

REPORT OF THE COMMITTEE ON BIRD PROTECTION, 1939

THE report of the Committee to the Fifty-sixth Stated Meeting of the A. O. U. assumed the function of the critic. Commendation expressed by members indicates that this attitude should be continued. In carrying out this desire, however, the present Committee is working under the handicap imposed by resignation of former Chairman William Vogt, whose capabilities contributed so much to the interest and value of last year's comments. In reviewing the status of threatened species and of milestones on the two-way track of bird protection, the 1939 Committee presents the results of its inquiries into the current causes of depletion or maintenance of our bird life.

A number of species continue to be threatened with extermination. Of these the California Condor, Eskimo Curlew, and Ivory-billed Woodpecker are probably most in danger. In spite of publicity and other educational work by numerous national and local organizations, the condor must still be regarded as a threatened species, although its numbers are perhaps greater than indicated by minimum estimates. In cooperation with the University of California, a three-year Audubon Society fellowship has been initiated for study of the species. Under a regulation designed to give special assistance to vanishing species, the Forest Service established a wilderness area in the Los Padres National Forest of southern California in order to afford the most strict privacy for the condors. The large area included in the nesting range is closed to all public ingress. Because of the wide-ranging propensities of the birds, however, they go beyond the limits of the wilderness areas and may then be killed by poachers.

No additional information on the Eskimo Curlew is available. It is of course quite possible that the bird is extinct. It would seem advisable, however, for the Union to attempt to establish relationships with organizations or persons in Argentina and perhaps other South American republics that might be in a position to make investigations. If curlews were found to be wintering in that country it is possible that through the Argentine national park directors or other means, some steps might be taken to assure better protection. Investigative and contact work on this species would appear to be a proper function of the Committee on Bird Protection.

Individual Ivory-billed Woodpeckers are certainly alive but their number is very low. Organizations in Louisiana are cognizant of the extreme dangers confronting the species and realize that their State is

the last stronghold of most of the surviving birds. For the past four or five years several groups have been requesting Federal protection for an ivory-bill habitat in northeastern Louisiana. This fine area, a portion of which is known as the Singer Sewing Machine Company tract (mentioned in last year's report of this Committee) is still subject to cutting. The presence of exceptional timber, in itself a necessity for the birds, makes outright acquisition by the Federal Government appear impossible at this time. If anything is to be done it must be accomplished by private means.

Chances for survival of the Whooping Crane are probably only slightly better. Preservation of this species presents an especially difficult problem and adequate information on its needs is still lacking. This species would be a particularly happy choice as a subject for research work. It is inadequately protected on its wintering grounds and more attention should be paid to determination and reservation of these areas in order to prevent encroachment of disturbing visitors. A few Biological Survey refuges are hosts to the Whooping Crane but extension of protected areas is desirable.

The Trumpeter Swan has made a slow but encouraging increase in numbers although it is by no means out of danger. An estimated five hundred of the birds are known to live and nest in British Columbia but their habitat is isolated and difficult of access. From the standpoint of protection this is extremely fortunate although it has prevented the accumulation of exact data regarding numbers and status. In the United States, fifty-one cygnets were reared last season on the Red Rock Lakes Migratory Waterfowl Refuge, where special efforts have been made to secure utmost safety by excluding all visitors from nursery areas during the spring and summer. The discouragingly low number of only four cygnets was brought to maturity in Yellowstone National Park. Protection in the park was adequate and investigation indicated that predatory animals were not responsible for the poor showing. It is possible that disturbance by human beings may have broken up nestings. Special attention should be paid to insure privacy for the birds during incubation and early part of the rearing season. A number of swans (thirty-nine) have been discovered on small lakes south of Yellowstone National Park. Attention of the Forest Service has been directed to their presence and special protection is promised. A coordinated winter census made about the middle of February 1939, by the Biological Survey and the National Park Service gave a total of sixty-six birds at Red Rock Lakes and

106 in Yellowstone National Park. The actual count of 172 Trumpeter Swans is believed to represent a population of about 190. This total may have been augmented by migrants from British Columbia that have since returned to the deeper wilderness. Because present information indicates that winter losses of adult swans are largely due to starvation, investigation might disclose feasible means of furnishing natural or artificial aids at that season.

