

unit volumes of sea-water has been made by estimation of the amount of plant pigment, and data on volumes, dry weight and composition of representative plankton animals have been obtained.

By the use of reasonable average-constants for all the factors concerned in an evaluation of the dynamics of a plankton population, G. A. Riley showed that it was possible to produce equations which gave promise that theoretical treatment might provide an understanding of the fundamental processes controlling plankton growth and distribution. In subsequent work he found that with selected seasonal data from different regions the changing abundance of the population could be predicted with a fair degree of approximation using theoretical equations. His latest collaboration, with H. Stommel and D. F. Bumpus¹, is an attempt to examine the principles of regional distribution.

This work and its predecessors deserve close attention by ecologists. They emphasize gaps in our knowledge, and perhaps impress upon us most the need to come to agreement on the best methods of quantitative assessment of the varying populations. The fact that the synthesis of the picture has advanced so far that it is amenable to mathematical expression should in itself act as a stimulus for renewed efforts.

F. S. RUSSELL

¹ Riley, G. A., Stommel, H., and Bumpus, D. F., "Quantitative Ecology of the Plankton of the Western North Atlantic". *Bull. Bingham Oceanogr. Collection*, 12, Art. 3, 1 (1949).

IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY ANNUAL REPORT

THE forty-second annual report of the governing body of the Imperial College of Science and Technology* covers the year ended July 31, 1949, and, besides the statement of accounts, contains a list of publications during the year, arranged by departments, and a list of changes in the teaching and administrative staff. The number of full-time students during the year was 1,428, as against 1,510 in 1947-48, and of these 87 came from foreign countries, 140 from the Commonwealth overseas and 406 from the British Isles outside a radius of thirty miles from the College. The total of academic distinctions for 1948-49 was 800 as compared with 875 in 1947-48, 700 in 1946-47 and 618 in 1939-40.

Among important educational developments noted in the report are the offer by the trustees of the Rockefeller Foundation of £27,200 to cover the cost during 1949-52 of a research fellow in public health engineering at the College and a tutor at the London School of Hygiene and Tropical Medicine. Standard Telephones and Cables, Ltd., has contributed £1,200 per annum for seven years towards the establishment of the Henry Mark Pease readership in telecommunications, while the University Grants Committee has financed the further development of geometrical optics in the Technical Optics Section of the Physics Department. Proposals for research work and training at a high level in mineral dressing are being implemented through a recurrent grant of £6,500 per annum from the University Grants Committee, and application has been made for a capital grant for the

* Forty-second Annual Report of the Governing Body of the Imperial College of Science and Technology. Pp. 53. (London: Imperial College of Science and Technology, 1949.)

reorganisation and modernization of the Bessemer Laboratory for this purpose.

The report also refers to the revision of building plans with the idea of allocating the ground now available to the more urgently needed buildings: plans for a new aeronautics building, an extension of the Unwin building and a further extension of the chemical technology building have already been submitted. Completion of these immediate projects will also provide for an extension of the Biological Departments. As a first step towards the encouragement of cultural studies and giving students the opportunity of preparing themselves also for life in its broader aspect, a course of lectures on "Ends and Means in Science" has been arranged, to be given by professors of the College to members of the College as a whole.

FOREST POLICY IN UGANDA ANNUAL REPORT FOR 1948

DURING 1948 the turning point in forestry seems to have been made in Uganda. The report for the year* commences with the following paragraph: "Russia continues to have a series of five-year plans. In Uganda we have a general development ten-year plan. Now His Excellency the Governor has produced a plan for centuries—a statement on Forest Policy. For the first time since the Forest Department was formed they have been given a real directive." Of course, these things have been said before, but it would appear that Uganda, through its Governor, has envisaged a real forest policy. Briefly the points are: "(1) To reserve in perpetuity, for the benefit of the present inhabitants of Uganda and of posterity, sufficient land (either already forested or capable of afforestation) to maintain climatic conditions suitable for agriculture, to preserve water supplies, to provide forest produce for agricultural, industrial and domestic purposes, and to maintain soil stability in areas where the land is liable to deterioration if put to other uses. (2) To manage the forest estate to obtain the best financial returns on its capital value and the expenses of management, in so far as such returns are consistent with the primary aims set out above. (3) To foster, by education and propaganda, a real understanding among the people of Uganda of the value of forests to them and their descendants. (4) To encourage and assist the practice of sound forestry by Local Authorities and private enterprise; and to educate selected Africans in technical forestry."

The work described in this report gives confidence that a start has been made with putting into force this suggested forest policy, and it is to be hoped that the effort will be maintained. So often in the past these suggestions of forest policy have been announced, only to be entirely ignored by subsequent governors and their councils, usually on the score that the Colony is in financial difficulties, and therefore the forest policy is one of the first things to suffer. Moreover, no announcement of a new forest policy, and even its introduction by the governor concerned, is of any use unless the strength of the forest department is sufficient to carry out the plan. In the past this has certainly not been the case with the forest departments in East Africa.

* Uganda Protectorate. Annual Report of the Forest Department for the Year ended 31st December, 1948. Pp. ii+57. (Entebbe: Government Printer, 1949.) 2s.