alas, is not perfect. Every good man ought to go a-fishing, because it would make him even better.

¶ The man who fishes cannot conceivably harbor evil thoughts of his fellow man or his fellow woman. He does not desire money, for all the money in the world is powerless to sway the simple judgment of a fish as the quality of a worm.

¶ He is busied in a far more noble pursuit than the unpleasant pursuit of gain. He ceases to waste his time in making a living. He is after fish. In those supreme and royal hours there is no dream for him except fish. His soul is serene and his nose is sunburned and the work-day world is lost.

¶ And when he comes back home, there is no selfishness left in him. He tells his brother fishermen all that he learned—just what the fish bit best on, and how they did it. Fishing is a generous art. It hath no room in its kindly philosophy for petty meanness or ignoble secrecy.

¶ In this book the writer tells all that he knows, after having fished and studied fish for twenty-five years. He is conscious that hundreds of his readers will know something that is not here set down. He will ask them only to remember what he said in the introduction to this little preface—that no man knows all there is to know. And he will add that he has set nothing down that he has not tried himself or seen himself; so whatever may be the faults of this book, it has at least the one humble merit of being based on actual and repeated experience.

¶ It has been a pleasure to write the book—a pleasure, but a softened sorrow, too, for so many of the fine old anglers with whom he has fished have gone to the Happy Fishing Grounds, where, he hopes and believes, they cast shadowy flies with Izaak Walton and discuss great striped bass with grand old Seth Green. Surely men of the simple, innocent mind and soul of good fishermen will have a fishing heaven beyond.

¶ So the book, dedicated to the good anglers who have passed, is given to the good anglers who are alive, with the modest hope that it will please and help them to good luck and monster fishes.

Tomcod

TOMCOD. Because the tomcod is most numerous in cold weather, it is often known as frost-fish, a name, which, however, it has to share with smelts and whittings.

¶ It belongs to the codfish family and closely resembles the common codfish in shape, color and markings. Many fishermen believe that the tomcod is nothing but a young deep sea cod, but this is erroneous. The tomcod never grows more than a foot long and few specimens are over six inches. It is the smallest of the cod family.

¶ A few tomcods are caught around New York during the entire year, but the big runs appear with the cold weather of November and disappear with mild weather in spring. Tomcod fishing usually stops by the end of March.

¶ The tomcod spawns in our waters during the winter. It runs far up such rivers as the Hudson and does not object to fresh water. It likes fairly deep water, but prefers shores to open channels as a rule. Therefore the best fishing is from piers, rocky ledges or steep tough banks that have at least seven feet of water at low tide. Places twice or three times as deep are better.

¶ If fishing from a boat, places where the channel gets narrow or deep holes at the bends of channels are the best. The tomcod likes rocky bottom.

¶ Most of the fishing is done from piers. It is not uncommon for a fisherman to catch 50 to 150 tomcods in a day from one of the piers that jut into the New York Bay or the East or North rivers.

¶ The tomcod is a bottom fish exclusively. It must be fished for with sinkers heavy enough to hold bottom.

¶ To get any amusement out of it, a light rod should be used. The current at many of the piers and shores where tomcods are plentiful is not too strong for a light rig, as a half ounce sinker will hold bottom.

¶ Pier fishing for tomcods is usually good at Ulmer Park, thence along shore to Fort Hamilton and thence up to the piers that extend into the East River. Along the Staten Island shore the piers at Midland Beach and South Beach are good. There is excellent fishing at times from piers at Clifton, Stapleton and Tompkinsville.

¶ Tomcod fishing is fair in the Kill von Kull from West Brighton to Mariner's Harbor.

¶ The railroad bridges over Newark Bay still offer fair tomcod fishing. There is some shore fishing along Greenville and Communipaw, on the New Jersey side of New York Bay. The best tomcod fishing, however, is from piers and shores on both sides of the Hudson River above Grant's Tomb and thence north as far as Croton.

¶ For boat fishing the channels that run under the trestle work in Jamaica Bay should offer some good sport, as the government has been planting tomcod fry for some years. In the dredged channel in Gravesend Bay there are several deep holes that attract tomcod. The Eel Patch, near Bayonne, in Newark Bay, is fairly reliable.

¶ Glen Head, Glen Cove and Oyster Bay on Long Island are excellent places.

¶ The best bait for tomcods is sandworms. As a rule they will take bloodworms readily. Next in value comes the soft clam. Small baits should be used.

¶ Leaders are not necessary. Three hooks or even more are attached to the line, the lowest being tied close to the sinker and the others as near together as possible.

¶ Double gut is enough for the snells. The best sizes of hooks are number 7 Sproat or Carlisle, number 6 Aberdeen, or number 3 Kirby. See hook chart in back.

Cod

COD. The codfish is one of the most widely distributed fishes known to man. It is found on our Atlantic and Pacific coasts from the temperate zone to the Arctic Ocean, and is plentiful in northern European waters.

¶ It is one of the greatest feeders in the sea, and will eat almost anything on the bottom, from snails to small fish. Some of the rarest deep-sea shells would not be known to science if they had not been found in the stomachs of captured codfish.

¶ Besides being the most plentiful food fish, it is one of the largest. The official records vouch for specimens 5 feet long.

¶ The fish caught around New York range in general weight from 5 to 20 pounds. Fish weighing from 20 to 45 pounds are taken on the fishing banks steamboats every year, but the average is under 15 pounds.

¶ They are deep-sea fish almost exclusively, but come toward shore when tempted by good food conditions. Thus in 1897 there was a wonderful shore run. They were taken close to Norton's Point, Coney Island. Row-boats that went out from Gravesend Bay took fish inside of the Point. Great catches were made from the ocean piers on Coney Island.

¶ During this run codfish ventured into Jamaica Bay. One was caught in Flatlands Bay in less than fifteen feet of water.

¶ A similar run has not occurred since then, but there has been fair night fishing at Coney Island every win-

ter. This night fishing is best when the weather is very cold. Smelt has proved good bait there.

¶ The bulk of the codfishing, however, must be done off shore. One good ground is the Rockaway Shoals, reached by boats from Gravesend, Sheepshead and Jamaica Bays. The best grounds are the fishing banks off the Long Island and New Jersey coasts.

¶ The fishing begins in late October and improves steadily with cold weather. Fishing Banks steamers go out through the entire winter. In April the fish leave.

¶ The codfish is not a particularly choice feeder, but he is not prone to frequent dirty bottom. While he will feed over both sandy and muddy bottom, he prefers bottom that has rocks, mussels or coral.

¶ Codfish are so voracious that a codfish that is struck and tears away will often come to the bait again within a few moments after getting his wound.

¶ Being bottom feeders exclusively, heavy sinkers are needed. The best is the bank sinker. It should weigh $6\frac{1}{4}$ to 9 ounces for the heavy fishing off shore. For fishing inside of the Lower Bay sinkers ranging from $6\frac{1}{4}$ ounces to $7\frac{1}{2}$ ounces should be sufficient.

¶ No leaders or gut snells are needed on the hooks. Most dealers carry codfish hooks fastened to heavy twine snoods.

¶ One, two or three hooks may be used. The first is tied just above the sinker. The others are tied far enough apart so that they will clear each other.

¶ If it is possible to obtain calico crab in the shedder state, no better bait could be desired. Smelts and herring are good bait, but the usual bait is soft or hard clam and the great ocean clam known as the skimmer.

¶ A hard strike is needed to fasten the hook firmly in the leathery mouth of this fish.

¶ The styles of hook preferred by most fishermen are Limerick or Kirby. Numbers 7/0 to 8/0 as shown in chart are the best sizes. Codfish have gaping mouths and large hooks are needed.

Pollack

POLLACK.

The pollack is the one game fish of the cod family. It does not range as far south as the codfish, and is more common at Cape Cod than around New York.

¶ On the Long Island coast it is most plentiful off Montauk Point, where it runs in large schools. When a "run" is on, there is excellent sport in trolling from power boats and sailing dories in the tide rips.

¶ The pollack, like the codfish, reaches great size. Specimens 4 feet long have been recorded. The capture of pollack is generally accidental, as there are rarely enough fish in New York waters during the winter to make it profitable to go after them especially. Great quantities were caught on the Farm Banks in 1897. They ran up to 29 pounds.

¶ In former days when the pollack was more plentiful here, it had the local name of coal fish, which is the same name it bears in England, where it is one of the favorite sports of sea anglers to troll for it.

¶ Although most of the pollack taken on the fishing banks off Long Island and New Jersey are caught on bottom while fishing for cod, the pollack is not a bottom feeder exclusively. It is the one member of the cod family that seeks live prey on the surface.

¶ When pollack are thus hunting they rush violently along the surface in schools that often make the water foam and boil. At times they "mill," when the schools bear a striking resemblance to moss bunker schools if the pollack are small.

¶ Pollack will take lead or pearl squids when trolled rapidly among them. In Newfoundland and New Brunswick waters a favorite method of amateurs is to cast nickeled spoons with a long rod from an anchored boat.

¶ When thus hooked on the surface they make a determined fight, occasionally leaping from the water.

¶ The tackle must be heavy. An average school of adult pollack will contain fish that range from 10 to 15 pounds in weight.

¶ Fishermen desiring to try pollack fishing from Long Island cannot do better than to arrange with the professional fishermen at Montauk. When the pollack strike in there, the sport is excellent.

¶ In bottom or bait fishing for them, the best bait is herring or shedder lobster. but shedder crab, sand launce, smelt and even clam will take them.

¶ In bottom fishing the rig should be the same as that used for codfish. In surface fishing, without a spoon or squid, a number 1 Virginia, tapered point, or number 6/0 Kirby or Limerick hook should be attached to the end of the line with a piano wire leader.

OTHER CODS. There are several members of the cod family that are caught occasionally around New York though very rarely. One is the spotted codling. It grows to a length of about a foot. The brown line along its side is broken by white spots, the inside of its mouth is white, and the first dorsal is chiefly black with a white margin. A few come into the Lower and Raritan Bays in late fall. ¶ A hake, known as squirrel hake, also comes into the Lower Bay in small numbers. It is plentiful in Buzzard's Bay in May and June and October and November. It averages about 2 pounds and has very poor flesh. A few are taken in nets in Gravesend Bay. ¶ The haddock which swims with the codfish, but hardly ever gets longer than 2 feet, is caught occasionally on the fishing banks, but is much more abundant off Gay Head, Mass., and around Martha's Vineyard.

Whiting

WHITING. The professional fishermen know this fish as the winter weakfish and as frost fish. Another name is the silver hake. It belongs to the same order of fishes as the cod and the ling, but is in a family by itself.

¶ Its bright silvery sides and fairly graceful shape make its name of winter weakfish appropriate. It arrives in October or November in schools that generally contain a few hundred fish. It is only seldom that they are caught in any quantity, as they are not sufficiently plentiful to induce anybody to go out after them especially. Therefore the only whiting that are caught are those that happen to take the hook of the sportsman fishing for cod.

¶ Schools of whiting run close along the surf of Long Island and New Jersey in the winter, especially at night. At such times the fish are generally in mad pursuit of the little silver sand launt, and they crowd so closely to shore that the surf often throws them on the beach.

¶ Fishermen take the whiting in cold weather at night by wading along shore with torches and spearing or scooping them with nets as they dash through the surf.

¶ The names "hake" and "whiting" are also given sometimes for the kingfish, an entirely different fish.