Less than seven hundred Great White Herons are alive today but the future of the species is more secure since establishment of its chief nesting ground in southern Florida as a Biological Survey wildlife refuge. In January 1939, in an aerial survey of the entire range, 585 birds were counted. Since the highest previous count was 426 birds, it seems reasonable to believe that in time the Great White Heron may again become fairly common in the Florida Keys.

Another bird greatly reduced in numbers is the White-crowned Pigeon. It has been killed in large numbers for food and much of its forest habitat has been cut. We have no information on its present status but some encouragement may be derived from the fact that its United States range in the Florida Keys now has complete protection.

During the past year or two, through special efforts of the Forest Service in cooperation with State and Mexican Governments, Masked Bob-whites were reintroduced into Arizona. Up-to-date information on their survival is lacking.

Due to drainage, drouth and fires, which will be described more fully below, the Everglade Kite faces an immediate future that is indeed dark. Information at hand indicates that a very large percentage of the snails on which it feeds has been destroyed. Kites have become extremely scarce in their usual range. Limpkins, largely dependent on the same food supply, are almost equally adversely affected. A few Limpkins and Swallow-tailed Kites find shelter and probably nest on Biological Survey refuges in the southeast.

In Texas, the Roseate Spoonbill is rather favorably situated. It occurs today on several refuges of the Audubon Society and of the Biological Survey, particularly the Aransas Pass Migratory Waterfowl Refuge. The species also occupies sanctuaries on the Louisiana and Florida Gulf Coasts where it receives complete protection. Flocks numbering as high as forty birds have been seen on the Indian Key Refuge of the Biological Survey. On the peninsula of Florida, however, numbers of Spoonbills are very low due in part to drainage and consequent alteration of the environment. Out of the 250 individual

birds now estimated to be in the southern part of the State, there were but twenty-five breeding pairs during the past spring. Only one rookery functioned, that on Bottlepoint Key in Florida Bay. The future of the Roseate Spoonbill in Florida is very precarious.

The Florida Sandhill Crane has been hard hit by the drouth and the flocks have apparently scattered widely. Protection from wanton shooting is now a greater problem than previously when definite areas were regularly occupied by the birds and were known and patrolled by State, Federal, and Audubon Society wardens. On the other hand, Biological Survey personnel on refuges in the Middle West report that the flight of Western Sandhill Cranes through that section of the country last fall was the largest in years.

It must not be forgotten that the shrinkage in *continental* status of rare species is only one part of the problem of conserving the American fauna. The other part is the shrinkage in *local* status of species that may be common elsewhere. Local extirpations make a species almost as inaccessible to the local human population as if the species had disappeared altogether. Moreover, continental extirpations are invariably the cumulative result of many local shrinkages. For example, the Great Blue Heron is presumably still common continentally, but it is becoming decidedly uncommon in some north-central States, probably because of the destruction of rookeries by fishermen.

The Duck Hawk is dwindling in some localities, probably because of inroads made by egg collectors and falconers.

The Prairie Chicken, which in the Lake States built up to a high level during the cyclic high of 1936, is not recovering with the other grouse. The reason may lie in the wholesale burning of peat meadows during recent drouths, and their subsequent smothering under thickets of non-habitable aspen and poplar. The Sage Grouse has completely disappeared from many districts in the West. The Spruce Grouse is retiring across the Canadian border, presumably because of intensive pulpwood cuttings and the construction of fire trails by the CCC. The Ruffed Grouse, Pileated Woodpecker, and other woods-loving species are steadily being forced out of the regions of intensive agriculture of the Upper Mississippi basin.

The total shortening of local faunal lists by these local shrinkages is probably more important, socially speaking, than the total shortening of continental lists. Under our existing patterns of thought, people do not become alarmed about local faunal losses. "The

species still persists elsewhere." This, however, is the same kind of logic as led to the extermination of the Passenger Pigeon. There is little danger, of course, that many species will repeat the pigeon tragedy, but there is perhaps cause for alarm in the fact that people still think in terms of the same ecological fallacies as prevailed in 1870.

"Extermination" campaigns continue popular. With the demand for predator control running higher in Alaska, outbursts against the eagle have been particularly violent. Crow and other bird-predator control campaigns continue almost unabated. The Biological Survey has made investigations of crow damage particularly in the Plains States and has in nearly all cases found local estimates to be exaggerated. The Survey is attempting as best it can to develop deterrent measures in order to cut down as much as possible actual killing of crows. Under present disorganized methods, crow control does not appear to be seriously affecting the total population. It is suggested, however, that ornithologists should pay more attention to studies of the possible effects of widespread destruction in order to attempt to forecast the ultimate results if these campaigns continue.

