Obituaries

NICHOLAS POLUNIN C.B.E., M.S., M.A., D.Phil., D.Sc., F.L.S., F.R.G.S. (1909–1997)

Professor Nicholas Polunin died in Geneva 8 December 1997. Polunin was so far sighted in environmental ethics of the earth and the future of the biosphere that the impact of his contribution will be greatly felt for many generations to come. He had been a member of B.S.B.I. since 1944, and one of his brothers, Oleg, was also well-known to B.S.B.I. members.

They were the sons of a Russian father and an English mother, Elisabeth Violet Hart, both artists at heart, although Vladimir, his father, was originally a forester. Nicholas' first marriage to Helen Lovat Fraser gave him a son and his second marriage to Helen Eugenie Campbell gave him two sons and a daughter. Helen Eugenie Campbell was of great assistance till the end of his life since she shared his vision, aspirations and knowledge of this fragile and endangered world.

Polunin had a brilliant career after obtaining a First Class Honours degree in Botany and Ecology from Christ Church, Oxford in 1932. He then left Oxford for two years to study at Yale for his M.Sc. which he received in 1934. He then resumed his research at Oxford and obtained his D.Phil. in 1935 and D.Sc. in 1942. Besides his academic prowess he was a great explorer with a particular penchant for Arctic regions and their botany, phytogeography, ecology, aerobiology and conservation. He was appointed the conservation editor of *International industry* from 1943 to 1946. This journal demonstrated the flair he had for global issues long before they became popular with other scientists.

Polunin's early interest was biased towards plant geography with emphasis on the flora of Spitzbergen, Lapland, Greenland, Iceland and Labrador, as well as various islands of the Canadian eastern Arctic. This involved a great amount of travel in times when communications were quite primitive and hazardous and while aviation was still in its infancy. In the great North he relied on the most environmentally friendly mode of travel, dog-sledge transport.

While an undergraduate at Oxford he joined a number of expeditions from which he collated much information for his books. The first, *Russian waters* was published in 1931. In 1932, he studied the plant life on Akpatok Island in the Hudson Strait which is described in the *Isle of auks*. During further botanical explorations in the 1930s in Arctic Canada, Greenland, Iceland and Lapland he recorded widely. He discovered many plant species new to science and continued his geographical interest by documenting botanical evidence for Viking movements between the North American continent and Greenland. He held a chair at McGill University, Montreal from 1947 to 1952. This post gave him geographical proximity to his study sites. He was in the party that discovered Prince Charles Island in the Foxe Basin, which was the last major island to be marked on the world's map, as well as Foley Island. Accounts of these discoveries appear in *Arctic unfolding* (1949). Between 1940 and 1948 he published in three volumes the *Botany of the Canadian Eastern Arctic: Pteridophytes and spermatophytes; Thallophytes and bryophytes* and *Vegetation and ecology*, followed by *The circumpolar Arctic flora* in 1959. He also published a standard field guide in 1960 called *Introduction to plant geography and some related sciences*. The number of scientific articles he managed to publish is also awesome, but all his invaluable contributions have been much needed considering the gloomy future for his planet – although Polunin remained hopeful all along as he outlined in *Rays of hope for planet earth and even its biosphere* in 1991.

Polunin also played a major role as research project director with the U.S. Air Force floating ice island project in the Arctic Ocean which continued when he took up the post of scientific adviser to the U.S. Army Corps of Engineers. Universities in Iraq (1956–58) and Nigeria (1962–66) also benefited immensely from his appointment in their Faculty of Sciences; however, political unrest forced him to return to Europe.

In 1967 he founded *Biological conservation* and edited it until 1974. That same year he founded the quarterly journal *Environmental conservation* aimed at influencing government policies. He was its editor until 1995 by which time he was 86 years of age! His reputation for boundless energy was well founded.

