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difficulties facing planners of new towns. It is an excellent theoretical exercise, but how will it work in reality? Some crucial points remain in doubt. Will development of the city be coordinated sufficiently, both internally and regionally ? Many of the planners' proposals for the city have had to be guesswork because the Government's economic strategy for the south-east will not be completed before December 1969, the date of the completion of the master plan for Milton Keynes. The city's future depends on the attraction of the right industries-if it does not succeed it could become a dormitory town for Birmingham. Another problem is water supply. Buckinghamshire Water Resources Board only has definite sources of supply decided up to 1975-only the first six years of the thirty years of rapid growth of the city as proposed. in the report.

#### ARCHAEOLOGY

### **Treasure Trove**



Three of the five late Iron Age gold torcs or neck collars which were found last October at Belstead near Ipswich by a workman driving an excavator. The torcs, declared treasure trove in December, are now on permanent exhibition at the British Museum and their finder has received a £45,000 reward. Each is about 8 inches in diameter and their weight ranges from 858 to 1,044 grams. Four of the five are decorated in the same style as the torc found several years ago at Snettisham in Norfolk and also now at the British Museum. The Snettisham torc was found with a silver coin of the second quarter of the first century BC stuck in one of its decorated ring terminals. Because of similarities of style the Ipswich torcs are believed to date from this period. They are particularly valuable to archaeologists because they are unfinished and thus reveal the methods used by Iron Age goldsmiths. The three illustrated, for example, show the sequence in which the incised decoration was built up on the ring terminals. (Photographs by courtesy of the British Museum.)

# conservation Naturalists to Unite?

NATURALISTS seem to have been taken by surprise by the memorandum "Plan for a Merger" in which Sir Landsborough Thomson has set out proposals for a society to coordinate bodies concerned with nature conservation in Britain. Sir Landsborough proposes a merger of the Royal Society for the Protection of Birds, the Society for the Promotion of Nature Reserves and the Council for Nature. This is not a new idea; the SPNR and the RSPB already have a liaison committee which agrees that a merger is a good long term aim, and throughout 1968 there were discussions with the Council for Nature about the formation of a new organization. Sir Landsborough Thomson's document, produced independently of the Council for Nature of which he is chairman, is intended to give some impetus to this process of rationalization, which many people believe cannot be hurried.

There is considerable overlap of function between the existing organizations, although each originally had a distinct purpose. The RSPB, with more than 30,000 members, has 104 acres at its headquarters in Sandy, Bedfordshire, where 13,000 birds are kept and ecological work is carried out. The SPNR devotes most of its energies to being the national mouthpiece of the county naturalists' trusts (which now cover the whole of England, Wales and Scotland), encouraging local government, river authorities, sporting organizations and similar bodies to adopt an enlightened attitude to conservation. The Council for Nature was set up in 1958 to represent and coordinate the voluntary conservation movement as a whole. More than 400 societies are affiliated, and several of them, including the RSPB and SPNR, are represented on the council. It is the fact that the Council for Nature is an affiliation of societies and not an autonomous society that is worrying some people about the merger-it looks as if the Council for Nature would be merging with part of itself. Last April a new constitution was adopted and the old executive committee was replaced by the present council of members elected by the affiliated bodies. These changes were regarded at the time as a step towards closer cooperation with other voluntary bodies.

Sir Landsborough Thomson's proposed constitution for the new merged society suggests that there should be both corporate and individual members, with all bodies associated with the Council for Nature as corporate members and the county naturalists' trusts as "associated trusts". Members of the RSPB and the SPNR would be able to be members of the new society, which would have a name such as the "Royal Society for Bird Protection and Conservation"—fresh permission would probably be needed for the "Royal" title. Two councils are suggested, one elected and executive and one appointed and advisory. The proposed constitution includes provision for a magazine, on the lines of *Birds* now published by the RSPB, but with a wider scope and title such as "Birds and Habitat".

### POLLUTION

## London grows Cleaner

THE River Thames and London's air are becoming progressively cleaner. That is the cheerful message of the annual report for 1967 of the Scientific Adviser to the Greater London Council which says that, for the first time for more than half a century, "not a single sample (from the Thames) at any time during the year was devoid of oxygen". The river is sampled in



Dissolved oxygen in the Thames at low water (continuous line) and at high water (broken line) between July and September, 1967.

alternate weeks at high and low water at twenty-nine sites covering ninety miles of its course (see Figure). But even if the present rate of improvement is maintained, it will be many years before anglers find it worth their while to unpack their creels on London Bridge.