¶ Whiting in our territory rarely weigh more than 1½ or 2 pounds in shore or 5 to 6 pounds in deep water. Smelt and sand launt makes the best bait. Numbers 4/0 Sproat or 5/0 Limerick are good hooks.

LING: HAKE— The ling is extremely plentiful around New York and can be caught all the year. It is a hake but is not called by that name. The fish known as "hake" by New York fishermen is another fish of the same family.

¶ The ling is generally gray or yellowish-brown. The fish known here as hake has a purple hue. It is a better fish. Ling average $2\frac{1}{2}$ pounds. Hake average 4 pounds but run up to 18 pounds,

¶ Hake are not often caught during summer. Ling are most plentiful in spring and autumn but can be found in summer in the deep water off Scotland Lightship.

¶ There is considerable disagreement about the hakes. There are many fish of the hake family and even scientists do not agree about them.

¶ The ling likes muddy and dirty bottom, and stays in one feeding ground for a considerable period. There are ling grounds close to Rockaway Beach and Coney Island where a good catch of ling is practically assured at any time except under adverse weather conditions.

¶ One spot is near the bell buoy off Rockaway. Another is on one of the old dumping grounds inside of the Lower Bay. At times ling are so plentiful that they can be taken anywhere over the mussel beds between Coney Island and Sandy Hook. There are seasons when small boats anchoring between Norton's Point on Coney Island and the ship channel catch many.

¶ Ling are bottom-feeding fish. Their natural food consists of the crabs that stay active in the winter, which are: the calico or lady crab, also known as the sand crab, the green weed crab, and the red rock crab. Clam is good bait and is the kind most used.

¶ In ordinary seasons ling come into shore at night to feed along the surf. This makes the ocean piers at Coney Island favorite places, as they are lit electrically.

¶ The methods of capture are the same as for codfish. The best hooks are numbers 5/0 Sproat, Limerick or Kirby and number 2 Virginia, as shown in chart.

Porgy

PORGY. Most of the fishing for porgies is now done in the open sea from large boats. These porgies are known as sea-porgies and run large, ranging up to 2 pounds. They never come into the bays, but stay in deep water.

¶ The young porgies, known as sand porgies, come inside of the inlets in vast numbers in some seasons, though they have not been nearly as plentiful in recent years as they used to be. They rarely average more than $\frac{1}{4}$ pound and generally are still smaller.

¶ Porgies arrive in June and stay till October. July and August are the best months.

¶ They are bottom fish exclusively and prefer rocky places, wrecks and channels that have the bottom known as "cinders."

¶ Hard clam is the best bait. In the bays, however, when the small porgies are present in good numbers they will take shedder crab, shrimp, sandworm and bloodworm ravenously. The baits should be cut into tiny pieces for the bay porgies, as they are cunning thieves and nip at the bait so swiftly that they will strip the hook unless the bait is small.

¶ The bay porgies run into both shoal and deep water wherever there is food but prefer places at least 10 feet deep at low tide where there is a fairly strong current. When they are present at all they are generally in large schools. Therefore if the fisherman strikes one he is fairly sure to get more. No definite rule can be given about tides. They generally bite best at slack water and the first hour of the running tide.

¶ They do not often fool with the bait but go at it sharply and they must be struck at once. A swift jerk must be given the instant they nibble. The legs of shedder crab make excellent bait because the skin is tough and the bait is small enough to stick closely to the hook.

¶ The rig for porgy fishing is the same for both sea porgies and bay or sand porgies, the only difference being that the hooks are much larger in sea fishing. The sinker must be heavy enough to hold bottom without drifting off. The first hook is tied just above the sinker, and the other hooks as close to it as possible without tangling. A good rule is to tie them just the length of the snell apart. In bay fishing most fishermen use 3 hooks and some as many as six. In good porgy seasons it is nothing uncommon to catch two or three fish at once.

¶ The fishing banks, the Iberia and Black Warrior wrecks, Rockaway Shoals and the mussel beds off Long Beach are the famous grounds for sea porgies. They have been fairly plentiful every season in recent years even when there have been no small porgies in the bays. Hard clam and skimmer clam are the best baits on the wrecks. They fight hard and strong tackle is needed. They are among the most popular fish caught in the open sea.

¶ For sea porgies use No. 6 or 7 Virginia, No. 1 Sproat, or 1/0 Limerick or Kirby hooks. For bay porgies use No. 7 Sproat, Aberdeen, Carlisle or No. 9 Chestertown hooks. See hook chart.

LAFAYETTE

LAFAYETTE.

This is exclusively a bottom fish. It disappears entirely for some seasons and then comes suddenly in incredible quantities. The "run" of 1908 was a very large one, almost as good as some of the record runs of past years. The little fish were caught as far up the river as Newburgh, N. Y.

¶ When lafayettes appear at all, they can be caught practically everywhere around New York, running into all the inlets and far up the East and Hudson Rivers. They rarely weigh more than a few ounces and fish of the size of the human hand are considered large. They are very game, however, and give excellent sport for their size. Some fishermen carry trout rods to use for them when other fish are not biting.

¶ They generally arrive in July and stay till October. When food is plentiful they will not always take clam bait, preferring bloodworm, sandworm or bits of shedder crab; but after a few weeks they have generally cleaned up the waters so thoroughly that they will take hard clam or anything else. Worm bait or shedder crab, however, is the best at all times.

¶ They are not particular as to locality, but swarm as plentifully in muddy creeks and on mud flats as in

channels and over hard bottom. The best places for them are oyster beds or channels with from 8 to 10 feet of water at high tide. At low water they run to the deeper channels or into holes in the small channels and drains.

¶ Although they are lively feeders, they are rather wary and often go at the hook very quietly and cautiously, nipping the bait off bit by bit so daintily that they can hardly be felt. It is not easy to hook them when they do this. The best way is to lower the rod a few inches so that the tide can carry the bait off. Generally the lafayette will grab it when it thus moves away. Another way is to raise the tip of the rod gently, luring the fish along until he strikes sharply.

¶ Always keep a taut line and move the bait up and down from the bottom every few minutes. Lafayettes will bite harder at a moving bait than a motionless one; but the movement must be gentle.

¶ Never use large baits. It is true that there are times when the fish will go at anything. But when they are at all shy, they will stay away from a large bait or tug at it cautiously while they will snap boldly at a bit of bait just large enough to cover the point of the hook. Always cut the jaws off sandworms and bloodworms. If you use shrimp for bait, put it on head first so that the point of the hook will be at the tail. The lafayettes are often afraid of the spines on the head.

¶ Use a sinker that is just heavy enough to go down to bottom swiftly but that will move a little with the tide whenever the line is raised. Tie the lowest hook just above it. This bottom hook will take the most fish. Fasten the next hook about 3 inches above it and so on. Three hooks are usually used but many fishermen use as many as five.

¶ Use no leaders unless the fish are scarce or shy. The smaller the hook the better. The best are Carlisle and Sproat numbers 8, 9 and 10.

King Fish

KINGFISH. This fish is getting to be scarce around New York. Few are caught now in Jamaica Bay or in the Lower Bay and Staten Island waters where they used to be plentiful. They still occur in fair numbers in the waters behind Long Beach and in Great South Bay. There is reasonably good kingfishing in the surf at Rockaway Beach at times. Barnegat Bay and Corson's Inlet in New Jersey offer really good fishing usually. Below Virginia they are still plentiful. They like deep water at ends of sand bars. ¶ Though kingfish are among the gamest salt water fish, they are bottom feeders exclusively. Their mouth is underneath and is very small, consequently small hooks and baits must be used. The sinker must be heavy enough to touch bottom, and yet light enough so that the tide can carry it along every time the line is lifted. This should be done constantly till the bait has been carried several hundred feet from the boat. ¶ Attach the hook close to the sinker. Leaders are not essential when casting from shore. Kingfish like sand-worm bait best but shedder crab is mostly used as the small sand crab is a terror on bloodworm. Soft and hard clams are good. They like hard, clean bottom of bright sand or oyster beds, and rarely run larger than $3\frac{1}{2}$ pounds. Aberdeen No. 1 or Chestertown No. 6 hooks are good. No. 1 or 1/0 Sproat or O'Shaughnessy are right for casting.

Eel

EELS. These fish bite best in spring and autumn, but can be taken throughout the summer also.

¶ If the weather is mild and open, they often feed well into December. If the temperature drops low, they burrow into the mud and hibernate for the winter, coming out again in March or April with the flounders.

¶ They bunch in great numbers in mud holes in winter. Baymen who locate these holes drive spears into the bottom, and often bring up two eels at one thrust and sometimes three or four. A barrellful of eels is sometimes taken out of one hole.

¶ Eels feed most freely at night. The peculiar smacking sound that almost all fishermen have heard near grassy banks after dark, is made by eels feeding on shrimp and spearing.

¶ Creeks with steep sod banks or with sedges standing in 3 to 5 feet of water at high tide are excellent places, particularly on dark nights without a moon when the tide is flood. The best fishing usually is close to the bank. It is well to sound the depths and pick out the deepest places. Small drains running through flats that are dry at low tide often hold many eels when the tide begins to ebb.

¶ The best method for eel fishing is bobbing. No hook is used. A dozen or more sandworms or bloodworms are strung on rough worsted or silk, the loose ends of which are then wound around and around the bait suf-

ficiently to protect it against being torn off, but not so much as to hide it. The material used must be of rough fabric, because the idea is that the tiny teeth of the eels will get caught in it and the fisherman can thus lift the eel into the boat before it can get away.

¶ This bob is used with a line just long enough to touch bottom. A very stiff stick or pole is used instead of a rod. A sinker is tied below the worms.

¶ As soon as a bite is felt the bob is brought smartly inboard. It is then shaken violently over a bucket or other receptacle and the eel is shaken off.

¶ In hook and line fishing, the sinker must be heavy enough to hold bottom in any tide. There is little advantage in using more than two hooks, as eels will rarely bite at a hook much higher above the bottom than three or four inches.

¶ They bite very quickly and cunningly and must be struck promptly or they will steal the bait.

¶ The angler should be provided with a rag so that the eels can be gripped firmly as soon as they come in. If they are allowed to wriggle or dangle even for a moment they will generally tie themselves into a knot in their endeavor to tear away.

¶ The best places for them are shallow coves and bays, such as the flats in Flatlands Bay, the creeks east of the trestle in Jamaica Bay, the muddy cove at Great Kills, S. I., Gravesend Bay, and the sedgy shores of the Arthur Kill between Staten Island and New Jersey.

¶ In autumn the eels run well along the Staten Island shore between Princess Bay and the Woods of Arden.

¶ The best bait is shedder crab, sand or bloodworm. Clam, hard and soft, attracts them almost as well.

¶ Large eels will bite well at killies. The killies need not be alive. Spearing make a fine bait.

¶ Tie the hooks as close to the sinker as possible. The best sizes and kinds are No. 9 Chestertown, No. 7 Kirby or Limerick or No. 8 Sproat. See the hook chart.

Smelt

SMELT. Comparatively few fishermen know that there is good winter fishing for smelt in some parts of Pelham Bay, behind City Island, and in the channels that run in at Larchmont, Mamaroneck and New Rochelle along the north shore of Long Island Sound.

¶ Smelts, also known as frostfish and icefish, begin to run in late November. They remain only during winter and will not stay in warm water. They prefer narrow inland channels and rivers or creeks.

¶ The average size of smelt around New York is less than seven inches. They reach lengths of twelve inches occasionally.

