

OBITUARY

WILFRID BACKHOUSE ALEXANDER, British ornithologist, died at Parkstone, Dorset, on 18 December 1965, at the age of 80. His contributions to British and Australian ornithology have been recorded in recent issues of *British Birds*, the *Ibis*, *Nature*, and elsewhere. The present notice can only highlight briefly two of his activities which have been of outstanding importance to those interested in the polar regions. In 1928 he published his *Birds of the ocean* (New York and London, G. P. Putnam's Sons). This was not only the first of the modern series of pocket field guides; it gave a great stimulus to the hitherto neglected field of marine ornithology. Alexander's voyages to Australia, and his work there between 1912 and 1926, led to a lifelong interest in southern petrels, and especially their habits and distribution at sea. A second edition of *Birds of the ocean*, with major revisions, was published in 1954 and a German edition in 1959. This book is still the best guide for those who wish to identify birds in the Southern Ocean.

Alexander's second main contribution which had polar connexions was his association with the *Handbook of British birds*. He assumed responsibility for the sections, especially on "distribution abroad", which had previously been organized by F. C. R. Jourdain, who died suddenly in 1940. His contributions to this work will long remain a reliable source of information on many species which occur in the Arctic.

DOW VAWTER BAXTER, of the University of Michigan's School of Natural Resources Forestry Department, was born on 16 January 1898 and died on 31 December 1965. Born in Hillsboro, Illinois, he attended the University of Michigan where he received his BSc in forestry in 1921, his Master's degree in 1922, and his doctorate two years later. From 1919 to 1924 he was assistant in the Botany Department there, leaving in 1924 to become an instructor at the University of Wisconsin. He returned to the University of Michigan in 1926 and became professor in 1945.

His special interest was wood-destroying fungi and since 1930 he had led some twenty-five expeditions to investigate forestry diseases in Alaska and the Yukon. He travelled widely on botanical projects and was concerned in the experimental planting of forest areas in Iceland from Alaskan seeds.

GEORGE H. BLACK, who was Supply Officer in the United States Antarctic Expeditions of 1928-30 and 1933-35, died on 28 July 1965 at the age of 69. The remainder of his life was spent in the US Army and Navy, the Canadian Army, and for a short period, rubber-planting in Liberia. He served in both the First and Second World Wars.

Konsul LARS CHRISTENSEN, the Norwegian whaling magnate, ship-owner and philanthropist, died in New York on 10 December 1965 at the age of eighty-one, an almost legendary figure in the world of Antarctic whaling and exploration. He was born in 1884 at Framnæs near Sandefjord. His father, Chr. Christensen, and his father-in-law, Thor Dahl, were both men of great wealth and influence as ship-builders, ship-owners and ship-chandlers; he succeeded to both their businesses as a comparatively young man, but not before he had established his own and had gained the knowledge and experience to exploit his inheritance.

Chr. Christensen, after years of sealing and whaling in the Arctic, sent ships to Antarctic waters in 1892-94 in search of Right Whales; they returned to report no Right Whales but vast schools of Fin Whales. These were the pioneer voyages of C. A. Larsen in the *Jason* (1892-93 and 1893-94). By 1905, Christensen's factory ship, *Admiralen*, the first of its kind, was working off the South Shetland Islands and the era of Norwegian

Antarctic whaling began. Lars Christensen, however, after seven years training in shipping offices in Norway, England and Germany, struck out on his own. In 1907 he formed a small, and not very successful, company to carry coal to Canada and another engaged in coastal trade in north Norway. The same year he visited Canada and the United States to study whaling conditions, while two of his brothers went to search for new whaling grounds off South America. From these visits whaling ventures followed, in Chilean waters, and off the coasts of Brazil, West Africa, and Alaska, some successful and some not, but all adding to the sum of his knowledge of the industry. By the time he was thirty, Christensen had helped to start, and had managed, one coaling business, four small shipping companies and seven whaling concerns.

