

## PETER ARNOLD FLORSCHÜTZ\* (1923-1976)

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The death of Peter Florschütz, on 27 May 1976, deprived the world of bryology of another of its spiritual leaders. Having fully regained scientific momentum after a period of managerial and organisational involvements connected with the changes in Dutch University life which occurred in the late sixties and early seventies, Florschütz had succeeded in starting a promising school of Utrecht cryptogamists, when, almost abruptly, death ended what would have become his scientific fulfilment.

Peter Arnold Florschütz was born in the Hague on 16 March 1923. His father, Gaspard Florschütz, was a chief inspector of the Hague city police and his mother was Elizabeth Philippina Engelina Scharwächter. He is survived by his mother, his wife, his three children and two sisters.

Peter went to the denominational highschool (Christelijke Hogere Burgerschool B) in the Hague and it was during his schooldays that his great love of nature developed. From the beginning it was clear that he was going to be no narrow specialist and that is was the totality of nature's creatures that would hold his interest. The Hague being a sea-side town, and the paternal home being within very easy cycling, even walking, distance of the dunes and the shore-line, it is understandable that Peter's first interest in animals and plants arose from contact with the birds, the molluscs, and the algae of the wide Dutch sandy beaches as well as the living population of the sand-dunes protecting the inner parts of Holland from the sea.

During these years Peter joined the Netherlands youth union for the study of nature (N.J.N.), a youth organization which forms the common background of so many of today's dutch biologists and has an obligatory retiring age of 23 years. This organization, which links young enthusiastic naturalists together in the formative years of their lives developed in Peter his combination of genuine interest in nature-study and "Wandervogel" romanticism, and introduced him to intense discussions of the world's affairs and the ideals and means to improve them, as well as an early awareness of the needs of nature conservation.

In this organization Peter joined the group making special studies of biological sea-shore phenomena (the "strandgroep"). At home he kept a beautiful marine aquarium, lovingly cared for and stocked with animals and plants collected by himself. He was one of the early editors of a modest journal "Het Zeepaard" (the Hippocampus) which published his first biological observations. These early accounts deal with animals and plants alike, and were characteristic of the Peter as so many came to know later — a man fascinated by life in all its forms. In later years he added a profound interest in herpetology, succulent and aquatic plants and cryptogamy but in these early years it was the birds and molluscs of the shore that were his main preoccupation. Though later developing into a highly competent scientific biologist, Peter never lost his touch of the "complete naturalist". Whenever travelling to study mosses, whether in the European alps, the mediterranean maquis, the Suriname forests, the Colombian paramos or the wide open spaces of the American West, he would never confine his interests to one group alone and within a few days he would be acquainted with the main mammals and birds, would have picked up various lizards, frogs and snails and have become surprisingly well acquainted with the general vegetation. As a guide on

\* A bibliography of the bryological papers by P. A. Florschütz will be published elsewhere.



field trips Peter remained unsurpassed both for his knowledge as well as his companionship, features of his personality which developed rapidly during his early years in the Hague where already he was in great demand to act as guide to local or visiting groups of naturalists.

This gift for popularization, for transmitting not only factual knowledge but also an awareness of life and its miraculous diversity, was the basis of Peter's gifts as a teacher and of his later successful contributions, through publications, lectures and field trips to organizations concerned with succulent plants, ich-

thyology and herpetology, gardening and horticulture, to mention only a few. During the last years of his life, he was active in stimulating a new interest in donkeys in the Netherlands: he even founded a "donkey-club" and had the satisfaction of seeing the dutch donkey population grow spectacularly within a few years.

Peter left the Hague for Utrecht in 1941, when he went to university with the object, of course, of studying biology. The war-years were difficult for students at Dutch universities. Although Leiden was closed as early as 1941, Utrecht remained "open" in some way until early 1943 when German demands to oust jews and to sign declarations of "loyalty" to the occupying forces, and thereby to refrain from any underground activity, became so tight and were refused so clearly that the German civil administration had no choice left except closure. Many students were abducted to Germany for forced labour but others went into hiding and Peter, who was exposed to a mixture of these two possibilities, ended up in hiding in the old botany building at the Lange Nieuwstraat during the hungry winter of 1944-1945 when the allies had encircled but not yet liberated the western part of Holland.