¶ They run in big schools and bite fast and steadily. Night or dull days are best for fishing.

¶ In most channels they bite best at flood tide.

¶ At the slightest nibble the fish must be struck and with the same motion lifted into the boat. When smelt are biting fast they can often be brought in as fast as the line can be wielded.

¶ Most fishermen do not use a reel but have only enough line to reach bottom. This is quite practicable as smelt fishing is usually best in from 4 to 6 feet of water.

¶ Bloodworm is the best bait. They will take shrimp, sandworms and clams. All baits must be small.

¶ Use a sinker heavy enough to take the bait to bottom quickly. Immediately above it tie three or four No. 8 Carlisle, Aberdeen, Chestertown or Sproat hooks,

Sheepshead

SHEEPSHEAD.

This fish is so scarce now on the Atlantic coast north of Virginia that there is no use fishing for it specially. Now and then one is caught while fishing for blackfish. The sheepshead has the same habits and feeds the same way. It is a great prize, not only because of its rarity, but because it is immensely strong and usually runs large, ranging from 5 to 20 pounds.

¶ When taken on blackfish tackle sheepshead often succeed in snapping the hook in two, as they have a habit of butting their heads against rocks. They will take any blackfish bait, but prefer hermit crabs.

¶ August and September are best. Sheepshead are occasionally caught along the trestle in Broad and Beach Channels, Jamaica Bay. They like mussel bottom. Many were taken each season years ago on the Black Warrior Wreck and the Stone Pile. A few are still caught at Fire Island.

¶ To fish for them specially tie a number 2 Virginia or Blackfish hook (see chart) close to the sinker and bait with a young soft clam about 1 inch long, leaving the shell on. Give them a little time after they take the bait till they begin to crush it.

Sea Herring

HERRINGS. Several varieties of the herring take the hook well in our waters. The first ones are the sea herring, which arrive about the end of May with the early weakfish. They average about 1 pound, and are beautiful fish with very large silver scales and pearly tints over steel blue.

¶ In October a larger herring, running as high as $2\frac{1}{2}$ pounds, arrives and often stays till December. This is the hickory shad, better known as fall herring or shad herring. The true shad does not take the hook.

¶ All these herrings are surface feeders and very shy indeed. They must be kept near the boat by constant and liberal chumming. The tackle must be very light.

¶ They make a game though short fight, often leaping clear of the water. Sometimes, especially early in the morning or at dusk, they will snap eagerly at tiny bright spoons or fly hooks.

¶ Very small killies and bloodworms make fair bait, and herring will often bite at weakfish tackle baited with this, but to get a good mess it is necessary to fish with much finer tackle.

¶ A single shrimp is put on the hook and the line should be tossed lightly into the tide and allowed to float away with the chum. If the fisherman avoids noise or sudden motions and chums properly, the herring will come close to the boat.

¶ An extremely small hook is necessary. A number 8 Sproat or Chestertown should be attached to a 6 foot leader and fastened to the end of the line. Neither float or sinker must be used. See chart of hooks.

Flounder

FLOUNDER. This fish feeds only on bottom. Soft black mud in water from 6 to 10 feet deep at high tide is best. At high tide they scatter well over the flats, but remain most numerous at the edges of channels and drains. At low tide they work into the deeper channels and generally are most plentiful at bends or in deep holes. Other good places are holes under steep banks in creeks if the bottom is fairly soft. A good rule for channel fishing is to anchor on the edges of channels at high tide; between the edge and the center at half tide; and in the center of the channel at low tide.

¶ It is wise to study the bottom. This is done easily by simply lifting the anchor and examining the mud that is brought up. Flounders are a very cleanly little fish and they want mud that is free from filth. Coal-black mud that feels velvety when rubbed between the fingers is best especially if it has tiny white specs in it. This shows that it has shell-fish life, which attracts flounders. If the mud has a greasy or slimy appearance or a foul odor, the chances are not good there for fish. There are exceptional cases where flounders are caught on dirty bottom, but the rule given here is good generally.

¶ The sinker must be heavy enough to hold bottom

without moving. It should sink into the mud so that the fisherman can stir it every few minutes and thus raise up a little cloud of mud. This attracts flounders. For the same reason, it is good to anchor astern of a clammer or oyster dredger. The flounders gather there to feed on the worms, etc., dislodged by the rake.

¶ When flounders are biting well, they swim slowly along hunting food, and at such times a good catch can be made without moving the boat all day. But it will not pay to stay in any spot if the flounders do not bite there pretty rapidly. They may be feeding within a few yards, but the boat may be anchored in a spot that has nothing to attract them. There are always such spots in even the best flounder grounds.

¶ If flounders are not biting where you are, raise anchor and move a hundred feet or so, and repeat this until you strike fish. Flounders must be hunted. They don't rush around looking for food like weakfish.

¶ There are days when they do not bite anywhere even in the best places. They lie buried in the mud with only their eyes uncovered. Then they often can be made to bite by stirring up the bottom with a rake or a pole or by rowing around with the anchor dragging. This brings them out of the mud, and then they usually start feeding because they are tempted by the worms that come swirling out of the disturbed bottom.

¶ Flounders come in from the sea in September, begin biting as soon as the weather gets cold and bite well into December in mild seasons. Then they go into the mud and stay dormant till the end of February. In a mild winter they often begin feeding freely by Washington's Birthday. Toward the end of April they run out to sea again. Hardly any stay in the bays through summer, and those that do are small.

¶ The best months for them are late March, April, October and November. If the season is cold, they often lie on shallow bars when the day is sunny, and

if the day is dark they will seek the deepest water or lie under banks, preferring those sheltered from wind.

¶ For flounder fishing the boat should be anchored with as little rope as possible so that it will lie steady. The fisherman must feel his line constantly. Flounders bite very lightly and generally do not fool much with the bait, but nip at it and go. They must be struck at once.

¶ A short, smart tug generally fastens the hook in their mouths. It is a mistake to use the violent, surging jerk that many fishermen employ. Flounders have a great habit of spitting the bait out, and a ferocious jerk on the part of the fisherman helps them in this trick. The secret is to strike the fish just hard enough to twist the hook in his mouth and make it hold.

¶ Sometimes flounders bite so delicately that they can hardly be felt, and it seems as if spearing or other tiny fish were nibbling. Then they need coaxing. Slacken the line instantly and let them have a few inches. This generally tempts them into sucking the bait in. After a second or two, tauten your line up very gently, and if you feel the weight of the fish on it, give a short, steady tug. This will hook the fish, whereas a sharp jerk will probably pull the hook away from him. Lifting the tip of the rod 3 or 4 inches will be quite sufficient if done with the proper motion.

¶ If you are using light tackle, don't make the mistake of despising the flounder because he isn't a game fish. Handle him respectfully when hooked, for his first fight will be violent, and he can smash tackle very suddenly.

¶ Sandworms make the very best bait. They should be firm and red. Sick, thin, greenish worms are no good. Cut the jaws away before using the worm. Use small baits. Very often flounders will refuse to go near large baits. The worm should merely cover the hook half way up the shank.

¶ Soft clams are next to sandworm in value. Then comes hard clam. The common mussel known as horse

mussel that is found everywhere sticking out of meadows and banks is good, but will not stay on the hook well. Sometimes when flounders are "off their feed," they will take a combination bait made of a tiny bit of clam with a bit of sandworm on the point of the hook. A bit of red feather on the hook is useful sometimes, but it must be very small.

¶ Toward the end of April when the flounders move to sea, and the very large flounders known as "sea flounders" are caught, clam often proves the best bait. When the flounders thus run, the fisherman will do better in the deep channels near the inlets than on the flats and shallow channels inside of the bays.

¶ The bays on the south shore of Long Island have the ideal conditions for flounders. Jamaica Bay is one of the best places on the coast. Flounders weighing as high as $4\frac{1}{2}$ pounds have been taken, and a few weighing 2 pounds and more will be caught during a good day's fishing. The average weight, however, is probably little more than 1 pound.

¶ Long Island Sound is also famous for flounders. The waters around City Island contain enormous numbers. They are small, however, averaging below $\frac{1}{2}$ pound.

¶ In rigging for flounders the prime necessity is to get the hooks as close to the sinker as possible. The hooks should have strong snells. Do not use leaders.

¶ The lowest hook must be tied immediately above the sinker. The other hooks go as near the first as possible. A good rig is to use a wire spreader which makes it possible to use 2 or 3 hooks all on bottom without tangling. (See swivel chart on page 56.)

¶ In flounder fishing it is better to have hooks too small than too large. The best hook for all 'round fishing is a number 8 Chestertown. This will hold fish from $\frac{1}{4}$ to $1\frac{1}{2}$ pounds perfectly, and will not miss many larger ones. Those who prefer a larger hook will not go amiss if they take a number 7 Chestertown. Number 5 Kirby is also a good hook.

Sea Bass

SEA BASS. This is a very plentiful fish in the open waters around New York. It used to be equally plentiful in the bays, but in recent years it has not appeared there in large numbers.

¶ The sea bass that come close into shore and enter Great South, Jamaica, Raritan and Barnegat Bays are much smaller than the ocean sea bass. They rarely run as high as $1\frac{1}{2}$ pounds and the average is $\frac{1}{2}$ or $\frac{3}{4}$ pound. They are bottom feeders entirely and like the deepest water they can find. They are hardly ever found in water less than 10 or 12 feet deep at low tide and the best depths are from 15 to 50 feet

¶ They prefer deep channels with hard bottom, and prefer mussel beds, rocks or "cinders," which are the homes of marine worms. Wrecks or timbers that have been sunk long enough to be encrusted with mussels and barnacles are excellent. Creeks that have sod banks dropping steeply into 10 feet of water or more at low tide are good places when the tide is high. The sea bass usually feed close under the banks there. Creeks with low muddy or sandy banks are not good generally. Sea bass are very cleanly feeders and like clear water.

¶ The early run enters the bays in late May. These fish are small and usually dark brown in color. They bite best on sandworm. In July the larger bass arrive. They are generally dark, blue, indigo and black predomi-

nating. Shedder crab and clam attract them best, but they will also take sandworm and shrimp.

¶ These summer bass are not shy and no leaders are needed. The sinker must be heavy enough to hold bottom in any tide. Often the best fishing is in the very middle of deep channels when the tide is rushing at its swiftest. Therefore fishermen should be prepared with sinkers weighing at least $3\frac{1}{2}$ ounces or even 6 ounces.

¶ Two or three hooks are used, the lowest one being about 2 inches above the sinker. The others far enough apart to clear. Keep a taut line and strike without too much force the moment a good bite is felt. If there is only a nibble, give the fish time. When a sea bass takes hold in earnest he gives a good tug.

¶ In August in good bass years a run of larger fish comes in from the sea. Their color is generally lighter, often being straw yellow with indigo blotches. These fish may average 1 pound and in a good day's catch there may be a few weighing $1\frac{1}{2}$ pounds. They are far more shy than the summer bass and leaders are necessary. The lower leader should be at least 3 feet long and be attached about 6 inches above the sinker. Another leader 2 feet long should be attached about $1\frac{1}{2}$ feet above the first.

¶ These late bass will take shedder crab and clam, but sometimes they are very slow about taking anything except live bait. Nothing will attract them so much as a green killie $1\frac{1}{2}$ or 2 inches long, hooked carefully through the lips so that it can swim naturally. If the hook is passed gently into the killie's mouth and out through its gills, it will live for hours.

