REPORT OF THE COMMITTEE ON BIRD PROTECTION, 1966

OUR report for the year, September, 1965, through August, 1966, follows. We wish to express our appreciation to numerous individuals and organizations for contributing information which we have incorporated in these pages.

Canadian policy on migratory birds.—An important statement on national wildlife policy was recorded by the government of Canada on 6 April 1966.

The government will make every effort to prevent extinction of any species, to maintain bird populations at levels as nearly as possible in harmony with man's various interests, and to acquire, maintain, or improve habitats in order to support optimum numbers of game or other desirable species. Conversely, game bird populations are to be regulated, by hunting or otherwise, with consideration of the carrying capacity of the habitat and of any possible danger to other interests.

Procedures will be initiated in 1967 to conclude agreements with owners of about two-thirds of the 6,000,000 small potholes in the waterfowl prairie breeding grounds. The owners will be paid certain amounts for maintenance of these habitats. Acquisition of larger tracts which are important migratory bird habitat, including upland and shoreline habitat frequented by Sandhill Cranes in Saskatchewan, has been undertaken by the Canadian Wildlife Service. Also, beginning in 1966, migratory game bird hunters in Canada will be required to have a special permit, this to allow annual estimates of the game bird harvest.

Waterfowl.—A cold, late spring and moisture in above-normal amounts resulted in a general delay of nesting in the northern plains states and southern prairie provinces. However, subsequent good weather, better water conditions, and a breeding stock more than one-third larger than that of 1965 resulted in fair to excellent production of ducklings. Breeding surveys indicated that the southward flights in 1966 would be moderately larger in the Central and Pacific flyways, and slightly larger in the Atlantic flyway, than in the previous autumn. (This comparison is based on 1965, a notably poor year when the total duck breeding population was eight per cent lower than the previous record low of 1952.) The national wildlife agencies of the United States and Canada estimated that the 1966 breeding stock was lower than the average during the past 13 years. The Mallard population is still relatively low. That of the geese (collectively) may be close to the numbers of a year ago.

Endangered species.—A compilation of data on rare and endangered wildlife has been completed by the U. S. Bureau of Sport Fisheries and Wildlife. The information will be made available to the public in the

form of a "red book" before the end of 1966. The agency expects to maintain up-to-date information which will help to guide conservation programs. The Bureau has also completed a study of existing legal protection for endangered birds and other vertebrates. This, it is hoped, will stimulate additional protective measures by both states and the federal government. To assist in publicity, an artist and a photographer are making and collecting pictures of the endangered animals.

Legislation has been enacted by the Congress to give more responsibility and latitude to the Department of the Interior in conserving and propagating endangered species of wildlife. The Act will make possible the acquisition of land essential to any species in danger of extinction. Whenever possible, long-term leases and easements, rather than outright purchases of land, will be made. New projects currently are directed at saving the Attwater's prairie chicken and several Hawaiian species. (Acquisition of habitat and protection from hunting and other disturbance were vital in restoring the Trumpeter Swan population to a safe level and in preventing the otherwise almost certain extinction of the Whooping Crane. The number of whoopers continues to creep upward. There are now at least 51, of which 7 are in captivity, and an additional net gain seems likely this year. More land in the Texas winter range of the crane is urgently needed.)

Research under the "endangered wildlife" legislation is concentrated on field investigations of ecology, life history, and behavior of a few selected species and on experimental propagation and the study of some endangered forms in captivity. Three field biologists are employed. One is studying some Hawaiian species, especially some honeycreepers. The second, supplementing investigations by the National Audubon Society, is studying the California Condor. The third biologist is in southern Florida to work on several rare species, with priority on the Everglades Kite, which now numbers about 20 birds.

The studies in Hawaii have revealed that reproduction of both the Nene and the Dark-rumped Petrel is seriously endangered by the mongoose. As a result, numbers of the latter will be reduced in the nesting areas of these birds. Also, a survey by the Fish and Wildlife Service of the Mexican duck in its principal highlands breeding range indicates that the species may be declining in Mexico, just as it did in the United States, due to extensive drainage. Taxonomic studies are in progress to determine, as a basis for conservation and management, whether or not the northern and southern populations represent distinct races.

More detailed comments follow concerning several endangered species.

Raptores.—A count of 38 California Condors was made in October, 1965, by a team directed by the California Department of Fish and Game

and the National Audubon Society. This number is close to the estimate of 40 birds in 1964 reported by Miller, McMillan, and McMillan. The "Miller-McMillan" report emphasized that the presence of a significant number of immature condors indicates that reproduction still occurs and, if one or two condors annually can be saved from being shot, the downward trend might be reversed. However, due to lack of favorable publicity, the condor does not enjoy the public esteem and interest essential to conservation action, and, indeed, the existence of the Sespe Wildlife Area, a wilderness refuge for the condor, is in jeopardy (see discussion later).

