REPORT OF COMMITTEE ON CONSERVATION, 1968¹

THE status of any species of bird is of concern to A.O.U. members. But concern about a problem is merely an emotional reaction unless it is based upon a thorough understanding of the problem and all that contributes to it. Thus it is of the utmost importance that we understand the status of birds, and other wildlife, in the context of current social and economic conditions and that we consider solutions to problems in the light of our objectives for human society. With this in mind, our report stresses public awareness of the environment and of some of the many factors influencing it. We also comment on research, introductions and exotics, and some special problems of individual species and groups of birds.

PUBLIC AWARENESS

There is room for optimism on the one hand, when one notes that conservation and ecology have become popular topics in recent years, even though they are often misunderstood and misinterpreted. Recent U. S. Congresses have passed unusual amounts of worthwhile conservation legislation, covering everything from air and water quality to support of endangered wildlife species. The Canadian Wildlife Service has been given increased responsibilities, as well as the means to carry them out, and wildlife habitat in the settled part of Canada is being classified and mapped in each province under the comprehensive ARDA Canadian land inventory program. The government of Italy recently outlawed the killing of spring migrants and the use of "very small" birds for food. The Governor of Hawaii has given some assurance of protection for the unique Kanaha Pond Sanctuary on Maui from a proposed airport extension that threatens this key portion of habitat for waterfowl and the endangered Hawaiian Stilt.

Several state and provincial game departments have recognized that their responsibilities extend beyond the harvestable species of wildlife. Some have changed their name from "game" to "wildlife" and at least a few have established professional positions to deal with nongame species. Others intend to do so. Many professional wildlife biologists still must acknowledge such trends. These signs, together with the rapid growth of community nature centers and organizations such as the National and Canadian Audubon Societies and the Canadian and National Wildlife Federations, are further evidence of the trend. If still more evidence of the flourishing interest in nature and conservation is needed, merely note, in your own family or living room, the increased time and space given

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to birds, other animals, and nature conservation in general on television and in your magazines and newspapers.

THE ENVIRONMENT

On the other hand members of the A.O.U. must be concerned about the long-term trend of ever-decreasing quantity or quality (but not necessarily both) of our natural resources. Even more striking is the rapid deterioration of the quality of our environment through pollution of air, water, soil, and quietness. Another persistent trend is continued drainage, poorlyfinanced acquisitions, encroachments upon, and envelopment of natural areas that are of vital need to birds and other wildlife. Let's look briefly at some of these environmental influences:

Pollution.—Last year it was the 'Torrey Canyon' disaster. This year the oil pollution problem came a little closer to home on 3 March 1968 with breakup of the 'Ocean Eagle' at San Juan Harbor, Puerto Rico. Fortunately local ocean currents were such that inhabitants of the shoreline were spared much of the catastrophe that occurred in England. The Smithsonian Institution reports that the main loss was to pelicans, several hundred of which were cleaned by hand. Although wildlife and humans were relatively fortunate at San Juan, just how great a disaster must occur before ocean users are forced to reduce the potential for oil spillage to an absolute minimum?

On a somewhat more optimistic note, water quality control is making progress across the U. S., although several conservation organizations are concerned that some of the quality standards are being lowered in order to put the U. S. program across. Programs approved long ago are delayed by lack of funds.

Pesticides and other chemicals continue to pollute the continent's soils and water. The U. S. Bureau of Sport Fisheries and Wildlife's Division of Pesticide Registration reviews about 500 pesticide labels per month. This program has influenced rates of application of chemical pesticides in the direction of greater safety.

Studies on the Bermuda Petrel (Science, 159: 979, 1968) and Canadian Wildlife Service pesticide contamination investigations on the Gannets of Bonaventure Island both reveal these species are heavily contaminated with DDT. These birds feed only on marine fish, and their contamination attests to the incredible persistence of DDT and its spread from inland areas of application to the distant Atlantic marine food chain.

