

SANCTUARIES AND THE CONSERVATION OF BIRDS

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It is agreed by all competent authorities on bird conservation that a vital principle in any conservation policy is the preservation of the essential environment of the birds. The importance of habitat conservation is now recognised by all Australian protectionists. It is axiomatic that birds can be conserved successfully only if their habitat is conserved also. Nevertheless, these widely-accepted premises are really an over-simplification of what is in fact a very complex problem.

All species of birds are not equally distributed, nor equally abundant, nor are their ecological requirements identical. Consequently, the random or haphazard creation of sanctuaries would be unscientific and may be ineffective for the conservation of some species and worthless for some others. A profound knowledge of avian biology would be required to determine the effective strategic location, size, and number of sanctuaries in South Australia, even if all geographic regions of the State were still in their virgin condition. European settlement has wrought such far-reaching changes in the flora and fauna that the distribution and population status of many species of birds has been greatly affected.

It is instructive in this connection to consider the numerous observations made by

Eylmann (1911, 1914) about 40 years ago on the alterations then taking place in this State and the Northern Territory, to the habitats of birds and the bird-life, as the result of European activities such as the clearing of forests and scrubs, the reclamation of swamps, the widespread use of poison for the destruction of pests, and the irresponsible shooting of waterfowl. He expressed the fear that some species of birds would be greatly reduced in numbers or would even become extinct locally.

Plant communities have been reduced in size or their composition altered directly or indirectly through the effects of our civilisation. This in turn has affected the avifauna either favorably or adversely, as the case may be, in individual species. Such disturbance of the inter-relations of plant and animal life must surely have had, and still continues to have, extensive and unpredictable consequences in most parts of the State. Species which have a narrow habitat-tolerance are most severely affected.

In view of the disturbance of the flora and fauna known to have already taken place, it is impracticable to propose the creation of numerous sanctuaries where everything is to be inviolate. And this is quite apart from the obvious fact that the creation of such sanctuaries is highly improbable because of

the numerous practical and political difficulties which such scheme would encounter.

Modern naturalists recognise that the old concept of a balance of Nature does not take into account some vitally important facts of ecology. The composition and function of any biota is not necessarily regular and unalterable, but the communities generally display a resiliency and a capacity for adjustment and compensation. A so-called sanctuary may thus become simply a temporary refuge area for some species, or it may enable one or more species to increase abnormally at the expense of others.

This is well illustrated by an instructive paper by Drost (1954) on problems encountered in the conservation of some sea-birds. He describes how on certain sanctuaries the Gulls multiplied at the expense of the weaker Terns, which in some cases disappeared altogether from former breeding-grounds. A species of Tern, he shows, may be a limiting factor in the population of another species, and even in regard to a species of Dotterel.

Effective fauna conservation can therefore be achieved only by the exercise of a measure of judicial scientific control of fundamental biological factors determining the density of breeding populations of a biota. The effects of losses sustained by populations of game birds, plus the incalculable role of sanctuaries established without adequate knowledge of the ecology of individual species involved may in due course drastically alter the composition of duck populations, for example, in some regions.

Some control in the form of differential protection is almost certainly necessary in the case of rare or particularly vulnerable game birds. Furthermore, the losses suffered by populations of certain parrots, cockatoos,

finches, and some other species from the activities of bird-catchers operating commercially for the local market and for export inter-State and overseas must be quite serious in some species and localities.

It is altogether inconsistent with the objects of fauna conservation that a large trade in wild-caught protected birds should be permitted, or even tolerated at all. Nevertheless, many thousands of individuals of protected birds have been trapped for commercial purposes. As has been pointed out elsewhere by the writer (Boehm, 1959): "The supporters of this detestable traffic endeavor to justify it by pointing to the few cases in which an Australian species of parrot or finch is being widely bred in aviaries. They use these few triumphs of aviculture for the purpose of covering up a multitude of evils."

The doctrine of fauna conservation by complete concentration on a campaign for more sanctuaries amounts to little more than diversionary tactics to ensure the continuation of inefficiency in conservation practices for the short-range benefit of sportsmen, and to give security to the irresponsible extensive exploitation of wild bird-life in the interests of fanciers and zoos.

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