

It points out that, for a country of Canada's size, a degree of specialization is essential if high standards are to be achieved. Standards of excellence in given areas will not only encourage scientists and engineers to stay in Canada but also constitute the only sure way of achieving results which are internationally significant and competitive. The ING project is related to an area in which Canada already has an important investment and an international stature. It will have an encouraging effect on those concerned with the basic research and engineering objectives of the project, and it is expected to have a substantial industrial fall-out. It does not duplicate research abroad, and should attract foreign scientists to Canada as well as placing Canada in a good position for exchanging research information with other countries.

Control of Malaria

THE World Health Organization has been so successful in eradicating malaria from certain parts of the world (particularly in Europe, where the number of malarial cases fell from more than four million to less than seven thousand in the first fifteen years of WHO's existence) that it can now turn its attention to the problem of keeping these areas free of the disease. Unfortunately, laboratory tests for detecting potential malarial carriers are not completely effective, and a person infected by a mosquito may remain a carrier for a very long period of time. Permanent immigrants are more likely to re-introduce the disease than tourists, and the WHO technical report devoted to the problem stresses the necessity of co-operation between government authorities concerned with health and immigration. But it is possible to contract malaria during a short stay in an infected region, and the report recommends that shipping companies be aware of the problem, and that passengers and crews should be instructed in the use of prophylactics. A new difficulty besetting health workers has been the increase in the number of *Plasmodia* resistant to 4-aminoquinolines. Fortunately, however, few resistant strains have reached malaria-free countries; WHO hopes shortly to resume publication of its reports on the spread of the strains.

The measures Britain takes to keep out malaria are hardly exemplary. No checks for the disease are made on passengers coming from abroad—though the Board of Trade does issue advisory notices to shipping companies on the diagnosis and cure of the disease. Yet Britain has not been troubled by a malaria epidemic since 1921, and during the past ten years no cases have been reported. The reasons for this are partly fortuitous—*Plasmodium falciparum* does not usually survive in the mosquito long enough to be transferred to the next human host. This is not true of *Plasmodium vivax*, the malarial parasite endemic in Britain in the past but now imported by immigrants from India and Pakistan. Indian immigrants, however, tend to live in cities where the appropriate mosquito species are rare. In any case it appears that the mosquito population as a whole has been greatly diminished by farm insecticides—the use of which is not, of course, primarily directed against mosquitoes. Finally, as more and more people travel by air rather than by sea, the risk of passengers being infected with malaria *en route* and entering Britain as innocent carriers of the disease has

lessened. Not only do air passengers spend less time in infected areas, but aeroplanes and airports are rather easier to spray than ships and harbours.

Tissues in Store

THE problem of a Christmas present for the biologist who has everything might be solved by a glance at the catalogue of the Exotic Animal Tissue Bank. This is a collection of tissues which was established in September 1967 at the St. Louis Zoological Park, in St. Louis, Missouri, in co-operation with the Center for the Biology of Natural Systems at Washington University.

The tissues come from animals which have died in the zoo—the service operates as part of the zoo's research programme. There are now more than 1,000 specimens available to research workers, teachers and anyone else who would like them. Prices range from \$2.00 for 1–10 g to a minimum of \$25.00 for amounts greater than 1 g. Prices for whole organs weighing less than 10 g will be quoted on application. With each specimen comes a brief history, including the species, age, sex, treatment given and cause of death. Many specimens have already been distributed to workers in a wide range of disciplines.

Specimens are fixed in 10 per cent buffered formalin, or frozen or made into slides, and it is hoped to expand the service to include fixation for electron microscopy. Anyone wanting to look at such things as the aorta of the sand boa constrictor, the spleen of the African lion, the rumen contents of the onyx, or the uterus of the agouti will now know where to apply.

New Look for Classics

"AN Approach through Classics" is a report prepared for the Schools Council on a possible course in the humanities for children between 11 and 14. In these three years, the children are to be given an account of events, myths, discoveries, literature, art, politics and personalities from the Egyptians and Sumerians to the Renaissance. Those who jib at the superficiality of learning implied by this syllabus could well reflect on how few "educated" people could give an account that was more than superficial on any topic within this huge range. What most people learn vaguely and by diffusion it is proposed to teach rather less vaguely, though necessarily with very little detail. But it is, perhaps, a pity that the syllabus makes no mention of any specialization, not because it would be good to induce in children the notion that human development has been a series of "set periods", but so as to point the dangers of generalization which such a course is prone to.