If A.O.U. members in less populated areas are not familiar with the intensity of sound pollution today, they should try to identify or even locate warbler songs in the treetops along the Potomac River upstream from our nation's capital, and 15 to 20 miles from two jet-age airports!

Fortunately, again, some influential parties *are* trying to do something about this locally. Their solutions, if successful, may be useful elsewhere on the continent.

Wildlife habitat.—Habitat losses continue to alarm us, particularly in estuarine areas and along river bottoms. The moratorium on the continued filling of San Francisco Bay, as one example, is about over, and the Bay Conservation and Development Commission soon will release its report. The fact remains that despite what recommendations they may make, no source of funds for the purchase of land in the Bay for habitat preservation exists unless funds from the Duck Stamp loan can be used to establish a National Wildlife Refuge there. This could not cover all the many habitat types involved. The Bureau of Sport Fisheries and Wildlife is still without a source of funds to purchase lands having unique values of ecological or other scientific interest such as occur in the San Francisco Bay region. Although local Audubon Societies have leases in the area, no mechanism to preserve wildlife habitat permanently has been established.

Wetlands.—Everglades National Park was suffering critically from drought in April. Your Chairman noted very little surface water was available and the former wading bird colony sites in freshwater habitats were practically deserted. Wood Storks failed to produce young again this year. As in past years when spring droughts plagued the park, water still was plentiful in the conservation areas to the north. The Corps of Engineers has asked other agencies to comment on a mitigation plan which must be approved by Congress. The 4 to 5 years that must pass before the plan can be operational may well be critical ones for the fauna of the park.

Drainage of wetlands in the heart of the continent in Canada and the U. S. continues at the same pace reported in 1967. Loss of this habitat is being offset only slightly by conservation agency purchases of wetland areas and by the increasing waterfowl developments in Canada by Ducks Unlimited. The Canadian Wildlife Service has concluded agreements with about 3,700 landowners to maintain more than 27,000 acres of privately owned prairie wetlands in their natural state. Almost 19,000 acres of migratory bird habitat have been purchased in Saskatchewan, Quebec, Nova Scotia, and New Brunswick.

The Yukon Flats wetland habitats, temporarily forestalled from destruction by the shelving of the Rampart Dam project, along with millions of other publicly-owned Alaskan wetlands acres remain subject to various types of exploitation. These wetlands, which serve all four flyways, need to be identified and given protection. *Refuges.*—The prestigious USDI Advisory Board on Wildlife and Game Management, all professional members of The Wildlife Society, submitted its third report, this one on the National Wildlife Refuge (NWR) system, to the U. S. Secretary of Interior in March, 1968. A few of its eleven recommendations would change some aspects of existing management practices. Members of the A.O.U. will be especially pleased to note the report urged more extensive research use of refuge areas.

The U. S. Bureau of Sport Fisheries and Wildlife reports seven new refuges were added to or approved for the NWR system during 1967. These plus additions to existing refuges total over 75,000 acres. We are pleased that Congress extended the wetlands loan to allow expenditure of the full \$105 million which was originally to have been appropriated over a 7-year period. It is becoming increasingly evident that even after the full amount of the loan has been appropriated, many critical waterfowl areas still will be without protection.

Despite the passage of the Endangered Species Act allowing for purchase of land for endangered species, no endangered bird habitat purchases have yet been made, nor are funds for rare species provided by the act. The budget for FY 1969 contains \$750,000 to acquire Bald Eagle habitat on the Potomac River in Virginia. The situation is particularly critical in Hawaii where about half of the endangered birds listed in the BSF&W's "Redbook" are found and where federal purchase of lands is virtually impossible. Progress is being made in acquainting the residents and landowners of Hawaii with the need for habitat preservation.