The Greater London Council, which is charged with preventing pollution of the Thames, in fact puts more effluent into the river than any other organization, so that it can congratulate itself on the way improvements in sewage treatment-£20 million is being spent at the Beckton sewage works alone-are taking effect. But the report emphasizes the need for continued surveillance of trade effluents. In the past four years, the council has increased the analysis of trade effluent samples from 15,621 samples a year in 1964 to 38,804 in 1967. Of the 38,804 samples taken in 1967, 7.7 per cent were unsatisfactory and some of them extremely Thus one effluent contained 430 mg per litre of SO. cyanide, or 43 times the maximum permitted concentration, and another contained 4,620 mg per litre of formaldehyde, 230 times the permitted concentration. Needless to say, the pleas of indicted traders were almost invariably that the pollution resulted from accidents. The council says, however, that it intends to maintain its vigilance. But overall, the percentage of unsatisfactory trade effluents fell marginally from 8.9 per cent in 1966 to 7.7 per cent in 1967.

The improvement of London's air since the 1956 Clean Air Act has been even more impressive than the cleansing of the Thames. In 1967, the average concentrations of smoke and sulphur dioxide were 55 and 161 microgrammes per cubic metre respectively, compared with 65 and 175 microgrammes per cubic metre in 1966 and 190–200 and 230–235 microgrammes per cubic metre in 1955–6. As a result of these improvements, newly cleaned buildings—St Paul's and the National Gallery for example—should stay clean for decades.

Those who know the clouds of smoke about the Bankside power station on the opposite side of the river, less than half a mile south of St Paul's, may be forgiven for asking what point there can be in cleaning St Paul's. During 1967, a special survey of this problem was carried out, and the report says that in southerly winds, the air by the cathedral is not abnormally polluted and that highest concentrations of sulphur dioxide occur in the air at St Paul's when the prevailing winds are from the east. The Bankside smoke plume seems to have been exonerated.

#### WATER POLLUTION

# **Another Lead Balloon**

POLLUTION does not appear to be the World Health Organization's strong point. Its recent report on environmental pollution was flaccid (Nature, 221, 404: 1969) and no doubt its successor, Water Pollution Control in Developing Countries (Technical Report Series No. 404), published last week, will receive a similar unenthusiastic welcome. The new report is the outcome of a meeting, in December 1967, of seven members of a WHO expert committee on water pollution control, one representative from the Economic Commission for Europe and one from Unesco. They, in turn, have based their recommendations on the reports of an inter-regional seminar organized by WHO in New Delhi in November 1967 at which fourteen countries were represented. At best, the report contains straightforward, sensible stuff; it provides an insight into the situation in particular countries and it may also provide personnel in these developing countries with a broad but not detailed plan of attack on the management of water resources and the control of pollution.

This said, however, the report is unremarkable and not very original. Thus it states that, in any country where the demand for water is increasing and water pollution is reducing usable water resources, the only rational way to protect the public health is the organization of water pollution control as part of overall planning of the water economy. The first step is to record existing resources of both surface and underground water. The next is to predict the future needs for water—first for urban, industrial and agricultural uses, and second for recreation, power generation, transport of wastes and so on. If it looks as though future needs will exceed resources, then provision should be made to make good the deficit by water and waste-water treatment, and by storage, conservation, recovery and re-use.

Equally uninspiring is the section on water quality management. The committee concludes that the way in which polluted water is treated depends on the way in which it is to be used or disposed of. On the one hand, it recommends that developing countries should favour low-cost systems which do not require complex machinery for treating sewage and industrial wastes; for example, irrigation, stabilization ponds and oxidation ditches. But in the same breath, the report states that, in selecting methods for treatment of sewage, considerations of public health should always come before those of cost.

### MEDICAL EDUCATION

### Echo of Todd in London

FEARS that the Todd report on medical education (*Nature*, **218**, 121; 1968) might be pigeonholed will be partly allayed if the suggested revisions of the regulations for the London MB and BS degrees get off the ground. Liberal beyond expectation, the suggestions—outlined by a sub-committee on the medical