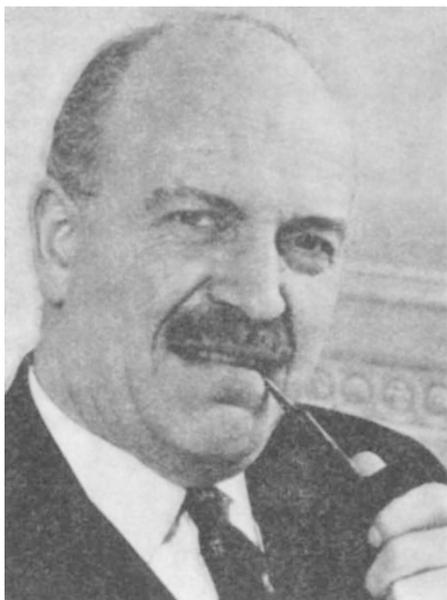
The course involves no study of any particular language nor—a more serious omission—any teaching of elementary linguistics. No one could expect fourteen year olds to have enough Latin to be useful in understanding Roman life, but it might well have been profitable to make mention of language as a repository of culture. The use of translations in the study of classical literature, much emphasized in the report, will also bring problems. "Pupils very soon absorb Homeric style and diction, his similes, stock epithets, etc."—but is it useful to have children emulate clichés, even Homeric ones? The report quotes a splendid

pastiche of nineteenth century Homeric translation, written by a boy of eleven.

These are, however, minor points. Perhaps the most serious difficulty that would arise if the syllabus came into wide service would be the shortage of teachers knowledgeable enough to take the course.

New Man for Porton

IN March 1968, Mr Gordon Neville Gadsby will take over as director of the Chemical Defence Experimental Establishment at Porton, near Salisbury. He will succeed Mr E. E. Haddon, who is retiring. Mr Gadsby, who is the present deputy chief scientist (Army), was an honours graduate in chemistry and a Cadbury Prize winner at Birmingham University and before the war was senior chemistry master at Waverley High School in Birmingham. After service in the Army and as a lecturer at the Royal Military College of Science, he moved into operational research. In 1960 he became director of operational science and research and, later, director of the Army Operational Research Establishment. In 1965 he became director of biological and chemical defence (Army).



Despite its fearsome image, the establishment at Porton is responsible for a great deal of useful work. Mr Gadsby is not yet ready to suggest any changes which he may favour when he becomes director, but makes it clear that he does not want to give the impression of being a new broom.

Improving Traffic Flow

TRAFFIC delays throughout Britain are estimated to cost £750 million a year. This figure is clearly one reason why the Road Research Laboratory is spending £0.5 million on a large scale experiment in traffic control by computer. The experiment, taking place in Glasgow, is described in a recent report from the laboratory.

A similar experiment carried out in West London was devised to solve a particular problem, but the Glasgow experiment is designed to test and compare

eight different systems of traffic control. The experiment started on May 10, and results so far are said to be encouraging. The experiment is controlled by a Marconi Myriad computer which has been used to link 80 traffic signals controlling a square mile in the centre of Glasgow. The systems under test do a variety of things, from minimizing the delay in networks controlled by fixed time signals to arranging for equal saturation on all branches of a crossroad. Each system is assessed by measuring the average journey time over standard routes with instrumented cars. Five of the systems under test have been tried previously, either in this country, Europe or the United States; the other three have been newly devised. As far as the RRL knows, this is the first time that a fully comparative experiment has been conducted. Traffic delays in central Glasgow, the RRL estimates, cost £2 million a year—if only 5 per cent of this can be saved, a reasonable estimate, the experiment would pay for itself in five years.

Following Parasites

THE Ministry of Overseas Development has made a grant of £45,000 to establish a new headquarters for what is called—somewhat alarmingly—the Blood Meals Service. This is a unit financed by the government to analyse the stomach contents of blood-sucking insects carrying malarial and other parasites. Smears of the stomach contents are sent from abroad, and their analysis provides clues to the feeding habits of vectors, and other information of importance to foreign workers and authorities such as the World Health Organization. Until now this has been done at the Lister Institute of Preventive Medicine, Elstree, but work has now begun on the new centre at Silwood Park, near Ascot, the field station of Imperial College, and it is hoped that the service will be able to move there early next year.

The Ministry's grant also covers the cost of the service for the next three years, and the new director of the unit, Mr Peter Boreham, is hoping to be able to carry out research on the pathogenesis of trypanosomiasis as well as operating and improving the service itself. The unit will be an important addition to the research teams at Silwood under the direction of Professor T. R. E. Southwood. The Blood Meals Service was founded in 1948 by Professor Bernard Weitz, who continued as director until this September, when he left to direct the National Institute for Research in Dairying at Shinfield, Berkshire.

European Forestry

FORESTRY cannot keep pace with the marked growth of industrial production. This is one of the important findings of a report called *Cost Studies in European Forestry*, published by the Royal College of Forestry in Stockholm.

Conditions in forests and forest industries are considered in detail for each country, and the results include the share of forestry in the gross national Product, total roundwood balances, external trade in forest products and wage development. Data for Sweden served as a standard for the work in other countries and analysis of material was carried out at the Royal College of Forestry in Sweden. For the purpose of the study, Austria, Finland, Norway and