

vided in the form of two dinners (on successive nights, of course!), well lubricated by their preceding "happy hours". Awards were presented at the official conference dinner, and it was indeed a pleasure to see Geoff Chavasse presented with the Kirk Horn Flask plus a bottle of the vital ingredients with which to keep it well charged.

The organising committee excelled themselves in the efficient organisation of a memorable AGM and Conference, not only in the smooth running of every aspect of the event, but also in the very high level of sponsorship achieved which, for poor consultants like myself, helped to keep the registration costs down to a very reasonable level indeed. This will be a hard act to follow next year. And our thanks must go also to the sponsors for helping make the event both affordable and enjoyable.

#### **Dennys Guild**

## **Forest Valuation Working Party progress report**

The Working Party is in the process of developing guidelines for forest valuation. We have met eight times (to the end of April) and have prepared drafts on:

- the purpose for forest valuation;
- alternative approaches to forest valuation for each purpose;
- guidelines on the appropriate method for each purpose;
- standards for forest description.

Draft Standards for Forest description have been written for:

- Description of Land
- Forest Area
- Declaration of Land Value
- Description of Croptyping
- Recording Forest History
- Yield Estimation
- Describing Costs
- Specification of Prices
- Disclosure of Discount Rates.

The Working Party is currently in the process of reviewing these standards. It is anticipated that discussion drafts of the Standards for Forest Description together with other background material will be released for review in June. Comment will be sought from both members and the wide range of other interested parties.

**Bruce Manley  
Convenor**

# **The role of forestry in the MacKenzie Basin**

Institute President Peter Olsen and Councillors joined a group of members from the Canterbury Section in an inspection and general review of the role of forestry in MacKenzie Basin on March 5 and 6.

We enjoyed the enthusiastic and expert guidance of Nick Ledgard as we inspected established tree planting trials on a representative dry lowland site, earlier planted shelterbelts, and a comprehensive arboretum of various conifer species at the Ribonwood Station, Omarama. The group also viewed the impact of shelterbelt plantings, small established woodlots, and escaped wildings on the impressive tussock grassland landscapes dominating the foothill country around the basin itself.

The weather was beautifully fine and almost cloudless as we ascended the Mount John University Observatory site for luncheon. The panoramic scene lived up to its reputation as a countryside with special qualities that have made it a unique landscape. The shape of the surrounding mountains was more dramatic under a bare tussock mantle. And neither the "barbecue-breaker" daily on-shore gale, nor the more familiar nor'wester, which provide New Zealand records for peak windiness on this most exposed site, were thankfully present on this occasion.

Nick provided a well-balanced introduction to the opportunities and challenges facing land owners and others with an interest in landscape values. This has been a particularly damp season and those unfamiliar with the impact of successive seasons of drought might have gained a rather rosy picture of tree establishment and growth prospects.

To the much discussed and vexed question of tree wildings Nick stated his firm belief in the strategic importance of adopting a firm management policy to control outbreaks at the outset rather than stand by and let the countryside be checked with scattered and unevenly spread trees. The neglect in some districts has jeopardised the support of others in the community who have a less direct interest in sustainable and profitable use of the land.

The scale and special care taken in establishing new and comprehensive Landcare/FRI trials of several conifer species on a carefully selected representative lowland site took most of us by surprise. There were machine-planted rows

of small seedling trees and parallel open sown seed trials for comparison in the rabbit-proofed enclosures. Frost is seen to be a more serious controlling factor in survival than drought – and severe frost sufficient to kill young pine trees and Douglas fir may be absent for several years.

#### **Snowfalls**

For those who are unfamiliar with sustained frost risk in the inland South Island hill country I quote from the official meteorological report for July 1968:

"The snowfalls on the last four days of June on the high country of both islands and to low levels in the South Island persisted for the first four days of July, and there were further falls about July 10-12, and on the 25th. Frosty conditions, especially during the first half of the month, allowed little opportunity for the snow to melt over the greater part of the South Island. On the hills to the south-west of Mossburn at an altitude of about 650 metres the depth was reported as 70 cm and 350 cm in the drifts, and it remained frozen there for three weeks.

"Very severe conditions were experienced, even at quite low altitudes where a continuous snow cover persisted. For example, Tara Hills, Omarama (altitude 500 metres) had snow lying on the ground the whole month, never less than 14 cm in depth. The mean temperature was  $-5.0^{\circ}\text{C}$ , the lowest ever recorded in New Zealand for a month below the altitude of 1000 metres. On eight days the maximum temperature failed to reach zero C, the lowest maximum being  $-6.7^{\circ}\text{C}$  on the 14th. The air temperature fell just below  $-17.8^{\circ}\text{C}$  on the 6th, 7th, and 14th."

And we have been reminded of particularly cold months in recent years, notably July 1991 and June 1992 in both Central Otago and in the MacKenzie Basin when established radiata pine trees and eucalypts suffered severe damage and loss.

At all events the newly-planted tree seedlings looked most promising and the good depth of soils would enable the young trees to send roots down to a level that would render them more drought resistant. There was some evidence of the importance of mycorrhizal inoculation on this site. Nick commented that the MacKenzie Basin was, however, essen-

tially a woody plant habitat despite occupation in recent centuries by tussock grassland and pasture.

