It is felt in some quarters that a school of fishing should be established in Great Britain, particularly for the training of fishery officers and others who will be going out to British Colonies under the Colonial Development Scheme. It is doubtful whether there would be enough trainees derived from this source to support a satisfactory school on a permanent basis. But the British fishing industry also would benefit if the recruits to its ranks could have a period of training in a well-planned and wisely conducted school of fisheries such as that at Cronulla. Fishing in Britain and other European countries has long ceased to be run on primitive 'rule-of-thumb' lines, and there seems at present to be a decided danger that British fishermen may be outstripped by Continental rivals who give more attention to the proper study of fishing in all its aspects. G. A. STEVEN

BOTTOM DEPOSITS OF LAKE WINDERMERE IN RELATION TO THE QUATERNARY HISTORY OF THE BRITISH ISLES

THE importance of the bottom deposits of Lake Windermere as a source of information concerning the post-glacial history of north-western England has already been indicated by the stratigraphy and diatom sequence established by Winifred Pennington (Mrs. T. G. Tutin) (*New Phytol.*, **42**, 1; 1943). These deep-water deposits (brought within reach by the unique qualities of the Jenkin core-sampler) have been used again by the same worker to extend our knowledge into the late-glacial period (*Phil. Trans. Roy. Soc.*, B, **233**, 137; 1947). Water-laid, laminated clays are found above and below a layer of grey detritus silt which contains remains indicating that it was laid down during a cool-temperate phase. This is tentatively correlated with the Allerød oscillation established in north-western Europe and Ireland.

Analysis of the post-glacial layers (utilizing both pollen and macroscopical plant remains) reveals a fairly close correlation with events in East Anglia, except in the later stages where a *Salix* maximum occurs in Zone IV and *Betula* assumes, in Zone V and early Zone VI, the dominance characteristic of profiles from the west of Britain. *Tilia* does not appear until Zone VII, and *Fagus* and *Carpinus* are completely absent. *Pinus*, which appears to be consistently over-represented in the deep-water deposits, falls off very rapidly at the transition between Zones VIc and VII, but always reappears at a characteristic position near the surface, where the brown and indurated clay gives way to soft, black, rather unconsolidated gyttja. This reappearance may be due to planting (a rise in the importance of grass pollen in deposits laid down 2,000–2,500 years ago having already suggested the beginning of clearance of the primeval forests).

Samples from beneath shallow water provided the clearest pictures of the late-glacial and early post-glacial changes, but deposition appears to have ceased (due to turbulence) when the mud has approached to within about three metres of the water-surface. The lesser clarity of the early stages of deep-water samples appears to be due to a very slow deposition here.

Possible correlations of dating with geological reports for north-western England, Ireland and Scandinavia are clearly shown in tabular form, and it is concluded that the lower laminated clay is contemporaneous with the Scottish re-advance, the Carlingford re-advance in Ireland and the Lower *Dryas* clay in Denmark, and its end is placed at about 10,000 B.C. The commencement of the deposition of the upper laminated clay is placed at 8,300 B.C., and its continuation for some four to five hundred years (estimated by counting the varves) is believed to be the result of a valley glaciation in the Lake District. This is correlated with the Antrim coast re-advance and valley glaciation in the Wicklow Mountains, the Upper *Dryas* clay of Denmark and the formation of the great Fenno-Scandian moraines. In the post-glacial period, a dating between 6,300 and 6,000 B.C. for the Boreal-Atlantic transition also agrees with Scandinavian results.

A brief correlation with the previous work is made and the greater detail revealed by pollen-analysis is demonstrated, while the same technique is also made to shed further light on the stratigraphical results previously obtained. H. G. BAKER

THE NORWEGIAN POLAR INSTITUTE

ON March 1, the Norwegian Polar Institute (Norsk Polarinstitutt) was established in Oslo in order to continue and expand the activity of Norges Svalbard- og Ishavs-undersøkelser. The latter office was founded in 1928, when it took over the work which since 1909 had been carried out by Government-supported expeditions to Svalbard. Norges Svalbard- og Ishavs-undersøkelser has been engaged in the preparation of topographic maps and hydrographic charts of the Svalbard region and in geological investigation on Svalbard. It has provided facilities for numerous scientific workers to visit Svalbard and Eastern Greenland, and has carried out a large amount of practical work such as the establishment of aids for navigation and maintenance of weather stations.

Besides continuing this work, the Polar Institute will broaden the scope of the scientific activity, partly by adding specialists of its own permanent staff, and partly by securing the collaboration of specialists who are connected with university institutions in Oslo and Bergen and other scientific organisations. The sphere of interest will be expanded to include the regions of the Antarctic over which Norway claims sovereignty. It is hoped that the Polar Institute will be able to undertake, sponsor or stimulate geological and palæontological research, glaciological and meteorological studies as well as work in the fields of zoology and botany. The publications of Norges Svalbard- og Ishavs-undersøkelser (*Skrifter* and *Meddelelser*) will be continued from the Polar Institute without any break in the numbering.

The Polar Institute will not absorb organisations which are primarily engaged in scientific work in the polar regions, such as the Aurora Observatory at Tromsö or the Government Institute of Whaling Research in Oslo; wherever desirable, it will collaborate with these organisations.

The Polar Institute comes under the Department of Industry of the Norwegian Government, but Dr. H. U. Sverdrup, who has been appointed director,