

The Wildfowl Trust, 1960.) 10s. net.) The number of visitors increased during the year, finances are adequate and the scientific staff have extended their investigations by aerial surveys and other means. A valuable inclusion in this attractive report is the translation of a research article by Prof. S. M. Usjinski on the status of the Brent goose in the Soviet Union. The drawings and photographs are up to the standard expected from Slimbridge.

The National Research Council of Canada

DETAILS of the grants totalling 9.37 million dollars in 1959-60 from the National Research Council of Canada in its forty-third year in support of research at Canadian universities in science, engineering and medicine, show an increase of 2.62 million dollars on 1958-59 and of 6.25 million dollars on 1955-56; they are contained in a report issued by the Council, which includes also a Supplement to the 1958-59 report (Pp. ii+213+xi. Ottawa: National Research Council of Canada, 1960. 50 cents). Of this, 8,586,265 dollars were in direct support, 76.7 per cent being for scientific and engineering research and 23.3 per cent for medical research, while of the total, 84.6 per cent represented 958 research grants to members of university staffs and 15.4 per cent provided 450 postgraduate scholarships and fellowships. Of the indirect support, 39.4 per cent was for contributions, grants, etc., to scientific organizations and functions and 35.3 per cent for the publication of scientific periodicals. Besides a full list of grants and their recipients, fellowships and scholarships, the report includes an outline of the programme and particulars of the membership of the administering bodies.

Atmospheric Pollution

A RECENT publication entitled "The Investigation of Atmospheric Pollution" includes the thirty-first annual report of the Atmospheric Pollution Research Committee of the Fuel Research Board for the year ended March 31, 1958, and gives in synoptic form information regarding the research projects considered during that period (Department of Scientific and Industrial Research. Pp. iv+164. London: H.M. Stationery Office, 1960. 8s. net). Smoke from railway locomotives, which are responsible for one-seventh of all the smoke discharged to the atmosphere, has been investigated. Other subjects considered were, instruments for measuring air pollution, air pollution by fluorine compounds, fumes from coke fires, smoke abatement in the iron and steel industry, and air pollution and health. The second part consists of the report of the Director of Fuel Research on the investigation of atmospheric pollution. Here more details are given on the emission of pollutants to the atmosphere, with some indication of the sources of smoke and sulphur dioxide from various fuels. From the data available it would appear that there is a steady decrease in the amount of smoke emission to the atmosphere since 1955-56, and during the same time there has been no increase in the sulphur dioxide concentrations in the atmosphere. The report states: "This shows without any doubt that the concentration of sulphur in the air in this country [Britain] is not increasing". There is also some interesting information on the smoke and sulphur dioxide concentrations in the City of London. Some particulars are also given about the work of the Fuel Research Station on the production of reactive domestic coke, smoke elimination from boilers, combustion of oil fuel, exhaust gases from motor vehicles, and other

topics. The third part summarizes the results of the observations taken throughout Britain by the co-operating bodies which take part with the Department of Scientific and Industrial Research in monitoring atmospheric pollution.

Water Pollution Research

ANTICIPATING a rapid rise in the demand for industrial water, an increase in the re-use of water, and the consequent need to improve effluents, the current report of the Water Pollution Research Board, Department of Scientific and Industrial Research, announces the imminent expansion of its Stevenage laboratory by nearly 50 per cent (Water Pollution Research, 1959. Pp. vi + 115 + 4 plates. London: H.M. Stationery Office, 1960. 7s.). The report contains much detailed and valuable, but necessarily esoteric, information about the progress made with diverse investigations into the design of waste treatment plants and the pollution of rivers.

Two particularly interesting advances may be selected for further mention. Previously, laboratory trials of a new synthetic detergent had shown that it was more easily decomposed during sewage treatment than the usual detergents. To test these observations, the whole town of Luton was supplied with apparently normal packages of detergent which contained the new active agent instead of those usually employed. Less synthetic detergent reached the sewage works, and the increase in the proportion destroyed during treatment agreed with the laboratory experiments. If it proves possible to extend the distribution of this new detergent to the whole country, the condition of many rivers and water supplies should be improved. Tests on the effects of suspended mineral pollution, often a subject for speculation, have shown that concentrations which are fatal to fish, during continuous exposures of about ten weeks, are higher than those commonly found in polluted rivers. Pathological changes of the gill tissues are apparent in the dead fish.

Biological Engineering Society

THE first meeting of the Biological Engineering Society was held on October 15 at the National Institute for Medical Research, Mill Hill. About 100 participants assembled in the morning to listen to a series of short papers, each describing a demonstration to be held during the afternoon. Sir Charles Harington, director of the Institute, opened the proceedings, and in his address drew a parallel between the state of biological engineering to-day and biochemistry half a century ago. Perhaps in the years to come a fusion of the two disciplines of biology and engineering might result in biological engineering becoming as acceptable as biochemistry to-day. In the meantime, advances in biological and medical science, he said, are very dependent on advances in engineering and instrumentation, and the Society is making a valuable contribution by enabling biologists and engineers to work more closely together and to understand each other's points of view. Prof. R. F. Woolmer, the president of the Society, replied to Sir Charles, and pointed out that it was appropriate that this first scientific meeting should be held at the Institute, which in its work and organization is a good example of the way in which engineers could work together with biologists. A number of demonstrations illustrating many aspects of the work of the institute, and that of members of the Society from other centres, was given. The honorary secretary of the