Left to itself, the district would sooner or later revert to woody species such as sweet briar and broom if the seed was available. It is, however, more likely that introduced conifer seed would be more mobile and that the district could be covered in wilding trees over the course of time without intervention. Better, he said, to manage the local soils – and for wealth and employment, if possible.

Members of the group observed *Hieracium* infestation but an accompanying small dog owned by this writer failed

to locate more than the isolated rabbit during the course of the two-day inspection.

The arboretum located in a reasonably sheltered gully site on the foothills at Ribbonwood is already producing some very encouraging progress. The pastoralists, Mr and Mrs Colin and Gwenda Mackay, were most enterprising and hardworking farmers, and we all felt the community was the stronger for such dedication and persistency in a habitat that could so often be very inhospitable. Fortunately the weather was fine for our inspection and the Mackays' hospitality was much appreciated.

An inspection of a mature seven

hectares of Douglas fir at the top end of Lake Ohau, and now set for logging, demonstrated how profitable such enterprise can be in the heavier rainfall zones on the western side of the catchment nearer the Divide. And what a marvellous and memorable drive we enjoyed alongside the big canals with the Southern Alps and Mount Cook as a backdrop. Members of the Institute generally agreed that the visit had proved most worthwhile and that there was indeed an assured place for well-planned forestry consistent with good landscape outcomes in the long run.

**Jolyon Manning**



## PERSONAL PROFILE



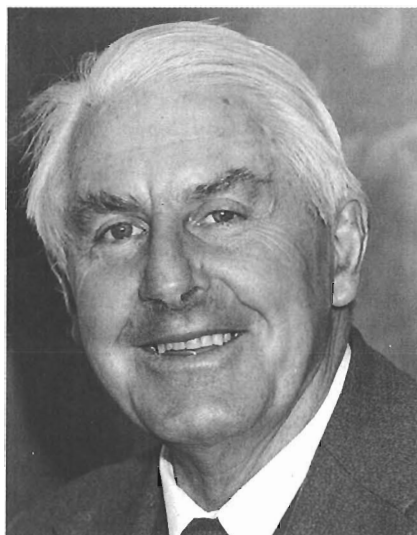
# Ross Smith Macarthur

Ross Macarthur was born in Wellington in 1923, descended from Scottish grandparents who emigrated to Otago. He obtained a broad-based education at Scots College (Wellington), Victoria University and Lincoln College, and he then volunteered for war service. He gained the skills of pilot and navigator and served in Canada, Africa and Europe, at one stage with Malcolm Conway. He then went to Oxford University where he graduated with an Honours degree in Forestry in 1948.

Returning to New Zealand, Ross joined the Forest Service in Canterbury where he "shared an office with Jack Holloway and was lucky enough to do some beech forest field work with him". He also wrote a working plan for Hanmer Forest – a rather academic exercise because there was then no market for the wood.

Ross is an energetic, forthright and indomitable man of great integrity who does not suffer fools gladly and can, when he considers it proper, be blunt and acerbic. He "lambasted" several senior officers about the then universal planting spacing of 6ft x 6ft. NZFS Head Office put him on his mettle, under Fred Alsop and Hugo Hinds, to "find out what the correct spacing should be". Ross thinks that his report (unpublished) "was the best thing I ever did in forestry".

In 1953 he joined the Southland Catchment Board as Soil Conservator and Land Classifier. Four years later he was



**Ross Macarthur**

appointed the first Soil Conservator to the Marlborough Catchment Board. "The early years in Marlborough were a major pioneering effort on a solo basis," he writes, "in a region dominated by sheep grazing, burning and extreme climatic events. Soil erosion was everywhere at both high and low altitudes." From 1957 to 1958 he fought for the use of trees to heal the widespread erosion scars and as a profitable land use, throughout the region. His efforts were eventually rewarded with the formation of the Marlborough Forestry Corporation and his appointment as its Principal Executive Officer as an addition

to his role of Chief Soil Conservator. Formation of the Marlborough Forest Owners Association followed with help from the Forest Service and NZ Forest Owners Association, "and today constraints on forestry are minimal".

His concern about logging impacts on steep country led him to visit Europe a number of times to study steep-land logging systems and in 1984 he demonstrated a Wyssen system which proved conclusively its low impact on soils. After retirement in 1985 he formed Skylogs Equipment Co., which continues to promote protective logging systems. He is also now working on a Cork Oak project which he finds rewarding and a source of personal satisfaction.

Ross has been a member of the NZIF since 1949, and from 1970 to 1975 he served on the Editorial Committee of the NZ Journal of Forestry. He has also presented a number of papers on soil erosion, management of steep-land soils and of forests upon them. He was made an Honorary Life Member of the NZ Association of Soil Conservators in 1986 and served as President of that body in 1965-67.

Like his working life, his spare-time activities have been, and remain, vigorous, including outdoor recreation on land and sea. As a lateral thinker, he has long been keenly interested in monetary reform. As a staunch advocate of municipal composting and low energy organic farming he managed an organic farmlet for 17 years and is an Honorary Life Member of the NZ Soil Association, serving as President from 1970 to 1972.

To sum up: Ross has throughout his career been a fervent battler for what he believes to be right, and also for the honour and good standing of the forestry profession.

**C.G.R. Chavasse**