Unreasoning war against hawks, which seldom discriminates between beneficial and detrimental species, continues in many parts of the country. It is all too common to read in the daily newspapers the monotonously uniform formula, "The hunters' club of — has placed a 15c per pair bounty on hawks' feet. Club officials said the move was to protect wildlife." In British Columbia the Allied Game Protective Association passed a resolution requesting the provincial Game Commission to remove legal protection from the Red-tailed Hawk, Marsh Hawk, and Prairie Falcon. Your committee has made a small contribution to the defense of hawks by bringing certain biological facts to the attention of the writer of a nationally syndicated newspaper column, which at numerous times in the past several years has printed unreasonable and bitter attacks on 'predatory' species, including the Bald Eagle and the Red-tailed Hawk. No repetition of this type of release has occurred in the six months that have elapsed since the facts were brought to the columnist's attention.

A number of developments during the past year have resulted in unfavorable conditions for birds. Marsh drainage for mosquito control has been extensive and the damage far in excess of what it should be. Too much of the control is still based on the desire to provide labor for unemployment relief rather than upon clearly demonstrated public need. During the past five years enough ditches for mosquito

control have been dug in the United States to circle the earth more than three times at the equator. During the past calendar year approved Federal projects for mosquito-control drainage totaled more than \$40,000,000 in addition to \$25,000,000 for agricultural drainage. Although the enormous damage to bird habitats is to be deplored, some of this eventually may be rectified by natural forces for there is little or no likelihood that more than a small percentage of the projects can be adequately maintained. Since October 1, 1938, when the CCC was withdrawn from mosquito-control operations, there has been a notable lessening of this work along the Atlantic seaboard and the type of control continued is much less damaging. During the past year, as a result of public awakening to the realization of wildlife values and perhaps also due to criticisms of excessive or unwise control measures, many State drainage budgets have been greatly reduced. Since authority for review of WPA projects was given the Biological Survey, damage done by continuing projects has decreased. While the value of some mosquito control is recognized, the public should demand that this work be based on clearly proved need. Furthermore, biological and natural means of control should be employed to the fullest possible extent.

Proposed flood-control measures may also hold possibilities of permanent detriment to bird habitats. Very extensive operations have been proposed in central Florida and it is hoped that the appalling lessons taught by the recent spectacular fires may be kept in mind by those in charge. Information from War Department engineers indicates that appreciation of biological problems involved in flood-control operations is becoming more widely recognized. That organization is now striving to conserve rather than dissipate the water supply of Florida. It is certainly to be hoped that this enlightened attitude will continue.

In connection with a review of past and planned operations designed to 'improve' man's environment, frequently to the tremendous detriment of wildlife factors, we quote W. L. McAtee in Circular 520 of the U. S. Department of Agriculture:

"That wildlife enjoys living in general as much as man, and probably in many ways even more, is a thought that should never be entirely out of mind. Man assumes dominion over wildlife and exercises it as he can, but in so doing he should as far as possible in the case of every creature, respect its right to existence, to its chosen home, and to undisturbed enjoyment of its way of

life. As has been so often, but not too often, said, in following out ideas for readjusting wildlife and its environment, man should do only what is necessary and no more."

Probably the most outstanding recent misfortune to North American bird life is the great drouth and series of fires in Florida during the past spring. It cannot be denied that the detrimental effects of this drouth, the worst recorded in Florida, were greatly augmented by unwise drainage. The fires burned mainly to the eastward of a north-south line from Lake Okeechobee to Cape Sable. Something over 2,000,000 acres were burned, often to bed rock, dissipating in smoke and ashes the organic matter in the soil as well as all vegetation. Observers who have traveled extensively over this burned area found few waterholes remaining. Upon examining several Seminole Indian wells, three to four feet deep, they found powdery dust at the bottom. All wildlife—reptiles, amphibians, and mammals particularly—suffered severely. In certain cases the results of the fires have indirectly affected birds. Numbers of raccoons, for instance, concentrated around the remaining water where natural food inevitably became scarce. One large Wood Ibis rookery lost about 60 per cent of the hatched young through depredations by the hard-pressed 'coons. It is improbable that many birds were actually destroyed in the fires but the effects on nesting possibilities were catastrophic. There were no rookeries this spring over great areas on which many egrets, herons, and ibises have been reared in previous years. The colony of about 40,000 White Ibises at Lake Washington dispersed without nesting. The White Ibis has virtually disappeared from Florida instead of being, as formerly, the most abundant breeding species.

