A Long Line (Set Line) Retrieval System¹

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ABSTRACT

The efficiency of certain pot and trap fisheries can be increased by utilizing a longline (set line) system. Longline systems have certain inherent advantages when pots or traps are fished in deep water, in fisheries where rough or stormy weather is a common feature and where a large amount of gear must be efficiently handled.

A longline system can be defined as attaching pots to a long ground line at intervals suitably spaced for the particular fishery. The ground line is attached to anchor lines at each end. The anchor line, in turn, proceeds to the surface where it is buoyed. Extensive sea trials along the Oregon Coast have demonstrated that Dungeness crab pots can be rigged in a longline system for approximately 55% of the cost of individually-buoyed gear. The savings increase as the fishery proceeds into deeper water. Working efficiency is increased as the gear can be retrieved more rapidly than individually-buoyed gear in any depth exceeding 10 to 12 fathoms. If vessel steering and engine controls are installed at the gear-hauling station, it is possible to reduce the crew by one member. Gear loss has been radically reduced and fishing time is optimized because buoys and longline systems have a great deal more buoyancy than is possible with individually-buoyed gear and, hence, longline gear can be retrieved in conditions of adverse current that preclude recovery of individually-buoyed gear. Continued field experience dictates that additional savings are possible as the gear can be more lightly constructed than the traditional individually-buoyed gear.

¹Complete details of this fishing method are described in: A Long-line (Set-Line) Crab Pot System by R. Barry Fisher, 1970, Circular of Information 630, Agricultural Experiment Station, Oregon State University, Corvallis, Oregon.