## Reports and Journals

The Journal of Applied Ecology. Edited for the British Ecological Society by A. H. Bunting and V. C. Wynne-Edwards. Blackwell Scientific Publications. Vol. 1, No. 1, 70s., or 120s. a year (2 issues).

As applied ecology is, or ought to be, virtually synonymous with conservation, members of the FPS should welcome the appearance of this new journal, a companion to the British Ecological Society's existing Journal of Ecology and Journal of Animal Ecology. The most important paper in this first issue is one by Dr. David Jenkins and his Nature Conservancy colleagues on the effect of predation on red grouse populations in Scotland. Their conclusions, put briefly, shatter many long cherished prejudices about game preservation: predation is not important in limiting either the numbers of breeding grouse or the numbers subsequently available for shooting. Moreover, except locally and seasonally, the activities of gamekeepers apparently do little or nothing to depress the numbers of predators. In fact, as Dr. Jenkins's team have demonstrated before, grouse populations fluctuate with the heather, their food supply and, as Colonel Meinertzhagen and others have already shown elsewhere, many of the traditional activities of keepers are a colossal waste of time.

Other papers of special interest to conservationists in this issue are by Dr. Uvarov on the problems of insect ecology in developing countries, and by D. A. Spencer, showing how tree-rings can be used to trace past fluctua-

tions in the population of porcupines.

## Working Conference on Birds of Prey and Owls, Caen, April, 1964. International Council for Bird Preservation. 17s. 6d.

This important report contains a series of first-class papers on the serious plight of raptorial birds in Europe, together with sufficient evidence to show that this plight should never have come about. For the senseless and largely emotional onslaught on birds of prey by game preservers and others throughout the ages has been based on a total misconception: that the raptores are harmful to game and other animals and birds, as is clearly shown by Dr. Jenkins's paper in the Journal of Applied Ecology, reviewed above. The reverse now appears to be the case, for it is clear that the birds of prey play a vital part in evolution, removing the weak and diseased members of the population, so strengthening the stock. Contrariwise, the game preservers themselves have often been playing a dysgenic part, by removing the strongest and healthiest members of the population—this is an important factor in the decline in the size of the red deer since medieval days. Game preservation policies, as hitherto practised in Europe, need to be turned upside down forthwith. Here is the blueprint for that bouleversement.

The principal papers in the report are: Kai Curry-Lindahl on birds of prey and their environment; Heinz Brüll on the importance of the goshawk and sparrowhawk in their ecosystem, a field study in north-west Germany which is essential reading for anybody who would understand the problem; J. D. Lockie on the Nature Conservancy's research on birds of prey and their food supply; Michael Woodford on falconry and conservation; and Stanley Cramp and W. Przygodda on the effect of toxic chemicals on predators. There is also a series of reports on the status and protection of birds of prey and owls in most countries of western Europe, and a useful summary paper by James Ferguson-Lees.

The conference passed resolutions urging the removal of all birds of prey

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from lists of harmful species; the protection of birds of prey throughout the year; strict control over the use of pesticides, including immediate prohibition of the persistent chlorinated hydrocarbons; and the complete prohibition of poletraps, on the use of eagle-owls as decoys, and on bounties on birds of prey.

Deer Control, by H. A. Fooks and John Hotchkis. British Deer Society, Grey Plovers, Hendon Wood Lane, Mill Hill, London, N.W. 7, 5s. 9d. including postage.

It is pleasantly surprising in these days of habitat destruction, to read here in the Earl of Lonsdale's foreword that "extensive afforestation of marginal areas coupled with the renovation of old woodlands has greatly enlarged the habitat available to wild deer, the numbers of which have considerably increased". So too, unfortunately, has the damage that they do, and control is essential. The British Deer Society recommends the formation of local Deer Control Societies, two of which already exist in Ashdown Forest and East Sussex. Their experience has shown that control can be successfully achieved if landowners, farmers and foresters co-operate with trained stalkers. How to form and run such a society is described by two highly experienced "deer-men"—one the first game warden of the Forestry Commission; the other chairman of the East Sussex Deer Society.

Predator and Rodent Control in the United States. Advisory Board of Wildlife Management, Chairman, A. Starker Leopold. U.S. Fish and Wildlife Service, Washington, D.C.

"Far more animals are being killed than necessary for efficient protection," is the conclusion of this report to the Secretary of the Interior, Mr. Stewart Udall. The operations of PARC, Predator and Rodent Control, a branch of the Fish and Wildlife Service, are criticised as bearing in many localities "scant relationship to real need and less to scientific management", and often based on insufficient data. Control is essential, but the report points out that in some places some wild animals have social values far in excess of the damage they do. "The large carnivores are fascinating to most Americans, and for every person whose sheep may be molested by a coyote there are perhaps a thousand others who would thrill to hear a covote chorus. Control programmes ignore this scale of values. . . . Control tends to become an end in itself." The case of an area in California is quoted where sheep losses were valued at \$3,500 and the cost of predator control on national forest lands at \$90,195. Control methods that inadvertently kill large numbers of other animals are strongly condemned, especially poison baits, to the use of which they attribute the killing of two Californian condors, found to have died of 1080 poisoning as a result of eating dead ground squirrels, and the nearextinction of the black-footed ferret.

The Board's recommendations include the appointment of a continuing Advisory Board representing livestock and agricultural interests, conservation and technical organisations; more research; a new name for PARC more in keeping with the broad management functions it should assume; a complete reassessment of the policies and operations of PARC, "limiting the killing programme strictly to cases of proven need . . . with minimum danger to non-target species."