WILDLIFE RESOURCES

WITH the signing of an agreement by state agencies in Ohio, nine states are now cooperating with the U. S. Bureau of Biological Survey in investigations to learn how to increase, maintain and use wildlife resources, and to show on trial areas how facts found in research can be applied in a practical manner. In addition to Ohio the cooperating states are: Alabama, Connecticut, Iowa, Maine, Oregon, Texas, Utah and Virginia.

Several other states sought to take part in the research program, but available funds limited the quota to nine. These were selected with a view to carrying on research on a regional basis with as little duplication as practicable. Each state program is arranged so that the practical information obtained may be applied in a large area.

Advisory committees of representatives of the Biological Survey, land grant colleges and state game departments administer the work and funds. Project leaders selected by the bureau and states direct the active work at the land grant colleges.

Major studies under way thus far at the college stations and project leaders are: mourning dove, Alabama Polytechnic Institute, Auburn, Ala., H. S. Peters; eastern cottontail rabbit, Connecticut Agricultural College, Storrs, Conn., Dr. Paul D. Dalke; muskrat, midwestern cottontail rabbit, and coot, Iowa State College, Ames, Ia., Logan J. Bennett; woodcock and moose, University of Maine, Orono, Me., C. M. Aldous; raccoon, gray squirrel and fox squirrel, Ohio State University, Columbus, Ohio; project leader not yet appointed; antelope and possibly blue grouse, Oregon Agricultural College, Corvallis, Ore., Arthur S. Einarsen; western bobwhite quail and western turkey, Texas A. & M. College, College Station, Texas, Dr. W. P. Taylor; mule deer and sage grouse, Utah State Agricultural College, Logan, Utah, Dr. D. I. Rasmussen; and wild turkey, Virginia Polytechnic Institute, Blacksburg, Va., C. O. Handley.

"Each year the money paid to trappers, and that spent by sportsmen and others directly interested in wildlife runs well over a half billion dollars," says Dr. W. B. Bell, chief of the division of wildlife research of the bureau. "Yet very little has been done," he says, "to systematize this industry through careful management. It is the ultimate aim in this research program to find out not only what can be done to produce more wildlife, but how it can be done on a practical land use basis."

One or more trial demonstration areas are being set up at each station in order to work out a complete life history and management practice for one or more particular fur, game or other wildlife species. Most of these areas will be established on land of private owners cooperating with the research projects and in state and national forests. Summaries of the state programs may be obtained by writing the bureau for leaflet, BS-38.

Funds to maintain the research stations come from the Biological Survey, the American Wildlife Institute and the colleges and game departments of states in which the stations are located.

NATURAL SCIENCE MUSEUMS AT DALLAS

The Museum News reports that three natural science institutions, costing more than half a million dollars, are being constructed on the grounds of the Texas Centennial Exposition in Dallas, which will be open from June 6 to November 29. They are the Museum of Natural History, the Museum of Horticulture and the Aquarium, all financed by the City of Dallas, as a contribution to the exposition and as permanent educational institutions.

The Museum of Natural History is 96 by 140 feet in ground dimensions and two stories high. It is of structural steel framework, faced with native Texas limestone. Texas marble is used for carved cornice and trim. On the first floor will be displayed habitat groups covering the full range of Texas animal, bird and reptile life, prepared by J. H. Wood, of Ann Arbor; W. A. Mayer, of Dallas, and Jonas Brothers, of Denver. Cases fourteen inches from the floor with view openings uniformly six feet in height are used. The cases range from nine feet deep and thirty feet wide downward. The backgrounds are by J. D. Figgins, formerly of the Colorado Museum of Natural History. On the second floor will be displayed mineral and geological material, mostly of Texas origin, gathered under the supervision of H. W. Law; also a display of photographic transparencies of Texas wildflowers in natural colors. In the basement is air-conditioning machinery for the operation of a system of temperature and humidity control, and space for workshops. The museum is under the direction of F. W. Miller, curator, with J. D. Figgins as assistant.

The aquarium is a concrete structure faced with cream-colored brick and is 150 by 70 feet. The building and equipment cost about $182,000. Skylights admit the maximum of sunlight through glass of a special type which passes a major portion of the ultraviolet rays. Water circulation is by electric pumps to gravity-feed tanks. The display facilities include eight tanks of 2,000 gallons capacity, four of 3,000 gallons, eighteen major and twenty-four balanced display tanks —all for fresh-water species; also four small tanks for salt water species, chiefly from the Gulf of Mexico off the Texas coast. The collection of tropical fishes comprises about 75 species. Pierre A. Fontaine, of Dallas, is aquarist in charge.

The Museum of Horticulture is of steel and cream