For commercial fishermen, it is efficient means to take buffalo. For States seeking commercial gear to replace gill net, it is at least a partial solution.

A FLOATING TRAP NET FOR USE IN RESERVOIRS

By Gary Ackerman and Marvin F. Boussu

The trap net described here was designed and built by the senior author for a commercial fisherman who furnished the materials and helped to construct it. Essentially, the gear is a small trap net that uses a hoop net for the pot or crib section. The 200-foot-long lead and the two 40-foot-long wings are 18 feet deep (fig. 1). The heart section is 30 feet long and tapers from 18 feet square in front to 7 feet in diameter, where it ends with a hoop attached to the body of a standard hoop net. The crib section is seven 7-foot hoops

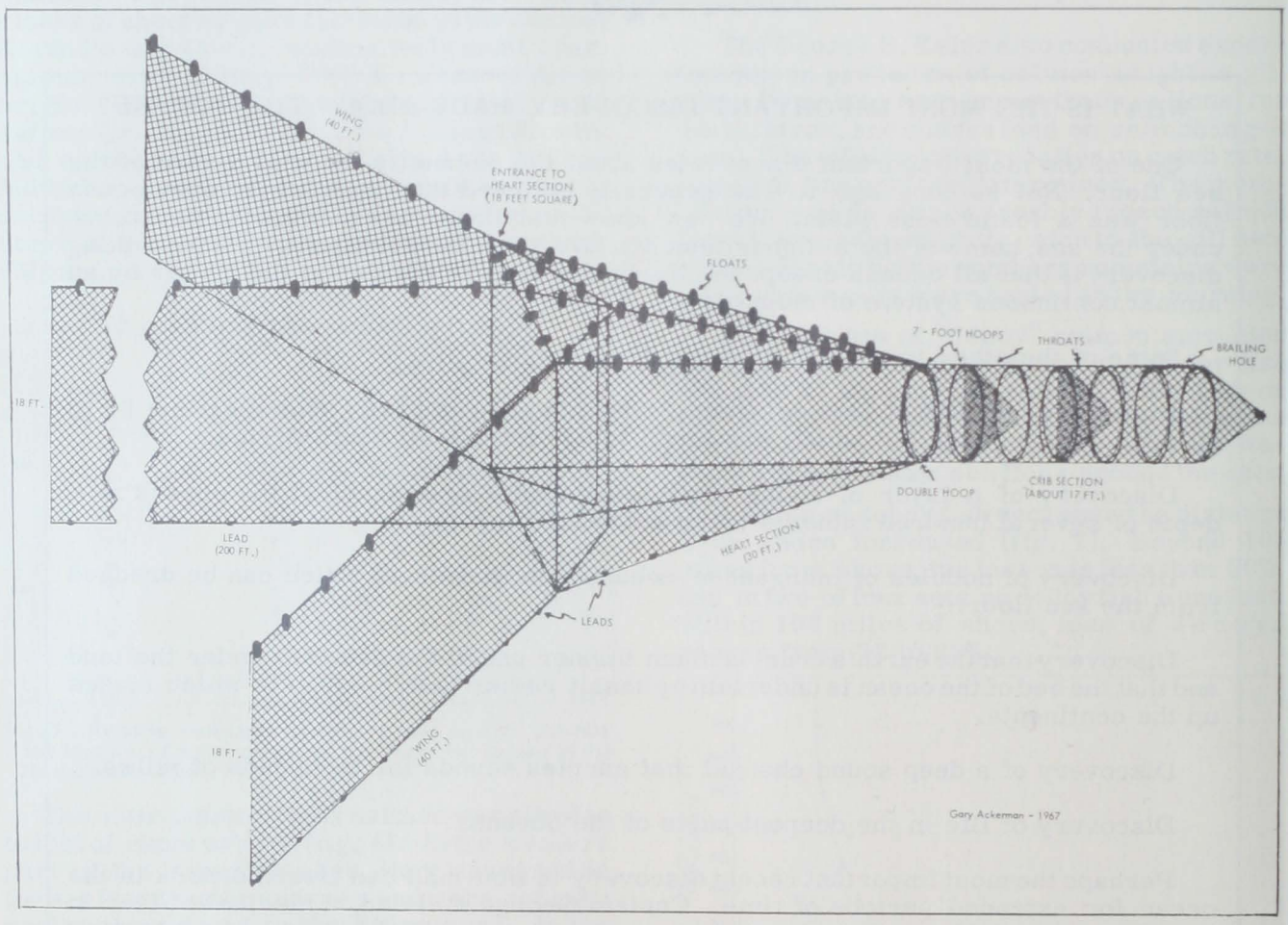

Fig. 1 - Construction diagram of floating trap net.