¶ When the bass are biting well, they will strike like a weakfish, gulping the killie and hook and running off. A mere tightening of the line will fasten the hook in their mouths then. But they are more likely to catch the killie by the tail and then lie quite motionless, so that all the fisherman can feel on his line is a very gentle series of short tugs. If the angler strikes then,

the bass will let go or tear off part of the killie.

¶ As soon as these gentle tugs are felt, lower the tip of the rod nearly to the surface and pay out line bit by bit, keeping the thumb constantly on the reel so that you can feel the fish all the time. The fish will move away slowly and may take out as much as 50 feet or even more. Sometimes he will make smart runs, enough to make the reel spin; but unless he has the hook, these runs will not have any force behind them and will not be followed by the violent surge that a sea bass always makes when he is really hooked.

¶ Generally the bass will stop after he has moved away about 20 feet. Then a sharp series of quivering tugs will follow, meaning that the fish is turning the killie in his jaws to get it down head first. As soon as he has done this, he will start off with a powerful jerk and a short, gentle strike will hook him.

¶ The great hump-backed sea bass that are caught in the open sea bite savagely and without any of this trickery. The best baits for them are hard and skimmer clams and shedder crab. Heavy sinkers weighing from 5 to 10 ounces are needed. The hooks must be tied close to the sinkers and must have very strong snells, for the fish range from 1½ to 6 pounds.

¶ The mussel beds off Long Beach, L. I., the Iberia Wreck and the fishing banks outside of Sandy Hook are the best places. They can be reached only by seaworthy and large boats. The fishing begins about the middle of June and lasts till October. It is at its best in August.

¶ For these big ocean bass the best hooks are No. 5/0 Sproat, O'Shaughnessy, Limerick or Kirby or No. 4 Virginia. For the August-run bay bass use No. 1/0 Sproat or Aberdeen. The latter hook is excellent for killies because it is so thin and blue that it is almost invisible in the water. For the early summer bass in the bays No. 1/0 Sproat, No. 6 Virginia or No. 1/0 Kirby or Limerick will be best. See hook chart.

CHANNEL BASS. (RED DRUM). This fish is not so plen-

tiful around New York that anybody can catch it, nor are there enough so that even experts can expect to get one every time; but there are more large red drum caught with hook and line each year than most fishermen imagine. It is a handsome fish, belonging to the same family as the weakfish; but there is no resemblance between them. The red drum feeds almost entirely in the surf or in deep inlets and never comes inside of confined bays. They run along shore in July and August. Every year a fair number weighing from 10 to 60 pounds are taken by casting into the surf at Long Beach, L. I. A sixty pounder was taken in 1901 at Edgemere, L. I. The best fishing for them is in the surf from Barnegat to Sea Isle City, N. J. (Corson's Inlet.) There is also trolling there. Rig and method are the same as described for striped bass fishing in the New Jersey surf. Shedder crab is best bait.

BLACK DRUM. This fish is related to the red drum and reaches weights up to 100 pounds. It is not so handsome nor nearly as game as the red drum. Most of those that are caught are taken in the surf, but a few are hooked by bottom fishing on oyster beds, where this fish often is a great pest, destroying young oysters in immense quantities. Now and then schools of young drum ranging from $\frac{1}{4}$ to 4 pounds come into New York harbor. They have black stripes, and are called "banded drum." They are fairly common near Barnegat Inlet.

BERGALL. (CUNNER.) This fish is related to the blackfish, and is found in the same places. Inside of bays it is simply a nuisance, rarely being more than a few inches long and stealing bait industriously. In the open sea, however, it sometimes reaches $2\frac{1}{2}$ pounds. Bait, rig and method are same as for blackfish.

FLUKE. No fish comes into the bays regularly in such numbers as does the fluke. From late May to the end of October it can be found almost everywhere from Cape May to Montauk Point.

¶ It is shaped like the winter flounder but otherwise is entirely different. It has very large jaws full of long, sharp teeth, and it hunts live prey, especially killies and spearing.

¶ It will go anywhere in search of food but it prefers clean stony or sandy bottoms in channels that have at least 8 or 9 feet of water at low tide. Favorite places for fluke to lie are in the deep water at the tail-ends of sandy bars where the current eddies will swirl killies and other food to them. The fluke also likes creeks with steep sedgy or sod banks, sometimes called stunt banks. Another good spot is wherever a drain or small creek meets a channel.

¶ It is a bottom feeder almost entirely, but at times it feeds and "breaks" on the surface, especially at dawn or evening. At night it will work into the high grass where there are only a few inches of water.

¶ It is a slow swimmer and usually follows a moving bait for some distance before taking hold. Now and then, however, a fluke will strike savagely and rush away like a bluefish, even jumping clear of the water if the place is shallow.

¶ The fluke is a great glutton and gorges itself till it can hold no more; yet there are times when it is "off its feed" and then only the best bait and scientific fishing will succeed.

¶ It is not a shy fish and does not object to noise or disturbance like the weakfish, but quiet fishermen will do better than careless ones. It will generally take a moving bait better than a motionless one. Therefore drifting is more successful than still-fishing.

¶ Drifting is not at all like trolling. A sinker is used to keep the bait dragging on the bottom. This sinker need not be heavy, because the boat moves with the tide. Sinkers like Nos. 9 or 10 shown in the sinker chart in the back of this book are the best kinds because they are not likely to catch in shells or stones. A 3 foot leader is attached with a good swivel about 6 inches above the sinker and 2 feet above this is a 2 foot leader.

¶ The best bait is a bottle green killie about 2 inches long. Hook it through the lips or pass the hook gently into its mouth and let it come out at the gills, thus not wounding it at all. Many fishermen put the hook through the killie's back, because they argue that the fluke will hook himself more surely. This is true, but it has the disadvantage of dragging the killie sideways, which makes it look utterly unnatural besides generally making it twirl and spin till the line kinks.

¶ No other bait compares with killies for drifting, but shedder crab, spearing, mossbunker or strips of herring, porgy, lafayette, sea robin or snappers are all very good. Fluke will also take sandworm and clam.

¶ In deep water drifting use only one leader with two hooks attached to it. Bait the lower hook with a killie and the other with fish bait, preferably a piece of sea robin.

¶ The boat is allowed to drift with the tide and from 50 to 100 feet of line are paid out. In places less than 10 feet deep, as much as 200 feet may be neces-

sary if the water is very clear, as the fluke will keep away from the boat. In deep water it is enough to pay out sufficient line to keep the sinker on bottom.

¶ On the flood tide the fishing is done on the banks near the channel edges. At low water, fish right in the channels. Fluke bite best in a running tide and few are caught in slack water.

¶ Still-fishing is done from any anchored boat with exactly the same rig. The sinker must be heavier, however, because it must resist the tide; but it should not be so heavy that it will not drift a little every time the line is raised. This should be done continually for fluke are often very slow about taking a motionless bait.

¶ Ordinarily fluke will gulp the bait and give a violent plunge immediately. Then a short jerk is sufficient to hook them. But at times they take hold of one end of the bait and tug gently and in a noticeably sluggish way. When they do this, they generally give three or four quivering jerks in swift succession, as if they were trying to back away with the bait. This is just what they are doing. At such times a few feet of line should be let out very slowly. After a few seconds, raise the rod carefully and feel the fish. If he is still tugging lazily, it is a sign that he has not yet gulped the bait. Draw the bait in slowly a few inches. If this does not tempt him to snap at it, let him have more line again. The writer has given a lazy fluke as much as 100 feet of line.

¶ When the fluke finally bolts the bait, there will be no room for mistake, for he turns instantly with a powerful flirt of his tail and starts away.

¶ Fluke average about 2 pounds, but at any time and in almost any place, even an unskilful fisherman may hook one that will run anywhere from 5 to 15 pounds. Fluke reaching the latter weight have been taken in Great South, Jamaica, Raritan and Barnegat Bays more than once. Almost anybody may expect one or more that will weigh 5 pounds in the course of an average

day's fishing around New York, and hardly a day passes in July and August without the capture by somebody of a fluke weighing 10 pounds or more. In the deeper water off shore, fluke occasionally weigh as much as 20 pounds. The deep holes in the Rockaway Inlet channel and thence out across the mussel beds often hold very large fluke. Beach Channel, the Raunt, Goose Creek, Fishkill and Island Channels in Jamaica Bay have lots of fluke of all sizes at all tides in an ordinary season. An excellent place is close to Nova Scotia Bar where its southern end slopes into very deep water.

¶ Dead Horse Inlet and a deep place in Island Channel close to the sod banks north of Barren Island are famous spots. Dead Horse Inlet begins between Barren Island and Sheepshead Bay and leads in behind Barren Island.

¶ By starting from shore after high water, fluke fishermen will have the ebbing tide to carry them toward inlets and then can drift back again with the incoming tide. The jerks of the line as the sinker drags on bottom, will fool the inexperienced drifter again and again into the belief that a fish is biting, but after a short time he will have no trouble in perceiving the difference.

¶ The best hook for general fluke fishing is a No. 1, 1/0 or 2/0 long-shank Kirby Bass. The long shank of this style is a great advantage in taking the hook out of the fluke's unpleasant jaws. The No. 1 hook is small enough to hook a fluke as small as 1 pound. The 2/0 will not miss many small fluke and still it is large enough to hold as big a fish as may come along. Many fishermen, however, prefer 5/0 and 6/0 Sproat hooks, and there is no particular objection to this, as the fluke has big jaws and will take big baits. See actual sizes as shown in hook chart. The long-shank Kirby Bass hooks are same sizes as the Kirby hooks on the chart, the only difference being in the long shanks.

Weak Fish

WEAKFISH.

By nature weakfish are surface swimmers, hunting live prey, but they adapt themselves to local conditions. In shallow channels and over flats and oyster beds, they generally feed on or near the surface because shrimp, shedder crabs, killies, etc., gather there. In water deeper than 15 or 20 feet, where the smaller swimming creatures do not willingly venture, the weakfish are always likely to feed on worms and other creatures on bottom.

¶ Their manner of biting is as variable as their habits. When they run on the surface they take the bait with a smashing strike; but when they are feeding any distance below, they often bite daintily, and on the bottom they usually nibble or tug a little while before taking the hook and running away.

¶ Their normal way is to snatch the bait at full speed with an effort that can best be described as like a furious blow. This "strike" is superior in suddenness and viciousness to the strike of any other common fish, not excepting black bass or striped bass. Only the bluefish equals it. If weakfish fought to the end as they begin, they would be the leading game fish of North America; but their first dash is their best. They weaken steadily though they do not surrender without many sudden and savage rushes.

¶ These fierce spurts that occur without warning, make weakfish difficult to handle. Their lips are almost like paper and the hook rips through them, permitting the

fish to tear themselves free. Therefore a rod that is flexible yet springy, like an 8-ounce black bass bait rod, will save more fish than a stiff rod that refuses to yield to their surges.

¶ Practically all fishermen who use the heavy stiff sea rod expect, as a matter of course, to lose a certain number of weakfish through tearing loose during that first desperate rush. The writer has fished with every kind of weakfish tackle made, and he can assure his readers that an angler with a sufficiently elastic rod will lose very few, if any, fish if he tries the following method when the fish are striking hard.

