

action, but changes in liver function and occasional hepatic damage have been noted.

Fertility

THE birth rate in the United States and the United Kingdom continues to decline. According to figures just released by the National Centre for Health Statistics, the birth rate in the United States in 1967 was 17.9 per thousand compared with 18.4 in 1966. This is below the 18.4 per thousand level of the depression years 1933 and 1936, and the absolute number of births in 1967—3.53 million—was also lower than in 1966—3.61 million. A much more sensitive indicator of trends in fertility is, of course, the relationship between the annual number of births and the number of women in the child-bearing age group (15 to 44 years old). In 1967, the fertility rate in the United States was 88 per thousand, higher than the 76 per thousand during the depression. Compared with the 1930s, fewer women are producing more children. The post-war boom in babies in the United States continued unexpectedly for a whole decade and the fertility rate reached a peak of 123 in the late 1950s; since then it has steadily declined to the present level. It remains to be seen whether or not the decline in birth rate reflects only a change in the timing of births or whether there will be a real decline in completed family size. A real decline is expected; with increasing standards parents are choosing to spend more on a few children than take the cheaper by the half dozen outlook. The British population is showing a similar trend. Statistics just released by the Registrar General covering the first quarter of 1968 indicate a continued fall in the birth rate. The rate was 17.3 per thousand compared with 18.1 per thousand and 18.2 per thousand in 1967 and 1966, respectively.

According to the latest United Nations estimates, the world population at the beginning of 1968 was 3.443×10^9 ; by the end of this year the population is estimated just to exceed 3.5×10^9 . The world population will, by then, have increased by 1×10^9 since 1953 and at the present rate the next increase of 1×10^9 is expected within 14 years. In 1967 the population grew most rapidly in Central America and the population of the region may well double in the next twenty years. By contrast at the present rate it will take about 350 years for the population of East Germany to double and about 140 and 63 years to double the populations of Britain and the United States.

Europe's Water

SOON after May 6, a poster urging water conservation will appear on billboards in the eighteen member countries of the Council of Europe. It will announce the European Clean Water Campaign, which the council is launching at a formal ceremony in Strasbourg on May 6 when the twelve clauses of the European Water Charter will be announced with as much publicity as possible. The Clean Water Campaign is a preliminary part of the European Conservation Year 1970. The precise wording of the Water Charter, which was agreed by the council last May, has not been disclosed, but it stresses the familiar cry that water resources are far from inexhaustible and that water must not be wasted or polluted. Although the whole

campaign has been designed to appeal to the general public, it is not aimed at dripping taps or hose pipes but at emphasizing the enhanced amenities that a rational development of water resources would provide for everyone. The council's idea is that, if it can create a climate of public opinion intensely hostile to the squandering of water, national governments, local authorities and industry will all be forced to adopt proper measures to dispose of sewage and industrial wastes and to exploit water supplies.

In Britain, because the campaign is part of the European Conservation Year, the National Parks Commission is to run the national campaign in association with the Ministry of Housing and Local Government and the Water Board. But, relying as it does so heavily on the effect of public opinion, the campaign will certainly need all the support it can muster if it is to be anything other than a damp squib.

Variation on a Theme

ANOTHER approach to the controversial question of teaching engineering in schools is about to be put into action. Last week it was announced that Shell International Petroleum Company is awarding a grant of £27,000, spread over three years, to the Institute for Educational Technology at the University of Surrey to support a project designed to further the introduction of engineering and other applications of science into sixth form activities quickly and on a national basis. Mr G. C. Sneed, head of applied science at Ealing Grammar School, has been appointed director of the project.

Mr Sneed points out that able students tend to prefer pure science to more technical subjects, and this may stem from the fact that most of them are given no introduction to technical subjects at school. Several schoolmasters have tried to provide an answer to this problem individually, but recognition of the need for a combined effort led to the setting up in November 1967 of an "action committee" to discuss what could be done. One outcome is the proposed summer school to be held at Imperial College in September of this year, at which teachers will be able to see equipment that has been used successfully by others in introducing technological subjects.

As an important part of the project, Mr Sneed intends to visit different industries and to build models for use in schools of machinery and other equipment, indicating their industrial applications. After about two years, teachers will be able to visit the institute to familiarize themselves with the equipment, and a book containing suggestions for class experiments based on the results of the project will be available. Twelve members of the scientific staff at Surrey University are co-operating with Mr Sneed, and he will later be joined by another teacher and by technical staff. Mr Sneed's own experience as a teacher is valuable because he has a good idea of what is likely to interest the pupils.

The idea is that engineering and other applied sciences will supplement rather than replace more theoretical subjects such as physics; theory will simply be illustrated and broadened by reference to practical application in industry. Mr Sneed emphasized that the scheme differs from that of the Schools Council's project teams on applied science and tech-