BIOLOGY

1965 Biology "Year"

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➤ AN INTERNATIONAL Biological Program, similar to the famed International Geophysical Year (IGY) but three to five years long, is set to begin after 1965, it was announced in Corvallis, Ore.

At least 32 nations, including the United States and Russia, will participate in the study of how civilization threatens all living things, including man. The world's plant and animal scientists, biochemists, geneticists, geographers and leaders from other areas of science will combine their talents to solve vital food shortage problems and aid human and animal welfare.

"Because of the complex nature of the biological projects to be undertaken, the major research effort will be carried out in a three- to five-year period beginning no earlier than 1965," Dr. G. Ledyard Stebbins, secretary-general of the International Union of Biological Sciences, stated.

The first planning for the Program was undertaken in Morges, Switzerland, last May, Dr. Stebbins said.

The program would include:

Investigation of communities of plant and animal life menaced by change or extinction;

Studies of the results of rapidly changing pressures on mankind by the environment, including man-made hazards such as radiation:

And research aimed at understanding the forces affecting the balance of nature, and imp. oving food and animal production.

The theme of the Program will be "The Biological Basis of Productivity and Human Welfare," he said. All scientists involved with the planning agreed that a single year of research would be neither practical nor desirable. Training and education in biology will be emphasized heavily throughout the program.

"Two goals must be kept in mind," he said. "One is preparing a larger number of able young men and women for careers in biology and applied fields related to it. The other is educating the public of all continents to the great contributions which biological knowledge is making to their welfare."

Dr. Stebbins made the announcement at the American Institute of Biological Sciences meeting at Oregon State University.

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Ancient Sea Water Found

➤ AN ANCIENT leg of the sea was cut off when part of Canada tilted upward some 10,000 years ago. The salt water left behind was discovered in a land-locked British Columbia lake.

The ancient sea water is the oldest trapped salt water yet discovered, according

to Dr. Peter M. Williams, chemist of the group of scientists from the University of British Columbia Institute of Oceanography who observed the salty lake.

The salt can be detected starting about 400 feet below the surface of the lake. The concentration increases with depth. No oxygen or fish were found near the bottom.

Powell Lake is 80 miles north of Vancouver on Canada's west coast. Some 13,000 years ago the area was covered with a vast sheet of ice that scoured out the lake's basin, Dr. William Mathews, geologist of the party, told scientists at the American Institute of Biological Sciences meeting in Corvallis, Ore.

When the ice sheet retreated, the land actually rose to its present height above sea level, trapping the salt water in the basin. Scientists know the sea level was at least 200 feet above the present level because the fossil remains of sea animals are embedded in the surrounding mountains.

Third member of the party which made the discovery was Dr. George Pickard, director of the University's Institute of Oceanography.

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Built-In Warning Device

A CHEMICAL warning system in most North American fresh-water fish tells the rest of the family to stay away when the fish is attacked.

"Fright reaction" of the largest order of fresh-water fish in the world, including carp and catfish, was described by a Canadian scientist as a "substance secreted by the fish when it is wounded."

The chemical composition of the substance is not known, Dr. Wolfgang Pfeiffer of the University of British Columbia, Vancouver, told the American Institute of Biological Sciences at Corvallis, Ore. It is carried in the surface body cells of the fish and released when the cells are broken open by the teeth of the predators.

The substance is extremely soluble in water and only very minute amounts are necessary to repel schools of fish of the same type, he explained.

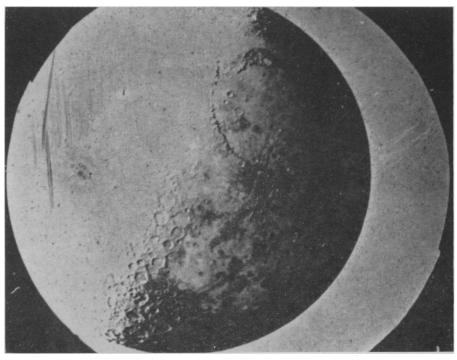
The substance has been found only in fish of the Ostariophysi order, which contains more than two thirds of all fresh-water fish. Salmon and trout and salt-water fish do not carry the substance, he said.

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Change Mosquito Sex

➤ WARMING the waters harboring mosquito eggs can turn a potential male into a harmless and incomplete "female," minus the power to suck blood and produce eggs.

An impatient graduate student at the University of Illinois, John F. Anderson, stum-



EARLY PHOTOGRAPHY—Found in New York University archives among the files of Dr. John W. Draper, one of the first Americans to experiment with photography, this daguerreotype shows the new moon with almost as much detail as modern photographs. It was made between 1840 and 1860 on a three-inch square copper plate and is about one and three-quarter inches in diameter.