Following successful acquisition of any needed habitat areas, adequate financing must be assured to protect, patrol, and manage the acquired area. Some isolated colonial bird nesting islands go uninspected for extensive periods. The 2.7 million-acre Aleutian Islands NWR, which stretches across 1,500 ocean miles, has a staff of only two professionals for the entire refuge, plus two biologists primarily assigned to monitoring AEC activities on Amchitka. The Arctic NW Range lacks adequate funding not only to manage it, but to gather data as a prelude to management.

Encroachments.—Encroachments by the military are worldwide. In 1967 the unique fauna and flora of Aldabra Island off Africa's east coast were threatened by Royal Air Force developments. Worldwide objections by conservationists and the devaluation of the British pound combined to defer the threat. The use of Amchitka Island by the military and AEC under "secret classification" is an encroachment upon one of the more important islands in the Aleutian Islands NWR.

The military has no corner on encroachment upon wildlife. Highway Department rights-of-way continue to invade existing wildlife habitats. Interstate 65 across Wheeler NWR in Alabama and a proposed highway across Modoc NWR in northeast California are examples. Compounding Wheeler NWR problems is a proposed airport runway extension that would bring low-flying aircraft across the refuge, impairing the refuge's value and creating another bird-aircraft problem.

Channel-dredging plans for the intercoastal waterways near St. Marks and Chassahowitzka NWR's in Florida and in Pamlico Sound, North Carolina, are only two of dozens of ways in which natural habitat is being encroached upon. Many habitat areas are subject to encroachment for oil and other mineral prospecting, and a late report indicates the Stillwater NWR in Nevada may have its water supply jeopardized when present water rights in the Carson and Truckee River system are adjudicated.

A simple example of "envelopment" is Anaho Island Refuge in Pyramid Lake, Nevada. Today's motorboaters and anglers innocently circle the island en masse, neutralizing the sanctuary benefit the island once afforded to White Pelicans and which they now need more than ever.

Finally, human population pressure itself is erasing the very purposes for which many areas may have been set aside. Until mankind becomes realistic enough to recognize the need for his own population management or control, such pressures will continue to multiply. The Wildlife Society has recently faced this fact and concluded that: "Human populations *can* and *must* be maintained, by all civilized and peaceful means, within the limits of the world's resource base in order to fulfill man's spiritual as well as physical needs." As a starter the Ohio Chapter of the Society will sponsor a symposium on "Rampant reproduction and renewable resources" at the 1968 meetings of the American Institute of Biological Sciences.

Habitat management.---Most of the land-management practices on this continent are carried on by other than conservation agencies and organizations. Timber harvesting, agriculture in all its aspects, and urban, industrial, and transportation development activities represent the vast majority of land uses. Many of these land uses are said to be carried on in accordance with the "multiple-use" concept, but evidence from such areas as forested northern Minnesota shows forest wildlife populations declining steadily under these programs. Most wildlife species are associated with disturbed habitats. They flourish in areas altered by fire, landslides, floods, or windstorms which often provide considerable variations in habitat. Contrarily, vast areas of a climax vegetation type or single-crop agriculture provide a low abundance of wildlife. Agriculture must provide cover in addition to food and water, or there will be little wildlife. The time is coming when some of the better land classes must be zoned specifically for wildlife. Urban planners serving our human population will have little attractive wildlife without planning for appropriate "open space" habitat. All of the efforts to conserve habitat recounted

in the prior section of this report serve only to delay the inevitable if the major land users do not accept and adopt the basic recommended wildlife habitat management practices.

In Latin America.—Discussions at the Pan American Section of the International Council for Bird Preservation held in Caracas, Venezuela, 18–24 March 1968 centered around the many problems facing the avifauna of the Americas and those of Latin America in particular. Habitat destruction was deemed one of the greatest threats to bird populations. It was embarrassing for our committee to hear at Caracas that a U. S. A.I.D. program was one factor operating against the preservation of habitats. The retention of private lands in natural reserves is not recognized as a "productive" use of such lands. Under agreements with A.I.D. the lands may be confiscated by the government and redistributed. To avoid this, many landowners have cleared and put their holdings into questionable "use." A.I.D. policies should be reviewed in the light of ecological knowledge.