Only two of his early whaling ventures were successful. The A/S Condor pioneered a new development. At Grytviken in South Georgia they bought flensed whale carcasses and boiled out the oil, also producing guano, on board the sailing ship *Nor*. The A/S Hvalen also produced good profits when, in 1910, they took over the factory ship *Hvalen* and its licence for hunting whales off the South Shetland Islands for two seasons. The largest concern was the greatest disappointment. The Alaska Whaling Co was formed in 1911, with Christensen as manager. Whaling was undertaken both from the factory ship *Admiralen* and from a land station on Akutan Island, one of the Aleutian Islands. It was a fiasco from start to finish and Christensen severed his connexion with the company in 1914.

In 1911 he attempted a strange project with the Belgian polar explorer, Adrien de Gerlache. They contracted for the building of a timber sailing ship with auxiliary engine, *Polaris*, designed for cruises with tourists to Spitsbergen and east Greenland. The expected financial support from Belgium did not materialize and the vessel was sold to Sir Ernest Shackleton. Under the new name *Endurance*, she sailed south in 1914 for one of the most dramatic adventures in Antarctic history.

In 1911 Christensen became a founder-director of Hvalfangernes Assuranceforening Gjensidig, an organization of Norwegian whaling companies formed to guard their marketing interests; and was later vice-chairman of Den Norske Hvalfangerforening, a similar body founded in 1912. With his father, father-in-law and brothers he formed A/S Vera Fedtrafneri at Sandefjord in 1913 to exploit the patent of a hardening process for whale oil, a venture that brought the shareholders lucrative returns for many years.

Thor Dahl died in 1920 and Chr. Christensen two years later. Lars Christensen now controlled a wide ramification of family businesses of which the three main concerns, Bryde og Dahl's Hvalfangerselskap A/S, A/S Odd and A/S Ørnen, represented one of the largest concentrations of whaling interests in the history of the industry. The history of these controlling companies and their various subsidiaries is extremely complicated, with numerous changes in name and affiliation. At the beginning they operated chiefly from South Georgia and the South Shetland Islands, but also for a few years in north-west Australia. Later, the operations were mainly pelagic, in the Southern Ocean.

This is not the place to recapitulate in any detail the stormy history of whaling in the years between the two World Wars: the over-production of whale oil and the consequent financial crisis, the increasingly stringent national and international regulation of whaling, the lay-up of the Norwegian and other whaling fleets in 1931–32, the relations with the new whaling nations Germany and Japan, the quarrels about quotas, the British–German conflict about the Norwegian whale oil, the increasing power and demands of the trade unions, the wartime destruction of the whaling fleets and their subsequent reconstruction after 1946, with still greater problems arising from the serious depletion of the stocks of whales due to over-fishing. In all these questions, Lars Christensen was a central figure, and the part that he played was frequently decisive although often highly controversial. Looking well ahead, he foresaw the decline of whaling and steadily developed shipping as a second string; the Pacific Transport Line,

the Christensen Canadian African Line, the Norse Oriental Line of oil tankers and cargo ships evolved from the early 1920's. In later years his interests widened to include deep-sea fishing, sealing, nylon-spinning and oil drilling.

Lars Christensen made major contributions to Antarctic exploration and he was the chief architect of Norwegian territorial claims in the Antarctic. His name will always be associated with the expeditions aboard *Odd I* (1926–27), *Norvegia* (1927–28, 1928–29, 1929–30, 1030–31), *Thorshavn* (1932–33, 1933–34, 1934–35) and *Thorshammer* (1936–37). All of these he organized and sent out at his own expense.

The history of the coastal exploration of the Antarctic sector which later became Dronning Maud Land was almost exclusively the story of Christensen's enterprises. These voyages were primarily motivated by a desire to obtain information about new whaling grounds and to safeguard Norwegian whaling interests. It had been strongly felt in Norway that the regulations as to licences, leases and duties imposed by the British Government in the Falkland Islands Dependencies were restricting the Norwegian industry. While fully realizing the necessity for international agreement on rational exploitation, the Norwegians resented this foreign control which arose despite the predominating position that Norway had always held in Antarctic whaling and the prominent part that Norwegians had played in Antarctic exploration. During the years 1919–28, Norwegian whalers paid £437221 in duties to the Falkland Islands Government, and further duties were paid to the New Zealand Government for Ross Sea licences. Lars Christensen himself had never approved of the "sector principle" as applied in the Antarctic, but he had strongly urged Norwegian territorial claims in order to counteract the extension of British claims. It was not until after 1929 that almost the entire whaling industry became pelagic and therefore largely independent of shore stations and the licensing system. It should be recalled that British claims to the Falkland Islands Dependencies had been consolidated in 1908 primarily to control whaling at a rational level. It was not appreciated in Norway that almost the *whole* of the government revenues from whalers were used by the British Colonial Office to finance the "Discovery Investigations", a research organization charged with collecting the scientific information necessary for this control.

