PAAVO KALLIO (1914-1992)



Professor Paavo Kallio died on 11 June 1992 in Turku, Finland. He was a botanist, a scholar on subarctic and arctic nature, and an enthusiastic supporter of international research in northern areas.

Paavo Kallio was born in Turku on 13 April 1914. He entered the University of Turku in 1935, but World War II interrupted his studies and he served as an officer, mainly in the north-

ern fronts in Lapland and in Karelia. Even during wartime, however, he continued to make observations on nature, especially on plants. He graduated in 1944 in botany, zoology, geography, and geology and defended his doctoral thesis on the morphogenesis of the unicellular *Micrasterias* algae in 1951. From 1945 onwards he worked at the Department of Botany at the University of Turku, first as an assistant, later as associate professor (1957-63), and finally as professor of botany until his retirement (1963-77).

Professor Kallio was both a plant physiologist and an ecologist. He also worked actively in floristics, mycology, and nature protection. He had a keen total interest in nature, especially in northern areas. This interest in the North had been aroused while collecting data in western Lapland for his M.Sc. thesis in geography. In the mid-1950s he organized field excursions for students to Lapland, and as a result of these trips a site for a field station was chosen in the northernmost part of Finnish Lapland at Kevo in Utsjoki (69°45′N). Even after retiring from his professorship, Paavo Kallio, the founder and the long-term head (1956-76) of the Kevo Subarctic Research Institute of the University of Turku, continued to serve as chairman of the board at Kevo (1977-84).

Kallio supported and "attracted" many kinds of research at the Kevo Station, especially in natural sciences, but also in other areas. Intensive international cooperation at Kevo was launched during the IBP (International Biological Programme), including contacts — unusual at that time — with Russian scientists (e.g., Academician B.A. Tikhomirov). Kallio visited Yakutia in 1968 and the Chukchi region in 1977. He made two research trips to Svalbard and several to North America, especially to the Quebec-Labrador peninsula. His role in initiating the Kevo Station's active cooperation both with research stations in northern Scandinavia and with many North American institutions was central, particularly with visitors between Kevo and universities in both Canada

(McGill, Laval, and Manitoba) and Alaska (Fairbanks). The Kevo Station has served as a base for field and laboratory studies also for many researchers from Germany, the United Kingdom, Poland, the countries of the former U.S.S.R. and of Scandinavia, and of course for students and scientists from other Finnish universities.

Professor Kallio also founded three forest-line arboreta at Kevo, where tree-line trees from different parts of the Holarctic region have been planted. The arboreta already offer an excellent research facility, whose value will only increase with time. Kallio was the initiator of the Northern Treeline congresses held at Kevo and Abisko, Sweden, in 1977 (Holarctic Ecology 2, 1979) and at Kuujjuaraapik (Poste-de-la-Baleine), Quebec, in 1981 (Collection Nordicana 47, 1983). He also participated in the MAB/Northern Science Network program. Under his guidance the Kevo Subarctic Research Institute became one of the most recognized northern research centres.

Kallio's aim was to make Kevo (and the biogeographical province Inari Lapland, 23 000 km² in area) into a "known point," a well-studied reference site for subarctic Fennoscandia. Results of these faunistic, floristic, and geographical research projects have been published in the series Reports from the Kevo Subarctic Research Station and in Kevo Notes. A detailed floristic study of Inari Lapland is under way: five parts (285 p.) have now been published in the Kevo Reports. Kallio and his co-workers have also worked on the photosynthesis of mosses, nitrogen fixation of lichens, taxonomy of the northern Betula species, Fennoscandian monitoring program of the northern tree line, damage and recovery of subarctic birch forests attacked by the geometrid moth Epirrita autumnata, and the ecology and use of cloudberry (Rubus chamaemorus), crowberry (Empetrum hermaphroditum), and angelica (Angelica archangelica) in northern Finland. He also supported research on the two most important animals in the native Sami people's daily life, reindeer and salmon. Kallio was an activist in the founding of the Sami Museum in Inari and acted as an expert in the planning of the Arctic Center in Rovaniemi. In addition to his scientific papers, he published numerous popular articles and books on nature and biological research in the northern Holarctic region.

Paavo Kallio was awarded many honours, such as honorary doctorates, the Finnish Government Prize for science popularization, and the Europe Prize of the Johann Wolfgang von Goethe Stiftung (Europa-Preis für Landespflege, 1987).

All his friends, colleagues, and students will remember him as an active and unprejudiced scientist, an inspiring and supporting teacher, and a warm and kind person. He will be greatly missed by all who knew him. The ashes of Professor Paavo Kallio were buried at the Kevo Subarctic Research Station in Lapland.

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