SCIENTIFIC EVENTS

THE COMMONWEALTH SOLAR OBSERVATORY, CANBERRA[1]

THE first report of the present director of the Mt. Stromlo Observatory refers to the period May, 1939–April, 1940, though it also sketches the history of the observatory since its establishment in 1910, and gives a brief account of the main observational programs carried out since the first director's appointment in 1924. The observations of solar radiation begun in 1926 have been completed, and a discussion of the results is promised. One of the most interesting conclusions is that the correlation between total solar radiation and duration of bright sunshine is so close as to be useful for derivation of the first quantity, the direct observation of which is difficult, from the second, which is a standard meteorological datum. Spectrohelioscopic and visual observations of the sun have been directed respectively to the detection and mapping of bright solar eruptions, several spectrograms of which have been obtained during 1939. As compared with flash spectra, these show a puzzling enhancement of low-excitation Fe I and Fe II lines.

A new program of stellar observations is planned for the Reynolds 30-inch reflector which has been converted from Newtonian to Cassegrain form for the purpose. A single-prism spectrograph for spectroscopic parallaxes and a photo-electric photometer have been made for use at the Cassegrain focus. The work on cosmic radiation and atmospheric physics with which the name of the observatory is especially associated has been carried on with a few modifications, chief among which are the discontinuance of the observations of atmospheric electricity and night-sky luminosity, and an extension of the work on cosmic rays and the ozone content of the atmosphere. With the establishment five miles away of an official Commonwealth meteorological station, many of the routine meteorological observations have been discontinued, though measurements having a direct bearing on other observatory programs are still being carried out. An impressive list of papers published during the year shows that the establishment is more than maintaining its high standing amongst southern hemisphere observatories.

THE PACIFIC EXPEDITION OF THE AMERICAN MUSEUM OF NATURAL HISTORY

ACCORDING to a preliminary report on the program of the American Museum-Pacific Expedition which is now conducting field research along the Pacific coasts of Colombia and Ecuador, received by the American Museum of Natural History from Dr. Robert Cushman Murphy, curator of oceanic birds, the winter range, hitherto unknown, of several species of seabirds has been established.

Dr. Murphy is leader of the expedition that has been in the northern Pacific aboard the diesel schooner *Askoy* since February, studying the relationship between the ocean waters adjacent to this part of South America and the life of the sea and the shore.

This area of the South American coast is one of the least known in the whole world as it is far from the regular trade routes and seldom visited by ships. It has been found that this region has a totally different current and temperature system from that of any other part of the Pacific Ocean adjoining South America and its life is correspondingly distinct. The field studies include basic oceanographic investigations, quantitative measurements of the microscopic life in the sea and study of the birds, fish and other animal life that depend upon this particular oceanic pasture for their existence.

The personnel, in addition to Dr. and Mrs. Murphy, includes Dr. John C. Armstrong of the department of living invertebrates, and Mr. José G. Correia, field assistant. Dr. Armstrong is making extensive oceanographic studies and Mr. Correia is collecting sea birds. To further the survey, extremely valuable scientific equipment was lent by the Hydrographic Office of the Navy Department, the U. S. Coast and Geodetic Survey and the Woods Hole Oceanographic Institution. These instruments include deep sea thermometers, recorders for counting minute sea-life and other recorders to test the salinity of the ocean water.

In addition to the oceanic work, the party hopes to explore most of the numerous bays and estuaries of the coast and also to make two land journeys to the crest of the Baudo-Mountain range, which is not connected with the Andean range, and from which the museum has, as yet, no birds or other animal collections.

THE ZOOLOGICAL EXPEDITION TO THE GALAPAGOS ISLANDS OF THE FIELD MUSEUM

DR. CLIFFORD GREGG, director of the Field Museum, Chicago, and Edward H. Bean, director of the Brookfield Zoological Garden, announce that the zoological expedition to the Galapagos Islands, sponsored and led by Leon Mandel, of Chicago, and conducted on board a yacht chartered by him, is on its way home with important collections for both institutions.

Approximately 2,000 specimens of fishes, birds and reptiles have been collected for the museum, as well as two live albatrosses, three frigate birds, eleven penguins, three land tortoises, a giant Barrington iguana,

[1] *Nature.*