

FISH COMMISSION OF OREGON

Cruise Report 66-4 - Tuna Gill-netting Observations

Vessel: Julean of Newport, Oregon.

Description: 50-foot steel hull, northern dragger. The boat is normally used for crab fishing and tuna trolling.

Owner: Kenneth Staffenson, Newport, Oregon.

Dates: July 26 - August 6, 1966.

Itinerary: The Julean departed Newport on July 26, 1966 and returned due to bad weather on July 27, 1966 after jigging for tuna in the area off Heceta Bank. On July 31, 1966 the Julean resumed jigging for tuna west of Heceta Head in the one degree block having the southeast corner of 44° north latitude and 125° west longitude. The boat worked south into the 43° N-125° W block and on the night of August 5, 1966 set out the gill net at about the Loran bearing 2H4-1540, 2H5-3280. On August 6 the Julean traveled directly for Charleston, Oregon as strong northwest winds were building and the gill net was disarranged and in need of overhaul.

Methods & Gear: The gill net was a composition of eight 50-fathom shackles of net of three different mesh sizes. Two shackles were 5-inch mesh, three were 5½-inch mesh, and three were 6-inch mesh. All shackles were 100 meshes deep with an actual fishing depth of 5-6 fathoms. These nets were obtained by Mr. Staffenson on loan from the Bureau of Commercial Fisheries. The nets were modified by adding swifter line from the cork line to the lead line. This allowed considerable slack in the web to permit tangling the fish rather than actually gilling them. As the gill net was set large balloon floats on 2-foot lines were attached to the cork line by clips every 25 fathoms. These floats added to the visibility of the cork line and were intended to support the net in the event that it became loaded down with fish. One end of the net was marked with a pole buoy with a flashing amber light. The other end of the net was fastened to the bow of the Julean by a 200-foot line. Another flashing amber light was hung from the rigging of the Julean.

The net was set downwind over the starboard side of the boat past a 4 x 4 post lashed to the rail, while the boat moved by using its own power and drifting. Retrieving was achieved by using a crabpot hydraulic block which was modified to accommodate the net. This block was attached to a hydraulic davit located at the rear of the house and against the starboard rail. During the operation the boat was moved along the net so that the power block would not have to pull the weight of the boat as well as the net.

Results: Mr. Staffenson wanted calm winds and seas for fishing the net. After several days waiting he decided to set it because it

appeared conditions were going to be satisfactory. The post on the side of the boat acted to guide the net over the side. It also provided a tight corner in which the web became lodged several times. The location of the net on the boat prior to setting contributed greatly to the slowness of the setting time which was 45 minutes. While fishing, the net lay in a general northwest-southeast line, perpendicular to the trough of the swell. This position could not be changed because the net was attached to the boat which was pulling the net by its drift. The retrieving operation began before daylight. The northwest wind had increased and the seas were running as high as 8 to 10 feet. This put a tremendous strain on the net and made its visibility difficult. It was necessary for one man to guide and hold the net in the block and the other to pull it from the block and stack it. The block had difficulty pulling the net and it was necessary to keep the boat moving into the net. It was discovered that the time it took to pick a fish from the net was sufficient to allow the boat to drift against the net and tangle in the propeller, which happened. The net tangled a second time due to the bad visibility, wind, and sea. The total time to retrieve the net, while leaving the fish in it, was one hour. The catch on this set was 9 small blue sharks (50 cm to 85 cm in length), two medium blue sharks (about 100 cm in length), and one large blue shark (about 132 cm). All of the sharks were in the bottom half of the net.

Discussion:

The results of the one set is not indicative of the net's efficiency for catching albacore. The difficulties in setting the net and retrieving it could be overcome with an additional investment in equipment. One idea would be to set up a reel to be operated over the stern of the boat such as is used in the salmon fisheries on Puget Sound. The packers consulted about this venture were skeptical about the quality of any albacore caught by the gill net, but were interested in seeing it tried.

Mr. Staffenson felt that the labor involved was too much after a full day of jig fishing, and would require additional crew members if he was going to continue with this venture. Another disturbing factor was the inability to get away from the fleet, so that other boats would not drift or run onto the net. The night of the set the Julian had run about one hour in a westerly direction in an effort to clear the fleet but to no avail. One boat had to be warned away from the net with a flood light. The need for additional crew and a clear fishing area along with an uncertainty about a market for any fish caught were factors causing Mr. Staffenson to give up the project.

It is possible that the net would have fished better if it were layed in the trough rather than perpendicular to it. This would have placed the net across the path of tuna oriented with the current if this occurs and is certainly not in a disadvantageous position if random movement is the case.

Personnel: Ken Staffenson - owner-operator of the Julean
Darrel Staffenson - crewman
Dick Person - crewman
Karl R. Hellberg - Oregon State Fish Commission

Karl R. Hellberg
August 29, 1966

Distribution:

Astoria - 4
Staffenson - 4
Clemens (CDF&G) - 1
Wendler (WSDF) - 1
Alverson (BCF)
Newport
Charleston
Portland
Library
Van Hying
Percy, OSU

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