visitors to look at its galleries and attend its lectures and films, and an impressive new insect gallery was opened to the public in October 1968 which should help to boost attendances in future.

POLLUTION

Fish Throng Sweeter Thames

THE last salmon to be taken up river in the lower Thames was caught in June 1833 and the commercial fisheries, some of which brought in annual catches worth £5,000 a year, disappeared a few decades later. The villain of the piece was an English invention, the water closet, which by its widespread adoption in 1810 rapidly turned the Thames into a sewer for the two million inhabitants of London.

The Greater London Council and the Port of London Authority have made notable efforts to clean up the river, and within the past ten years fish have once more returned to the Thames. A sample of fish trapped in the intake screens to power stations has shown that forty-one different species were present in the lower Thames last year, according to a survey by Alwyne Wheeler of the British Museum (Natural History) (*Biological Conservation*, **2**, 25; 1969). Particularly encouraging is that smelt, a member of the salmon family, have succeeded in crossing the most heavily polluted part of the river between Gravesend and Putney. In the past five years this stretch of river has rarely been totally deoxygenated, as used to be the case, but there seems little hope of the oxygen reaching the 30 per cent saturation which is necessary for the survival of salmon. The prospect that salmon will return to the Thames is remote not only because of their particular sensitivity to lack of oxygen but also because the weirs and other obstacles that have since been built may prove impassable.

AGRICULTURE

Research for the Farmer

THERE might almost be a biological clock controlling the regularity with which Agricultural Research Council units come and go. The annual report for 1968–69 (HMSO, 12*s* 6*d*) records the closing of the unit of embryology at Bangor on the retirement of its director, Professor F. W. Rogers Brambell. But in the same year two new units were set up: the unit of invertebrate physiology and biochemistry split between Professor A. W. Johnson at Sussex and Dr J. E. Treherne at Cambridge and the unit of developmental plant physiology and pathology under Professor P. W. Brian at Cambridge.

As the report says, ARC units are usually created to provide additional research facilities for a university scientist who is recognized as a leading authority in a line of research which is of immediate or potential interest to the council. After agreeing to the broad outlines of the themes to be studied a director is free to pursue his research in whatever way he thinks fit without interference from the council. These units are regarded as an important means of recruiting to the agricultural research service, and when a director retires and his unit is disbanded staff members can usually be transferred to other ARC posts.

In 1968–69 the research units received £830,991 of the ARC's total expenditure of £13,909,900; £3,860,098 went to the ARC institutes and another £7,707,504 to other state aided agricultural institutes, such as Rothamsted Experimental Station and the National Vegetable Research Station, which are not supported solely by the ARC. These items of expenditure are all slightly greater than the previous year's figures, but there has been a noticeable decrease in grants for studentships, training awards and fellowships, which amounted to £17,485 compared with £34,358 in 1967–68.

As usual, much of the annual report is taken up with recent developments at the institutes and units, in particular those visited by the council's representatives making their routine inspection of progress. Last year they went to the National Institute of Agricultural Engineering, where they were able to see the latest developments in potato harvesting, which include an automatic separator for removing potatoes from clods of earth and stones. X-rays are beamed onto mixtures of soil, stones and tubers, but pass through only the potatoes, which are then deflected out of the machine. Some fully automatic harvesters, incorporating the separator, are now being manufactured for use on farms.

Other recent developments featured in the report include the low alcohol cider produced at Long Ashton Research Station. The production of this beverage involves distilling the alcohol from normal cider and replacing the volatile flavour constituents removed during distillation. Cider produced by this method, for which a patent has been filed, contains less than 1 per cent alcohol.

An intriguing possibility for biological research has come from joint work carried out at the Pest Infestation Laboratory and Rothamsted Experimental Station. It seems likely that the wax moth, *Galleria mellonella*, a pest of bee hives, can be controlled by adding *Bacillus thuringiensis* to the foundation wax put in by bee keepers. The bacterium is harmless to man and bees, but devastating to the moth.

CONSERVATION

Strong Council

THE Council for Nature is in a stronger position than ever before. This is the conclusion of its chairman, Sir Landsborough Thomson, reviewing progress since the adoption of a new constitution in April 1968 (*Working for Nature*, Council for Nature report 1968–69, 2*s*). Before the change, which replaced an unwieldy executive committee by a properly constituted council, the organization was in danger of becoming too independent, expressing opinions that member bodies might not have shared. This was contrary to the original aims of the Council for Nature, which was set up in 1958 to represent and coordinate the voluntary movement for conservation and natural history in the United Kingdom. Now there are affiliated rather than member bodies, represented on the council through standing committees, although a dozen constitutive bodies are represented directly on the council.

The chairman remarks that the process of streamlin-