From the 1970s, without losing interest in botanical matters, he began to concentrate on global issues

vital to the survival of the planet. He sponsored and organised a multitude of international conferences on environmental and social issues with the aim of bringing together the world's academic scientists, industrialists, agriculturalists and governments. Some of these included: *The environmental future* (1972), *Growth without ecodisasters* (1980), *Surviving with the biosphere* (1990), *1st recycling congress* (1993). Public and governments' awareness were his utmost concern. He created a World Council for the Biosphere in 1983 in Geneva to promote public awareness of the growing threat to the environment. He contributed greatly to East-West relations as early as 1966 and in 1988 had a big impact with the International Vernadsky Foundation in Russia and its associated Centre for World Biosphere Studies in Pushchino. The 1986 Chernobyl nuclear tragedy demonstrated concretely the urgency for international cooperation on environmental matters and the need for nuclear disarmament. Acid rain travels over thousands of kilometres, chemical waste is dumped in poorer countries, large scale deforestation goes on daily for instant profit, the list is now endless. Polunin helped nations to communicate on a worldwide basis in organising and participating in many world symposia on an immense range of issues and topics irrespective of the countries' political persuasion. He sensed that highly populated countries such as India and China deserved as much attention as the industrialised polluting countries.

Polunin received many accolades such as the prestigious U.N. Sasakawa prize in 1987, the order of the Golden Ark in the Netherlands, the addition of his name to the Global 500 Roll of Honour, etc. These honours symbolised the world's appreciation and gratitude for his immense and far-sighted contribution to our environment and ecological ethos.

His early global approach to conservation was expressed in the 1971 International Conference in Finland. Twenty years later, in 1991, his belief in people power had not dwindled: he instigated the annual World Biosphere Day to be celebrated on 21 September each year to increase public awareness and celebrate the autumnal equinox. It is to be hoped that in future World Biosphere Day will be better publicised through his creation of Biosphere clubs and the resulting dissemination of his global concern for our planet.

Polunin also saw the importance of encouraging excellence among academics, he created the "Best paper" prizes given by the Confidential Award Committee of *Environmental conservation.*

Polunin's last major work in 1997 was the editing of a comprehensive text from the Foundation for Environmental Conservation compiled by Lynn M. Curme who has worked for the *Environmental conservation* journal for the last eleven years.

As a tribute to his quintessential work on our planet I would like to quote his own words from 1980: "One retains the abiding impression that Man now has the knowledge and means to save his world but still shows inadequate signs of acting in time and unselfish urge to do so" and from 1994 "... human existence on Earth is, after all, sustainable, we nevertheless must remember the fear of many that it is not, and the prophecy of some that all life on Earth is doomed. There being no other known source of life in the Universe than Planet Earth, the extreme threat, however remote, places on our species, as evidently the only existing organism with the intelligence of conscious foresight, the tremendous responsibility of safeguarding life – which, for healthy biospheric existence, means conserving all forms and manifestations of life that can be saved for posterity".

SELECTED PUBLICATIONS

BOOKS REFERRED TO IN THE TEXT

1931 *Russian waters.* E. Arnold & Co, London.

1932 *The Isle of auks* (an account of the Oxford University expedition of 1931 to Atpatok). E. Arnold & Co, London.

1948. *Botany of the Canadian Eastern Arctic.* Part 3. *Vegetation and ecology.* Bulletin Number 104, Biological Series 32, National Museums of Canada, Ottawa.

1949 *Arctic unfolding.* Experiences and observations during a Canadian airborne expedition in Northwest Territories and the Arctic Archipelago. Hutchinson & Co, London.

1959 *Circumpolar Arctic Flora.* Oxford University Press, London.

1960 *Introduction to plant geography.* Longman, London.

1997 *World who is who and does what in environment and conservation.* L. M. Curme. Ed.: N. Polunin. Foundation for environmental conservation. Geneva & St Martin Press, New York.

REPORTED INTERNATIONAL CONFERENCES, ETC. REFERRED TO IN THE TEXT

1972 *The biosphere today. The environmental future*. Proceedings of the first International Conference, 1971. Macmillan, London.

1980 *Growth without ecodisasters?* Proceedings of the 2nd International Conference on Environmental future. Macmillan Press and John Wiley & Sons, New York.

1981 13th International Botanical Congress held at the University of Sydney, Australia. *Journal of environmental conservation* **8**: 332.

1982 UNESCO ICSU conference – Establishing a scientific basis for land management. Paris. *Journal of environmental conservation* **9**: 74–75.

