

the addition of two or three scientific and technical men to this committee is necessary. So far as we can see, none of the committee has any real knowledge of the scientific principles underlying the problems its members will have to discuss. We hope that this will soon be remedied. It is necessary to consider the instructional and entertainment values of broadcasting, but it would be foolish to neglect the scientific development of the art. We have tried to find out from the *Annual* the amount expended in 1934 on research. Unfortunately this does not appear; it is apparently included in the general sum of £334,959 mentioned on p. 91 for maintenance, salaries, development and research, etc.

Science and Social Responsibility

In the April number of *State Service*, the journal of the Institution of Professional Civil Servants, Prof. H. Levy contributes an interesting article on this topic. The social consequences, he says, that have flowed in the wake of technical advance stand now in such clear outline that even scientific men, traditionally concerned only with the internal content of their work and not with its external repercussions, are beginning to lose their complacency. In the past, the scientific method excluded from its scope all matters involving prejudice, desire, bias or purpose, and was purely objective in character. In the logic of the physical sciences, human desires play no part, but in the social sciences they are fundamental. The pursuit of science is essentially a co-operative activity and is therefore socially conditioned. It is directed to an end, and that end is its social purpose, but since the direction which scientific investigation takes is in this way socially determined, science itself becomes one of the determining factors of society. It improves the technical level of production; it introduces new factors into the way of living for the population; it affects their cultural interests; it creates new needs and therefore arouses new hopes and desires. In almost every walk of life, laws of detailed social behaviour on which action is based are already recognised. Is it too much to suggest that here in small detail are the kinds of regularities and recurrences that make a science possible? Are we not therefore entitled to expect corresponding regularities, perhaps deeper and more far-reaching, on a large scale, and as a consequence, since society is dynamic, a logic of social change? Since science is itself a motivating factor in that change, its study is a scientific responsibility.

British Trust for Ornithology

FIELD ornithologists in the British Isles are making an experiment in co-operative research which, if successful, may have far-reaching implications. They have a peculiar problem to deal with, partly because the great majority of them are not trained men of science, and yet are being led on to territory where an advanced scientific technique is essential. Some of the combined operations recently carried out have been on an impressive scale. The census of heronries in 1928 needed some five hundred observers before it was completed, while the great crested grebe

inquiry of 1931 and the two-year woodcock inquiry now in progress have each enlisted more than a thousand observers. Naturally such work calls for a high degree of organisation, but until very recently British field ornithologists as such possessed no national organisation whatever. Irreplaceable manuscripts, field-notes, photographs, maps and collections of literature or bibliography were got together and dispersed according to the hazards of individual existence. A number of prominent ornithologists, including Mr. H. F. Witherby, president of the British Ornithologists' Union and editor of *British Birds*, Prof. Julian Huxley, the Rev. F. C. R. Jourdain, secretary of last year's International Ornithological Congress, and Dr. P. R. Lowe of the British Museum, combined to fill this gap by forming the British Trust for Ornithology as a permanent national trustee for the interests of field ornithologists. The Trust itself holds capital funds and assets in kind, such as a library, and collects subscriptions, which enable it to make grants for ornithological research. These grants, which at present are only on a very small scale, are being used to develop the nucleus of an Institute of Field Ornithology at Oxford, recognised and administered by the University. A national planning committee for the ornithological programme as a whole has been set up jointly by the Trust and the University.

THE Trust's first report just issued shows that, in spite of very cramped finances, a wide range of research has already been undertaken with marked success. Special reference should be made to the enterprise of the Trust in starting an experimental annual index of heron numbers, based on a twenty-five per cent sample of the breeding heron population of England and Wales. The index for 1934 is given as 102, 1928 being taken as 100. Another interesting point is the linking up of census work on swallows with a study of the size of broods, association with domestic animals at breeding places and occurrence of certain lethal parasites. The inquiries into short-eared owl habits during a vole plague on a Forestry Commission estate, and into the effect of the recent drought on great crested grebes, are further examples of the broad range of research which this comprehensive and flexible type of organisation makes possible. The Trust is still in an experimental stage. Inquiries and offers of help should be addressed to the Honorary Secretary, Mr. E. M. Nicholson, 61 Marsham Street, London, S.W.1.

Earthquakes in Persia

DESTRUCTIVE earthquakes have recently visited the Persian province of Mazanderan that lies along the southern border of the Caspian Sea. The first shock occurred on April 12, and was followed by others of greater severity during the next few days. It is stated (*The Times*, April 24 and 27) that 28 villages have been destroyed and about 600 persons killed. The province is one that is seldom disturbed by great earthquakes, though it lies near the important centres of Teheran and Resht. Sir Arnold Wilson, in his valuable paper on earthquakes in