

will be made available to Latin-American republics through a program of cooperation being worked out with the Puerto Rican Government's fisheries division and educational institutions. Under the plan, student assistants will be employed in the laboratory investigations, and, after two years of research work, should be in a position to aid their own governments in solving fisheries problems. As a result, the studies, covering the development of methods for preserving and marketing fishery products, as well as biological and fish cultural investigations, are expected to contribute to the economic welfare of all the Latin-American countries.

Construction of the new laboratory building in Puerto Rico was made possible by a recent grant of Public Works Administration funds.

THE EXPEDITION TO WESTERN COLORADO OF THE FIELD COLUMBIAN MUSEUM

A NUMBER of important fossil finds of the Field Museum Paleontological Expedition to Western Colorado have been reported by Bryan Patterson, assistant curator of paleontology.

These include a skeleton of a prehistoric animal called *Taeniodont*, a representative of a small early group of hoofed mammals—a forerunner of a similar but larger creature excavated by Mr. Patterson in 1933 and known as *Barylambda*. The present specimen, according to Mr. Patterson, may constitute a new genus. He writes: "We have been on the track of this beast since 1932, but until now have never found more than a few fragments of it."

Other specimens collected by the present expedition include multituberculates (a group of small rodent-like animals characterized by many cone-like prominences on their teeth) and prehistoric turtles. Work has been begun on the excavation of a fossil crocodile, and a large collection of small fossil animals has been made.

Mr. Patterson is accompanied by James H. Quinn, a member of the staff, and by several volunteer collectors. The official announcement states that

The field of operations lies in Mesa, Garfield and Gunnison counties, where an extensive series of formations belonging to various periods and eras in the earth's history is exposed. The work is mainly in late Paleocene and early Eocene deposits (the opening epochs of the Age of Mammals), with some attention also being paid to the late Cretaceous formations (the closing period of the Age of Reptiles). The main objective of the expedition is to collect fossil mammals from the Paleocene and Eocene. Specimens from these early horizons are of great interest to students of mammalian evolution. The dinosaurs and other reptiles that had previously dominated the earth were but a short time extinct (geologically speaking), and the mammals were just getting well under way. Many

groups that no longer survive were flourishing, and several of the dominant mammalian types of the present time were represented by exceedingly primitive ancestors. Thus, for example, the horses of the early Eocene were small creatures no larger than foxes, and they possessed four toes in contrast to the modern horse's one.

In addition to the work on vertebrates, attention is being given to geological observations and to the collecting of fossil plants. It is hoped that by means of the latter it will be possible to make somewhat more precise age determinations and correlations of the late Cretaceous formations than has hitherto been done.

HURRICANE WARNINGS OF THE U. S. WEATHER BUREAU

THE U. S. Weather Bureau has issued a statement describing the methods used to chart storms during the hurricane season, which in the United States runs usually from July to October.

The hurricane warning service, according to F. W. Reichelderfer, chief of the bureau, is more efficient this year than ever before. Observations are taken twice daily from over eighty stations in the West Indies and the Caribbean, and two to four times daily from vessels in the Gulf of Mexico, Caribbean and West Indian waters. These observations are in addition to the reports from the regular system of stations in the United States and vessels in the North Atlantic.

Whenever there are indications that a tropical cyclone or hurricane is forming, special observations made at two to three hour intervals by ships and stations in the region of the hurricane are sent in so that the four forecast centers of the hurricane warning system—Washington, Jacksonville, New Orleans and San Juan—have information as to the location of the hurricane and its intensity long before it enters American waters or approaches the coast.

The effectiveness of this system was demonstrated recently in the case of the small hurricane which crossed the Florida Peninsula on August 11 and 12. This hurricane was first detected and warnings issued from the Jacksonville center on August 8 when it was located 175 miles northeast of San Juan. Subsequent advisory information was issued every six hours until the storm neared the Florida coast, after which the advices were increased to hourly broadcasts by radio-telephone until the storm passed across the Peninsula into the Gulf of Mexico.

Mr. Reichelderfer points out that:

These advices serve as examples of the remarkable accuracy with which the movement and intensity of violent storms can be foretold by means of the hurricane warning system. Many studies have been made of the formation and behavior of hurricanes which have moved toward our Atlantic and Gulf coasts during the past fifty years or more. Severe hurricanes do not often reach our coasts. But the Weather Bureau, through its system of hurricane