1983 3rd World Wilderness Congress in Inverness. *Journal of environmental conservation* **10**: 366–367.

1985 Beijing International Symposium on Hydrogen Systems. *Journal of environmental conservation* **12**: 189–190.

1988 Jubilee events dedicated to Vernadsky, V.I. 125th Birthday Anniversary including international symposia held in Leningrad, Kiev and Moscow. *Journal of environmental conservation* **15**: 187–189.

1990 4th Wright science colloquium – The evolution and demolition of planet earth. Held in Geneva. *Journal of environmental conservation* **17**: 281.

1990 4th International Conference on Environmental Future – Surviving with the Biosphere, held in Budapest. Hungary. *Journal of environmental conservation* **17**: 184–185.

1991 Rays of hope for planet earth and even its biosphere. *Journal of environmental conservation* **18**: 193–196.

1993 1st International recycling congress. Grand-Saconnex, Geneva. *Journal of environmental conservation* **20**: 179.

A. BATAILLE

CAPTAIN R. G. B. ROE O.B.E., R.N.
(1911–1997)

Captain Robert Roe served a distinguished career in the Royal Navy and came to live in Somerset in 1951, to take up an appointment with the Admiralty in Bath. Both he and his wife became very interested in the rich local flora and this gradually led to more detailed botanical studies. He joined the Somerset Archaeological and Natural History Society and became plant recorder for the society. He also became a member of the Botanical Society of the British Isles in 1956 and the B.S.B.I. vice-county recorder for North Somerset 1965–1993 and South Somerset 1978–1993.

During this time he realised there was an urgent need for an up-to-date Flora of Somerset and in 1966 he organised a meeting at Crewkerne to launch this project. Over the next 15 years he encouraged and organised a group of many local botanists to record Somerset plants on a tetrad basis. His records were kept meticulously and with instant access so that one could always be sure of a rapid and considered response to queries.

The Flora was published in 1981, adding Somerset to the counties at that time provided with a modern Flora. He also produced maps of Somerset plants, preparing the way for a future more detailed Flora. The production of the Flora was a remarkable achievement, considering it was all maintained on record cards as was the custom before the use of computers. He added several new species to the Somerset list. Especially notable was the discovery in 1959 of several clumps of *Leersia oryzoides* along the Bridgwater and Taunton Canal.

Chris Boon tells me the following story about Captain Roe's enthusiasm for plants. "This tale was recounted to me by my late father. It may be apocryphal, but it has all the hallmarks of a dedicated amateur botanist: Captain Roe was in command of a ship in waters off the coast of Eire and, being the good botanist that he was, he knew of the presence of *Pinguicula grandiflora* in the southwest of Ireland. He had not seen this plant in the wild before and, being so close to its native habitat, he thought that the opportunity was too good to miss. The obvious course to take was to have himself rowed ashore and search the coastal hills. The adventure was successful but whether any evidence was taken in the form of a specimen I do not know."

He was also a keen conservationist and a member of the Somerset Wildlife Trust. His wide knowledge of Somerset plants helped a great deal with site recording and the assessment of new sites for possible reserves. Captain Roe will be remembered as a kindly man with a quiet sense of humour, and we extend our sympathy to Isabell, his widow and constant recording companion.

J. G. KEYLOCK

DAVID ALLARDICE WEBB (1912–1994): BIBLIOGRAPHY OF PUBLISHED WRITINGS – ADDITIONS

A bibliography of the published writings of David A. Webb compiled by one of us (M.B.W.J.) was recently published in this journal (**21**: 7–13). It comprises 206 entries covering a wide variety of topics, written over a period of more than 60 years. It was there stated that further publications by David Webb would undoubtedly surface – as indeed they have. The present list of 28 includes overlooked botanical works, non-botanical articles published, for the most part, in Trinity College Dublin periodicals, a letter to *The Times*, and two works which had not been published when the bibliography was compiled.

Since publication of his bibliography a more accurate count of the number of families edited and species accounts written or co-written by David Webb for *Flora Europaea* has been made. Revised figures presented here replace those given in his bibliography: Volume **1**, 1st ed. (1964) – editor of 14 families and author of 303 species accounts; volume **2** (1968) – editor of 14 families and author of 192 species accounts; volume **3** (1972) – editor of six families and author of 351 species accounts; volume **4** (1976) – author of 30 species accounts; volume **5** (1980) – editor of nine families and author of 146 species accounts.