¶ After playing out the bait to the right spot, hold the rod almost, but not quite, at a right angle to the line, with the tip close to the water. Keep a firm grip, or a strike may jerk it out of your hands. Hold the thumb of the left hand on the spool of the reel. Never mind about the reel handle. When the fish strikes, do not strike back. Simply sway him firmly with the rod, governing the reel altogether by the thumb. If his dash is too wild for the rod to hold him, regulate the thumb pressure to give him line, quickly or slowly, as he takes it; but don't give him an inch of slack line, and do not for a moment relax the steady, even pressure of your rod.

¶ Above all, do not make the mistake of letting the fish jerk your rod forward so that it will point in the same direction as the line. This is a common mistake of beginners and of men who are accustomed to the use of heavy tackle. The rod will govern the fish only when it is in such a position that its full elasticity comes into play. In any other position, it will permit slack line the instant the fish changes his course; and slack line in weakfishing means a lost fish almost always. This is because the hook is almost certain to tear the jaws somewhat, no matter how carefully the fish is handled; and as soon as slack line occurs, it is likely to drop out.

¶ Do not try to reel the weakfish in till his first rush has ceased. Fight him with the rod as much as possible. You will be surprised to find how well even a very large fish can be controlled. Most salt water anglers begin to reel in the moment they fasten their fish. Then, if the fish makes a new dash, it is either a case of hauling against him by main strength or he will jerk the reel handle from the angler's fingers and run without any control.

¶ Weakfish make these unexpected dashes continually, and it is then that they escape or smash tackle. Do not, therefore, be in a hurry to reel in. So long as the rod is playing the fish, you have him safe and can afford to delay reeling till you are fairly sure that he is ready to come. If, however, the weakfish tries a favorite trick of rushing toward the boat, you must reel instantly and sway your rod backward as far as it will go, to prevent slack line.

¶ Ordinarily, weakfish hit the bait so desperately that they hook themselves, and it is unnecessary to strike them. There are times, however, when they take the bait gently and move away, generally slowly, sometimes quickly, but in either case without force. In such cases they must be struck. Tauten the line very gently till the whole weight of the fish is on it. If he pulls steadily, it is likely that he has the bait well in his jaws and a firm, deliberate stroke of the rod will fasten him. If, however, the fish simply tugs irregularly or makes little nipping jerks when you feel him on your line, the chances are that he is playing with the bait. Give him line very carefully and without sudden motions. Sometimes a timid fish will take 25 or 30 yards. Then, as a rule, he will swallow the bait and start away.

¶ If you feel tiny, feeble nibbles at your bait in waters where weakfish should be, do not be in haste to assume that it is done by lafayettes or other small fish. Sometimes weakfish will nip at bait this way through

a whole tide. There is little use then in trying to hook them with a sharp strike. Change the bait, adjust it very carefully, and when the fish nibble, play out 8 or 10 feet of line instantly. The tide will at once swirl the bait along and the fish generally snap at it immediately. Many fishermen coax the weakfish by pulling the bait away from them instead of letting it drift; but timid fish are much more likely to snap at something that drifts naturally with the tide than at something that moves against it.

¶ Combinations of bait often prove successful when weakfish are nibbling. Put a shrimp, killie or worm on the hook and cover the point and barb with a bright bit of clam, or run the hook through the body of a soft clam and then hook on a killie through the lips.

¶ It is always well to have a variety of baits. Shrimp, bloodworm and sandworm are best in late May and in June. After that, and till the fish depart in early November, shedder crab usually leads as bait, but there are times when shrimp will be most successful.

¶ They will often bite at strips of mossbunker, herring, snappers, porgies, lafayettes or sea-robins when nothing else will tempt them. Live killies will take the largest fish, especially early and late in the season, when the great tide-runners hunt by themselves.

¶ The writer has taken weakfish on clam, both hard and soft, when they refused shrimp and shedder crab. Whatever bait may be used must be absolutely fresh. Only rarely will weakfish take stale shedder or shrimp that have been dead for any length of time.

¶ Surface fishing can be done with or without a float. The most simple rig is to attach the hook to a 2 or 3 foot leader which is tied directly to the line. No sinker is used unless the current is so swift that it forces the bait to the top. In that case small sinkers (see No. 12 on sinker chart) or split shot (see No. 13 on sinker chart) should be fastened to the leader a foot above the hook. The sinker chart is on page 57.

¶ If used without a float, this rig is allowed to drift off with the tide. Every few minutes the line must be pulled taut to prevent the bait from sinking to the bottom. Then a little more line is played out. This process is repeated till 150 or 200 feet of line are out or even more if the current will carry it. Then the line should be reeled in slowly, stopping every few minutes and giving it a smart jerk. Weakfish often follow a bait and strike when it is jerked.

¶ If the current is too feeble to carry the line away, a float should be attached just above the leader. Do not use a heavy float with a light rod. It will interfere with striking the fish.

¶ Hooks with pearl squids are very popular for this kind of fishing, but sometimes the fish will take plain hooks in preference. No one can tell beforehand. The only way to find out is to experiment. Weakfish change their habits according to circumstances.

¶ When the fish are running deep, the rig is quite different. Tie a sinker to the end of the line, preferably of the style like No. 9 in the sinker chart. It must be heavy enough to go to the bottom, but not heavy enough to stay there motionless. It should move a few feet with the tide every time it is lifted.

¶ A 2 or 3 foot leader is tied to the line immediately above the sinker or 1 or 2 feet above, according to the way the fish are running. About 3 feet above this, tie another leader, 3 or 4 feet long. Good swivels should be used to connect the leaders to the line to prevent snarling.

¶ As soon as this rig touches bottom, the fisherman must begin to lift it, let it move off a few feet, lift it again and so on, till he has let out as much line as possible. Sometimes the fish do not take hold till the bait has moved 200 or more feet away from the boat. Then draw it in by similar slow degrees.

¶ Whatever method of fishing is used, chumming must be done constantly. This is one of the most import-

ant things in weakfishing. Shrimp makes the best chum. Pinch each one to kill it before tossing it overboard. If thrown over alive they often scatter too far, as they can dart big distances. It is impossible to use too many shrimp. From 1 to 2 dozen should be thrown out each time. If the tide is swift, toss them as far ahead of the bow as possible. In slack tides, throw them where your line is.

¶ If shrimp are scarce, mince porgies, lafayettes, small snappers, killies or spearing, but be sure to make very tiny bits. This stuff sinks quickly. Therefore, too much must not be thrown out at one time, or it will attract dogfish and crabs. If none of these baits can be obtained, cut clam or mussels up and save every fragment of shedder crab shells and even bread crumbs and egg shells or other remnants of food.

¶ Any noise that can be carried through the water is likely to frighten the fish. When approaching the fishing ground, do not row over it, but drop down on it with the tide if possible. Lower the anchor without a splash and give it only enough cable to hold securely. Do not shuffle the feet on the bottom of the boat, drop oars or pound clams, etc., on the gunwale or thwarts of the boat.

¶ Weakfish arrive early in May and immediately run toward the heads of bays to spawn. This operation is completed by the majority of the fish by the middle of May, though some fish full of spawn are taken in June.

¶ They do not bite freely when they arrive, but fish are caught every year beyond the Trestle Work, Jamaica Bay and in Great Kills, Giffords, Staten Island, as early as May 15. Good fishing, however, rarely begins before the end of May. The fish bite through the summer and until the end of October.

¶ Weakfish ranging from $\frac{1}{2}$ to $1\frac{1}{2}$ pounds usually swim in schools which generally contain several hundred fish but sometimes number many thousands. Fish ranging

from 2 to 5 pounds do not usually swim in schools except in the open sea where large schools of fish running up to 12 and 15 pounds are found at times. These rarely enter the bays.

¶ As a rule the weakfish in Jamaica and Great South Bays run large, the average probably being 2 pounds, while fish weighing from 3 to 5 pounds are taken in some numbers. Every season a few fish weighing more are caught. The records for Jamaica Bay show fish weighing 7, 8, $9\frac{3}{4}$ and 11 pounds.

¶ The weakfish taken on the Staten Island side of New York Bay run smaller, being generally school fish not exceeding an average of 1 pound. They are, however, wonderfully plentiful, so that catches of 50 and even 100 to a single rod are not unusual in a good season. The best grounds are the oyster beds extending along Staten Island from Great Kills to Tottenville.

¶ Very large fish are taken now and then along the north shore of Long Island Sound, especially when trolling for striped bass at night around the rocks of such places as Larchmont, etc.

¶ In Narragansett Bay weakfish ranging from 6 to 10 pounds and more are plentiful, and many are caught that far exceed this weight. In New York waters the average angler considers a $2\frac{1}{2}$ pound fish very good.

¶ On oyster beds and other open waters where the depth is from 6 to 15 feet at high tide, the best fishing usually is from half flood to half ebb. In creeks and small bays fishing is best as near high tide as possible. In large, deep channels, the last half of the ebb is generally to be preferred. The largest fish are generally taken near banks or shores at flood tide at night when they run in to feed.

¶ "Jigging" is successful often. The fisherman lets the boat drift over shoal water and uses a hand line with a brightly scraped lead squid without bait. The line is jerked up and down with a sawing motion.

¶ Most fishermen use exceedingly large hooks. The pop-

ular size is probably 6/0 Limerick or 5/0 Carlisle, Sproat or Kirby, as shown on the chart in this book. The largest hook that the writer has used in many years is 1/0 Sproat, and he has found that this hook will hold weakfish of four pounds perfectly.

¶ A great deal, however, depends on the fisherman. There is no doubt that 1/0 Sproat would seem far too small to most experienced anglers. A 3/0 Sproat or a 4/0 Limerick, Kirby or Carlisle should, however, be large enough for any fish except the great sea-run weakfish that weigh more than 10 pounds.

¶ For school fish averaging $\frac{3}{4}$ to 1 pound, a number 1 Sproat or O'Shaughnessy, or a number 1/0 Carlisle, Limerick or Kirby should answer perfectly. If fish are very shy, an Aberdeen hook will often succeed because it is so thin that it is hardly visible in the water. But this thinness makes it likely to rip through the thin jaws of the fish.

¶ The best shape of hook for weakfish is the Sproat or O'Shaughnessy. If the sportsman feels enough confidence in his skill, he should use hooks with nothing heavier than double-gut snells and leaders. An expert can hold fish of any reasonable size with these if his rod is flexible enough to take up sudden strains.

¶ When weakfish swim slowly about with the tips of their dorsal fins showing above the surface, they are generally exasperatingly backward about biting. The writer has succeeded sometimes, not always, by tying Aberdeen or Sproat hooks as small as numbers 6 and 7 to very light mist-colored leaders and baiting with a single shrimp put on with its head up the shank of the hook while the point and barb were just covered by its tail. This rig, without sinker or float, was tossed overboard very quietly and allowed to drift far astern. When weakfish strike such small hooks, they must be allowed to run free for a few seconds so that they will take the hook well into their throats, otherwise they will not hold.

Striped Bass

STRIPED BASS.

The striped bass is the most difficult to find of all our local fish. It has the most unaccountable moods everywhere from the Chesapeake to Cape Cod. It is, however, the most eagerly sought of all fish, because it is not only game to the heart, but because there is always a chance that a very large one will take hold even in a tiny creek.

¶ Every year a few large bass ranging from 10 to 20 pounds are caught in the shallow, narrow, grassy creeks near the trestle work in Jamaica Bay. The lucky anglers rarely get more than one large fish in a day, however, and they often try for weeks without a single strike.

¶ The most likely way to get large bass is by casting into the surf along Long Island, or on the New Jersey beach from the Highlands to Ocean City. Asbury Park and Deal Beach have always offered the best fishing there.

