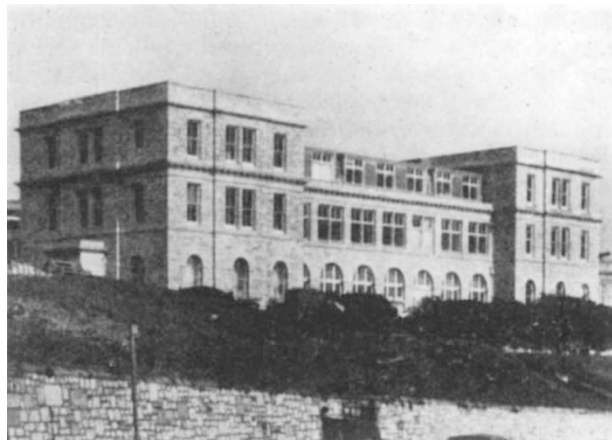


Oceanography at Plymouth

THE marine sciences are an old, if not a venerated, discipline in Britain, but the British Government still seems scarcely aware of their potential importance. Most of the money for research comes from the Natural Environment Research Council, which spent about £1,515,000 in this area in 1967, a reasonable figure when compared with Britain's GNP, but low for the number of people and the number of establishments doing some work on marine science. What is really needed is some body to coordinate information and research and to encourage greater exchange between research and industry.

One of the few laboratories which actively promotes a closer exchange between scientists in marine biology in Britain and abroad is the Marine Biological Association. The association is an independent research institute with very strong university connexions which receives 95 per cent of its quarter of a million pound budget from the NERC; it has a permanent research staff of only 20 scientists but is host to over 100 visiting research workers during the year and can accommodate 15 to 20 at any one time. The association's laboratory at Plymouth is one of the few research establishments in Britain actually based on the coast—the other principal



Marine Biological Association Laboratory, Plymouth.

one is the Scottish Marine Biological Association—and is therefore visited regularly by professors and students who would not otherwise have access to the sea. While the NERC research vessel unit will not remain in Plymouth because of a lack of docking space (*Nature*, 218, 999; 1968), the association's director, Dr J. E. Smith, is confident that Plymouth will grow as an oceanographic centre, and where the scientists are, the ships will have to call. As a start, the association itself is drawing up preliminary plans for a new 19,000 square foot addition to be built on a two acre site in West Hoe promised by the city of Plymouth. The NERC has already approved the project, and if the Treasury makes funds available the new building should be ready within four years. The main purpose of the addition is to give the association some much-needed breathing space by placing the teaching rooms, the computer, the big tanks and the ships' workshops and instrumentation there, though a new unit studying inshore hydrography will also be based there. Dr

Smith hopes that these additional facilities will draw scientists from other disciplines, such as physical oceanography.

The association now has four boats, having just taken delivery of a 40 foot launch for quick trips to and from nearby sites with live material and for reaching grounds that were previously inaccessible. While the largest ship, the 120 ft R.V. Sarsia, is out most of the year on cruises lasting from five to fourteen days, it is badly designed for work and cannot take more than three scientists on any one cruise. The two other ships, the 60 ft Sula and the 30 ft Gammarus, are both used for day collecting trips. A new vessel at least the size of the Sarsia is needed, though the decision rests with the NERC and will be viewed in light of the other boats in the NERC's fleet, used primarily by the universities. In the meantime, space on the various boats is arranged more by individual goodwill than by formal policy; a good system until it breaks down.

The most widely publicized work done by the association during the past year concerned the oil pollution caused by the sinking of the tanker Torrey Canyon. The results of the study have been published by the Cambridge University Press (*Nature*, 218, 499; 1968). The Torrey Canyon disaster emphasized the weakness of former ecological surveys; there have been no studies so far of entirely pollution-free areas to serve as a basis of comparison. In an attempt to remedy this situation while there is still time, the association plans to study two rivers, the Tamar, which flows into Plymouth and is now relatively unpolluted nearer its source, and the Camel, on the North Devon coast, which Dr Smith thinks is still completely untouched.

Power Struggle

THE argument over the cost of generating electricity in Britain has broken out again. The intensification of the struggle between Lord Robens, chairman of the Coal Board, and Sir Stanley Brown of the Central Electricity Generating Board suggests that the decision about the fuel for the proposed power station at Seaton Carew is imminent. Lord Robens claims that an independent inquiry into fuel costs would show that nuclear costs have consistently been underestimated, while the process of streamlining the coal industry has been ignored. By 1970–71, he claimed in a letter to *The Times* this week, the National Coal Board will have available about 70 million tons of coal at a price of 3.25 pence per therm. Anticipating a little, he made a firm offer to the CEGB to supply coal at this price to fuel Seaton Carew power station. This would produce electricity at a generated cost of about 0.55 pence per kilowatt hour, according to the NCB, against a CEGB estimate of 0.51 pence for a nuclear station. Lord Robens pointed out that nuclear power costs have shown a consistent escalation—Dungeness B, originally to generate electricity at 0.46 pence per kilowatt hour, is now being quoted at 0.57 pence.

In reply, Sir Stanley Brown pointed out that the same considerations also apply to coal fired stations. The cost for Drax, the latest coal fired station, has increased from 0.56 to 0.60 pence per kilowatt hour, and the danger of a further increase in prices is more serious for stations in which fuel makes up a substantial part of the cost. Nuclear stations, with their low fuel