

D. A report covering each cooperative investigation, including copies of all maps, charts, photographs or other notes relating to the work shall be filed with the Smithsonian Institution by the leader of the joint investigation within a reasonable period following its completion. It is contemplated that a proper report embodying the results obtained will be prepared for publication by the leader or his agent within a reasonable time.

2. The act provides that "all such cooperative work and division of the result thereof shall be under the direction of the Secretary of the Smithsonian Institution." The leader of any joint investigation must be approved or designated by the Secretary, who may at any time, if in his judgment it be desirable, send a representative to the scene of operations to inspect the work, at the expense of the allotment made for the particular investigation concerned.

3. Any cooperative investigation involving lands under the jurisdiction of the Departments of the Interior, or of Agriculture, will be subject to such rules as the secretary of the department having jurisdiction may impose.

C. G. ABBOT,  
*Secretary*

SMITHSONIAN INSTITUTION

### PROPAGATION OF THE GIANT TORTOISE IN THE UNITED STATES

THE hunting party sent by the New York Zoological Society to the Galapagos Islands in March returned in May with 180 giant tortoises, all of which are to be devoted to attempts at propagation.

The director of the expedition has already located colonies of 15 to 30 tortoises at Balboa, Canal Zone; San Diego, California; Superior, Arizona; San Antonio and Houston, Texas, and New Orleans, Louisiana. Other breeding stations will be located in southern Florida and probably at other points nearer the tropics.

All the tortoises have been numbered, weighed and measured. These and other scientific records will be made annually until the little known changes due to growth and age are ascertained.

The tortoise colonies already established are under the protection of scientific or other responsible organizations. They have in each case an acre of range, more or less, are behind tight fences and before December will have shelters to which they can retreat during chilly weather or unusual dampness. There have been no losses and all are in thriving condition.

The Galapagos tortoise is now known to be extinct on all islands of the group except Albemarle and Indefatigable, with the possible exception of Duncan Island. All of the tortoises secured were found in the

mountains of southern Albemarle, which involved a week's journey with pack animals.

We confirm the opinions of other observers who have visited the Galapagos during the past 30 years, that the giant tortoise cannot long survive on those islands, where all its eggs and young are destroyed by wild dogs, pigs, cats and rats. Hunting by parties from passing vessels seems to be ended, as tortoises are now to be found only among mountains difficult to reach.

The expedition found in a cave a dozen large and fairly complete skeletons of the long-extinct tortoise of Charles Island. No other scientific work was attempted, except the securing of rooted plants of an absolutely spineless cactus discovered by the director, which is now being propagated at Balboa, C. Z., and at the Desert Arboretum at Superior, Arizona.

The U. S. Bureau of Fisheries cooperated with the Zoological Society to the very important extent of lending a ship, the *Albatross II*.

C. H. TOWNSEND,  
*In charge of Expedition*

### FIELD TRIP OF OHIO GEOLOGISTS

THE annual field trip of the geological section of the Ohio Academy of Science was held in the vicinity of Dayton and Springfield, Ohio, on June 1, 2 and 3. Thirty-eight people representing thirteen institutions were in attendance.

J. Ernest Carman, of Ohio State University, and C. F. Moses, of Muskingum College, acted as guides on the first day of the excursion, when the party visited the outcrops of the Devonian in the Bellefontaine outlier. On the second and third days August F. Foerste acted as guide taking the party to outcrops of the Silurian in both the Springfield, Ohio, region and the area near the western boundary of the state.

Saturday evening, at the Engineers' Club of Dayton, the group was addressed by Arthur E. Morgan, president of Antioch College, formerly chief engineer of the Miami Conservancy District, on the problems of flood prevention at Dayton.

A fifteen-page mimeographed pocket field guide was published for the convenience of the members of the party. The booklet contained routes, sections to be visited, and a short account of the general relations of the formations.

The colleges and universities represented on the trip included: Antioch, Bowling Green, Kenyon, Miami, Muskingum, Ohio State, Ohio Wesleyan, Toledo and Wooster.

A. C. SWINNERTON

ANTIOCH COLLEGE,  
YELLOW SPRINGS, OHIO