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CAN FISH LEARN TO AVOID FISHERMEN?

Can fish learn that it is dangerous to get in the path of a trawlor to get too interested in a hook? Mr. J. H. S. Blaxter of the Marine Laboratory, Aberdeen, has researched the ability of fish to learn by experience.

Fish learn by association. In a tank, they will learn to associate a stimulus in the form of a noise, taste or temperature change with "feeding time". Thus stimulated, they will learn to go where food has been given. One test involved swimming up a slight ramp. Soon the fish would swim up the ramp when stimulus was applied without food.

About 30 "stimulating" experiences are needed to establish a new behavior pattern that, once learned, can be retained up to 9 months.

It is not known how often fish may avoid commercial fishing gear. Salmon and trout, threatened repeatedly by the angler, can become difficult to catch, having learned success through each survival experience. Age brings experience, but it also brings greater size and swimming power-up to a point, when old age might diminish the powers of escape. Which is the operative factor?

Tank experiments may show whether this escape knowledge can be passed to other fish (an older fish leading others from danger). However, tank fish behavior may differ from that of ocean fish. Science hopes to find answers through research. ("World Fishing.")