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TROLLING FOR NILE PERCH (*LATES NILOTICUS*) IN LAKE KYOGA

by

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NILE PERCH were introduced into Lake Kyoga in the mid-1950s from Lake Albert. Murchison Falls on the River Nile, between the two lakes, prevented Nile Perch, and other elements of the typical nilotic fish population, from naturally reaching Lake Kyoga. The introduction has been successful and considerable stocks of Nile Perch now exist in Lake Kyoga. In 1967, 13,000 tons of Nile Perch were estimated to have been landed by the commercial fishermen, fish of 200 lb. being now caught, and specimens of 100 lb. being fairly common. Large Nile Perch are caught commercially on long lines baited with live *Protopterus* spp. or *Clarias* spp. Large mesh gill-nets occasionally take Nile Perch of up to 30 lb., but the high cost of the nets does not, at the moment, appear to justify this method of fishing; a 10 in. net, stretched 100 yards long (unmounted), 15 meshes deep and 60-ply nylon, costs approximately U. Shs. 300. The long-lines used are extremely simple and cheap to make, but considerable labour is needed to catch bait. Small *Protopterus* are normally caught by turning over floating rafts of grasses and papyrus, and extracting the fish from the root mass; this is hard and dirty work. Other small fish, more readily available, do not, according to fishermen, work as well, possibly because they are not as durable as the *Protopterus* or *Clarias*. Dead bait is never used.

A few anglers using conventional rods and reels troll for and catch Nile Perch in fair numbers, but the local commercial fishermen have not taken up this method readily. It was thought that if a suitable commercial trolling gear could be made, it would provide the fishermen with an additional and profitable method of catching Nile Perch. Simplicity of construction and operation, as well as low initial cost, were the main considerations used in developing the gear described below.

It was decided to use a 28 ft. Sesse-type canoe, powered by a small outboard engine, as this type of boat is beginning to be used more and more by the fishermen, and it also allows sufficient room to handle large fish. At first, the canoe was fitted with two bamboo booms, about 12 ft. long, and the lines were tied to the end of these, a tag line being used to pull the main line to the side of the boat so that fish could be hauled in. As Lake Kyoga is very shallow, the average depth being approximately 15 ft., with rooted vegetation over large areas of the bottom, plug baits have been used almost exclusively for the following reasons:—

(a) they are buoyant, and work near the surface;

(b) they have a vibrating action that can be felt through the line, although this action stops when the plug is fouled by weed.

This arrangement worked very well with small fish (*i.e.* up to 20 lb.), but larger fish were frequently lost, often with damage to or loss of the plug. It was surmised that a sudden and very great strain must be placed on the gear as a fish strikes the bait. Various modifications to embody a certain amount of flexibility were made to the gear, including:

(a) mounting the line to the pole by several large rubber bands, made from lorry tyre inner tubes;

(b) incorporating a weak link in the line that would break under the impact of striking and release an additional line.

Although these modifications slightly reduced the number of fish lost, it became apparent that the basic arrangement of the gear was unsuitable, and no amount of modification would radically improve it.

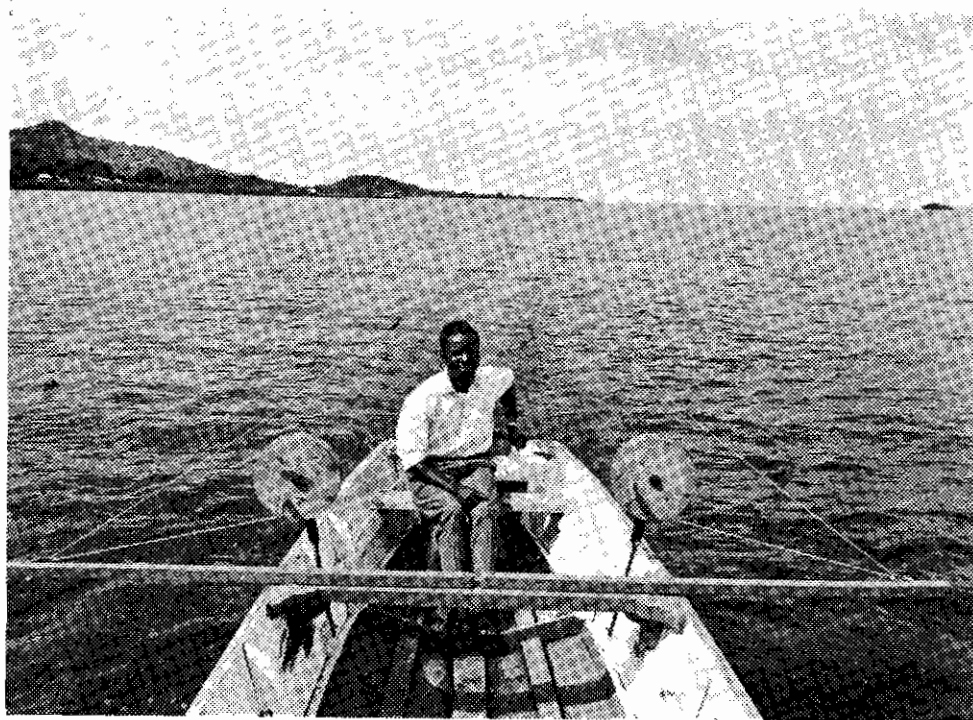
It was felt that the gear must embody a device similar to a modern multiplying reel used by anglers, which has a built-in adjustable clutch. Normal rod fishing is an effective and exciting method of catching large Nile Perch, but the initial cost is prohibitive. In Uganda a suitable rod and reel would cost U. Shs. 350, and it also requires skill and experience to operate and maintain. Keeping cost, simplicity and ease of construction in mind, the 'braked reel', shown in Fig. 1, was produced. All materials used were readily available, and it could be made in a minimally equipped workshop. A complete reel was produced for approximately U. Shs. 30. As the wing-nut is tightened, the braking effect on the reel is increased.