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spaced $2\frac{1}{2}$ feet apart. Throats are at the second and fourth hoops, and a laced brailing hole is at the top between the sixth and seventh hoops. A system of corks floats the gear, and leads on the bottom lines give it vertical stability.

Construction materials were: Webbing--No. 18 nylon thread; lines--$1\frac{1}{4}$-inch braided nylon; plastic floats--3 by 4 inches; leads--No. 6; and oak hoops--7-foot diameter. Mesh size throughout is 7-inch stretch measure.

Use and Results

The net was designed primarily to take bigmouth buffalo. For this reason, it is floated on the surface (fig. 2).

The lead is usually placed perpendicular to shore and from shore to net, although "openwater" sets also are practical. The net is set by fastening the tag end of the lead to shore, stretching the lead and net out longitudinally, anchoring the crib, and then anchoring the wings in position. The crib anchor rope is 100 feet long and the wing anchor ropes are 50 feet long. The wing anchor ropes are yoked about 30 feet from the anchor with one line leading to the bottom line and the other to the float line. The gear has not been fished on the bottom, but this could be done by a change in the float-lead ratio. We recommend that the net, as now rigged, not be set in water depths over 30 feet. To fish depths greater than 30 feet would require anchor lines longer than those used at present to prevent excessive downward pull that would cause disfiguration of the net or submergence of float lines. The weight of longer anchor lines would probably require more floats at the wing and lead tips, and on the crib section.

Fig. 2 - Floating trap net in fishing position on Oahe Reservoir, S. Dak. In this set the lead extends to shore. Note floating debris--a common problem on this newly formed reservoir.

This gear is economical to fish because one man in a small boat can set, move, and fish the net. The facts that anchors instead of stakes are used to hold the net in place, and only the pot is raised to remove fish, account largely for the ease of operation.

The net caught fish effectively in two reservoirs. It was first fished commercially August 4 to 17, 1967, in Lake Oahe, South Dakota. During the 14 days of fishing, the net was lifted seven times. Bigmouth buffalo constituted 93 percent of the catch by number and weight (table). Average catch per lift was 74 buffalo with a dressed weight of 296 pounds. The catch was outstanding because August is usually a poor month for taking buffalo in Lake Oahe. Catches with the new net were considerably greater than with standard hoop nets fished concurrently in the area. The commercial fisherman later fished in Lake Sakakawea, North Dakota, and reported that the net continued to be an efficient gear.

Number, Dressed Weight, and Percentage Composition of Fish Taken in Seven Lifts with A Floating Trap Net in Lake Oahe, August 4-17, 1967

	Total Catch			
	Number	Percent	Dressed Weight in Pounds	Percent
Bigmouth buffalo	519	93	2,070	93
Carp	15	3	73	4
River carpsucker	15	3	47	2
Blue sucker . . .	8	1	28	1
Northern pike . .	1	tr.1/	8	tr.1/
Total . . .	558		2,226	

1/Less than 0.5.

The limited fishing data indicate that the net has potential as a commercial gear and is highly selective toward bigmouth buffalo. In additional testing, we suggest that baiting might improve the catch rate, especially of "openwater" sets.

THIS CHRISTMAS TREE IS SHRIMPLY DELICIOUS

In answer to many requests, the United States Department of the Interior's Bureau of Commercial Fisheries has once again released instructions for its Shrimp Christmas Tree for the most exciting holiday table in the neighborhood.

From a commanding position on a buffet table or as a colorful centerpiece for a well-appointed holiday dinner, this unusual tree is certain to capture compliments. Leafy green endive duplicates crisp holly while ever-popular shrimp add shape and color interest to this creative conversation piece.

This intriguing tree is elegant but deceivingly simple. The materials are readily available at most local variety stores and supermarkets.

SHRIMP CHRISTMAS TREE

3 pounds shrimp, fresh or frozen
2 quarts water
$\frac{1}{2}$ cup salt
4 large bunches curly endive
1 styrofoam cone, $2\frac{1}{2}$ feet high
1 styrofoam square, 12 x 12 x 1 inch
1 small box round toothpicks
Cocktail Sauce

Thaw frozen shrimp. Place shrimp in boiling salted water. Cover and simmer about 5 minutes or until shrimp are pink and tender. Drain. Peel shrimp, leaving the last section of the shell on. Remove sand veins and wash. Chill. Separate and wash endive. Chill.

Place cone in the center of the styrofoam square and draw a circle around the base of the cone. Cut out circle and insert cone. Cover base and cone with overlapping leaves of endive. Fasten endive to styrofoam with toothpick halves. Start at the outside edge of the base and work up. Cover fully with greens to resemble Christmas tree. Attach shrimp to tree with toothpicks. Provide Cocktail Sauce for dunking. Serves 12.