¶ The favorite Asbury Park rig is a pyramid-shaped sinker (see number 3 in sinker chart.) In ordinary surf 3 ounce is heavy enough. In very high seas and bad undertow 5 ounce is used. About 2 feet above the sinker a 2 foot leader of triple or quadruple gut is fastened to the line with a double action swivel like No. 10 in the swivel chart in this book. The hook is a 6/0 tempered O'Shaughnessy. A medium stiff rod with very large agate guides is used. The reel must

be large enough to hold 600 feet of 21 thread line. Bloodworms, shedder crab and skimmer clams are the best bait. The length of the cast varies according to locality. Generally it is necessary to cast 100 to 150 feet and in some spots longer casts are demanded.

¶ June and September are the best months; but there have been years when the records for number and size of big fish were made in August. The fishing generally lasts into October. The records show fish weighing from 5 pounds to 65 pounds.

¶ Long Beach, L. I., is another good place though the fish do not seem as plentiful there as on the New Jersey coast. The same style rig is used but very long casts are required. An excellent place for very large bass is at Montauk Point, L. I., where fish weighing from 35 to 65 pounds have been taken in recent years. Twenty years ago several fish of more than 70 pounds were hooked. Late summer is best there.

¶ July is the best month at Block Island on the Sound.

¶ Fishermen trying the surf casting anywhere on our coasts must, however, be prepared for disappointment. Even in the most reliable places the fishing is uncertain. The famous Cuttyhunk and Pasque Island clubs at Buzzard's Bay, Mass., have years when hardly any fish are taken and the same is true of the South Side Sportsman's Club at Oakdale, L. I., whose fishing in Great River is generally excellent.

¶ A fair number of large bass is taken by casting from shore along the Hudson River from Riverside Drive, N. Y. City all the way to Croton and beyond. The rig, bait and method of fishing are the same as for surf casting except that the sinker and line are lighter. Most of the fish range from $\frac{1}{2}$ pound to 10 pounds. Very few weigh more, nowadays, though in past years the Hudson River bass records showed fish of more than 70 pounds.

¶ Many Hudson River fishermen use tiny bits of cork on the leaders to keep them away from the crabs on the

bottom. Much tackle is lost by fouling the stones. The river fishing begins in May and lasts to November.

¶ Very large baits are used for surf and river fishing. One large bloodworm or sandworm is threaded on the hook and drawn over the shank and well up the gut, leaving only an inch or so of his tail to dangle. Then another large worm is put on so as to cover the rest of the hook, leaving a good part of his tail to float free. Many expert anglers use three and even four worms on one hook.

¶ The three hours before high tide and the first hour after it are the best for surf and river fishing. The striped bass root on the bottom for worms and similar food and love to work close in to shore. The richest place for such food is at low water mark or a little beyond. The fish cannot approach this, of course, till the tide is well up. On gently sloping beaches low water mark will be from 50 to 100 feet outside of high water mark.

¶ In the more inclosed bays such as Jamaica and Great South Bays, the bass like to run up grassy creeks that have steep sod banks where they can browse at high tide. Although very large fish run into these places, the average will not weigh more than 2 pounds and there will be many smaller fish. They are much more shy in such confined waters and the tackle must be finer. They do not feed so much on bottom, but browse along the sods and if there are sedges, they are most likely to be feeding on the surface.

¶ The tackle in these places is very simple. No sinker is used. A number 1½ Sproat or O'Shaughnessy hook is attached to the end of the line with a four or six foot leader. Shrimp, shedder, worm or live killies may be used for bait. The boat is pulled close to the bank, the anchor being laid on shore. If this cannot be done, the boat should be anchored across the channel with bow and stern anchors, one lying on shore and the other on the opposite side of the channel so

that there will be no anchor rope in the channel itself to frighten the fish.

¶ The fisherman must be very quiet. The bait is cast gently down the tide and allowed to float close along the grass, sometimes being permitted to sink almost to the bottom and then being brought up to the surface. Three hundred or more feet of line are thus played out, the bait being kept in constant, but gentle motion. In deep channels with a very swift current, this rig may be weighted with a sinker heavy enough to keep it five or six feet below the surface but not so heavy that it will not freely move with the tide.

¶ Still another method of fishing is trolling, used to some extent in creeks and around the sod banks of islands in bays, but used mostly along open beaches and at rocky shores and reefs such as the shores from Hell Gate, N. Y., to Larchmont, Mamaroneck, South Norwalk, etc. Trolling is done with a rig much like that described for creek fishing, but the line and leader must have two or three good swivels like Nos. 7 or 8 in swivel chart. Some fishermen use a bright nickel-plated spinner above the hook. It must be small. The boat is rowed about 3 miles an hour along shore, as close as possible to the rocks or sods, and the fisherman lets out about 100 to 125 feet of line.

¶ Corson's Inlet, N. J. and Port Deposit to Conowingo at the mouth of the Susquehanna River are famous for trolling for very large bass. The favorite baits are bloodworms, eel-tail and mullet. Hooks as large as 10/0 Sproat are used. The fish run extremely large and powerful tackle is needed. Corson's Inlet is much more reliable than the Susquehanna. In the latter place fishing is useless till the river is just right. The fish are known as rock-fish there and in the South.

¶ Both in bays and the open ocean the striped bass prefer to venture near shore at night. The chances for a good catch are always better then than in the day time, especially in the case of large fish.

Bluefish

BLUEFISH: SNAPPERS.

This is the gamest of all salt-water fish around New York. Many expert anglers declare that it is a much better fighter than black bass or any fish except salmon. It is enormously plentiful some years and scarce in others. Its arrival probably depends largely on the food supply.

¶ The large bluefish, ranging from 6 to 12 pounds, and sometimes reaching 15 to 20 pounds, stay in the open sea. The nearest they ever come to shore is when they drive mossbunkers, herring or spearing into the surf. They hardly ever enter the quiet waters inside of the inlets near New York.

¶ The bluefish that come into Great South, Jamaica, Gravesend, Raritan and Barnegat Bays hardly ever reach 5 pounds and probably average only 2 pounds.

¶ In August the young bluefish fill bays and creeks and run up and down rivers, swimming up the Hudson River as far as Croton. Early in the season they are only 6 or 7 inches long. By October they will range from 10 to 14 inches and weigh up to 1 pound, averaging about $\frac{3}{4}$ pound. Even at that late date, however, there will be big schools of 6 and 7 inch fish.

¶ The large fish in the open sea are taken almost entirely by trolling from a sailboat or power boat going swiftly. The fisherman must depend upon his captain for fish. The fisherman tows a heavy hand line to which is tied a 7/0, 8/0 or even 9/0 Limerick hook set in a "squid," a solid block of tin, lead, bone or a

piece of round cedar. About 150 or 200 feet of line is played out. The savage fish hooks himself and must then be hauled in by main strength. Many fish are lost because they suddenly over-run the line and shake themselves free or even bite the line in two.

¶ A still more arduous, but expensive and difficult way to fish for the big ones is with rod and reel from an anchored boat, while a man is kept busy grinding up mossbunkers and throwing the fragments overboard for "chum." The chum must be thrown out in such a way as to have no break in the slick. The fisherman, armed with a strong rod and an immense reel capable of holding 800 feet of heavy line, fastens a 4 or 5 foot leader of tempered steel or piano wire with a No. 1 Virginia or 5/0 O'Shaughnessy hook to the end of the line, puts on a square piece of mossbunker and tosses it among the "chum." The fish generally take the bait only while it is floating out. If none strike it then, it must be recovered and tossed over again. It is furious work when a 10 or 12 pound fish takes hold, and only experts can handle such a fish on the rod.

¶ Fishing for the smaller bay bluefish is done much the same way, only with tackle much lighter, while the "chum" is often spearing or killies although mossbunkers are best. The stuff must be minced very fine. Live killies are best for bait inside of the bays because the fish there feed mostly on killies, spearing, shiners or very small herring. In the absence of live bait, however, shedder crab, spearing or mossbunker answer. Sometimes a piece of bluefish will beat any other bait.

¶ Only one hook is used. It should be mounted on a 3 foot length of thin wire or on gimp, as the bluefish can bite ordinary snells off as if they were cut with scissors. A pearl squid is excellent, providing it is set on a well-shaped hook. If a plain hook is used, let it be a Carlisle No. 4/0. This will catch a 1½ pound fish and also answer perfectly for a 2½ pounder. If the fish are running larger, a 5/0 is a better size,

¶ No sinker is used unless the tide is very swift. Then enough split shot (see No. 13 in sinker chart) should be pinched on the line above the leader to sink the bait about three feet below the surface. If the tide is not strong enough to carry the line away from the boat, a small float should be put on above the leader.

¶ When the fish are in big schools, they are often so desperate in their rushes for food that they will come close to the boat; but generally they stay fifty or a hundred feet astern. Therefore the bait should be cast among the chum as far as possible from the boat and the line should be paid out freely.

¶ Hardly ever is it necessary to strike the fish. They never nibble and rarely play with the bait, but snap at it fiercely and instantly rush away with tremendous speed and violence, giving the fisherman no warning. Often the first intimation a man has that he has hooked a bluefish is when the fish jumps out of the water.

¶ The fight that follows is savage in the extreme. The fish will run deep, throwing himself over and over as he goes down. Then he will flash as suddenly to the surface, jump from 1 to 3 feet high, and hurl himself back into the water headfirst. Generally he will turn over twice while in the air, shaking his head like a terrier.

¶ To haul with dead strength against such a fish is to risk smashed tackle. When the bluefish wants line, he is bound to take it. Yet though he must be humored, it is equally important that he shall get no slack line. Almost every hooked bluefish shakes his head more or less continually and at any moment an inch of slack may enable him to shake the hook out. The fisherman cannot always avoid slack line, however, because the favorite trick of the bluefish is to turn suddenly in the middle of a mad rush and to drive toward the boat like the living bolt of lightning that he is.

¶ Inexperienced anglers always stop reeling in disappointment when their line suddenly slackens and the rod straightens out; but that is the very time to do the quickest work. The fisherman must immediately reel as fast as he can turn the handle, at the same time raising his rod and swaying it back as far as possible in order to gather the slack in the shortest time. If the boat is large enough, he should also walk along the deck in order to hasten the operation.

¶ A bluefish may establish slack line a number of times before he can be brought to the boat. When he begins to yield, however, he has another dangerous trick in reserve. He will stop suddenly at sight of the boat and make one last run as furious as if he were freshly hooked. Usually he will dive and dash under the boat, coming to the surface some distance away on the other side. This of course places line and rod into a very difficult position unless the fisherman is prepared for the trick by keeping the tip of the rod pointing as nearly astern as possible so that the line can be guided around the stern.

¶ There is very little use in fishing for bluefish without a plentiful supply of chum. A school will flash past the boat at the rate of 100 miles an hour, so that in less than one minute the fish may be a mile away. The only way to hold them is to chum desperately the moment they appear. Some fishermen have a small meat chopper screwed to the gunwale and can thus grind out chum with one hand while fishing with the other.

¶ The general habit of these bay bluefish is to swim in rather compact bunches, keeping close to the deepest water and usually moving with the tide, although of course they keep continually darting back and forth also. When they find a school of spearing, killies, mossbunkers or herring, they dash forward to surround it and at the same time they sink so as to get under it, working just the way a purse-seine does. It is then

after they have cut the school up and have begun to scatter after fleeing stragglers that they are likely to take the baited hook.