The reels are bolted on to the sides of the canoe near the stern, the line running from the reels through small blocks mounted on the end of short booms that can be swung out over the side of the canoe. Twisted polyethylene line, of approximately 300 lb. breaking strain, with a very heavy nylon monofilament trace, is used. Wire traces were tried, but they tended to make the plug work deep and increased the weed problem. Since the gear was fitted, a number of fish in the 75-100 lb. size range have been hooked and successfully landed. Apart from the occasional bent hook, damage or loss of plugs has been stopped completely. Now that the gear is operating efficiently and reliably, a programme to assess catch rate and profitability is under way.

SUMMARY

The design of a braked reel device for Nile Perch trolling in Lake Kyoga is discussed. Simplicity of construction and operation, as well as minimum initial cost, were the controlling factors in developing the gear described.

Plates 1-3 on the following pages show the reel in use. Figure 1 is a diagram of the device.



Plates 1 and 2—Trolling for Nile Perch



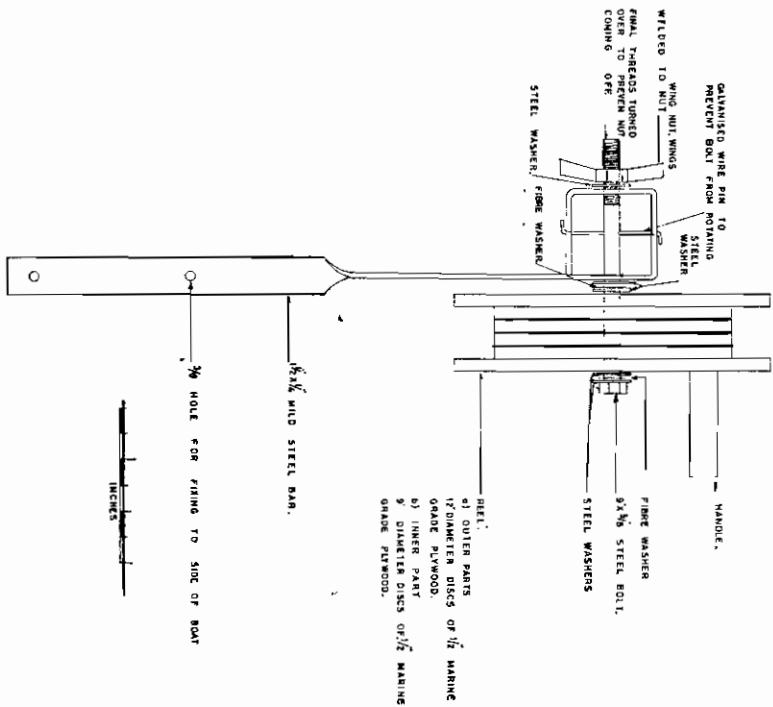
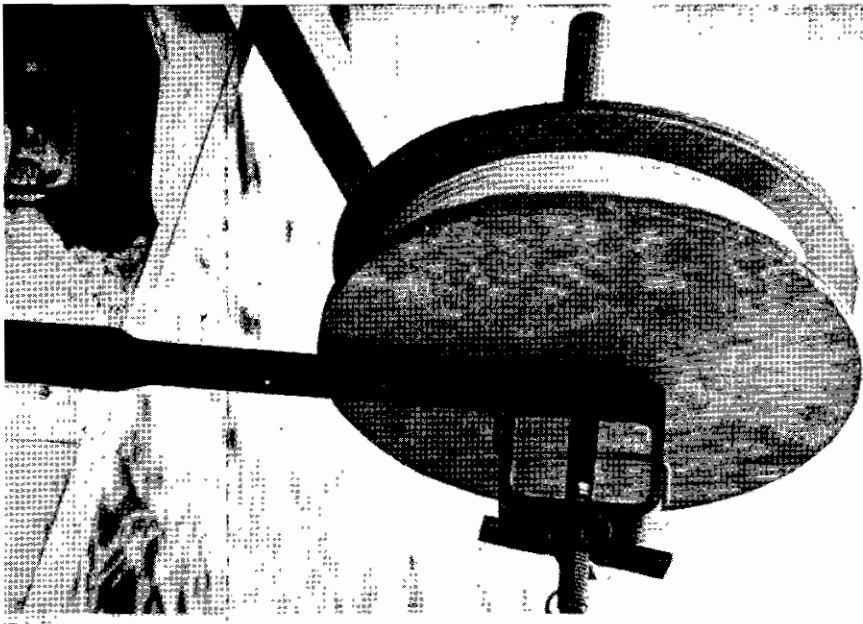


Plate 3 and Figure 1—Braked Reel device for Small Boat Trolling