The 1962 amendment to the Bald Eagle Act, extending protection to the Golden Eagle, contains a disastrous provision allowing control of the latter in regions where damage to livestock is believed to occur. Accordingly, destruction of Golden Eagles and some Bald Eagles continues unabated in the Trans-Pecos—Edwards Plateau region of western Texas and southeastern New Mexico, as well as in five other states in the southwest. Regulations permit control by trapping and by shooting from the ground only, but aerial "warfare" is financed by sheep and goat interests. In this manner, as recently reported by the National Audubon Society, 1,000 to 2,000 eagles are killed each winter.

Professional hunter-pilots, who could distinguish between Golden and immature Bald Eagles, have been largely replaced by amateurs, who do not know one species from another. A survey in late March, 1966, indicated that at least 20 per cent of the birds shot are Bald Eagles. According to some professional hunters, more eagles are being killed now than in the years prior to "protection."

While research on food habits on privately owned and fenced land is difficult, observations of the Fish and Wildlife Service and National Audubon Society during the last four years do not support claims of extensive damage by eagles to young livestock. Since the good will of the land owners is essential for effective work by state and federal game management personnel, little attempt is made to enforce the prohibition of the use of aircraft in eagle hunting. A solution to this problem is not evident, but the annual slaughter of these eagles cannot be tolerated indefinitely.

It is increasingly clear that the Peregrine Falcon population which formerly bred in the Appalachians and elsewhere in the eastern United States and which numbered many hundreds of pairs has (except for perhaps a very few individuals) completely disappeared within the past 15 years. The facts and possible causes of this die-off and the less drastic decline elsewhere in North America and in Europe were discussed last year at an International Peregrine Conference in Madison, Wisconsin. The proceedings of that conference, which are being edited by J. J.

Hickey, will furnish much information on the status of birds of prey generally as well as of the peregrines. The die-off in Britain was not total and it seemed possible that a residuum might have survived in the eastern United States. However, during 1965 and 1966, attempts by one of us (Spofford) to find nesting peregrines in the northern Appalachians from Maine to Pennsylvania were fruitless. Single peregrines were seen in April, 1965, near Gatlinburg, Tennessee, and in early summer of the same year, near Rutland, Vermont, and in eastern Maine. Some pairs are still breeding in the maritime provinces south of the Saint Lawrence River. However, we are informed that only 2 nests containing young were found in the entire Province of Ontario during 1965, as compared with 11 nests in 1964. The arctic and other boreal populations, some of which migrate along the Atlantic coast, still appear to be sizeable. In Canada there is now far less harassment of peregrines and other birds of prey than occurred a decade ago, although irresponsible falconers may pose a problem here, as they have south of the border.

The commercial exploitation of some species of hawks and owls through interstate commerce is becoming more serious. Because protection of birds of prey varies from state to state, it is difficult or impossible to control this commercial traffic. The National Audubon Society has initiated steps toward enactment of a federal law to prohibit the interstate traffic and export of North American birds of prey except for scientific or educational purposes. We recommend that the Union support this endeavor. For several years, Arkansas has limited shooting in the interim-hunting season to crows. However, in June, 1966, the Arkansas Game and Fish Commission removed protection from hawks, owls, English Sparrows, Starlings, wolves, bobcats, coyotes, groundhogs, gophers, nutria, muskrats, and beaver. Your committee has endeavored to assist the South Arkansas Audubon Society in protesting this action of the Commission, especially with reference to hawks and owls, and to the rare and decreasing red wolf.

Environmental pollution and birds.—For several years past, your Committee has reported on destructive aspects of widespread pest control, with special emphasis on the highly detrimental side-effects of DDT when employed against the Dutch elm disease. A news release which was widely disseminated in 1966 aroused hope that DDT would be superceded by TCPA, injections of which were alleged to increase the trees' resistance to the disease. Unfortunately, with TCPA, as with Bidrin, the amount of chemical injected must be gauged closely to the size of the tree. Overdosage kills the tree and under-dosage has no effect. We are informed that at least one of the chemical manufacturers of TCPA has stopped production, and a university laboratory has cancelled a program of experimentation in its use against Dutch elm disease.

Meanwhile, chemical contamination apparently continues to be worldwide. For example, biopsy samples of body fat from breeding Peregrine Falcons taken during June and July, 1966, along the Mackenzie River, Northwest Territories, showed pesticide residues in amounts up to 500 ppm. Eggs which were collected contained up to 10 ppm.

