The International Wildfowl Research Bureau

The I.W.R.B. came into being in 1954, evolved from various bodies originally set up in the period between the Wars under the aegis of the International Council for Bird Preservation (I.C.B.P.). At first its Headquarters were in London, under the guidance of Dr. Edward Hindle, F.R.S. In 1962 they moved to the Station Biologique de la Tour du Valat, Camargue, France, under Dr. Luc Hoffmann. At the beginning of 1969 they moved again, to Slimbridge, with Dr. G. V. T. Matthews as Director.

The Bureau's primary functions are Stimulation and Co-ordination, on the international plane, of (and between) research and conservation involving wildfowl and wetlands. In wildfowl are included ducks, geese and swans, flamingos and waders; in wetlands, marshes and shallow waters, fresh and salt, static and flowing. The wetland habitats are amongst the most immediately threatened by development since modern techniques have made their destruction a relatively easy matter. Wetlands are also particularly vulnerable to pollution and degradation incidental to technological advances. Wildfowl, by their migratory nature, emphasise the need for international co-operation in the conservation of their habitats.

The work of the Bureau is carried out almost entirely on a voluntary basis, albeit under the leadership of professional scientists working in their own time or in such time as their national institutes can allow. The salaried staff at Headquarters consists only of an Administrator and secretary. The research activities are organised through specialist working-groups, the conservation activities through national representatives.

Research Groups on Populations

One of the bedrock principles of the Bureau is that its advice on conservation should be based on adequate and scientifically determined facts. The accumulation of these data is the responsibility of working-groups of scientists and amateur observers. In Europe, where experienced workers are relatively plentiful, specialist Research Groups have been set up. In each case an experienced Co-ordinator gathers a team of specialists, one in each country, who in turn organise their compatriots within their particular field. In this way an active international team results, enabling, in particular, younger workers to participate in the Bureau's activities.

The first group established was the Goose Research Group (Co-ordinator, Prof. M. F. Mörzer-Bruijns, the Netherlands). Geese congregate, to roost at least, in relatively few places and, for many races, mainly in the ornithologically active countries of north-west Europe. The Group has therefore been able to determine with some accuracy the population sizes of two species and of three races. Their fluctuations and variations in breeding success have been regularly followed. In other geese, which have wider ranges, this degree of knowledge has yet to be achieved. However, the Group has published maps of the wintering quarters of all the Eurasian geese and, again, the north-west segments of their populations are well studied.

The Duck Research Group (Mr. G. L. Atkinson-Willes, United Kingdom), recognising that the greater dispersion of duck populations makes complete species censuses virtually impossible, has concentrated on making representative sample counts so that population trends can be measured with confidence. Some of the ornithologically advanced countries had been making regular monthly sample counts of ducks since the late forties. The trends these revealed could well be obscured by geographical shifts of popula-
Winter counts have been introduced, aiming at maximum coverage over at least the west of Eurasia. Countries with few ornithologists concentrate on making counts on just one date, special field trips are made to areas without local observers, and aerial surveys have been used to an increasing extent. Some six million wildfowl are registered in these counts and a sufficient run of data will soon be available to detect overall trends. Meanwhile detailed distribution maps have been drawn up for the wintering flocks of all the swans and the commoner ducks.

The Wader Research Group (Mr. F. Spitz, France) is more recently formed and has a particularly difficult task because of the high mobility, small size and dense-flocking behaviour of many species. Nevertheless, useful data on the distribution and numbers at the major resorts have been obtained by co-operative efforts.

Ringing wildfowl provides valuable data on their migratory movements and mortality. Apart from mist-netting waders and catching Cygnus olor, amateur participation is small compared with other bird-ringing. This is because the capture of ducks and geese requires massive trapping installations, expensive projectile nets or elaborate expeditions to high-arctic breeding sites. Most wildfowl ringing has therefore been associated with the efforts of national research institutes. Analysis of data has also tended to be on a national basis, though several co-ordinated studies have been made. With the agreement on a common recording method achieved through the international organisation, Euring, and the advent of automatic data processing, it is to be hoped that co-operative wildfowl ringing and analysis will possibly soon be organised by a Research Group of the Bureau.