Immediate steps should be taken by the State and the Federal Government to remedy as far as possible the destruction caused by unjustifiable drainage in southern Florida which directly contributed to the present situation. If water can be restored, the effects of the fires outside the burned areas will not be felt greatly south of the Tamiami Trail and along the southwestern coast. Due to the destruction of a great portion of the eastern Everglades, it is imperative that a plan be evolved for restoring moisture to the remainder in order to minimize the effects of future fires. This objective could be accomplished if the canals and drainage ditches in the Cape Sable region were blocked off or closed. Gates at the outlets would cause the water to remain on the flat prairies north of Flamingo and East Cape and provide fine winter feeding grounds for all marsh-loving

birds. *Control* of water could be achieved by means of gates. It is imperative, however, to devise safeguards for legitimate agricultural interests. Provided this necessary protection can be accomplished, the remainder of the expense involved will be comparatively small.

The Santee-Cooper Rivers diversion project has been much criticised during recent months. It is apparent that local interests are at last awake to the tremendous damage that will result to the environment and to wildlife, especially ducks and geese. Whether national awakening will be sufficiently prompt to prevent consummation of this highly questionable work remains to be seen. At present some preliminary construction work is going forward but great obstacles have been encountered, first in finding suitable footings for the dams and then in securing the necessary lands. If this project is carried through to completion there is little doubt that it will mean a tremendous loss of natural values in fisheries resources and in one of the largest remaining natural swamp areas in the southeast.

For a time it appeared that a much-opposed measure, the Florida ship canal, would receive appropriations for continued construction. Conservationists have been greatly concerned because digging of the canal would wreak tremendous destruction and disturbance of habitats in the region, where numerous comparatively rare species are found. It is also charged that construction would allow salt water to enter from the ocean with tremendous and widespread detriment to the freshwater supplies and to dependent plants and animals. Although appropriation of funds was refused, proponents of the canal insist that they will continue to press for reversal of this action and ornithologists should remain on guard.

Although actual construction of the long-discussed Nicaraguan ship canal appears rather remote, we believe that study should be made in advance so that, if the plan is consummated, attention can be given to saving as much as possible of any essential wildlife habitats that may be present. Even the very resources that may be affected by construction of such a canal are not known and require investigation.

Another measure for canal construction still in the preliminary stages of discussion concerns a projected waterway along the Gulf Coast inside the barrier islands from the Rio Grande to the Sabine River in Louisiana. If this project becomes an actuality, as seems probable, it will, at least to a degree, threaten the best goose and Red-head area in the United States, as well as the habitat of numerous other waterbirds, including some of the best Audubon Society and Biological Survey refuges.

In spite of repeated professions of respect for wildlife and its habitats, actions of the Tennessee Valley Authority during the past two years have not been in line with good conservation efforts. The policy of the Authority has apparently been to sterilize completely all habitats of mosquitoes in the enormous area under its control. This has been carried out thoroughly whether human beings were living near the areas treated or not, and regardless of economic factors and probable consequences to the flora and desirable members of the fauna. Enormous quantities of lead arsenate have been sprayed from airplanes over the waters of reservoirs and samples of mud have shown an arsenic content of as high as 3,330 parts per million. Such an enormous amount of poison will, of course, be a potential danger for a long time to come. Whether the TVA administration will accept the advice of other agencies for a revision of methods of mosquito control remains to be seen. Another disturbing development in TVA policy during the past year has been a radical change in the Authority's outlook on agricultural matters. Dr. Walter B. Jones, Director of the Alabama Department of Conservation, sums this up as follows:

"The Tennessee Valley Authority owns certain lands immediately adjacent to their reservoirs. Until this year the Authority had planted those lands with cover crops and forest trees and in general practiced soil building. Now much of that area is being planted to row crops, and some fields have actually been plowed at right angles to the contours and the soil turned over to the waterline of reservoirs. Soil erosion is resulting. All back water is now muddy. Food and cover for wildlife have been diminished through these practices. It appears that the Authority has completely 'about-faced' in its soil conservation methods."