By 1927 Christensen had planned to bring under Norwegian sovereignty all the land between longs 20° W and 60° E, in addition to Bouvetøya and Peter I Øy. In this project he was supported by the Norwegian Utenriksdepartementet (Foreign Office), but he was instructed not to name or claim any land which had previously come under the dominion of other powers. For these reasons the expeditions promoted by Christensen concentrated most of their work in the sector between Enderby Land and Coats Land. These Norwegian expeditions between 1926 and 1938 brought back cartographic and scientific results of considerable importance, covering almost the whole stretch of coastline between Enderby Land and Coats Land, a region which was visited by no other expeditions during this period. A Royal Decree of 14 January 1939 placed this region under Norwegian sovereignty.

Lars Christensen's original aims were thus realized in ample measure. Dronning Maud Land, Bouvetøya and Peter I Øy all became Norwegian territory. The Bouvetøya whaling ground proved to be a gold mine. The results of his expeditions were published in *Scientific results of the Norwegian Antarctic expeditions 1927–38 et seq. instituted and financed by Consul Lars Christensen* (Oslo, 1935–61). In his own book *Such is the Antarctic* (London, 1935), Christensen describes some of this great saga. One of his outstanding gifts to his home town, Sandefjord, was the "Kommandør Chr. Christensens Hvalfangstmuseum". This fine whaling museum and library has grown into one of the greatest collections in the world on the history of whaling.

B.B.R.

ALEXANDER FORBES, Emeritus Professor of Physiology in Harvard University, was born on 14 May 1882 and died on 27 March 1965.

He graduated at Harvard University, then took his medical degree in 1910 and followed this by two years at Liverpool University. He returned to Harvard Medical School as instructor, becoming assistant professor in 1921, professor in 1936 and emeritus professor from 1948. During a long and distinguished career he published many papers on the nervous system, on which he was a notable authority. He served in the US Navy during the First World War, being occupied with radio direction-finding techniques.

Forbes's lifelong hobby was sailing, and a chance suggestion by Sir Richard Grenfell that he should extend his field by visiting Labrador and surveying one of the many uncharted fjords there led to a project to survey the northern coast of the peninsula. Again at Grenfell's suggestion, he decided to make use of aircraft for the survey. He acquired *Ramah*, a 90-ft schooner, and a Fairfield cabin monoplane-seaplane for air photography; his own aircraft, a small, open-cockpit Waco biplane, served for reconnaissance work. O. M. Miller, head of the American Geographical Society's Department of Surveying, who was then developing the technique using "high-oblique" photographs for small scale mapping from the air, directed survey operations. N. E. Odell and E. Abbe joined the party as geologist and botanist respectively. The survey eventually spread over three years—1931, 1932 and 1933—Forbes himself taking part in the first and last ventures. During the summer of 1931, the survey covered the east coast of Labrador from Nachvak Fiord to Cape Chidley, and into Ungava Bay. The following year, air photographs were taken for some 150 miles south from Nachvak Fiord to connect with existing maps. In 1935, Forbes and C. J. Hubbard, who had piloted the Fairchild seaplane on both previous occasions, returned and filled in gaps in the photographic coverage—particularly harbours and channels in the Cape Chidley area. Forbes described the three operations in *Northernmost Labrador mapped from the air*, *American Geographical Society, Special Publication No 22*, (New York, 1938) and *Surveying in northern Labrador*, *Geographical Review*, Vol 22, No 1, 1932, p 30–60.