The need for good educational programs and material was emphasized. People cannot appreciate and will not protect that with which they are unfamiliar. Good field guides in Spanish and Portuguese are urgently needed.

The need for governments to consult with qualified persons in promulgating policies of land use was also stressed, as was the need for regional cooperation between countries in conservation of natural resources. The need to regulate closely the traffic in live wild birds and to have simple, easily enforced, and, preferably, uniform laws protecting birds in all countries was also voiced. The problems of pesticides, exotic species, and the plight of raptorial birds are similar to those in North America.

The I.C.B.P. made a series of 15 recommendations which our committee believes the A.O.U. should concur with and support.

RESEARCH

Much that is still going on in research was reported last year, is included elsewhere herein, or is not far enough along to discuss at this time. Your committee stresses the continuing need for more coordinated, regionally cooperative long-term research, especially on individual species, both game and nongame. The Southeast Cooperative Wildlife Disease Studies at the University of Georgia is a good example. Such programs, while difficult to establish, possibly may be funded more adequately for the long term, and also may prove a more efficient use of limited research funds.

INTRODUCTIONS AND EXOTICS

This is still a very popular area of activity and interest. In 1968 at least two annual conventions, the N. Am. Wildlife and Natural Resources Conference, and the Amer. Assn. for the Advancement of Science, had or will have special sessions on introductions and exotics.

Reintroductions have been made with some success in Europe: the Graylag Goose, Goshawk, and Raven to the Netherlands, and the Eagle Owl to Sweden. Here in North America the reintroduction successes with Wild Turkeys have been well documented in "The Wild Turkey and Its Management," published by The Wildlife Society in 1967, and the re-establishment of the Trumpeter Swan is well-known history.

The Pan American Sections of I.C.B.P. (see above) recommended that governments prohibit the importation of exotic birds and other animals (including fishes) without adequate biological studies. They also urged restocking with native species. The U. S. Congress has pending legislation to prohibit importation of endangered species. Government authorities are under constant pressure for the introduction of game birds, including waterfowl.

RARE AND ENDANGERED SPECIES

WATER BIRDS

Brown Pelican.—Brown Pelicans remain uncommon on the western Gulf coast, but your Chairman saw fair numbers nesting on Cedar Keys NWR in Florida in May. No pelicans nested in Louisiana in 1967 and only four pairs in Texas. Two of the latter pairs produced no young. A conference was held in Louisiana in January 1968 to lay the groundwork for a cooperative study of the pelican by various state and federal wildlife agencies and private conservation groups.

Aleutian Canada Goose.—Production of this goose at the Patuxent Wildlife Research Center is continuing and tentative plans are being developed for 1970 release of a substantial part of the 1968 captive hatch in the Aleutian Islands NWR on one or more islands formerly occupied by a breeding population of this species.

Cranes.—The wild Whooping Crane population suffered unfortunate losses this year after a record-breaking fall flight of 9 young of the year and 39 older birds. One adult female was killed out of a family trio by a snow goose hunter in January, and a subadult female flew into a powerline during a Kansas storm. The number in captivity is now 20. Under an agreement between the Canadian Wildlife Service and the U. S. Bureau of Sport Fisheries and Wildlife a total of 10 Whooping Crane eggs were collected for captive propagation in 1968. Eight of the 1968 chicks survive. A cooperative study of the plumage development of the Whooping Crane during its first year of life has been initiated between Oregon State University and the BSF&W at Patuxent.

RAPTORS

Florida Everglade Kite.—The actual observation last fall of 47, with a minimum total population estimate of 50 Florida Everglade Kites was followed this spring by the discovery of eight active kite nests. [Paul Sykes of the BSF&W informs me that 10 active kite nests in Florida produced at least 17 young this year.—Ed.]