After three years of work, a committee working for the Food and Agriculture Organization has drafted a model law for control of pesticides. The draft will be submitted shortly for consideration by member states of the United Nations. Its provisions cover almost all possible modes of control, including regulations for licensing, manufacturing, labelling, packaging, advertising, sale, use, and manner of spraying. The document should stimulate action in countries which have not awakened to the dangers and perhaps lead to improvement of some existing legislation.

A major conference on environmental pollution, to be attended by representatives of the Canadian government, industries, and universities, is to be held in Montreal in October, 1966. It is expected to result in recommendations on needed research and technological development, and to provide information for resolving jurisdictional uncertainties.

Pollution by oil of sea and inland waterways still occurs, but less frequently than in the past, perhaps as a result of the International Convention on Oil Pollution. The last serious occurrences on Canada's Atlantic coast were in 1960. Regular patrols, by helicopter and other means, by the Canadian Wildlife Service, have reduced deliberate violations of the law against the discharging of oil in the St. Lawrence—Great Lakes waterway. That Service has also negotiated with the developers of the Athabaska tar-sands oil-extraction project to ensure that adequate precautions will be taken to prevent pollution.

Alaskan bird problems.—The findings of the "Spurr Committee," the adverse recommendations of the Fish and Wildlife Service, and much criticism from many quarters have dealt a severe blow to the proposal for a huge dam on the Yukon River at Rampart, Alaska. However, conservationists must not take appearances for granted. Proponents may use any opportunity to push through Congress legislation authorizing "investigation and study." Such an act, involving millions of dollars, could result in construction under the guise of "preventing waste of funds already invested." The disastrous effects of an impoundment behind a Rampart Dam, if built, have been summarized in our last two reports.

With this notable exception, alteration of habitats in Alaska, either in process or forecast, are not likely to have any significant effect on the fauna. The extension of copper mining along the Kobuk River near Kotzebue, exploratory drilling for oil on the north slope of the Brooks Range east of the Colville River, road building, and urban growth are

examples of development which are minute in comparison with the vast regions still undisturbed. Even the subdivision of the dairy pastures between Fairbanks and College, where an estimated 10,000 geese and other waterfowl stop for a few days in the spring migration, will have little or no bearing on conservation since the birds can stop elsewhere on the thousands of sloughs, bars, and openings along the Tanana River.

Everglades water problem.—In its last four reports, this Committee has summarized the truly deplorable conditions in Everglades National Park resulting from subnormal rainfall. Marked deterioration of the marshes has been a threat to the survival of the Wood Ibis in the United States. Populations of all water birds declined rapidly and the future of the Park as an example of a special habitat was in jeopardy.

We are happy to report that by mid-summer of 1966 water levels were again high. Early in March a federal-state agreement was signed making a temporary allocation of Lake Okeechobee water to the Park. Also, heavy rains saturated the ground, forcing salt water back toward Florida Bay. The flood control works north of the Park were also filled, and several thousand cubic feet of water per second spilled over to add to the ground water.

This abundance, which was a blessing to birds, was a curse to certain mammals. In the upper Everglades north of the Park, deer historically have been scarce. Partly as a result of drainage and diversion of water, deer increased during the drought years to abnormal numbers. Some areas were burned out by fires, mostly caused by man, which removed the organic muck; other high sites were preempted by hunters for camps. Sportsmen's groups released wild pigs which flourished, competing with and even killing weakened deer. When normal, high-level flooding occurred in 1966, some of the deer and perhaps other species were in serious trouble. Conservationists were confused and local outdoor organizations clamored for diversion of "surplus" water to the sea in order to save a marginal deer herd.

Thus the abundance of water brought on immediate and long-range problems, since all of the plentiful supply should be stored to provide for the dry-season needs of the Park. Studies of water needs in southern Florida by the U. S. Corps of Army Engineers are to be completed late in 1967. At that time, comprehensive measures must be devised *and financed* to maintain the park ecology. The American Ornithologists' Union and all conservationists should keep vigilance to ensure that adequate steps are taken. As always, there is danger that in today's flood we may forget the need to provide against the drought that will surely follow.

Avifauna of northern Latin America.—A year ago this Committee called attention to the fact that the rain forests of central and northern Latin America are being destroyed at an accelerating rate by agricultural practices while many resident birds and at least 100 migratory species (including many insectivorous birds) depend on this and related habitats. Some recent studies have indicated a marked decline in the numbers of some of these species migrating northward through the United States. We suggested that factors which influence the birds during migration and in the winter should be scrutinized. The American Ornithologists' Union, at its 1966 meeting, commended the Smithsonian Institution for sponsoring an investigatory meeting. This international conference, which was first proposed by William Vogt of the Conservation Foundation, was held in Washington, D. C., in mid-April, 1966. The present chairman of the Bird Protection Committee was invited to attend as an Observer; he was enabled to do so with grants from the Union, the Conservation Foundation, and Defenders of Wildlife.

