

## OBITUARIES

GEORG CARL AMDRUP, who died on 16 January 1947, aged 80, was leader of the Carlsbergfond expeditions to Christian IX Land in East Greenland in 1898–99, and again in 1900. The first consisted of a wintering party at Angmagssalik, and in June–July 1899 Lieutenant Amdrup, as he then was, made a boat journey north to Agga Ø, covering 450 miles in 53 days. On the second, his ship, the *Antarctic*, after visiting Jan Mayen and Sabine Ø, proceeded to Kap Dalton, south of Scoresby Sund, and at this point on 21 July Lieutenant Amdrup was landed and next day set out on a small boat voyage accompanied by Einar Mikkelsen and two seamen. Amdrup's voyage down the coast lasted for 43 days, from 22 July to 2 September, when he reached Angmagssalik, and where his party was later picked up by the *Antarctic*, which had meantime been working in Scoresby Sund under Hartz. These expeditions, which had been carefully planned and competently carried out, yielded rich scientific results, Amdrup himself being responsible for the report on the old Eskimo settlements and the dying out of the natives in fairly recent times.

Vice-Admiral Amdrup became a member of the Greenland Commission in 1913 and was responsible for the publication of *Meddelelser om Grønland* after the death of Admiral Wandel in 1930. He was active in everything concerning Greenland, and his death removes one of the last of the distinguished crowd of older Danish explorers who, step by step, completed the first exploratory survey of the Greenland coast. J. M. W.

G. P. GORBUNOV, who died recently, was a biologist who did much work in the Soviet Arctic during the period of intensified scientific activity which followed the Revolution. He held a senior position in four of the series of expeditions to Novaya Zemlya organised by Professor R. L. Samoylovich, the Director of the Institute for the Study of the North (which later became the Arctic Institute). He carried out marine biological, zoological and ornithological work on those expeditions which went to Novaya Zemlya in 1923, 1924, 1925 and 1927. In 1927, as deputy leader of the expedition, he was a member of the party which sailed from the north of Novaya Zemlya to Zemlya Frantza-Iosifa (Franz Josef Land) and back doing hydrological work. He again visited Zemlya Frantza-Iosifa in 1929 when he was marine biologist of the expedition in the icebreaker *Georgi Sedov*; this voyage included a cruise in the northern part of the Kara Sea, hitherto almost unvisited. In 1930 he was again in the *Georgi Sedov*, which this time revisited Zemlya Frantsa-Iosifa and the northern part of the Kara Sea and then went on to Severnaya Zemlya. He was the biologist on board the *Sibiriyakov* during her voyage in the Kara Sea in 1933, and on the *Sadko* in 1935 when northern parts of the Barents and Kara Seas were visited and 82° 41' N. was reached (on the meridian 87° 04' E.)—a record for a ship under its own power. He was again in the *Sadko* when she sailed to the same area in 1936. His scientific papers were largely published in the *Transactions of the Arctic Institute* and its predecessors, and cover such subjects as the Echinodermata and Decapoda of the Kara Sea, mammals and birds of Novaya Zemlya, and the birds of Zemlya Frantsa-Iosifa. He also in more recent years worked up and edited the biological results of expeditions in which he had not taken part, among others those of the *Georgi Sedov* drift of 1937–40.

STEINÞÓR SIGURÐSSON, who was killed on 2 November 1947 by a lava block during his investigation of the Hekla eruption in Iceland, was born in 1904. After completing his scientific studies in Copenhagen in 1929, he returned to Iceland as a teacher at the Reykjavík high school. In 1939 he was appointed chairman of the new State Research

Council (*Ránsóknáráð Ríkissins*) and Director of the University Research Institute (*Atvinnudeild Háskólans*). In this capacity he organised a systematic study of the hot springs. His most important contribution towards the investigation of Iceland was his participation, in 1930–38, as geodesist in the Danish survey of the central parts of the country. Since 1942 he was leader of the investigations of the Grímsvötn district of Vatnajökull with its subglacial volcano; and from 1943 he was leader, in company with Jón Eyþórsson, of the investigations of Mýrdalsjökull and its subglacial volcano, Katla. Steinþór Sigurðsson was an excellent expedition man and a prominent figure in modern Icelandic research.

H. W. A.

SERGEY SERGEYEVICH SMIRNOV died in 1947 at the age of fifty-two. He was a geologist and mineralogist with a very high reputation in the U.S.S.R., and was a member of the Academy of Sciences. He was known chiefly as a leading figure among those geologists who, employed by the Soviet Government, prospected the vast unexplored regions of Siberia in search of minerals. His field work was concerned almost entirely with the eastern part of the country. After studying for 10 years the natural resources of the Baykal area, in 1933 he turned his attention to the region of Verkhoyansk in north-eastern Yakutiya. Here he discovered the Imtandzha tin deposits, some of the largest in the U.S.S.R., and established the presence of silver minerals in the recently discovered Bezymyanoye ore bed. In 1934 he wrote a comparative mineralogical analysis of the western Verkhoyansk area, and in 1937 published a similar work on the Verkhoyansk-Kolyma area, farther east. In all, Smirnov published over seventy scientific papers. His theoretical work, chiefly on the mineralogy of metallic ore beds, was considerable. The importance of this, and more particularly of his field work, was recognised in the award of a number of State decorations and prizes, including the Order of Lenin three times and a first-grade Stalin Prize in 1946.

V. K. YESIPOV, the Russian biologist, died on 23 March 1942 at Arkhangel'sk. Born in 1896, he went to Kazan' University and thence to the Institute of Geography at Leningrad University. While still a student he went on an expedition to study fish in the lower reaches of the Lena. In 1930 he was one of the three biologists on the voyage to Zemlya Frantsa-Iosifa (Franz Josef Land) and Severnaya Zemlya in the icebreaker *Georgi Sedov*. He was leader of the Arctic Institute's expedition to Novaya Zemlya in 1931–33, one of the objects of which was the study of fishing and hunting possibilities. Meanwhile, he had become a member of the Arctic Institute staff, serving as librarian and later as head of the Industrial Biological Section (which deals with the scientific aspects of hunting and fishing). He subsequently worked at Murmansk, concentrating on ichthyological studies. Awaiting publication at his death was a large work *Ryby Barentsova Morya* [*Fish of the Barents Sea*]. Among his publications, besides some 400 papers, articles and reviews, attention may be drawn to *Petr Pakhtusov* (Arhangel, 1936) on the expeditions of the early nineteenth-century explorer of Novaya Zemlya, *Promyslovye Ryby Barentsova Morya* [*Commercial fish of the Barents Sea*] (1937), *Zveri, ptitsy i ryby Arktiki* [*Animals, birds and fishes of the Arctic*] (1937), and his contributions to the official *Spravochniki* [*Handbooks*] on the White, Barents and Kara Seas.