SCIENTIFIC EVENTS

CANADIAN FIELD EXPEDITIONS

THE official announcement of the Mines and Geology Branch of the Department of Mines and Resources, Ottawa, states that the summer work of the National Museum of Canada will include biological and botanical investigations to be carried on in British Columbia, Alberta, Manitoba and Ontario, with archeological studies in Ontario.

The work is being directed toward the gathering of new information on Canadian fauna, flora and native races, and the acquiring of new specimens for the museum. R. M. Anderson, chief of the division of biology, is studying mammals in tht Waterton Lakes district of Alberta; H. M. Laing is continuing a biological survey of the coast of British Columbia, with particular reference this year to the area in the vicinity of Bella Coola; Angus Shortt is continuing a study of bird life in Manitoba which is being carried out from Churchill southward to the International boundary. Work this year will be chiefly in the vicinity of Dauphin; R. C. Hosie is continuing with his botanical studies of the region north of Lake Superior, and W. J. Wintemberg will make excavations in the vicinity of Waubaushene on what may prove to be the site of an old fort of historic interest.

Fifty-eight survey and exploratory parties, comprising a force of nearly three hundred men, have been assigned to field work this year by the Mines and Geology Branch of the Department of Mines and Resources. The parties, most of which have already left Ottawa, will map and investigate areas in every mineral producing province in the Dominion and in Yukon and the Northwest Territories.

There are forty-one parties engaged in geological investigations and seventeen in topographical mapping. Of the former, nine are in British Columbia, two in Alberta, four in Saskatchewan, five in Manitoba, four in Ontario, six in Quebec, three each in New Brunswick and Nova Scotia, two in Yukon and one in the Northwest Territories. In addition to these, one party is engaged in the collection of mineral specimens in eastern Canada.

Three of the seventeen topographical parties have been assigned to British Columbia, four to Alberta, one to Saskatchewan, three to Quebec, one to Nova Scotia and three to the Northwest Territories. One party is engaged in physiographic studies in the eastern Arctic.

MARINE STUDIOS

MARINE STUDIOS, a project comprising what is said to be the largest aquarium in the world and the only specially designed under-water motion picture studio, was opened to the public on June 23 at Marineland, eighteen miles south of St. Augustine.

This undertaking is the outcome of the efforts of W. Douglas Burden, associate curator and trustee of the American Museum of Natural History in New York, and his associates to portray the undersea world in natural surroundings, so that sea life under conditions as nearly identical as possible with those in which it exists in its natural state might be observed and photographed. In carrying out this plan Mr. Burden has had the cooperation of Ilia A. Tolstoy, grandson of Leo Tolstoy, the Russian writer, Miss Lillian Koehler, and their associates who have worked together from the beginning.

The undertaking revolves largely around the construction of the aquarium itself. Instead of the usual method of presentation whereby each species is segregated in its own small compartment, two large tanks present a facsimile reproduction of submarine life with each species playing the same part that it does in the ocean.

One tank is rectangular, 100 feet long, 50 feet wide and 18 feet deep; the other is circular, 75 feet in diameter and 11 feet deep. Enclosed galleries are built around each tank with observation platforms at different levels from which the public may view the spectacle of undersea life through more than 200 portholes built into the side of the tanks. The tanks and portholes were designed under the direction of a motion-picture engineer, who worked out in advance the various camera angles necessary to afford the greatest latitude in the filming of scenes.

The aquarium has been stocked with thousands of specimens, some rare in captivity. Two porpoises, a mother and her offspring, weighing probably 850 and 150 pounds, respectively, are believed to be the only two in the world in captivity; while two sawfish, one of which weighs over 1,000 pounds and is 14 feet, 8½ inches long, are the two largest in captivity. Other interesting specimens include five penguins imported from South Africa and South America, two large loggerhead turtles, numerous large sharks, rays, catfish, shrimp and thousands of coral and reef fish from off the Keys.

The formal opening ceremonies were conducted by Walter B. Frazer, mayor of St. Augustine, as master of ceremonies, with U. S. Senator Claude Pepper, Frank V. B. Couch, mayor of Daytona Beach; C. V. Whitney, and W. Douglas Burden participating.

THE MOUNTAIN LAKE BIOLOGICAL STATION

THE Mountain Lake Biological Station of the University of Virginia opened on June 20 for its ninth session. Instruction is given in two terms of five weeks each.

The following courses are offered in 1938. In the first term Professor L. L. Woodruff, of Yale University, assisted by Samuel L. Meyer, will give instruction in protozoology. Bio-geology will be taught by Professor Joseph K. Roberts, of the University of Virginia. Professor C. E. McClung, of the University of Pennsylvania, will give a series of lectures entitled "One Hundred Years of the Cell Theory."

