

A large gathering of c 120 people from around the country filled the Hutton Theatre to celebrate the life and achievements of Geoff Baylis FRSNZ. The talks started with Geoff's family life in Auckland, and covered many facets of his life, from his distinguished Navy service to his contributions to the University of Otago, the Royal Society of New Zealand, the Otago Museum, the Hellaby Indigenous Grasslands Research Trust and even to the Botanical Society of Otago. Apparently Geoff enjoyed watching the tape of our BSO inaugural Geoff Baylis Lecture several times. Geoff's long association with the Department of Botany as Head and Professor was described in detail by colleagues and former students, who between them produced a vivid picture of changing times. A fascinating display of photographs further illustrated Geoff's life and times. Graeme Parmenter recorded all the talks on video, and Anthony Wright is summarising the scripts for publication in the New Zealand Botanical Society Newsletter. The day finished with a dedication ceremony in the University Courtyard, where some of Geoff's ashes were placed and a plaque laid under the magnificent *Magnolia campbellii*. A fitting place, as Geoff planted this magnificent tree in 1965. It has twice featured on the cover of the University Calendar and also graces the cover of the official University commemorative register. Thanks to the vision and tireless work of Alan and Pat Mark the whole day was a very special, historic and moving occasion.

Trip reports

Blue Mountains, 13 March –

Norman Mason

Trip Leader: Professor Emeritus Allan F. Mark

It was a brilliantly sunny autumn's day as an unprecedented number of botany buffs embarked for a trip to the top of the Blue Mountains. It seemed that the combination of the trip leader's eminence and the prospect of visiting a little-known corner of Otago was too much to resist. As well as BSO members from Dunedin, the party's numbers were swelled at the Beaumont rendezvous by guests from Invercargill and Alexandra. From there the convoy climbed the immaculately maintained forestry road that wound through pine and Douglas fir plantations on the lower slopes. Having the right key (a privilege not known to all visiting parties of naturalists) we were able to follow the road past the locked gate right to the highest point on the range (c. 1000 m).

Between the conifer plantations and the tree line, is silver beech forest, interspersed with pockets of the more pale-leaved *Hoheria*. In places the tree line is ragged, with younger trees establishing above the main massing of mature beech. This suggests that the treeline has been temporarily lowered by past disturbance (human or otherwise), since New Zealand beech forest typically forms very distinct boundaries at its upper limit. Prof. Mark also pointed out areas of stag-headed beech trees as evidence of damage due to heavy snowfalls.

The trip focussed on the complex of peatlands near the summit, which includes shrubland, tussock grassland and various bog communities. In the shrubland *Dracophyllum longifolium* dominates, with *Chionocloa rigida* (narrow-leaved snow tussock) an important component in places. As well as the dominant *C. rigida* the

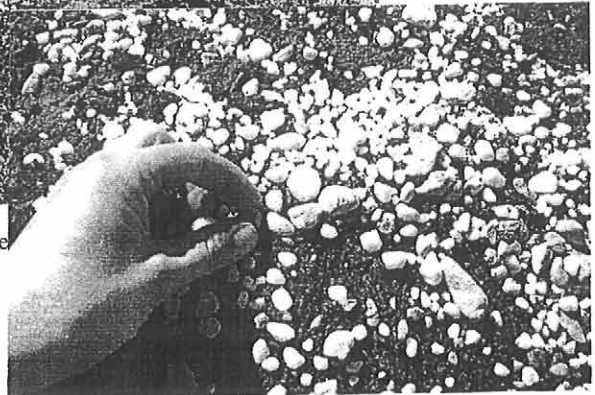
tussock grassland contains abundant *Gaultheria* spp., *Astelia linearis*, *Aciphylla aurea*, and several *Celmisia* spp. (or hybrids thereof). The bog communities included areas of *Donatia* cushion, with the cushion-forming species *Celmisia argentea* and *Phyllachne colensoi* also occurring. Cushions were often interspersed with grey-white strips of the lichen *Thamnomia vermicularis* (bringing to mind the image of an elderly man whose failing eyesight makes an all-over clean shave difficult to achieve). Also present are patches of *Sphagnum* spp. at tarn edges or in wet depressions.