Hiding from an unwanted regime in a botany building and a herbarium was found to have its charms. Those most exposed to arrest slept in the herbarium where they also hid underground newspapers and radio-sets among or behind the herbarium specimens. An emergency hide-out, used during raids, was constructed under the amphitheatre of the main lecture room where Went, Pulle, Koningsberger and many others had conveyed botany and genetics to so many promising young scientists.

Immediately after the liberation Peter took his bachelor's degree (1945) and was appointed assistant in the division of systematic botany under Pulle and Lanjouw. His training for a masters degree started with a study of the moss collections of Suriname, which had never really been worked upon. It is difficult to say when this interest in bryology started, but by 1943 it was already well developed. In the move away from the sea-shore, other organisms had caught Peter's attention and among them were the mosses which ultimately became his main subject of research.

The master's degree was obtained in 1949, plant systematics having been the main subject of specialization. The year was also noteworthy in another way because Peter married Jeanne de Waard.

The years between 1949 and 1964, when Peter obtained his doctor's degree, went by fast, perhaps even too fast. The Utrecht institute of systematic botany (the University administration objected against the venerable name Botanical Museum and Herbarium) under Lanjouw (who had succeeded Pulle in 1949 as professor of systematic botany) was in full expansion. Peter had many teaching duties, practical courses and field trips. In these years it became clear that he was a highly gifted teacher (and examiner) with a great hold on students and with an incredible facility to transmit information, insight and ideas. In addition to a heavy teaching load, there was the ever present "diffuse interest" in everything living which consumed much of the remainder of his time. Botanists visiting him in his room in the University were always intrigued by the chipmunks on which he readily discussed or were startled by the baleful stare from a living iguana eyeing them while basking on a sunlit radiator grill. So it was no wonder that progress on his thesis, a descriptive account of the mosses for the Flora of Suriname, was slow. Other bryological interests also slowed the thesis work. For instance, with R. van der Wijk, Peter took the initiative to revive H. N. Dixon's old plans put forward at Cambridge in 1930, to publish a new "Index bryologicus" (see Taxon 3: 97. 1954). The Paris Congress, held in the summer of 1954, accepted

this proposal and charged Florschütz and van der Wijk to go ahead with the preparation of what was to become a 4000 page index to the mosses of the world, the *Index Muscorum*. This task was far easier to commission than to execute and as both editors had many other things on hand they applied for funds to put a full-time collaborator on the job. With the appointment of W. D. Margadant in September, 1956, work began in earnest. Thanks to the financial help of the Dutch foundation for pure research (Z.W.O.) and the United States National Science Foundation, the work was established on a solid basis and was completed and published in a reasonable period of time. The nineteen fifties, the years in which Peter Florschütz grew to maturity as a scientist and in which the study of plant taxonomy at Utrecht reached a peak, had the right atmosphere for the study of plant systematics and due to the generous support of Z.W.O. and N.S.F. almost any reasonable project could be put into practice. The liberality of those years with respect to support for the natural sciences now gives rise only to feelings of nostalgia.

Peter's share in the compilation of the *Index Muscorum* was that of providing additional quality control. The actual compilation was undertaken in Groningen, by Margadant and van der Wijk, and was completed in 1969 mainly by van der Wijk with occasional but important help from his co-editors.

