

ICHTHYOLOGY

Jump to Unseen Pools

Gobies leap in right direction and reach water safely, due, it is believed, to memory of topography gained while swimming at high tide.

➤ **JUMPING** goby fish leap in the right direction, toward more water, and land safely, because they have a memory of the area in which they have been swimming.

This is the suggestion of Dr. Lester R. Aronson, of the American Museum of Natural History, from studies of the jumps made by *Bathygobius soporator*, scientific name for the goby, in tide pools at Bimini, British West Indies.

Gobies are tiny, tropical shore fish, usually about one and one-half or two inches long. Some of their leaps measure close to nine inches.

Dr. Aronson believes that the fish learn the arrangements of objects and obstacles as they swim over the pools at high tide. Then, when locked in the pools at low tide, they have no difficulty jumping in the right direction and landing safely. He further believes that this memory of local topography may be kept for at least two weeks, possibly longer.

As far as Dr. Aronson could tell, the leaps always started with the fish resting on the bottom of the pool. They would face the direction of the pool towards which they were about to jump, their body curved to one side in the characteristic before-leaping pose. Then, with a sudden snap, too rapid to be seen clearly, they would shoot through the surface of the water and fly through the air to the adjacent pool.

Although most of the gobies would jump when prodded, a few would not leap at all, merely swimming, if prodded, in the same pool until exhaustion.

One reason for the goby having learned to jump from one pool to another may be as a means for the fish to get more "living room" and escape from one another, Dr. Aronson believes.

Science News Letter, February 10, 1951

GEOLOGY

Plan Research Program On Petroleum Formation

➤ **THE SECRET** of how nature made petroleum is to be sought by an intensive study sponsored and financed by the American Petroleum Institute. The new study is part of a continuous fundamental research program for the benefit of the entire industry.

Actual studies will be carried out by the University of California, with field work by the Scripps Institution of Oceanography, La Jolla, Calif., and assistance by Woods Hole Oceanographic Institution, Woods Hole, Mass.

The remains of prehistoric marine animal and plant life buried in sedimentary rock generally are believed to be the source of oil formations. However, no detailed scientific evidence exists as to how this conversion occurs.

The present program is a three-year project. Field work will start this summer. Present plans call for the project to be devoted to a study of recent and near-recent sediments, that is, sediments laid down within the last 100,000 years, in the Gulf Coast area.

Cylindrical plugs of earth will be taken from different depths by core drilling both on dry land and out in the water. It is planned to begin the work at points inland and move seaward to where the water is about 60 feet deep.

It is thought that these newly laid deposits will show some relationship to deposits now yielding oil. Geologists feel that the underground formations in which oil is found began as surface deposits of marine animal and plant life in earth sediments laid down by prehistoric seas.

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