Seed Pest Workshop 1989. Forestry Canada Inf. Rep. N-X-274.

Grime, J.P. 1981: Plant Strategies and Vegetation Processes. J. Wiley and Sons N.Y.

Harper, J.L. 1977. The Population Biology of Plants. Academic Press, London.

Hedlin, A.F., H.O. III Yates, D.C. Tovar, B.H. Ebel, T.W. Koerber and E.P. Merkel. 1980. Cone and seed insects of North American conifers. Can. For. Serv., USDA For. Serv. Secr. Agric. Recur. Hidraul, Mexico, 122 pp.

Hoy, J.B. and M.I. Haverty. 1988. Pest management in Douglas fir seed orchards: a micro-computer decision method. Gen. Tech. Rep. P.S.W. 108 Berkeley, C.A. Pac. S.W. For. & Range Exptl. Stat. USDA For.

Ser. 29p.

Hunter, G.G. and M.H. Douglas. 1984. Spread of exotic conifers on South Island rangelands. NZ J. For. 29(1) 78-96.

Ledgard, N.J. 1988. The spread of introduced trees in New Zealand's rangelands and South Island high-country experience. Tussock Grassland. Mtlds Inst Rev. 44 1-7.

Ledgard, N.J. and E.N. Crozier. 1990. The spread of introduced trees in the New Zealand high country. FRI What's New in Forest Research No. 203

Miller, W.E. 1978. Use of prescribed burning in seed production areas to control red pine cone beetle. Environ. Entomol. 7 698-702.

Neser, S. and R.C. Kluge 1986. The importance of seed-attacking agents in the biological control of invasive alien plants. In the Ecology and

Management of Biological Invasions in Southern Africa. Eds. I.A.W. Macdonald, F.J. Kruger and A.A. Ferrar. Oxford Uni. Press. Cape Town

New, T.R. 1984. A Biology of Acacias. Oxford Uni. Press. Melbourne.
Nuttall, M.J. 1989. Megastigmus spermotrophus Wachtl, Douglas fir seed chalcid (Hymenoptera:Torymidae). In A Review of Biological Control of Invertebrate Pests and Weeds in New Zealand 1974-1987.
Eds. P.J. Cameron, R.L. Hill, J. Bain, W.P. Thomas. CAB CIBC Tech. Comm. No. 10.

Prevost, Y.H. 1990: Environmental architecture – preventing loss of seed production to insects in black and white spruce seed orchards; preliminary results. In R.J. West (Ed) Proceedings Cone and Seed Pest Workshop 1989. Forestry Canada Inf. Rep. N-X-274.

Schowalter, T.D., M.I. Haverty and T.W. Koerber. 1985. Cone and seed insects in Douglas fir *Pseudotsuga menziesii* (Mirb) Franco, seed orchards in the Western United States: distribution and relative impact. Can. Ent. (11) 1223-30.

Shea, P.J., M.J. Jenkins and M.I. Haverty. 1984: Cones of blister rust-resistant western white pine protected from *Conophthorus ponderosae* Hopkins (= *C. monticola* Hopkins). J. Georgia Entomol. Soc. 19, 124-129.

Weston, G.C. 1957: Exotic forest trees in New Zealand. NZFS Bull. 13. 104 pp.

Zimmerman, H.G. 1991. Biological control of mesquite, *prospis* spp. (Fabaceae), in South Africa. Agric. Ecosyst. Environ. 37 175-186.



## **INSTITUTE NEWS**



## President's comments

## Resource management and the environment

The current concerns about resource management and planning have led to a rather undue, overdone and almost hypocritical fervour for the environment and "sustainability". Our profession has expressed, over the years, the ethic of stewardship in this respect. In many quarters there has been an expression of surprise and hurt that the populace in general does not appreciate that this ethic rules foresters' behaviour. The indigenous forest debate has been an example of this reaction with an associated defensive attitude to our involvement in management. Too often the actions of a few are made the basis for discussion more characterised by heat than informed debate.

At a recent Resource Management Law Association conference there was surprise expressed at the thought that there are between 600,000 and 1,000,000 more hectares of indigenous forest in New Zealand since the cessation of the Land Development Encouragement Loan scheme in 1985. As part of this reversion process, hill-country pastoral farming is characterised by a quiet forest increase through the process of fern, scrub and secondary hardwood forest growth.

This phenomenon is historically well understood in older societies' although



Peter Olsen

Americans are surprised to be told that there is now more forest in the Eastern USA than 130 years ago, due to natural forest reclaiming pasture and cotton lands. Any environment where a forest is the natural climax vegetation will be characterised by this phenomenon and New Zealand is a classic example for over 90% of the land used for farming.

Therefore woe betide a planning

process which seeks to set in stone the characteristics of the current landscape and ignores the dynamics of the natural environment and the economic frailty of processes of change to pastoral, horticultural, or other land uses.

It was pleasing at the above conference to note Minister for the Environment Simon Upton's remarks, as the keynote speaker, wherein the Resource Management Act was expected to yield sustainable land use for the economic benefit of people. It is unusual to have a Minister of the Crown speak on such a complex subject in as erudite a manner as he did before some 200 lawyers and planners.

It is in this context that the Council encourages the formation of an Environment Working Group under Tim Thorpe as an additional capacity to that involved on Indigenous Forest under Dave Field. We need to have good sources of data from which to draw conclusions as to the profession's view on these topics and to join the debate from a platform of informed and dispassionate knowledge.

I look forward to results being as useful as those from the recent Forest Valuation working group in the draft Forest Valuation Guidelines.

Peter Olsen