The Blue Mountains represent somewhat of a boundary between coastal and central Otago, with several species (e.g. *Astelia linearis* and *Celmisia glandulosa*) reaching their eastern limit here. Other interesting occurrences are New Zealand edelweiss (*Leucogenes grandiceps*), golden *Celmisia* (*Celmisia semicordata* sub sp. *aurigans*) and an abundance of *Aciphylla scott-thomsonii*. During the day's botanizing there were several notable additions to the summit area species list compiled by the Otago Entomological Society. These included the discovery, by David Lyttle, of pygmy pine (*Dacrydium laxifolium*, now *Lepidothamnus laxifolius*), in the summit area. It was only later that the irony of this nomenclatural coincidence dawned upon me.

Prof Mark pointing out Moa gizzard stones on the peat to Dave Lyttle, Ian, Eve & Jimmy Radford, and Alli Knight amid the *Halocarpus* skeletons. - John Knight



Inset: Closer view of the putative gastroliths.- Monica Peters



An interesting feature of the summit area was the occurrence of large patches of exposed peat. This seems to have been the result of fire, given the charcoal layer apparent on closer inspection. Grey-bleached branches give evidence that these bare peat areas were once dominated by *Halocarpus* shrubs, whose demise is further proof of fire disturbance. Another curious find on the exposed peat was a pile of putative moa gizzard stones. Though it seemed to me that the smooth, white pebbles were very similar to those forming a pile of roading material near the summit transmission tower, Prof. Mark assured us they were deposited during a Moa's miring and not as a deer-stalker's joke. There are similar piles of stones in areas of exposed peat on Maungatua's summit, which lend support to the authenticity of our find.

Invasion by exotic conifers is a common problem in vegetation above the limit of native forest throughout the rain-shadow areas of the South Island. With large coniferous plantations on the lower slopes, the native shrublands and grasslands of the Blue Mountains have suffered heavy infestations of *Pinus contorta*, *P. radiata*, Douglas fir (*Pseudotsuga menziesii*) and European larch (*Larix europaeus*). Over the last five years wilding conifers have been largely eradicated from these areas through weekend trips organised by the Department of Conservation (D.O.C.) and the Royal Forest and Bird Protection Society. It is estimated that "several thousand" trees have been pulled, axed, bow-sawed, and chain-sawed to their deaths during these trips. Some of this work has been carried out on a c.800ha block of private land, with a view to future purchase as an addition to the existing D.O.C. reserve. However, the asking price of the landowner has, to date, proved too steep for conservation groups. Prof. Mark informed us that the owner now intends to plant conifers on the land having found "pastoral" management unprofitable.

The upper slopes of the Blue Mountains offer an accessible example of the Southeast South Islands sub-alpine vegetation. The summit in particular offers many curious juxtapositions of contrasting vegetation types on a peatland complex. This is a fragile landscape, which could easily be damaged if visitor pressure increases. Prof. Mark has recommended that D.O.C. Southland provide interpretation signs to inform visitors of the special features and their vulnerability, especially the cushion bog areas around the tarns, in the hope that this will help to minimise future damage. While the vegetation above the treeline is now largely free of coniferous invaders, the threat of future invasion remains, with considerable plantations still occupying the lower slopes and new areas on the upper slopes to come under plantation soon. It seems the fate of this special area depends on the tenacity of wilding pine control groups.

Rock and Pillar Range, 3rd April

David Lyttle

About 20 members of the Society met in the Botany Department car park and drove to the DOC car park at the foot of the Rock and Pillar Range. Those who wished to walk the entire altitudinal transect from the car park to the summit proceeded on foot while a number of others who were anxious to spend more time looking at the plants in the alpine zone drove up the hill in two 4WD vehicles. On the upper slopes the day was sunny with high nor-west cloud accompanied by a strong, cold wind. The first stop was at about 1250 metres by a snowbank to look for slime moulds that apparently appear