¶ It is then that their savage pursuit of the little fish makes them rush into the shoals and over bars blindly. But they dash back again into deep water instantly. The place to fish for them at such times is in the channels, baiting with killies about 2½ inches long or with spearing. Keep the bait in continual motion, jerking it with forcible movements of the rod, but always letting it swirl away again swiftly with the tide.

¶ If the bluefish are not in sight on the surface, the place to look for them is wherever two deep channels meet and make an eddy, or the tossing, boiling commotion known as "tide-rip" in water at least 10 feet deep at low tide. Excellent places generally are where the point of a bar drops abruptly into deep water, so that the tide sweeping by makes swirls and little whirlpools. Occasionally there will be found spots in deep channels where there is comparatively slack water even at the fiercest tide-rush. These slack spots are almost certain to attract bluefish because the straggling bait fish huddle there. Very often, however, the bluefish will not venture into the slack water itself, but stay just outside, on the edge of the current, waiting for the tide to carry victims to them. The fisherman should anchor his boat above the eddy or tide-rip so that his bait can drift down the tide about a hundred feet to the spot where the fish are. A light quill float will be advantageous in this kind of fishing. The best time is during two hours before high water and two hours after.

¶ Young bluefish, which are better known as snappers, have nearly the same habits and will be found in the same places as described here for the adult bluefish. But they are much less wary and will go into much shoaler water, so that it is easier to find and catch them.

¶ When the tide is a little more than half high, the little snappers like to run up creeks. Wherever a creek makes a sudden bend, there is always a good chance for snappers by anchoring so that the tide will carry the bait toward the point of the bank. The little killies and spearing generally swim out of the current and gather in bunches in quiet places like this. The best spots of all in creeks are where there are old mill dams, the remains of the tidal mills of past days. The swift water carries the spearing, shrimp, etc., down helplessly and snappers will gather in hundreds just below the rushing eddies to snatch them.

¶ The same reason brings snappers in schools around piers that jut into water where the tide is swift. This makes ocean piers excellent for snapper fishing. When they are plentiful, they will scatter over oyster beds and flats and take the hook anywhere. But the best places always are near points of land, piers, bars and other places where the tide is swift enough to make swirls and where the water is from 10 to 30 feet deep at low tide. The best fishing time is three hours before and two hours after high water.

¶ It is not necessary to use wire leaders but a very long shanked hook must be used. The tackle should be fine, for the little bluefish are cunning. The best rig for snappers ranging from $\frac{1}{4}$ to $\frac{1}{2}$ pound is a number 3 Carlisle hook on a 3 foot mist-colored leader, with a very light quill float just above the leader so that the bait will be about 3 feet below the surface. The best bait is spearing. Run the hook through the spearing just under the tail, let the point come out about the center of the little fish, draw the tail up over the shank of the hook to the gut and then put the point of the hook into the spearing's mouth so that it will protrude at its gills. Spearing cannot be kept alive on the hook. Live killies are excellent bait. Pieces of snapper are almost equally good. A bit of pearl or tinfoil is good on the hook.

Black Fish

BLACKFISH.

Mussel or "cinder" bottom; or rocks, spiles and wrecks covered with barnacles, are the places for blackfish or tautog. Oyster beds are often good, but not always. In creeks they feed close to steep sedgy banks that descend sharply into from 7 to 15 feet of water. If deeper holes exist, the chances are usually good for large fish.

¶ They are bottom feeders and like very deep water. They stay close to the feeding place, tearing the barnacles, borers and other shell-growth away with sharp tugging nips. The line must, therefore, be kept motionless and close to the spiles, rocks or banks.

¶ There is no fishing where it is more important to drop the line into exactly the right places. A comparatively small patch of mussels, rocks or wreckage may be crowded with blackfish while the bottom for acres or even miles around it will not have any fish. Therefore, a few feet will often make all the difference between a good catch of fish and none. When feeding over a small place, blackfish often herd so closely that they shoulder each other. They browse over a chosen ground very much like a flock of sheep.

¶ Usually they feed with their heads pointing downward, and they make quick, forcible darts at the food like the pecking of birds. This swift attack makes them

very clever at stealing bait without getting hooked. It is necessary therefore to have the line under full command all the time.

¶ It is a mistake, however, to strike at the first nip, because blackfish hardly ever gulp bait. They use their front teeth to nip off the shellfish from their clinging places. Then they pass it on to be crushed between crusher-teeth in the backs of their mouths. If they feel anything wrong before the food has passed beyond the front nipping-teeth, blackfish will spit out the bait at once. They will not return to a bait that they have once left like this.

¶ When you feel the first nip, give the fish time. Do not move the line in the least. Wait till the nipping gives place to a strong jerk that tells unmistakably that the fish has the hook. Most fishermen lose fish by being too eager. The very largest blackfish are often the slowest about taking the bait in and must be treated with the greatest care.

¶ The fish caught inside of the bays average about 1½ pounds, but there is always a good chance for fish weighing 3 and 4 pounds and a few running 6 to 8 pounds are caught every year.

¶ Off shore the blackfish probably average 3 pounds, but many weighing from 6 to 8 pounds are taken on almost every trip of the party boats and occasionally a fish weighing 10 pounds or more is caught. The largest recorded weighed a little less than 25 pounds.

¶ Fishing inside of the inlets begins in April. At this time the blackfish in the bays usually run larger than they do later, and the fish will often average 2½ or 3 pounds. They are, however, full of spawn.

¶ Toward the end of May they move from the bays and the off-shore fishing begins in earnest. Bay fishing continues through the summer, but the large fish are outside. July and August are usually poor months. In September, fishing both inside and outside starts briskly. It continues till November inside. Then the fish go to

deep water and bite off shore through November and December and all through mild winters. So far as known, blackfish do not migrate but hibernate in very cold weather, going into mud, rock-crevices or wrecks.

¶ No leaders are needed for them. They are not shy. The lowest hook should be tied $\frac{1}{2}$ to 1 inch above the sinker and two others are fastened just far enough above each other to avoid tangling. In bad spots, like wrecks, it is wise to use only one hook especially if the fish run large. A hooked blackfish invariably bores straight downward for the worst place he can find and tries to swim into a crevice. If other hooks are dangling free then, they will foul somewhere.

¶ Under any circumstances, extra tackle must be carried when fishing wrecks or rough reefs. Sinkers generally foul more than hooks. Many fishermen attach sinkers to the fishing line with a bit of weak twine or soft wire so that they can save the rest of the tackle if the sinker catches badly.

¶ Heavy sinkers are needed both inside and outside. In the bays the largest blackfish often bite best at the top of the tide rush in the deep channels, and a sinker weighing from 5 to 7 ounces is needed to hold bottom. For outside fishing use 6 to 10 ounce sinkers.

¶ This makes it necessary to use a stiff rod because the fish must be struck with great force to drive the barb into his hard mouth. A very flexible rod is of little use except in perfectly still, shoal water.

¶ All the tackle must be strong. The downward surge of even a 2-pound blackfish is surprisingly powerful, and whenever the fishing ground is at all rough, the fish must be kept away from bottom or from the spiles or rocks by main strength or they will tangle the line or pull it against the knife-like barnacles.

¶ The bait mostly used by the Fishing Bank boats is the calico or stone crab or the common blue crab in its hard or shedder state. The back shell is lifted away and the legs are broken off, leaving the first

joints next to the body. The crab is then cut up in such a way as to leave a piece of leg with each piece of body. The hook is run through the body part and out through the bony ring of the shell into the leg part. A crab will thus make from 6 to 8 baits.

¶ An almost sure bait for blackfish is the tail of the large hermit crab that lives in the deep-sea conch shell. It is very hard to get. Another almost certain bait is the black deep-water mussel; but it is hard to keep on the hook unless whipped on with thread.

¶ An easier bait to get and the best one for general purposes is the china-back fiddler crab, which lives in burrows on white sand beaches. The dark fiddler, found on sedgy banks and mud, is not so good. To hook the fiddler, pull out a claw and insert the hook in the hole it leaves. The point of the hook should remain hidden in the shell.

¶ Sandworms and hard, soft or skimmer clams are good. Bay blackfish generally prefer sandworm to clam and in summer will often take shrimp. Sometimes a shrimp with a bit of hard clam on the point of the hook will succeed when the fish bite poorly.

¶ Off shore fishing is best at the following places: the "Fishing Banks," which comprise a number of good spots in the open ocean off the Long Island and New Jersey coasts; Iberia wreck off Long Beach; Black Warrior wreck off Rockaway Beach; mussel beds between Sandy Hook and Long Beach and extending well toward Jamaica and Sheepshead Bays.

¶ Probably the best blackfishing ground for small boats is the Stone Pile which lies a few hundred feet off the Coney Island Beach, between the Manhattan Beach and Oriental Hotels. It can be reached by a short pull from Sheepshead Bay.

¶ In Jamaica Bay the best blackfishing is along the Long Island Railroad trestle work and in Beach, Fish-kill and Steamboat Channels. Other places are the Cart-wheel, Ruffle Bar, Black Wall and the stone dock on

Barren Island. Hassock and Irish creeks furnish some fish in the deeper holes.

¶ A wreck at the Bell Buoy off Coney Island east of the Iron piers is excellent for small blackfish. The twenty-foot channel in Raritan Bay is fairly good. An excellent spot in this bay is the Monument, composed of stones that mark the boundary between New Jersey and New York. The autumn is best there.

¶ In Hempstead Bay, L. I., there is good blackfishing along the Long Beach R.R. trestle work. The water is deep there and the fish run to a fair size.

¶ Excellent fishing is found at the entrance to Long Island Sound, off Throg's Neck, around City and Hart Islands and over the deep reefs of Sands Point and the Stepping Stones and Execution Rocks.

¶ Blackfish have a curious habit of lying on bottom on their sides or even lying head-down in some hole in the rocks just large enough to hold them. In April and May, while the spawning-time lasts, bunches of blackfish sticking closely together, will swim in great circles on the surface with their backs out of the water. Generally these bunches consist mostly of male fish following a few females or only one. They will not bite when they are thus playing on the surface.

¶ The mouth of blackfish is small, and the thick, tough lips are drawn tightly over the flat teeth. Therefore the hook must be comparatively small. The hook to be used is the style known as Blackfish hook or Virginia hook. Number 7 is large enough for bay fishing wherever the fish will not exceed 2 or 3 pounds. Number 6 will hold a 7 or 8 pound fish, but it will not do to strain too hard in fighting him or to lift him out of the water, because the steel of so small a hook is too thin. Where such large fish are expected and for outside fishing a number 3 hook should answer all demands. If extremely large fish are expected, some number 2 hooks should be carried along. See the chart in the back which shows exact sizes of these hooks.

SWIVELS

SWIVELS USED BY FISHERMEN.

No. 1 Brass to Buckle.	No. 6 Steel Hook.
No. 2 Watch Spring.	No. 7 Brass Box.
No. 3 Brass Corkscrew.	No. 8 Brass Barrel..
No. 4 Patent Spring.	No. 9 Treble.
No. 5 Special Link.	No. 10 Cross Line.

Spreader is shown closed.

SINKERS USED BY FISHERMEN.

No. 1 Bank.	No. 9 Bass Casting or Swivel
Dipsey.
No. 2 Swivel Diamond Casting.	No. 10 Egg.
No. 3 Pyramid.	No. 11 Clincher
No. 4 Hollow Running.	No. 12 Mackinac.
No. 5 Ringed.	No. 13 Split Shot.
No. 6 Barrel Shaped Swivel.	No. 14 Lead Coil.
No. 7 Adjustable Spiral.	No. 15 Lead Worm.
No. 8 Square.	