To collect material for his thesis, Peter visited Suriname with his wife from October 1950 to until May 1951. Some moss collecting had been carried out before 1950, but the collections at Utrecht were far from representative. Most previous collectors had looked primarily at the phanerogams and bryophytes had only been collected incidentally. The most important classical sets were those of H. C. Focke (1835-1850) and F. L. Splitgerber (1837-1838), which formed the basis of the *Prodromus florae bryologicae surinamensis*, published by Dozy and Molkenboer in 1854. It would be nearly a century before further serious moss collecting was carried out. The thesis, *The mosses of Suriname, part 1*, was finally defended, cum laude, on 29th June, 1964 with J. Lanjouw as "promotor". The fifteen years spent on this modern moss flora of a tropical country had resulted in a treatment which was exemplary for the present wave of tropical bryology studies. Peter's progress was slow, not only because there were so many other exciting things in life, but also because he was a perfectionist who did not want to go to press before being absolutely certain of all his data. In fact he felt it necessary to adopt a monographic approach to all the genera involved, a course which necessitated a very thorough search of the literature and the identification of types, etc. No wonder then that Peter's attention also strayed towards the history of bryology, *Index Muscorum* and *The mosses of Suriname* alike making him study the work of some of the fathers of bryology such as Johannes Hedwig and Philipp Bruch.

The publication in 1960 of a facsimile reprint of Hedwig's *Species muscorum frondosorum* with an introduction written by Peter showed that he was an astute historian with an excellent capacity for sensing the background influences and methods of his predecessors. Preparations for a similar assessment of the contributions of Bruch, Schimper and Gumbel and their monumental *Bryologia europaea*, to be undertaken jointly with Margadant, were alas cut short by his death.

After publishing his thesis, which will constitute his most important and solid contribution to scientific bryology, Peter visited Suriname again in 1964/65 with P. J. A. Maas, this time to explore the Bakhuisgebergte and to collect additional material for the second part of the *Mosses of Suriname*.

In 1972 other avenues of research opened themselves to Peter when he became acquainted with the Colombian Paramos, one of those paradises where bryophytes and bryologists thrive on cold air and overly ample rainfall. A checklist of Colombian mosses was started by Peter in close collaboration with his wife, Jeanne

Florschütz-de Waard, who will now continue this work as well as that on the mosses of Suriname.

From the days of the 1950 Stockholm Congress, Peter had enthusiastically participated in international cooperation and in International Botanical Congresses in particular. He was active at every nomenclature meeting and acted as secretary of the Committee for the Nomenclature of Musci and since 1969 was treasurer of IAPT. He was instrumental in setting up the now thriving International Association of Bryologists and at the XII International Botanical Congress in Leningrad in 1975, where his tact and charm were much in demand during negotiations, was elected its 1st Vice President for 1975-1981.

During the last years of his life, Peter was heavily involved in the administration and directorship of the five Utrecht botanic gardens. Here his love of living plants, his feeling for popularization, his wide knowledge of plants and their growing conditions, matched his great facility to work with the garden staff. These years were alas not free from the problems which have marred Dutch university life during the years of "democratization and participation", but Peter had the gift to remain sufficiently aloof and to be able to continue an enjoyment in his bryological work. He had been appointed lecturer (associate professor) of botany in 1965 and in this capacity he had started to build up a group of cryptogamists who, at the time of his death, were well on the way to becoming a new Utrecht spearhead in systematic botany. His first pupil to obtain a formal doctor's degree was S. R. Gradstein (1975) and it was a tremendous joy for Peter to hear, during the last days of his life, that Gradstein's thesis had won the Jesse Greenman award for 1976.

From December 1975 to March 1976 Peter and Jeanne spent a productive winter season at Paramaribo, teaching botany at the newly starting Suriname college of science. A few weeks after his return in March, 1976, he became seriously ill and it was not long before its fatal nature was realized. Not only was this illness to prevent him finishing his work on Suriname and Colombian mosses but it also robbed him of an opportunity to fulfil long cherished plans to visit the Galapagos Islands with Gradstein and W. Weber, to start work on a bryophyte flora of the area. His colleagues went, but Peter never saw the group of islands which, with their profusion of animals and plants about which he knew so much, to him constituted the ultimate in biological diversity. Death came fast, to end the well spent life of a highly gifted scientist, an able teacher, and a universal naturalist, as well as that of a warm and gentle human being and a loyal friend.