Adjustment in the relationships of various bird species must continue to extend westward as the Starling spreads toward the Pacific Coast. This exotic bird has recently been collected in Utah and has been seen even in southern Nevada. In the Northwest we believe it had reached the vicinity of Livingston, Montana, more than a year ago.

There are many bright spots, however, in the situation confronting the bird life of this continent. A number of agencies, Federal, State, and private, have continued good work through their various law-enforcement agencies. We are confident that Federal forces have never worked more successfully and with more public support than during the past year. State law enforcement universally is on a higher plane than ever and this has been brought about largely by an awaken-

ing of the public to the value of wildlife resources. Federal law-enforcement agencies have enjoyed more effective and whole-hearted cooperation of the States than at any time in the past. Protection on Federal reclamations withdrawals in the far West, which previously left much to be desired, has greatly improved and now has a commendable degree of efficiency.

A bill recently adopted by the Territorial Legislature of Hawaii gives complete protection to migratory and native shorebirds for a two-year period and paves the way for extension of the Migratory Bird Treaty Act to the islands. Most of the native birds, including the Nene or Hawaiian Goose, and species introduced during the past ten years were already protected.

A consciousness of the need for protecting the Bald Eagle has been awakened by legislation now pending in both Houses of Congress. It is to be hoped that the measure will soon be adopted to end the senseless slaughter of these magnificent and generally harmless birds. Support of all ornithologists is urged for bills S. 1494 and H. R. 3744.

As counteraction to the many projects that are decreasing the value of bird environment, much work aimed at restoration is being carried on throughout the country. One of the agencies so engaged is the Soil Conservation Service, which, because it has until recently administered no refuge areas, ordinarily receives little credit for bird protection. Although the principal objective is control and prevention of erosion resulting from unwise land use, a corps of trained biologists is employed to accomplish wildlife-habitat improvement and reconstruction through the use of erosion-control plantings especially chosen for their food and cover value. This work is carried on in 834 different areas in 47 States in close cooperation with approximately 72,000 farmers and ranchers. While less tangible than the planting of trees, shrubs, grasses, and legumes, the educational work of the Service in bringing about better appreciation of wildlife on the part of those who control the land may, in the long run, count even more for bird protection than actual physical operations.

While this committee does not wish arbitrarily to single out agencies for special mention from among the many accomplishing excellent educational results, we wish to commend two comparative newcomers to the field. The National Wildlife Federation seeks to coordinate the activities of eleven million sportsmen and the 36,000 groups and clubs engaged in conservation work. As a part of its educational function, the Federation sponsors National Wildlife Restoration Week, during which the story of wildlife conservation was related last

year in 70,000 school rooms. The sheet of stamps published annually includes bird subjects. The Federation also prepared the bill now known as the Pittman-Robertson Act, which earmarks funds for restoration of wildlife, including gamebirds.

Weekly conservation broadcasts, concerned with non-game as well as game species, have been continued by the American Wildlife Institute, which has also followed up its support of the ten Cooperative Wildlife Research Stations. Funds have been disbursed to aid constituted Federal law-enforcement agencies when regular allotments have been insufficient.

A third but old established organization, the National Association of Audubon Societies, has continued its work with children through its Junior Audubon Clubs. With another summer's operation of the nature camp, it has enrolled 612 teachers and other adult leaders from thirty-two States and three Canadian provinces and provided them with programs for use in their home communities.

Recent reports of the occurrence of the Reddish Egret on the Florida Keys are encouraging. The species has been practically if not entirely extirpated from Florida for a number of years, although it was once numerous.

It is a pleasure to report a small but substantial increase in the numbers of ducks, despite continuance of a gunning season that many consider unreasonably long. It must be remembered, however, that last season was an unusually favorable one, and yet the duck population shows only a moderate gain. It is still believed by many that more stringent measures should be adopted to insure the return of greater numbers of ducks to the northern nesting grounds. Recent investigation indicates that Redheads and Canvas-backs have made satisfactory progress, although they still deserve special attention.