During the Second World War, when he was serving as a Lieut Commander in the US Medical Corps, his knowledge of Ungava Bay and Labrador was put to practical use during the search for northern air-base sites for fighter aircraft being ferried to Europe. In *Quest for a northern air route* (New York, 1953), he wrote a spirited account of his activities in charge of surveys and supply convoys connected with the air bases at Goose Bay, Fort Chimo and Frobisher Bay during the years 1941, 1942 and 1943. They were strenuous years, particularly for a man nearly sixty, but to Forbes they were no more than another fascinating adventure.

B. FRANK HEINTZLEMAN, a notable figure in the development of Alaska, died on 24 June at the age of 78. He received forestry degrees at Pennsylvania State College in 1907 and at Yale University in 1910 and, from 1937 to 1953, was Regional Forester and Commissioner of the Department of Agriculture for Alaska. He served as Governor of the Territory of Alaska between 1953 and 1957.

CARL J. LOMEN, widely known as the "Reindeer King" of Alaska, died in Seattle on 16 August 1965 at the age of 85. Born in Minnesota of Norwegian parentage, at the age of 19 he accompanied his father, Alfred Julian Lomen, on a visit to Alaska, both attracted by the lure of the gold rush of 1900. They never returned to Minnesota, but set up a law office in Nome, where the rest of the family soon joined them.

As they grew up, Carl and his brothers, Harry and Ralph, occupied their abundant energies in mining and running a photographic business until the 1920's, when they began developing a reindeer industry in and around the Seward Peninsula. As far back as 1901 Carl Lomen had made many friends among the Norwegian Lapps who in 1898

had accepted contracts with Dr Sheldon Jackson's Reindeer Service to teach the Alaskan Eskimo reindeer care. Their operations over the next ten years are described in Lomen's autobiography *Fifty years in Alaska* (New York, 1955) and make an absorbing story of initiative and courage. In its heyday the partnership owned some quarter of a million herd of reindeer and employed hundreds of Eskimo as herders. A notable achievement during these years was the organization of the drive of 3000 reindeer, which the Lomens had sold to the Canadian Government, across Alaska and north-west Canada to a destination east of the Mackenzie River. These were required in replacement of the caribou herds on which many Eskimo depended for food, which had been slaughtered to near-extinction in many areas. The distance was over 1200 miles in a straight line, and the route traversed many times that distance over virtually unknown territory. The journey occupied just over five years and was carried through by Andrew Bahr, a Norwegian Lapp whom Carl Lomen persuaded to leave comfortable retirement in Seattle in consideration of "the great good the importation of reindeer would do for an entire people".

The Lomen family's efforts to organize reindeer husbandry in Alaska and to open up a market for reindeer products in the south came to an end in 1940, when they were forced to sell out to the United States Government because of legislation which sought to ensure the administration of the herds for the benefit of the Eskimo.

Lomen was, at the time of his death, President of the Lomen Commercial Corporation with shipping and other financial interests in Alaska.

J. H. HARVEY PIRIE, a member of the Scottish National Antarctic Expedition, 1902-04, died in Johannesburg on 27 September 1965, in his 88th year. He was born in Aberdeenshire and educated at Robert Jordan's College, Aberdeen, and Edinburgh University, graduating in science and medicine. Soon after graduating, he joined W. S. Bruce's Scottish National Antarctic Expedition, 1902-04, as geologist and medical officer, preparing himself by working at deep-sea deposits under Sir John Murray in the *Challenger* office and training in field work with the geological survey of Scotland. During the expedition he was one of the party of six who remained on Laurie Island when *Scotia* returned to Buenos Aires to re-supply in the summer of 1903-04. On his return, he published scientific papers in the *Scottish Geographical Magazine*, in 1904 and 1905; in the *Proceedings of the Royal Physical Society of Edinburgh*, in 1905-06; and contributed to the *Report on the scientific results of the voyage of SY Scotia* (Edinburgh, 1908).

He spent some years in private practice in Edinburgh before taking up an appointment as a government pathologist in East Africa. After army service during the First World War, he joined the staff of the South African Institute for Medical Research, remaining there until his retirement in 1941. He was President of the South African Medical Association and South African representative on the International Red Cross during the Second World War. He was also an enthusiastic and noted philatelist and edited the *South African Philatelist* for many years.

