ICHTHYOLOGY

Find "Extinct" Fish Alive In South African Waters

Big Blue Creature With Goggle Eyes Causes as Much Surprise as Would the Discovery of a Living Dinosaur

HINT of a "Lost World" beneath the sea, a survivor of long-gone geologic ages, has been hauled up in a trawler's net off the east coast of South Africa: a fish of a kind supposed to have disappeared utterly from the earth 50 million years ago.

Word received in Washington, D. C., was heard with amazement by scientists of the Smithsonian Institution, as if some one had announced the discovery of a living dinosaur. But the strange find is attested by the word of colleagues "down under" known to be competent and hard to fool. It seems impossible; yet apparently it's real.

The fish is a rather big one, about five feet long, dark blue in color with a metallic luster, with big goggle eyes. It has two back fins, the forward one in two sections or lobes. The paired fins under its body are almost leg-like, paddle-shaped in outline. The two lobes of its tail-fin are uneven.

Closer inspection shows a pair of openings, known as spiracles, behind the eyes, sharp conical teeth like a cat's, heavy bony plates under the wide jaw. The skeleton is made not of bone but of cartilage.

Very Primitive

All this, to scientists, is a picture of an exceedingly primitive type of fish. Some of the skeletal characters, and especially the bony jaw plates, mark the specimen as a surviving member of one of the most ancient groups of fishes, known as the Crossopterygians. There is no common name, for the whole family is supposed to have become extinct at least 50 million years ago, in Mesozoic time, the age of dinosaurs.

This family originated in the Devonian age, more than 300 million years ago, and most of them were gone even before the Mesozoic. Nearest relatives among fish still abundant are the sturgeons and the bowfin or dogfish of the Great Lakes and other freshwater bodies.

The capture of the strange sea monster has naturally caused a good deal of commotion in South Africa. First man to see it was Capt. H. P. Goosen, commander of the trawler. When he found this strange-looking five-foot fish staring at him with goggle eyes when the net came up from a 250-foot depth, he knew it was something out of the ordinary.

So he took it to East London, nearest South African port where there was a museum. The curator, Miss Courtney Latimer, immediately identified it as a rare and primitive species. The museum's taxidermist, preparing it for mounting, discovered the primitive cartilaginous character of its skeleton.

Dr. J. L. B. Smith, zoologist at Rhodes University College, Grahamstown, hurried back from his vacation to see the new find, and found another evidence of its primitiveness in a substance on its scales, known as ganoin. Further studies were made by two scientists of the South African Museum in Capetown, Drs. E. L. Gill and K. H. Barnard. They confirmed the unique nature of the fish, and its membership in the supposedly extinct Crossopterygian family.

Consensus of South African scientific opinion is expressed by Dr. Smith: "This is unquestionably one of the most valuable zoological specimens in the world today. Its scientific value is absolutely incalculable."

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SEISMOLOGY

Earthquake History of U. S. Compiled by Coast Survey

WHERE would you go to live if you wanted to be safe from earthquakes? Scientists decline to answer. They recall that two of the most severe disturbances in the history of this country, the New Madrid earthquake of 1811 and the Charleston earthquake of 1886, occurred in regions not counted as particularly seismic.

Scientists can, however, tell you in

TWICE AS FAST AS A HURRICANE

The wind blows fast inside the new Wright Wind Tunnel of the Massachusetts Institute of Technology, where scientists are able to obtain data on 400-mile-an-hour airplanes under atmospheric conditions like those found at 35,000 feet above the earth. It looks like a lot of structure to test scale models; just note the size of autos parked in the street next to it. It is one of the world's few variable density (i. e., variable atmospheric pressure) tunnels, which were pioneered by Uncle Sam's National Advisory Committee for Aeronautics. On the cover of this week's SCIENCE NEWS LETTER is shown the guide vanes for the huge wind box which take turbulence out of the air stream, guide it around the corners of its rectangular route. The air stream is turbulent because of the blowers and must be smoothed out to give results that have any meaning. The whole wind tunnel is tightly sealed so that the pressure may be varied.