

- ensuring that compliance procedures, such as inspections, audits and prosecutions, are working properly;
- transferring existing hazardous substances and new organisms to the new controls;
- monitoring and reviewing the extent to which the Act is contributing to the health and safety of people and the environment.

NZ Forest Owners' AGM

New Zealand's forest industry needs to be more sophisticated in its products and marketing relationships to survive in the global marketplace.

That's the view of NZ Forest Owners' Association President Erle Robinson.

In a speech to the Association's annual general meeting and conference in Grey-mouth on October 31, Mr Robinson said the sale of Forestry Corporation and its central North Island assets, to a consortium including Fletcher Challenge, was a major plus for the industry.

"It has elevated one of our forest companies to a higher level internationally because of its size, which must give us more clout in the international forestry environment."

Mr Robinson said the industry was heading into a period of consolidation. "It is an opportunity to re-examine the intensity and direction of our management within the forests.

"The challenge to our industry is to become more sophisticated about our forest products and our marketing relationships. Forest owners and those marketing our products need to be talking much earlier in the piece. As forest growers, we need to lift our sights beyond the forest gate.

"We're facing a period of intense international market competition where we have so much to learn about so many aspects from consumer preferences, logistics, product promotion and differentiation to eco-labelling.

"We haven't got anything to sell unless we have someone who is willing – and eager – to buy it."

Elected President at last year's conference, Mr Robinson was re-elected to the post. He is senior forestry manager for Fletcher Challenge Forests.

Activities at this year's NZFOA conference, which was hosted by Timberlands West Coast, included a seminar on sustainable forestry management and a field trip to view Timberlands' beech forest management programmes.

Ridding East Aucklanders of their hairy caterpillars

Low-flying aerial spraying of forests to release seedlings from weed growth or control *Dothistroma* pine needle blight are long-established, relatively straightforward forestry practices. But trying to low-fly aerial spray 30,000 homes in 4000 hectares of East Auckland to rid the area of the hairy caterpillars of the white-spotted tussock moth (*Orgyia thyellina*) has been an entirely different challenge.

A 30 mm fully-grown tussock moth caterpillar was first reported by a resident in Kohimarama in Auckland on April 17, 1996. Immediate survey of the area by Ministry of Forestry indicated its presence in an area of 700 hectares. Being in the same family as gypsy moth, a serious forest pest overseas, caused fear of potential

established to advise the Minister of Forestry. (The Minister's official announcement in the August issue of NZ Forestry explained these two committees.) Then the 1967 Forest Disease Control Regulations, which were originally enacted for the control of *Dothistroma*, were invoked to set up the Forest Disease Control Advisory Control Committee (White-Spotted Tussock Moth), on which the Institute has representation, as the main committee to advise the Ministry of Forestry on the eradication and monitoring programme.

Based on overseas experience, Btk (*Bacillus thuringiensis* var. *kurstaki*) appeared to be the optimum insecticide to use in the eradication programme. A 68



The hairy caterpillar.

consequences of the tussock moth becoming established in Aotearoa New Zealand. Early evidence showed that the caterpillars had a voracity for leaves from roses, many fruit trees, maple, willow, birch, oak, kakabeak, silver beech, red beech, radiata pine, Douglas-fir and some eucalypts. Without natural predators, such as those in its home countries of Japan, Korea, Taiwan, China and the Russian Far East, the tussock moth posed a serious conservation and economic threat to New Zealand. On the basis of this threat the Government voted \$7.5 million to its eradication.

Having established the threat of this invader, Operation Ever Green, under the direction of Ministry of Forestry General Manager Operations John Handiside, was set in motion to carry out the eradication programme. A Tussock Moth Science Advisory Committee was set up to advise the Ministers of Forestry and Science. A Community Advisory Committee was

page detailed environmental impact assessment was published in July. It identified that overseas studies of Btk, which has been commercially used in New Zealand since 1984, showed that it is very effective in killing caterpillars of moths and butterflies and its aerial application shows no public health concerns. The caterpillars must eat foliage sprayed with Btk, as it acts on their uniquely alkaline gut and does not harm other insects.

In early September a 65 page health risk assessment report on Btk spraying of Auckland's eastern suburbs, by Public Health A+ and Jenner Consultants Ltd, was published. It evaluated the pest control formulation Foray 48B which contains the biological agent Btk and drew on 30 years' overseas experience with its use.

Additives in Foray 48B, in the form of three preservatives, an acidity regulator, a sticking agent and a stabiliser, were all considered safe when used as food additives. Because the size of the droplets