RUPERT DE BURGH TROUTON, for many years chairman and managing director of Hector Whaling Ltd and United Whalers Ltd, died at Cape Town on 10 May 1965. After schooling interrupted by ill health, he worked for a period in the Treasury under Maynard Keynes, with whom he maintained a close friendship until the latter's death, and then, in 1919, entered King's College, Cambridge, where he gained a first in the second part of the Economics Tripos. He later joined a stockbroking firm, and began to take an interest in whaling which resulted in the formation of Hector Whaling Ltd in 1928 and a subsidiary, United Whalers Ltd, in 1935. Hector Whaling Ltd should not be confused with the Norwegian company, Aktieselskapet Hektor, of Tonsberg, with which it was closely associated. He was a very active Director of both Hector and

United Whalers. In 1953 the latter was absorbed by Hector Whaling Ltd. At the end of 1959 Trouton was succeeded as chairman by Sir George Binney, whose first task was to supervise the sale of the major part of the company's whaling fleet to Japan. During these years Trouton became absorbed in the industry and he was an acknowledged authority on all its aspects.

The factory ship *Balaena* was one of his particular interests and responsibilities. Built in 1946, she incorporated a number of features novel at the time—a quick-freezing plant for meat, a liver-oil extraction plant and, most notable of all, accommodation for three Walrus amphibious seaplanes for whale spotting and ice reconnaissance. In 1929 a rather half-hearted attempt had been made by the Norwegian Hvalfangerselskapet Kosmos A/S to use a seaplane for whale spotting, but it had not been a success. Trouton decided to develop this idea. He was advised by Michael Daunt and John Grierson, who had been associated as test pilots in developing the first jet aircraft. The change from Meteors to Walruses must have seemed a humorous contrast for them, but Grierson was willing to give the idea a fair trial and undertook the necessary organization. Despite its success during the 1946–47 season (26 flights, totalling 103 hr, were made over the whaling grounds), the spotting of whales from the air and the direction of catchers to them was something which could not at that time overcome the more traditional methods. In the light of later events, perhaps this was just as well for the over-fished stock of whales. Trouton's appointment of H. H. Lamb as meteorologist to this same project (his services were lent by the Meteorological Office), initiated research into the possibilities of providing weather forecasts for the whaling fleets. Of special interest was Lamb's deduction of the position and main topographical configuration of parts of the Antarctic coastline, based on purely meteorological reasoning.

B.B.R.

WALTER FREDERICK WHITTARD, FRS, Channing Wills Professor of Geology at the University of Bristol, died on 2 March 1966.

He was born on 26 October 1902 and educated at the Battersea College of Science and Technology. He received his PhD at the University of London, and also later at the University of Cambridge.

In 1929 he was chief geologist on J. M. Wordie's third Cambridge Expedition to East Greenland which carried out survey and geological studies on the inner part of the fjord region of east Greenland. Lauge Koch's expeditions, which had started work in east Greenland at the same time as Wordie's Cambridge parties, were active that year in the outer part of the fjord region, and there was a general agreement to try to avoid overlap of research. In spite of a severely limited period of time on land, because of adverse ice conditions, Petermanns Bjerg was climbed for the first time, and a large amount of reconnaissance work carried out. Whittard was the main author of a number of geological papers, dealing with the Pre-Devonian rocks of the area, which were published during 1930 and 1931.

From 1931 until 1937 he held teaching appointments at Imperial College, London. In 1937 he was appointed to the Chair of Geology at Bristol, and his Arctic interests are reflected in the number of colleagues and students who have, over the years, carried out geological work in the Arctic, most particularly in Greenland, and often with Lauge Koch's parties.

As well as fostering interest in Arctic geology, Whittard was active in an unusually wide range of other geological fields. He published important palaeontological studies and carried out detailed mapping in parts of the Welsh Borderland. Ultimately he devoted much energy to research on the geology of the sea floor, particularly of the English Channel and Western Approaches. He was a leading figure in the planning and administration of the Faculty of Science and the university.

P.F.