



DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

FISH AND WILDLIFE SERVICE

For Release SUNDAY, SEPTEMBER 1, 1940.

THE STORY OF WILDLIFE SERVICE FOOD-HABITS INVESTIGATORS

NOTE TO EDITORS: This is the first of a series of feature stories explaining the work of employees of the Fish and Wildlife Service, which will be issued from time to time. Photos to illustrate these are available from the Fish and Wildlife Service, United States Department of the Interior, Washington, D. C.

If ground squirrels are damaging the crops on Joe Smith's farm in Crouch, Idaho, or Bob Jones thinks the marsh hawks in Centre County, Pennsylvania, are eating bobwhite quails, both men probably write to the Fish and Wildlife Service, United States Department of the Interior, and expect something to be done about it.

Something is done. Shortly, Smith gets a letter telling him how to control ground squirrel depredations, while Jones is informed that marsh hawks seldom eat bobwhite quails and actually are beneficial to the game birds.

Back of the letters sent to Smith and Jones are more than 55 years of investigations of wildlife in North America, investigations that are recorded and constantly checked so that adequate, up-to-date information on wildlife may be available.

For example, take the Jones case. Jones probably was certain that he saw marsh hawks swooping down and gulping a few quails. But food-habit experts knew, without being in Centre County, that the hawks probably were eating field mice or other harmful rodents, and not quails.

There is no guess work about it. The specialists have records to prove their statements. About 10 years ago, some Southern sportsmen made a similar complaint. Service officials didn't know whether the hawks were guilty, so 1,100 pellets of the species were collected and analyzed. The investigators found quail parts in only 4 pellets and cotton-rat remains in 925. Since cotton rats are known to be highly destructive to quail eggs this much-maligned hawk was shown to be beneficial and was saved from threatened slaughter by well-meaning but misinformed citizens.

When it is realized that there are more than 800 native species of birds, a greater number of mammals, at least 350 reptiles, and possibly 20,000 plants, and that certain employees of the Fish and Wildlife Service are required to know these animals and plants well enough to recognize minute parts under a microscope, a fair idea is gained of the qualifications of a food-habits expert.

There are now 29 such specialists working for the Service. A group of them are employed either at the food habits laboratory in the Patuxent Research Refuge, Maryland, or at the Wildlife Research Laboratory in Denver. Others are assigned to conduct field investigations on National Wildlife Refuges in Louisiana, South Carolina, Delaware, Utah, Oregon, California, and elsewhere.

The studies made by these men, plus the work of their predecessors during the past half century, enable the Service to determine what animals are beneficial, neutral, or inimical to man's interests.

The average laboratory worker can conduct an experiment with little help from others. But a food-habits laboratory staff is composed of a group of scientists

who work together. One investigator may require the services of four or five fellow experts. Such teamwork is necessary because the study of the food eaten by an animal usually requires microscopic examinations of the stomach contents, which are generally broken up, partly digested, and often difficult to recognize.

At the laboratory, one man may be assigned to conduct a study on a particular animal's food. But that expert knows when he can't identify all of the stomach contents of a specimen of the animal he is examining, he can get the needed help from an expert on plant seeds, from another specialist on plant parts other than seeds, or from still another who can recognize a bird by seeing only a small piece of it. To cover ground thoroughly, the "team" also includes an expert on mammals and another who knows insects and other invertebrate animals as well as the ordinary individual knows the alphabet.

After learning the specific identity of the various foods of valuable forms of wildlife the investigators make studies of appropriate methods for increasing the supplies of such foods. Likewise, if the studies of any species of animal reveal that its feeding activities are inimical to the interests of man, an effort is made to devise measures for preventing or minimizing such damage.

All this study of the food habits of wild animals may seem unimportant to some individuals, but farmers, foresters, nurserymen, fishermen, and others depend on the result of these investigations for information that will help them avoid economic losses in their businesses.

Knowledge gained by food-habits investigators of the Fish and Wildlife Service often affects the success or failure of an agricultural or horticultural enterprise.

The tremendous volume of work involved in a food-habits investigation is illustrated by a recent Fish and Wildlife Service publication entitled "Food of Game

Ducks in the United States and Canada." This volume represents the combined efforts of at least 10 top-ranking food-habits experts who examined almost 8,000 stomachs of 18 species of game ducks collected during the past 40 years.

The results, however, are worth the effort, since people who are interested in increasing the continental supply of wildfowl can learn from this book what kinds of food these birds eat in any part of the country. That's very important to those who are spending thousands of dollars to plant food for game ducks.

Name your wildlife problem and the chances are that the Service food-habits staff either knows the answer or is working on it. Coyotes? A report on a 5-year study based on the examination of 14,000 stomachs is now in course of publication. Field mice? The food-habits men can tell you how to avoid losing valuable orchard trees by controlling the rodents. Wild geese? A recent publication tells how to discourage wildfowl from eating grain in the fields.

Study, patience, and much effort are behind such statements as: "Fish and Wildlife Service officials declared the brown pelican not guilty of charges that it consumes large quantities of food fishes, thus causing a shortage in daily catches. Most of the pelican's diet is so-called trash fish. Food fishes form less than 1 percent of the pelican's diet, food habits experts said."

The next time you see such a statement you'll know the food-habits experts had good authority for their announcement.