Research Groups on Habitats and Hunting

Thus far we have considered Research Groups whose aim is to provide the basic data on wildfowl populations, their fluctuations, distribution and movements. Research is also needed to ascertain what must be done to offset declines in numbers where they do occur. Without doubt the loss of wetland habitat is the most important restrictive factor. In recognition of this the Bureau, in collaboration with the International Union for the Conservation of Nature (I.U.C.N.), and I.C.B.P., set up Project MAR, named for the first three letters of the word for marsh in many languages. An international conference of experts was held in the Camargue in 1962, and the published papers formed a massive basic documentation for planning wetland conservation. Next, an annotated list of more than 200 wetlands most important for wildfowl in Europe and North Africa was drawn up and published. The authoritative document, giving international status to certain wetlands has, in many cases, provided invaluable support to efforts aimed at averting drainage and reclamation schemes for these areas.

One of the most difficult messages to get across to the public, to Government agencies, to engineers, to agriculturists, is the idea that 'wetlands are not wastelands', that they are not merely places to dump waste, to build factories and airfields, to convert to marginal agricultural land. To explain why the conservation of wetlands is a moral, aesthetic, scientific and economic necessity, the Bureau sponsored, as part of Project MAR, an attractively illustrated booklet 'Liquid Assets'. This was distributed widely, particularly within those agencies likely to be the most destructive of wetlands. A French version 'Ressources Méconnues' has also been published and Italian and German versions are in preparation.

' Liquid Assets' also sets out the ways in which recreational uses of wetland, fishing, boating, water-skiing, shooting, and so on, can be organised so that they do not prevent wildfowl utilising the habitat. For it is not enough simply to save wetlands from destruction. Wildfowl reserves must be maintained free of disturbance (at least at critical times of the year) and managed to the best advantage. The Bureau has compiled and published (in 1966 and 1968) two large volumes of multiplicated sheets, setting out the details of existing wildfowl reserves in Europe, North Africa and Western Asia. They are vital planning documents and, together with the knowledge of distribution gathered by the other Research Groups, can serve to indicate where further reserves are needed.

To organise the research needed to determine which are the best ways to manage wetlands, the Bureau has set up a Habitat Management Research Group (Dr. J. Szijj, German Federal Republic). This seeks to encourage Universities into directing their ecological students on to studies of direct application to the management of wetlands. A Handbook on wetland management techniques is in preparation. The problems vary so widely
throughout the area in which the Group is interested that Branches studying related habitats have been formed. The first was concerned with Mediterranean estuaries (Dr. L. Hofmann, France); recently formed was the Pannonicum Branch (Dr. A. Festetics, Austria) concerned with the area of the Danube basin and especially with its saline lakes.

An activity that impinges directly on wildfowl populations is hunting. While it is generally agreed that present-day stocks cannot stand the depletion of mass-destruction for market selling, there is much less certainty about the restrictions that should be imposed on shooting for sport. Again, the Bureau has sought to provide the necessary factual basis. It has first gathered together information on shooting seasons and other restrictions at present in force in the countries of Europe and North Africa. An analytical volume, in loose leaf format, has been published in 1966. Now there has been set up a Hunting Rationalisation Research Group (Dr. T. Lampio, Finland). This will aim to provide information that is still lacking on present regulations, but will be particularly concerned with formulating proposals for the international rationalisation of such regulations, on a biological basis. It will also stimulate the undertaking of research based on the activities of the hunters themselves, such as the analysis of age and sex ratios in their kill.

**Wildfowl Surveys**

In Africa and Asia there are vast wetland areas but very few amateur ornithologists, let alone professional ecologists. Yet, following the destruction of so much wetland habitat in the over-developed European countries, it is here that conservation is more urgently needed and efforts can be most effective. In these areas the Bureau has encouraged the formation of Wildfowl Surveys. These must necessarily work at a more superficial level than the Research Groups, but likewise aim to provide the basic information on the distribution of wildfowl and wetlands that is needed for conservation. They also seek to arouse interest in and action on the problems of research and conservation among the nationals of the countries within the region.

In Southern Africa a Wildfowl Survey (Prof. J. M. Winterbottom, S. Africa) has been in existence for as long as the Bureau itself. Besides general accounts of distribution, it has also produced monographic studies on a number of species of wildfowl. The West African Survey (Mr. R. Roux, France) is of more recent origin, but has already produced results of much interest. East African and North African Surveys are in process of formation. The South-west Asia Survey (Mr. C. D. W. Savage, Pakistan) has shown great activity and cohesion, even though its area stretches from Arabia to Assam. Basic documentation has been produced on many aspects of wildfowl conservation and plans are being made for the reintroduction of certain species. Surveys in Central Asia (Dr. V. E. Flint, U.S.S.R.) and North-east Asia (Dr. A. A. Kish-chinsky, U.S.S.R.) have now been formed.