ADDITIONAL BIBLIOGRAPHY

1945

Exhibition of living art: a symposium. *The Bell* **11** (1): 619–620.

1946

The Italian corporative system by J. Meenan [Review]. *Hermathena* **67**: 123–125.

1949

Ups and downs. *Trinity* **1**: 26–29.

1951

Election to Fellowship. *Trinity* **3**: 19–21.

1954

Henry Horatio Dixon. *Trinity* **6**: 29–32.

1955

The Trinity College Dublin Trust. *Trinity* **7**: 23–26.

Origin and distribution of the British flora by J. R. Matthews [Book Review]. *Irish naturalists' journal* **11**: 351–352.

1956

Irish herbaria. *Proceedings of the Botanical Society of the British Isles* **2**: 18.

(with S. M. Walters) *Calystegia. Proceedings of the Botanical Society of the British Isles* **2**: 22–23.

1957

Die Pflanzenwelt Spaniens by W. Lüdi (ed.) [Review]. *Journal of ecology* **45**: 958–960.

An atlas of plant distribution in the British Isles: a renewed appeal to Irish field botanists. *Irish naturalists' journal* **12**: 195–198. [Unsigned, but in the light of their 1954 article on the subject, almost certainly attributable to D. A. Webb and J. Heslop-Harrison.]

1958

The Irish national and B.S.B.I. map grids. *Irish naturalists' journal* **12**: 252. [Unsigned, but attributed to D. A. Webb in the index to volume 12.]

1963

(with W. D. Finlay, J. S. Jackson & A. E. J. West) *A preliminary report from the Subcommittee on Nature Conservation*. An Taisce, Dublin.

1970

The Irish vice-counties. *Watsonia* **8**: 51.

1972

Some outstanding queries in Irish floristic botany, in *Botanical Society of the British Isles. Report of Recorders' Conference, Dublin, September 1972*, pp. 7–13. The Irish Regional Committee of the B.S.B.I., Dublin.

(with D. Synnott). [Field Meeting report:] Mullingar, Co. Westmeath, 23rd–27th July [1971]. *Watsonia* **9**: 195–197.

1977

Gardening in College: a 50-year retrospect. *Trinity Trust News* **2**(2):4–5.

1978

Saxifragaceae, in V. H. Heywood (ed.), *Flowering plants of the world*, pp. 146–148. Oxford University Press, Oxford. Reprinted in 1993.

1979

Plant species, in J. P. Haughton *et al.* (eds), *Atlas of Ireland*, p. 37. Royal Irish Academy, Dublin. [Compiler of distribution maps.]

1981

The Country Life book of orchids by P. F. Hunt and M. Grierson [Book Review]. *Irish naturalists' journal* **20**: 214.

1984

The European Garden Flora. Volume 2. Cambridge University Press, Cambridge. Joint general editor; also author of nine genus and 29 species accounts.

1986

The European Garden Flora. Volume 1. Cambridge University Press, Cambridge. Joint general editor; also author of eleven genus and 24 species accounts.

1988

Porophyllum *Saxifrages* by R. Horný, K. M. Webr and J. Byam-Grounds [Book Review]. *Botanical journal of the Linnean Society* **96**: 391–393.

General preface, in *Atlas Florae Europaeae* **1** [compendium volume] (ed. J. Jalas and J. Suominen), pp. v–vi. Cambridge University Press, Cambridge.

1991

Unfamiliar names. Letter to *The Times*, 5 September, p. 17. [Changes to place-names.]

1993

Flora Europaea. Volume 1, 2nd ed. Cambridge University Press, Cambridge. Joint general editor; also editor of 18 families and author of 274 species accounts.

1996

(with J. A. N. Parnell & D. A. Doogue). *An Irish Flora*, 7th ed. Pp. xxxiv + 337. Dundalgan Press, Dundalk.

1997

Religious controversy and harmony at Trinity College Dublin over four centuries. *Hermathena Quatercentenary Papers 1992*, pp. 95–114.

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