

disease; in the last quarter of 1966 there were 135,000 notified cases, but only 37,000 in the last quarter of 1968. A survey of another childhood disease, mumps, is to be arranged. Fluoridation of water is still meeting opposition as strong as it is unfounded; only 2 million people in England and Wales receive fluoridated water.

For the first time since 1962, there was a slight decrease in the size of the waiting list for hospital treatment but, despite the more than £90 million spent on hospitals, the number of beds decreased from 27,091 to 26,846. Building schemes valued at £124 million were started in 1967-68, compared with £108 million in the previous year. Although the total number of nursing staff increased by 3,132 (1.2 per cent), the number of full time staff decreased by 0.2 per cent. The report says that the fall in the number of 18 year olds in the population accounts for the fall in the number of pupil nurses and with no understatement concludes "that efforts to recruit and retain nursing staff will have to be maintained".

PESTICIDES

Swings and Roundabouts

THE New York Academy of Sciences has at last published the proceedings of the symposium held in May 1967 (*Ann. NY Acad. Sci.*, **160**, 1-422; 1969). Although it is now far from up to date, the symposium should be compulsory reading for students of pollution by pesticides, if only because it provides a comprehensive review of essential background information. The eight sections range from discussion of the general ecological aspects of pollution to the biochemistry, pharmacology and physiology of pesticides. Many of the classic pieces of work on the subject are described, including the tale of the consequences of controlling gnats at Clear Lake, California—now an object lesson in pesticide problems.

In September 1949, under strictly controlled conditions, Clear Lake was treated with an analogue of DDT, called DDD, at a concentration of one part in 70 million. Biologists were persuaded that at this concentration the gnats would be destroyed but the fish and birds would be unharmed. For two years, no gnat larvae were found in the lake, but by September 1954, a second dose, this time at a concentration of one part in 50 million, was needed and three years later a third dose at the same concentration was applied. It was not until 1960, however, that western grebes were found dying of tremors characteristic of poisoning by chlorinated hydrocarbons. The grebes contained up to 1,600 parts per million of DDD. Moreover, there was a notable decline in the nesting population of grebes and the fish on which they fed contained even higher concentrations of DDD.

Not everyone may be concerned at the fate of the grebes, but the symposium describes an example of ecological disturbance with a direct effect on man's health. In the Demerara River estuary in what was then British Guiana, DDT was used in the forties to eradicate the mosquito *Anopheles darlingi*. By 1948, this vector of malaria had been eliminated, the agricultural economy of the area had been changed and mechanized crop farming had replaced animal farming. As a result *A. aquasalis*, which had previously fed on

cattle, began to feed off man and started to transmit malaria. During 1961-62, just ten years after the successful programme against *A. darlingi* and malaria had finished, 93 cases of vivax malaria occurred in the delta.

ENVIRONMENT

Lovers of the Land Unite

Is the world heading for an environmental crisis if pollution continues unchecked? Professor Barry Commoner of Washington University, St Louis, has thought for some time that this will happen. He argued his case again at the conference last week in London on "The Future of Man's Environment", organized by the Soil Association. He cited examples of modern technology—nuclear reactors, artificial fertilizers, gasoline engines and pesticides—which have "stretched the web of the ecosystem". But he said there is hope of making "technology conform to the powerful constraints of the living environment". In the United States, one particularly optimistic sign of public concern about pollution is the formation in the past six months of student environmental groups.

Professor Commoner's audience of about 100 representatives of British societies and organizations concerned with the environment hardly needed persuading about the dangers of pollution. Their object, indeed, was to discuss ways of coordinating their work more effectively, and they were greatly encouraged by Professor Commoner's emphasis on the importance of voluntary bodies working together cooperatively.

There was therefore some surprise when it was learnt that such a body is already being planned by the standing committee of "The Countryside in 1970" conference. This committee has set up a voluntary bodies working party under the chairmanship of Lord Molson, chairman of the Council for the Preservation of Rural England, and Sir Landsborough Thomson, president of the Council for Nature, with the object of forming a "National Coordinating Committee for Environmental Conservation".

But will this committee embrace a sufficiently wide range of interests, and will it be effective enough? Several at the meeting raised these questions, and the Soil Association will organize another conference to see how things are going in about six months time. One obviously relevant consideration is that the European Conservation Year is only a few months away, and time should not be lost if advantage is to be taken of the current interest of European governments in tackling environmental problems.

If a coordinated body on environmental conservation is to be a successful pressure group it must have access to scientific information. Professor Commoner argued that one of the first steps should be the publication of a journal. Part of the difficulty in assessing the dangers of pollution is that too little is known. The Soil Association is helping in this direction in a small way through research on its farmland at Haughley near Stowmarket in Suffolk. There, the association is in the fortunate position of being able to compare farmland that has been managed without the use of chemical sprays and artificial fertilizers for many years with similar farmland which has received fertilizers and