

Roger Michael Greenwood

1920-2017



Roger Michael Greenwood, known as Michael, was a Life Member of Forest and Bird. He was one of the foundation members of the Manawatu Branch when it was created in November 1957, and served on the Committee for more than 20 years. He, together with Mrs. Una Esler, formed the Junior Naturalists, which was designed to get children, between 8-16 years, in closer touch with conservation through recognition of native flora and fauna. In addition, he was a constant participant in many of the meetings and field excursions of Forest and Bird, and the Manawatu Botanical Society over the decades.

Michael was born in New Plymouth and educated in Wanganui and Canterbury. After University, in 1943, he joined the Plant Chemistry Division of DSIR, where he worked (apart from 18 months at the University of Western Australia when he was awarded a fellowship in Soil Microbiology) until he retired in 1980. During this time, his work at DSIR centred on isolating and typing *Rhizobium* bacterial strains to find their ability to nodulate their specific legume hosts. NZ 2037 being the most famous, was one of his strains which has been used widely for inoculating white clover. Seed coated with *Rhizobium* provides young clover plants with a kick-start and ability to fix nitrogen. This was an important development and part of the reason why our pastures are considered so successful internationally.

Michael also conducted several studies on New Zealand plants and, in particular, he worked with colleague Ian Atkinson to develop the hypothesis on the possible influence of moa browsing pressure in moulding divarication, the twisted and tangled morphology of many mainland indigenous shrubs. This hypothesis has

resulted in both amateur and professional botanists taking much more interest in this peculiar group of plants.

Before Michael retired he became interested with Keeble's Bush, which is close to Palmerston North. Keeble's Bush is widely considered to be the best remnant of lowland podocarp-broadleaved forest in the Manawatu. In his will, Charles Keeble reserved it for scientific purposes only, and in the decade after he died in 1971, Michael worked to form a charitable Trust to look after this well-preserved 17 ha bush remnant. Michael became the inaugural Chairman of the C.T. Keeble Memorial Forest Trust in 1985, served as chair until 2001 and remained on the trust until 2012. In 1980, he was offered a 1.8 ha scarp downstream from Keeble's Bush to plant in native trees, and since it had a wide range of differing habitats, he decided to take it on as a retirement project. Michael's specific aim, which he followed within this restoration programme, was to propagate and establish species which had become very rare within Keeble's Bush, thus securing their future in the Manawatu District. He continued growing and planting in this area over the next 30 years. His efforts inspired the planting of the intervening area, the Link, by Peter van Essen, starting in 1996.

Michael was a tireless advocate for protecting native forests and bush remnants. In 1984, he was involved with the "Save the Odilins Block Committee" which, through urgent negotiation, saved a 2000-hectare area of native bush at Tokomaru from being logged and which has now been returned to the Tararua Forest Park. He has also contributed to understanding and protection of most other remnants in the Manawatu through sharing his knowledge of New Zealand's flora and vegetation.

He was awarded the prestigious Loder Cup in 1993, New Zealand's premier conservation award, which celebrates our unique and distinctive flora and honours those who make outstanding contributions to its conservation.

In 2010, Michael was awarded Honorary Life Membership of the New Zealand Ecological Society for scientific achievement, contribution to Keeble's Bush and contribution to restoration ecology. He was also a member of the Pukeiti Rhododendron Trust, the Wellington Botanical Society, and the Manawatu Museum Society, and was a long-standing member of the local branch of the Royal Society of New Zealand and the NZ Institute of Chemistry.

Though largely unacknowledged, Michael is probably New Zealand's first and foremost restoration ecologist, as well as being an inspired scientist, an active and effective conservationist, and a true gentleman and friend. He will be greatly missed.

Anthea McClelland
Chair, F&B Manawatū

