ment, Harwell) on the possibility of protection, by chemical means, from whole-body irradiation. G. Hevesy (Stockholm) described some applications of tracers to the study of radio-lesions, and A. Forssberg (Stockholm) followed with a tracer study of the problem of protection from X-radiation. E. Lorenz (Bethesda, United States) presented a hæmatological study of the recovery of guinea pigs following chronic exposure to  $\gamma$ -radiation. The session closed with some further consideration of the problem of protection by L. F. Nims (Upton, United States).

A. G. MADDOCK

NATURE

## SOUTH AFRICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

## ANNUAL CONGRESS

S part of the diamond jubilee celebrations of A<sup>S</sup> part of the diamond justice Arnoiation of Salisbury, Southern Rhodesia, the 1950 congress of the South African Association for the Advancement of Science was held there, during July 3-7, in conjunction with the Rhodesia Scientific Association. The meeting was most successful, and was attended by more than one hundred visitors from the Union as well as by men of science from both the Rhodesias. The Sociedade de Estudos, Mozambique, was also represented. Visitors were well entertained by the town of Salisbury, by the Governor and by the Rhodesia Scientific Association, and a number of excursions were arranged covering most of the varied interests of those present at the congress.

In his presidential address to the Association, Prof. C. van Riet Lowe, director of the Union Archæological Survey, spoke on "Prehistory and the Humanities", making a plea for the wider teaching and study of prehistory as a means for emphasizing the essential unity of mankind and inducing a better appreciation of spiritual values.

The sectional address to Section A of the Associa-tion, by Mr. W. J. Jarvis, dealt with "Planning from a Multi-Racial Aspect" and considered some of the problems involved in integrating the native population into an introduced Western way of life. To Section B, Dr. A. M. Macgregor spoke on "The Primary Source of Gold", suggesting that gold mineralization is related to the intrusion of granitic material into basaltic rocks from which traces of gold are dissolved and concentrated. Dr. E. R. Roux spoke to Section C on "Interspecific Plant Hybrids" and cited examples of hybridization between apparently different genera which closer investigation shows might be merely very different adaptations; more studies on hybrids are needed. The address to Section D dealt with "Aspects of Museum Research", in which Mr. Reay H. N. Smithers, director of the National Museum, Bulawayo, showed the value of taxonomic studies in museums and urged the need for expansion of these services, which are basic to other biological researches. To Section E, Mr. Roger Summers, also of the National Museum, described "Iron Age Cultures in Southern Rhodesia", dealing particularly with the many ancient ruins and proposing a tentative chronology for them and for the Iron Age pottery found in the country.

Following the suggestion made by the United Nations Educational, Scientific and Cultural Organisation, a symposium was held on the theme of "Man's Use of Energy". An outstanding contribution was the first authoritative account of the plan to dam the waters of the Zambesi River at the Kareba Gorge, some two hundred miles below the Victoria Falls, and to set up power plants to develop about one million kVA. The dam would also make possible a big irrigation project.

Particular interest was aroused in the popular evening lecture—always a feature of the yearly congress—which this year was given by Dr. S. H. Skaife, of Cape Town, and included a colour film showing the activities of termites which he has kept for fifteen years in specially designed and constructed nests. The life-cycle of the insects was traced, and many new sidelights thrown on the totalitarian regime of these creatures, which were seen on the screen at very large magnifications.

## THE NATURALIST IN THE FIELD TO-DAY

THE Nature Conservancy is now in being and is a potential check against the destruction of areas in Great Britain of special importance from the point of view of geological structure, vegetation or other wild life, or of scenic beauty. The widespread seizure of these areas for afforestation, agriculture, Service requirements, etc., makes it all the more imperative to preserve what is left. But reserves can never be administered effectively by remote committees—still less from a 'window in Whitehall'. The care and vigilance of local interests, and especially of local naturalists, is needed : How far are they competent to shoulder this responsibility ? This question formed the subject of the presidential address by Dr. E. A. R. Ennion to the Conference of Delegates of Corresponding Societies at the recent meeting at Birmingham of the British Association.

Dr. Ennion, as warden of Flatford Mill Field Centre, has devoted the past five years to devising ways and means whereby the 'amateur naturalist', irrespective of age, sex, background or calling, can gain increasing competence in his or her special interests. The experimental stage is almost ended.

There has been a steady rise, growing steeper in post-war years, in the 'curve of opportunity' open to the amateur naturalist. Dr. Ennion discussed some of the contributory factors in turn: books and journals; natural history society reports; lectures, with the improved technique now offered by various visual aids; films; broadcasts. But all these have one fundamental weakness—the recording of someone else's triumphs and experiences. Only by personal exertions and discoveries is anyone really able to become a naturalist.

The opportunities for first-hand experience and guidance in field-work have increased considerably, although mainly for two groups: the university student, who has facilities especially for marine work at Plymouth, Millport, Port Erin, etc.; and the ornithologist, at any of the small coastal bird observatories, Skokholm, Lundy, Spurn Head, etc. A trend towards establishing inland stations is growing, too: Oxford at Wytham; Cambridge at Madingley; and the narrow boat *Beatrice* of the Severn Wildfowl Trust are instances in point.