Some anglers use hollow lead pipe for sinkers. They claim that the tide turns this sinker lengthwise and that the rushing water will pass through it allowing the sinker to hold bottom. See opposite page.

SINKERS

12.

13.

15.

14.

see
opp. page

FISH FACTS.

Fluke and flounders belong to the same family. There are several other flatfish around New York. One is the "window pane" or "sun dial," which has toothed jaws and otherwise looks much like the fluke except for its light color, much like sand, and the bright spots on its back. It averages about a pound and is not common. It gets its name because it is partly transparent. There are three very small flatfish almost exactly like the common flounder—the sand dab, sand flounder and the small-mouthed flounder. There is also a tiny flatfish known as sole. None of these are plentiful.

¶ Blackfish and bergalls belong to the same family, known as wrasse fishes. There are no other fish of this family on our coast.

¶ The weakfish, also known by the Narragansett Indian name Squeteague, belongs to a family called Croakers. The red and black drum, lafayette and kingfish belong to this family. There is a kingfish in Florida waters that is quite different, belonging to the mackerel family. Our northern kingfish is known as hake, whiting and Bermuda whiting from the New Jersey coast south.

¶ Porgies (Narragansett Indian name Scuppaug) belong to the same family as the sheepshead, which is a porgy though it lives with and has the habits of blackfish. There is one other porgy, the Sailor's Choice, which hardly ever comes to our waters. It has golden stripes and dark vertical bands.

¶ Sea bass, striped bass and white perch belong to the family grouped as sea basses. The white perch used to be common around New York, running into salt water from the rivers in autumn. They are rare now.

¶ Bluefish belong to a family by themselves.

¶ Menhaden or mossbunkers, sea herring and shad belong to the herring family. About 10 different herrings come into our waters. Menhaden will not take a hook and are valuable only for bait.

¶ The deep sea or conger eel belongs to the same

species as the common eel but a different family. A fish often caught on the fishing banks and called conger eel is not an eel at all. Its correct name is mutton fish or eel-pout. The true conger eel is also caught on the fishing banks.

¶ The butterfish which used to be most plentiful around New York, is pretty rare now. It belongs to a family by itself. A few are caught occasionally while fishing for sand porgies and lafayettes. They are small.

¶ Bonitos are mackerel fishes like Spanish mackerel. Both are taken only by trolling in the open sea. Sometimes big schools are struck. Bluefish tackle takes them. The tunny or horse mackerel belongs to this family. This is the same fish as the famous "Tuna" of Southern California. On July 31, 1908, four were hooked by Captain J. B. Thompson while trolling for bluefish off Ocean Grove, N. J. Three broke the lines. One was landed. It weighed 46 pounds. A small mackerel, usually 6 to 8 inches long sometimes runs into shore in extraordinary quantities. There was a famous run in 1896 when they were so plentiful that people dipped them up with scoop nets and even hands everywhere from Coney Island to Fort Hamilton. This is the chub mackerel, also called "tinker" and "thimble eye." It appears only occasionally. The common mackerel of the markets hardly ever ventures into our bays.

¶ Smelts are not related to spearing.

¶ Sea robins and hackleheads belong to different families. Sea robins are gurnards. There are four varieties in our waters—the common or web-fingered, the red-winged or striped, the big-headed and the flying sea robin. The latter is very rare. The hackleheads belong to the sculpin family. There are four varieties—the 18 spined, which is the one commonly caught; the brassy sculpin, which rarely grows more than 6 inches long; the daddy, which often reaches 2 feet and is very rare indeed; and the sea raven which is caught frequently on the fishing banks but hardly ever in-shore.

GUT LEADERS. The material of which leaders and snells are made comes from the silkworm, but it is not taken like silk, from the cocoons spun by the worm. To get the leader gut, the silkworm is killed just before he spins his cocoon, by being dropped into a very carefully made mixture of vinegar and water. When sufficiently pickled, the worms are torn open to get at the two silk sacks. The silk sack is pulled apart, which stretches the contents out to the desired length. Two strands are obtained from each worm. They harden almost at once, and this gut is stretched on a board to dry. After that it is thoroughly cleaned, sorted and tied into bundles for shipment.

¶ The Province of Murcia in Spain has almost a monopoly of the business. Most of the gut is marketed through Scotland and England. The gut comes in many grades and each grade is subdivided into three qualities. The wearing qualities of gut are judged by clearness, springiness, and hardness. Good gut should feel like wire. It should be perfectly round and have the same diameter from end to end.

¶ No matter how perfect the gut may be, a leader will be ruined if it is kinked sharply, especially when dry. It is a very good thing to soak a leader in cold water long enough to make it perfectly soft and pliable. When a bright, new, dry leader is twisted to fasten it to the line or the hook, the fibres break like glass. Leaders and snells will last and be sound if they are put into a basin of water the night before use and left there till morning. Do not use hot water.

¶ It does not pay to buy gut to make one's own leaders. It is much better and cheaper to get leaders ready-made, for it requires much skill to make the knots.

BAITS. The leading bait for local salt water fishing is the shedder crab. All fish will take it. The shedder is the common blue crab in the stage when his shell is splitting, but before it peels entirely and leaves him a soft crab. A shedder can always be distinguished by pinching the sides of the shell. If they yield and crack, the crab is good for bait. To use him the shell is peeled away from body and claws, until a perfect crab is left, but without shell. This should make six good baits without the claws. The latter make the best bait of all. When the blue crab is ready to shed, he goes into shallow water and hides under grass and weed or else clings near the surface to spiles and other hiding places, in order to escape the fish that hunt him while he is soft.

¶ Another excellent and all around bait is the shrimp which is so plentiful that quarts can be obtained by dragging a fine-meshed net along spiles or through grasses in shallow water. They cling to almost every boat float and pier and are most plentiful close in shore around spiles about low water. An ordinary long-handled net with fine meshes should be rapidly scraped along the spiles or grass. They must be kept alive. Dead shrimp are useless. They will live for days in a floating car. The fisherman must take this car in when moving the boat or the pressure of the water will kill them. When the tide is very swift the car should be taken in, as the current swirling through it will force all the shrimp to one end of the car where they will suffocate. During the height of the tide-rush, it will be sufficient to dip the car into the water frequently.

¶ The salt water minnows known as killies are kept in the same kind of car. They are hardier than shrimp and will live hours out of the water if kept cool and moist. The best killie is one with a dark green back and white belly. Another good one is mottled green with yellow on the fins. There is a white killie with curious black markings and irregular stripes, known as

the bass killie which is not good at all. It dies almost at once on the hook while the others will live indefinitely if used with common care.

¶ With a long-handled net killies can be caught in practically every creek or grassy cove. Look for them in shallow water. Even if only a few are in sight, toss some bits of clam or fish into the water, and the chances are that a good number will gather if you keep very quiet. When you have thus ascertained that the killies are present, crack a clam, lay it in the net and push it out so that the bag of the net will lie on the bottom and not wave in the water. Do not be in a hurry to lift it. Every killie that enters it will attract more. Sometimes half a hundred can be taken with one scoop of the net.

¶ The beautiful silver-banded spearing is not easily taken for he is too shy and too quick for the scoop net as a rule. A long seine is hauled parallel to the shore for this bait, and the average fisherman must depend on bait-catchers for his supply as he will waste too much time trying to get them himself.

¶ Sandworms live at low water mark in sod banks or tough sand. Rocky beaches are the best places. They can be obtained only at low water and must be dug out with spade or fork. Very few sandworms are found in the ordinary loose sand beaches of the ocean shore. They require places with consistency enough to give them secure burrows. The same is true of bloodworms. The latter are found only on rocky beaches. Most fishing tackle dealers keep fresh live worms and it pays better to buy them than to search for them.

¶ Bloodworms should be kept in shallow boxes in moist and cool sea weed. Sandworms should be kept in clean dry sand. They sicken and die in wet. Both worms must be sheltered from wind as well as sun and they should not be kept in cigar or tobacco boxes. Do not use pasteboard boxes, either. They will be sure to get wet in the boat and fall apart.

¶ Fiddler crabs are of several species, almost exactly alike except in color. The best is the brightly colored kind known as "china-back" which lives on clean sand beaches. The darker colored ones live on mud shores and sod banks and the blackfish often will refuse to touch them when they will take china backs greedily. Sometimes, however, the dark ones answer perfectly.

¶ Soft clams are found at low tide in sod banks or on muddy bars and on beaches that are either rocky or mixed with enough earth to give the clam a firm place for a burrow. They betray their presence by squirting jets of water into the air when any one approaches. They must be dug out with a spade or hoe.

¶ Hard clams live outside of low water mark and can be found by "treading"—that is, by wading on the mud flats at low water and feeling for them in the mud with bare feet.

¶ The skimmer clam is found only in the open sea outside of the surf. It looks like the hard clam except that it is much larger and more flat. It moves around by sticking out a wide fleshy foot, and storms often throw it on the beaches in great quantities.

¶ These are the standard baits. The average fisherman will not have time to obtain them for himself. Shedder crabs, like worms, can be bought from tackle dealers and in fish markets. Almost all fishing resorts have killies, shrimp, clams and sometimes spearing and fiddlers on hand.

¶ If through some fatality none of them could be obtained, the determined fisherman need not give up, however. If he can get mossbunkers, herring, snappers, lafayettes or even sea robins, he will have very attractive bait. Lacking all these, he may still depend on the "horse" mussels that stick out of every sedgy mudbank in every creek. Sometimes they make excellent bait. Once when the writer did not have even mussels he gathered half a hundred of the little snails that cover all muddy bottoms by the million. Cracking the shells with a

hammer he got enough small baits to catch a fair mess of tomcods.

¶ Another emergency bait which can be found in quantities on sand beaches, are the beach fleas, which hop about along the line of weed and refuse thrown up by the flood tide. Even if they are not in sight they can be found generally by digging a few inches deep with a stick. They are from $\frac{1}{4}$ to 1 inch long and make almost as good bait as shrimp. Sometimes fish will prefer them to anything else.

¶ Under stones and sea weed between low and high water marks there is a creature, the gammara, looking like a link between the beach flea and the shrimp. It tries to work out of sight by wriggling curiously on its side, and is easily caught. Three or four will make a bait that may do in an emergency.

¶ Small green and red crabs and several species of worms besides sand and bloodworms can be found in quantities on rocky shores by lifting the stones quickly. These are not good baits but better than nothing.

¶ Thus no fisherman need be without bait of some kind in any salt water bay or on any ocean beach near New York. But for all that, if shedder crab or worms cannot be bought before starting on a trip, it is wise to stop at a fish dealer's place and buy small fish to cut up for bait. Herring, snappers, porgies, lafayette, mackerel or smelt will be of service. Sometimes baits thus made by cutting up pieces of fish will be more attractive than anything else. A 2 inch piece of sea robin, skinned so that the silvery flesh shows, will often catch fluke, weakfish and bluefish, when they are slow about taking hold of ordinary bait. These baits made from fish are what is known as "fish bait." Dogfish is often used this way.

¶ An almost sure bait is the soft tail of the big hermit crab that lives in conch shells. It is hard to get but oystermen sometimes have it. Practically every fish will snap at it. It is known as "bank lobster."

*The Hooks Shown
In This Chart
Are Exact Size.*

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