Eagles.—The Bureau of Sport Fisheries and Wildlife has been conducting a nesting study on the Bald Eagle in southeastern Alaska where occurs what is probably the largest remaining major Bald Eagle nesting concentration in the United States. About 4,000 nesting pairs are present in that area. As this coastline is now being subjected to heavy logging, it is encouraging that the U. S. Forest Service is taking steps to prohibit cutting of trees within 300 feet of Bald Eagle nests. They are also restricting construction activities near nests during the nesting season in southeastern Alaska. The success of the Alaska restrictions is yet to be tested, not only on the eagles but also on the trees, for blowdowns may be extensive in the "tree islands" left in clear-cut areas.

Similar restrictions on activities near eagle nests in the National Forests have been initiated in most of the Forest Service regions. A number of large land-holding corporations, such as timber or utility companies, now follow such management practices on their lands, a welcome indication of industry's increasing attitude of responsibility for the public good.

Studies at Brigham Young University have revealed a substantial number of winter roosts of eagles in central Utah.

All raptors are now protected in Belgium, Great Britain, Iceland, Luxemburg, Netherlands, and Switzerland.

OTHERS

Masked Bobwhite.—Most Masked Bobwhites produced at Patuxent this spring will be utilized in a cooperative release project with the Arizona Department of Fish and Game, the U. S. Forest Service, Bureau of Land Management, and Bureau of Sport Fisheries and Wildlife to reestablish this species within its former range on federal and private lands in the Altar Valley of southern Arizona.

Ivory-billed Woodpecker.—Recent efforts to substantiate last year's Ivory-bill sightings in the Big Thicket of eastern Texas by John Dennis and cooperators have thus far been unsuccessful. James T. Tanner and Paul Sykes traveled by boat and afoot through much of the area of reported activity in January without seeing the birds or tree borings that could be ascribed to Ivory-billed rather than to Pileated Woodpeckers. The birds seen in 1967 must have been transient individuals whose present whereabouts are unknown. John Dennis is continuing his investigations in the Neches River Valley.

Ipswich Sparrow.—The Canadian Wildlife Service supported an investigation of the Ipswich Sparrow on Sable Island. It was learned that the breeding population numbered more than 1,000 and that some birds winter on the island. Previously it was believed there were about 300 individuals, none of which wintered on Sable Island. Continuing investigations should provide useful data.

Dusky Seaside Sparrow.—A 1968 survey of Florida's Merritt Island and St. Johns River marshes by Brian Sharp of the University of Wisconsin showed an encouraging number of singing males still present, most of them along the St. Johns River near where C. J. Maynard first discovered them 96 years ago.

The Redbook

A second printing of the Bureau's "Redbook" of threatened species is expected during 1968. The Bureau's Committee on Rare and Endangered Wildlife Species currently is evaluating responses to a request for additional information on any threatened vertebrate animal of the United States. Contributors are urged to submit any new information on rare and endangered species to the Bureau in proper format. Scientific institutions that may not have been included in earlier mailings will be sent copies upon request.

Conclusions

It should be apparent to A.O.U. members that an explosion of bird conservation problems echoes the human population explosion. These problems need prompt attention from everyone concerned with wildlife—botanists, herpetologists, mammalogists, and ornithologists alike!

Regrettably much energy diverted to side issues is reducing the effectiveness of conservationists. The current controversy about federal-state jurisdiction over wildlife is an example.

A statement in our report of last year bears repetition. "Your Committee wishes to urge more dynamic activity on the part of ornithologists. Each ornithologist, as a citizen, should accept his obligation to the public interest, especially within his area of competence. If each ornithologist does not accept his responsibility, others, less knowledgeable in A.O.U. areas of competency, will make the decisions for him!"

> Ray C. Erickson Gordon W. Gullion David B. Marshall David A. Munro Alexander Sprunt IV Walter R. Spofford II Fred G. Evenden, *Chairman*