The Atlantic Brant has made a gratifying increase but continued food shortage still restricts its numbers. Eelgrass along the United States coast is in some places in better condition than for several years but as a whole it is still far below normal.

Excellent progress has been made in reserving and placing under protection areas important for the welfare of birds. The White Heron refuge in Florida Bay has been established and personnel installed. A very excellent area, the Aransas Migratory Waterfowl Refuge on the Texas Coast, was staffed at about the time of the last A. O. U. meeting. With nearby Audubon Society refuges, it attracts several species of birds rapidly becoming rare. Among these are the Whooping Crane, Roseate Spoonbill, Reddish Egret, White-tailed Kite, Audubon's

Caracara, Wild Turkey, and Long-billed Curlew. Numerous other areas have been added to the Biological Survey refuge system but because of shortage of funds have not yet been given adequate protection. Extension of Glacier Bay National Monument by a million acres has provided added sanctuary to sub-arctic shore- and waterbirds. Twelve island areas in coastal Texas, over which no legal protection had previously been exercised, were leased and patrolled by the National Association of Audubon Societies. These areas are important for the conservation of a variety of rare or vanishing species. The Association also was instrumental in securing the establishment, by the State of Florida, of five important bird-nesting sanctuaries in that State. These are administered by the Audubon Societies.

Mention should be added of special measures taken to assist nesting Sooty and Noddy Terns at Fort Jefferson National Monument on the Dry Tortugas, which has been staffed for only a year or two. Norway rats, after escaping from ships, increased to such an extent as to be a menace to the continuation of the colony. Trapping has apparently eliminated these destructive mammals but precautions are necessary in order to prevent further incursions.

It is well to report the acquisition by the Biological Survey of the Back Bay and Pea Island Refuges adjacent to Back Bay and Pamlico Sound as these and the adjacent Mattamuskeet Refuge harbor one of the greatest concentrations of Canada and Snow Geese, Whistling Swans, and ducks known in eastern North America. Sporting and fishing interests demanded changes in the operation of the saltwater guard locks in the Virginia section of the intercoastal waterway that would have tremendously decreased the biological value of the Back Bay area by allowing salt water to enter unrestrictedly. These changes would also have resulted in great detriment to the oyster, crab, and other fish resources. After the probable results were demonstrated, lock operation was allowed to continue as previously. Some progress appears to have been made in acquiring the Cape Hatteras National Seashore area which will also aid in protecting large eastern portions of Pamlico and Currituck Sounds. The future of bird protection in this area looks doubly favorable.

With all the excellent work that has been done to insure survival of bird species and for adequate populations, much remains to be done. The most spectacular form of loss in wildlife is that of botulism in waterfowl and shorebirds prevalent on western lake shorelines. Notable progress has been made by Government agencies in obtaining an understanding of the cause and nature of this disease, as well as in

devising partial control measures. Further research is under way, which it is hoped will yield information that will largely prevent or more promptly and effectively curb the tremendous losses. Recent studies of the blood of wild birds has shown the frequent presence of protozoan parasites similar to the malarial organism. These have proved to be definitely pathogenic when transferred to birds of economic importance, such as quail. More general studies have been made by technicians of various Services of Sage Grouse, ptarmigan, quail, and Wild Turkey environments with a view to recommending necessary protective measures to insure preservation and increase of these birds. The range of various kinds of desert quail has been extended by installing water developments in California national forests, and food and environmental studies of quail were inaugurated in eastern and western forests.

This Committee wishes to reiterate the hope, expressed in last year's report, that every A. O. U. member will take an active interest in bird and other wildlife conservation. In addition, it desires especially to recommend for attention and action the following: urge State and Federal aid for the Ivory-billed Woodpecker through acquisition in Louisiana of its last important habitat; press for State and Federal action to protect the unique bird fauna of southern Florida through restoration and conservation of its habitat; acquaint the parties concerned, with the inordinate dangers inherent to bird life through construction of the proposed Florida ship canal, the Gulf intercoastal waterway, and the Santee-Cooper Rivers diversion and impoundment project; condemnation of irresponsible control of predacious birds, especially by means of poison; condemnation of excessive and unnecessary drainage carried out primarily in the name of mosquito control.

VICTOR H. CAHALANE, *Chairman*
ALDO LEOPOLD

WILLIAM L. FINLEY
CLARENCE COTTAM
Committee on Bird Protection