In North America, research and conservation on wildfowl populations, which are largely discrete from the Eurasian ones, have been under way since the early part of the century. A degree of sophistication has been reached which is not yet achieved in Europe. In this case the Bureau's aim is to ensure that the scientific results and conservation experiences in the New World are widely known in the Old. This it does by close contact with the agencies and institutions concerned. A similar relationship exists with Australasia.

**National Representation**

The Bureau is kept informed of developments, good or bad, in the various countries of Eurasia and Africa by their delegates to its Executive Board. It is with the guidance of these delegates that the Bureau offers advice to, and seeks to exert pressure on, the government agencies concerned with conservation. Fourteen countries each nominate two delegates, and eight other countries, not yet financially supporting the Bureau, two representatives. They are of senior standing, appointed by government agencies, national sections of I.C.B.P., or other representative national organisations. One or both should be closely connected with the governmental conservation agency, have a biological training and be acceptable to hunting organisations. Although keeping themselves informed on research activities and helping with the appointment of the national workers within Research Groups, they are not necessarily active in research themselves. In 26 further countries, not yet in a position to nominate official representatives, the Bureau itself nominates correspondents.

The Headquarters keep in touch with all these contacts. Besides general account those within its Research Groups and Wildfowl Surveys, and with other agencies and organisations...
International Wildfowl Research Bureau through correspondence, liaison visits, publications and by periodically issuing an informative Newsletter.

International Meetings
The Executive Board of the I.W.R.B., comprising the Co-ordinators of Research Groups and Wildfowl Surveys, National Delegates, Honorary Counsellors and Representatives of associated International Organisations, meets once a year. National Representatives and members of Research Groups in the country where the meeting takes place (usually a different one each year) are also invited. Besides discussion of the Bureau's business, such meetings also help to stimulate conservation activities in the host country.

At longer intervals the Bureau is concerned with other organisations in the convening of wider ranging conferences at which all aspects of wildfowl conservation can be discussed, and at which official governmental representatives are present. One such European Meeting was held at St. Andrews, Scotland, in 1963; another in Noordwijk, the Netherlands, in 1966. Technical Meetings were held in Jablonna, Poland, in 1965 and in Ankara, Turkey, in 1967. An International Regional Meeting took place in Leningrad, U.S.S.R., in 1968. The next large International Conference is to be held in Babolsar, Iran, early in 1971. Besides the possibilities these conferences provide for influencing governmental opinion, their published Proceedings bring to the attention of a wide audience the current position, and problems, in wildfowl research and conservation in Europe, Asia and Africa. One very important activity now nearing reality, is the drawing up and signing of an International Wetlands Convention. Countries adhering to this would undertake to limit the destruction of wetlands, to inform an international secretariat of any impending changes in their wetlands situation and to consult with its co-signees before permitting any changes.

Administration and Finance
While the Bureau seeks to achieve its aims by encouraging workers in many countries to direct their researches and activities to those problems it feels important, an administrative headquarters staff is essential to ensure co-ordination and continuity. That at present employed is tiny, but the salaries must be found. There is also a heavy expenditure on communications and printing. The Wildfowl Trust most generously provides accommodation and various associated services. The rest of the Bureau's expenditure must be met from national subventions, by grants from the World Wildlife Fund, and by private donations. The Bureau could achieve much more if it had a more substantial income. It is for this reason that its bank account is named and prices are given for its publications.

Publications
Past issues of the I.W.R.B. Newsletters and of research papers prepared under its aegis are available from Headquarters at the flat rate of 5/- per publication. Future issues of Newsletters will be sent to organisations or individuals subscribing a minimum of £1 per annum to Bureau funds. (I.W.R.B. a/c, Lloyds Bank, Dursley, Gloucestershire, England.) The following publications are also available.

Project MAR. The Conservation and management of temperate marshes, bogs and other wetlands. Ed. L. Hoffmann. I.U.C.N. Pub. N.S. 2, pp. 475 (42/-).


Proceedings of the First European Meeting on Wildfowl Conservation, St. Andrews, Scotland. pp. 289 (28/-).


Legislative and Administrative Measures for Wildfowl Conservation in Europe and North Africa. Looseleaf format (roneo-ed) (42/-).

Wildfowl Refuges in Europe, North Africa and the Middle East. Volume I. Volume II. Looseleaf format (roneo-ed) (42/-).

G.V.T.M.