Most of the representatives from five northern Latin American countries and from the United States felt that most migratory species that breed in the north temperate zone could survive environmental changes in their winter range. The preservation of resident species, particularly those of humid tropical forests, is a much more serious problem, since these birds need the habitat for nesting. Information is almost entirely lacking concerning the rate of decline and the precise effects of timber cutting.

A group of conferees, headed by J. W. Aldrich, listed 21 suggestions for action, based on the conference papers and discussions. These include inventories of animals supported by various habitats, preservation of renewable natural resources, particularly of rain forests, international exchange of information, control of illegal traffic in live animals, research, education, and publicity. Specifically for North America, governments and conservation organizations are urged to support studies on the breeding populations of species which winter in Latin America.

The problem of living-space.—Throughout this report we have referred to the importance of land. Preservation or restoration of habitat is frequently the most vital requirement for perpetuation of an endangered form.

The Soil and Water Conservation Act and "endangered species" legislation have recently assisted in providing legal authority and funds for acquiring and preserving bird habitats. As an example of action at a more local level, we cite a program in a region where human pressure on the land is high. An office of regional development has been established in New York State, to study and coordinate long-range planning of land

use. Under this program, the State Museum has surveyed areas along the Hudson River which have actual or potential value for nature preservation. Aquatic habitats such as small lakes and marshes (particularly saltwater marshes) are disappearing rapidly. The inventory of natural areas will be used as a basis either for acquisition or for agreements with owners for restrictions on use of the land. Some regulation of developments, such as buildings and roads, is needed in the immediate vicinity of wetlands for the preservation of birds, other wildlife, and plant species. We suggest that members of the Union should encourage their state authorities to start similar studies and to coordinate the results with the programs of other states.

Although these forward steps are evidence of real progress, at the same time, unfortunately, conservation is being forced backward by the rising tide of human population. Symbolic of these times and the conservation problems they present is the threat to Robert Ridgway's old nature preserve, Bird Haven, near Olney, Richland County, in southern Illinois. Ridgway conceived of Bird Haven not only as a bird sanctuary, but as an arboretum, and after he purchased the original tract in 1906, he added many plant species to its naturally varied flora. On Ridgway's death in 1929, his plans for an endowment for the sanctuary were incomplete, but friends added more land and set up an endowment.

Now the city of Olney needs more water and plans to inundate practically the entire refuge as a part of a reservoir. From the standpoint of bird conservation on a national scale, the problem of 120-acre Bird Haven is of no great moment, except as an ironic example and symbol of the plight of conservation in the latter half of the 20th century, when "sanctuaries-in-perpetuity" last only until it becomes expedient to destroy them.

The same basic pattern occurs over and over again. Farther north in Illinois, a proposed 24-mile-long Oakley Reservoir, planned by the Army Corps of Engineers, will flood most of the last sizeable tract of mature lowland forest in east-central Illinois, including a large part of Robert Allerton Park—a major site of long-term investigations in biology by staff and students of the University of Illinois. At a cost of 50 to 60 million dollars, the reservoir, with a life expectancy of about 100 years, will provide water to dilute sewage in the Sangamon River from the city of Decatur.

Far to the west, in southern California, the U. S. Bureau of Reclamation and the United Water Conservation District of Ventura County have proposed building the Topatopa Reservoir on the border of the refuge for the California Condor. Although outside of the sanctuary, heavy recreational use of the reservoir and the presence of an access highway to be

built through the nesting area would be a serious threat to this species. Also, the highway would offer new opportunities to hunters who shoot at anything that resembles a bird of prey. In a referendum early in 1966, the proposal was defeated by Water Conservation District voters by the narrow margin of 32 of more than 7,500 votes. The water district officials have announced that another referendum will be held on the 90 million dollar project. Modifications will enhance the proposition's chances for passage.

On the face of it, many of these are local problems, but compounded they become national problems.

It is ironic that while many of our countries' problems are basically biological (ecological) problems, biologists have (perhaps *choose* to have) very little voice in governmental policy. Far-reaching decisions on the use of land and its resources should be based, in part, on the judgments of a board of ecologists trained in the concepts of population dynamics. It is past time that biologists claim some meaningful role in the political decisions which influence not only the human species but all organisms.

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