SCIENCE NOTES AND NEWS

Conservation of Wild Life in India.—In his annual address to the National Institute of Sciences of India delivered last January at Calcutta, the President, Dr. B. Prashad, dwelt on the urgent necessity and the measures imperatively needed for the conservation of wild life in India. He made the point that the genesis of this world problem was to be traced primarily to the increasing ascendency of man over his environment. It is only very recently, however, that the existence of the problem has been recognised and the conscience of the world quickened, specially as a result of the efforts of a number of international conferences. The formation and development of many of the world-famous National Parks and Game Sanctuaries have been influenced by the resolutions adopted at these conferences. In 1935, an All-India Conference was convened by the Government of India to review the position and provide protection for the flora and fauna in this country. This Conference laid special stress on the establishment of wild life sanctuaries and also on the need for educative propaganda. A beginning has been made in the establishment of such parks, notably in the U.P., Assam and Mysore. In the field of propaganda, although much pioneer work has been done by a few enthusiastic individuals and scientific bodies—conspicuously the Bombay Natural History Society—it is disappointing that the (only) Indian Journal devoted to this subject, *The Indian Wild Life*, has had to cease publication —temporarily it is to be hoped. In conclusion, Dr. Prashad stressed on the complexity of the problems involved in any scheme of wild life conservation. The conservation of soil, waterways, forests and grass lands is intimately, though not always obviously, bound up with the direct measures for the conservation of wild life. At present for want of data, most conservation programmes in India must of necessity be empirical. Meanwhile, wild life management must be planned on ecological and biological data available, with the aim of preserving not merely a few species of game but the conservation of animal and plant life in general.

The Dictionary of Raw Materials of India.—The Council of Scientific and Industrial Research has arranged for the compilation and publication of a Dictionary of Raw Materials of India. An Editorial Staff working under the direction of an Advisory Committee has been appointed. In spite of the present unsettled conditions a most earnest endeavour will be made to collect all available knowledge regarding the raw materials of the country. An appeal is made to everyone who has any information of value on any aspect of the subject to communicate the same to Dr. B. L. Manjunath, Chief Editor, Dictionary of Raw Materials, 20, Pusa Road, Karol Bagh, New Delhi. Such assistance will be duly acknowledged in the text.

Use of Substitutes for Steel in Reinforced Concrete.—Of various substitutes for steel reinforcement so far tested, bamboo appears to be the most promising for India. Its ultimate tensile strength has been given by various authorities as between 14,000 and 30,000 lbs. per sq. inch, compressive strength between 5,000 and 10,000 lbs. per sq. inch, and Young's Modulus between 1,000,000 and 2,500,000 lbs. per sq. inch. It can be used whole but is recommended cut into thin strips. Placed cross-wise in the form of a mesh, it is suitable for light reinforcement preventing temperature cracks in concrete roads, floor slabs and canal linings. In China, bamboos are required to be three years old before use. In Italy bamboos are given a waterproof coat before use to prevent swelling due to absorption of water. As it is relatively new as a reinforcement no data exist on its durability, but this need not debar its use in purely temporary structures.

Literature on the efficient design of reinforced concrete structures, rigid frames, higher working stresses, pre-stressing and the use of substitutes, is available on loan from the Secretary, Central Board of Irrigation.

Botanical Society of Bengal.—The Seventh Annual General Meeting of the Botanical Society of Bengal was held on Saturday, the 6th March 1943, at 4 p.m., at the Botanical Laboratory, Calcutta University, with Professor S. P. Agharkar, President of the Society, in the chair. The Secretary, in presenting the annual report for the year under review, showed an all-round progress of the Society in spite of the present emergent situation. In delivering his presidential address on the "Practical Applications of Ecology", Professor Agharkar stressed the importance of the environmental conditions as a factor in the successful cultivation of the agricultural crops and forest plants. It was pointed out that only ecological principles would enable us to obtain larger supplies of food and other forest products required for the successful conduct of the war.

The following were duly elected as Office-bearers for the session 1943-44:—

President: Mr. S. N. Bal. *Vice-Presidents*: Prof. S. P. Agharkar, Prof. S. C. Mahalanobis, Dr. K. P. Biswas, Prof. S. R. Bose and Prof. J. C. Sengupta. *Treasurer*: Mr. I. Banerji. *Councillors*: Mr. K. G. Banerji, Mr. E. A. R. Banerji, Dr. P. N. Bhaduri, Dr. N. K. Chatterji, Dr. K. T. Jacob, Miss S. Meyer, Dr. S. K. Mukherji, Mr. P. N. Nandi and Dr. S. R. Sengupta. *Hon. Secretaries*: Dr. B. C. Kundu and Dr. J. K. Chaudhuri.

The Horticultural Society of India.—This Society is formed with the object of advancing the cause of horticulture in India by organising efforts to create facilities for horticultural work in the country and to safeguard the interests of Indian horticulture, by establishing a Central Institution and Provincial Organisa-