In the botanical field a course in the morphology of seed plants will be given by Ivey F. Lewis, director of the station and Miller professor of biology at the University of Virginia. Assistant Professor John M. Fogg, Jr., of the University of Pennsylvania, will continue the course begun in 1937 on the taxonomy of plants.

In the second term the zoological courses are: Morphology of the Animal Cell, by Professor Bruce D. Reynolds, of the University of Virginia, and the Biology of Vertebrates, by Maurice G. Brooks, of West Virginia University. Morphology of Pteridophytes will be handled by Major Robert P. Carroll, of the Virginia Military Institute, while Professor Robert F. Smart, of the University of Richmond, will offer work in mycology.

The emphasis throughout is on the living organism. As far as possible, material for dissection and experiment is collected by the students themselves with a view to avoiding the "glacial period" biology imposed of climatic necessity on students in the winter sessions of our colleges. For field work a wide variety of habitats is offered. The neighboring high dry ridges of the Alleghanies, the deciduous forests of the mountain slopes, the lake and mountain streams, cranberry bogs, the flood plain and bluffs of the New River give an altitudinal range from 4,500 to 2,000 feet.

The station buildings number nineteen, mostly small residential cottages of simple but comfortable construction along with the laboratory, the library and the dining-hall. The various buildings are named for biologists from the Southern States: Banister, Clayton, Elliott, Schweinitz, Audubon, Rafinesque, Michaux, Hentz, LeConte, Mohr, Gattinger, Catesby, Chapman, Walter Reed. The power lines of the Appalachian Power Company furnish dependable electric current to all buildings. Water from a spring high above the station is piped by gravity to the cottages.

Students and investigators come mostly from the South, though the station is open to those from elsewhere. Elaborate equipment for physiological work is not available, but the usual conveniences are offered for morphological or cytological investigations. Microscopes, microtomes, embedding ovens, centrifuge, glassware and the usual chemicals are at hand.

The library building is convenient, with study rooms available, but the supply of books is limited to the standard volumes bearing on the content of the courses given and some reprints. A complete file of *Biological Abstracts* is on the shelves, and volumes wanted are obtained on interlibrary loans.

The climate of Mountain Lake is delightful. The thermometer seldom rises above 85 during the day, and the nights are uniformly cool. Field work is facilitated by the absence of insects and other pests that so often make collecting a grim test of fortitude. There are no mosquitoes, ticks, chiggers or poison ivy, though an occasional rattlesnake provides excitement for the uninitiated. I. F. L.

THE AMERICAN PUBLIC HEALTH ASSOCIATION

THE preliminary program of the scientific sessions of the sixty-seventh annual meeting of the American Public Health Association has been issued. The meeting will be held in Kansas City, Mo., from October 25 to 28. An attendance of 3,000 professional public health workers is expected.

Fifty morning and afternoon meetings have been arranged by the ten sections of the association. These are: Health Officers, Laboratory, Vital Statistics, Public Health Engineering, Industrial Hygiene, Food and Nutrition, Child Hygiene, Public Health Education, Public Health Nursing, Epidemiology.

Special sessions are planned on public health aspects of medical care, oral hygiene, professional education and diphtheria immunization. A public meeting under the auspices of the local committee is planned for Wednesday evening, October 26, when Dr. E. V. McCollum will discuss the pasteurization of milk and Dr. Arthur T. McCormack will speak on the new responsibilities of the health officer.

There will be symposia on industrial hygiene administration, venereal disease control, laboratory diagnostic methods, expanding responsibilities in public health engineering, maternal and child health, frozen desserts, industrial hazards, water and sewage, typhoid fever, the next steps in school health services, milk and dairy products and many other important subjects.

Among those who will take part in the program are: Colonel A. Parker Hitchens, Dr. Earle G. Brown, Dr. Haven Emerson, Surgeon-General Thomas Parran, Joel I. Connolly, Dr. Nina Simmonds, Dr. Karl F. Meyer, Dr. Walter Clarke, Professor C.-E. A. Winslow, Dr. George C. Ruhland, Dr. William A. Sawyer, Dr. Walter H. Eddy, Dr. Frank G. Boudreau, Sol Pincus, Dr. Martha M. Eliot, Dr. Abel Wolman, Dr. Robert S. Breed and Dr. Felix J. Underwood. More than 300 papers and committee reports will be presented during the meeting.

The preliminary program is published in full in the August issue of the *American Journal of Public Health,* published by the American Public Health Association, New York, N. Y.