of the horticultural staff, and it demands a botanist who will devote time to the development of the garden. These are not easy things to achieve in short-staffed departments, but needs must first be formulated before they will be satisfied.

There have been two threads running through this article. The problem of the provision of more botanic gardens in general and the problems of the university botanic garden in particular. The conclusion is that we must encourage the public park to develop some sort of educational display of plants, that this may be better to have a horticultural bias

because in this way it will command the enthusiasm of the parks staff. The second conclusion is that where possible the new (and sometimes the old) universities should develop a university botanic garden which can be open to the public but that where that is not possible the university should make its garden as freely available as possible to organized parties and should, by example and encouragement, help the parks department of the local authority to develop educational collections. Active botanic gardens should play an ever-increasing part in our cultural life.

OBITUARY

Sir James Wordie, C.B.E.

By the death of Sir James Wordie on January 16 both the University of Cambridge and the world of polar affairs have lost a valuable and experienced adviser. James Mann Wordie was born on April 26, 1889, in Glasgow, where he afterwards attended the Glasgow Academy and the University before moving on to the University of Cambridge in 1910 to continue his geological studies. From this time on, his life was centred about Cambridge for more than fifty years although his interests and contacts in Scotland continued.

He was elected Fellow of St. John's College in 1921 and was in turn supervisor, tutor, senior tutor, president and Master. Many men who passed through his hands during these years have since made their mark in various fields, including that of his greatest interest—polar research.

Wordie's interest in polar regions was stimulated by a visit to Alaska in 1913 and by contact in Cambridge with the geologists who had just returned from Scott's last expedition. He joined Shackleton's Imperial Trans-Antarctic Expedition of 1914–16 as geologist and senior scientist. After a year spent drifting in the ice, first in the ship, then living in tents on an ice floe after it was crushed, the party reached Elephant Island, where they spent the winter under their upturned boats while Shackleton made his remarkable boat journey to organize their relief. After return to England he served in the Royal Artillery until he was wounded and invalided home.

In 1919, Wordie joined the late Dr. W. S. Bruce as second-in-command of an expedition to Spitsbergen, which started a pattern, that has grown considerably in recent years, of university undergraduates taking an active part in summer expeditions to polar regions. In 1921 he led a small expedition to Jan Mayen Island, and in addition to geological studies he led the first ascent of Beerenberg (8,090 ft.). During the following ten years he led three more expeditions to East Greenland, which in addition to the immediate scientific results stimulated an interest in polar regions of men such as Sir Vivian Fuchs, the late Augustine Courtauld, P. D. Baird, of Canada, Prof. Gordon Manley and M. A. F. Barnett, of New Zealand. He continued with similar expeditions in 1934 and in 1937, travelling via West Greenland to Baffin and Ellesmere Islands. His last major trip was to the antarctic in the southern summer of 1946–47, when he visited the South Orkneys, the South Shetlands, where he had wintered in 1916, and Graham Land on behalf of the Colonial Office.

Even before the Second World War, but especially during and since the War, his advice and influence played a large part in the development of polar activities from the United Kingdom. He was a member of the "Discovery" Investigations Committee of the Colonial Office from its inception in 1923 until it handed over its responsibilities to the newly formed National Institute of Oceanography in 1949. He was a founder member of the Committee of Management of the Scott Polar Research Institute in 1926, and was its chairman during 1937–55. His lifelong interest in glaciers and sea ice led to his appointment as reporter for glaciology on the main planning committee for the International Geophysical Year as well as the vice-presidency of the International Commission of Snow and Ice and of the British Glaciological Society. He was chairman of the British Committee of the Norwegian-British-Swedish Antarctic Expedition 1949–52, and vice-chairman of the Committee of the Trans-Antarctic Expedition 1955–58. This expedition was initiated during his term as president of the Royal Geographical Society. It was also during this presidency that the first ascent of Mount Everest was made, and Wordie had played a part in the important decisions made by a joint committee of the Royal Geographical Society and the Alpine Club which led to this success. His last major task was that of chairman of the British National Committee for the International Geophysical Year and its various Antarctic Sub-Committees. His long-held belief of the accessibility of the eastern side of the Weddell Sea was well proved by the successful establishment of the Halley Bay Station by the Royal Society International Geophysical Year Antarctic Expedition, as well as the establishment of the Shackleton Base of the Trans-Antarctic Expedition.

For his own exploratory activities, Wordie was awarded the Back Grant (1920) and the Founder's Medal (1933) of the Royal Geographical Society, the Bruce Medal of the Royal Society of Edinburgh (1926) and the Gold Medal (1944) of the Royal Scottish Geographical Society. His administrative activities in polar affairs resulted in his award of the C.B.E. in 1947 and a knighthood in 1957.

James Wordie was a quiet and modest man, whose strength of character and shrewd judgment caused many responsibilities to be thrust on his shoulders. Throughout his life the support and interest of his wife as well as that of his three sons and two daughters provided an atmosphere against which he could give of his best in public responsibilities.

G. DE Q. ROBIN