## **NEW INFORMATION**

# 'The Forestry Sector in New Zealand'

This book, published by the Policy Division of the NZ Ministry of Forestry, is a revised and updated version of an earlier 1980 publication from NZ Forest Service. It is a welcome and timely answer to those who constantly repeat the claims that the forestry sector has done little or nothing about marketing even though the wood harvest is about to double in the next few years. In no way is forestry another "Think Big" disaster. There are currently some problems in the "Achilles heel" of the forestry sector - sawn timber - but for the rest of the industry, especially the forest growers exporting logs, there are no current or perceived shortages of market outlets.

This publication includes the most recent and most comprehensive projections of future yields from New Zealand's plantations. The earlier forecast of Elliott and Levack (1981) now appears to be somewhat optimisite. For the period up to the year 2005 the latest projections lag about three years behind the earlier projections. New Zealand's harvest is expected to reach 20 million m<sup>3</sup> by about the year 2003 and not around 2000 as forecast earlier. Claims that New Zealand's current 10 million m<sup>3</sup> harvest is just about to double are therefore completely without foundation. The harvest level after the year 2005 is very dependent upon the current rates of new planting. If new planting now ceases, then the harvest will level out at about 25 million m<sup>3</sup> by the year 2020. If the rate of new planting continues at the high level of the first half of the 1980s (around 50,000 hectares/year) then the future harvest could reach over 40 million m<sup>3</sup> by the year 2020. (The publication also gives projections broken down by the forest planning regions of New Zealand.)

Will there be a market for all this wood? This report summarizes the opportunities as follows:-

- The New Zealand domestic market (currently equivalent to about 6 million m<sup>3</sup>) is unlikely to grow by more than about 10% by the year 2000.
- New Zealand is a very small producer by world standards (even by the year 2000 New Zealand will still be producing less than 1% of the world's industrial wood).
- Recent studies suggest that New Zealand should be able to sell most, if not

all, of the additional wood that could be harvested.

The research we have done in Tasman Forestry Ltd shows that there is little doubt there will be markets for all our wood. The key question is: "What should we do to ensure that our company and New Zealand achieves the greatest returns and benefits?"

This short, easily read, and well-presented publication is an excellent summary of the New Zealand forestry sector and its opportunities. It includes a concise and non-judgemental account of the changes in forestry administration resulting from the break-up of the old

### **BOOK REVIEW**

New Zealand Forest Service and other government departments responsible for land administration. The publication summarizes key statistical information (often presenting it in graphical form). It therefore complements, rather than supplements, the other very good official publication, *Statistics of the Forest and Forest Industries of New Zealand*.

This publication goes a long way to combat some of the negative comments on the New Zealand forestry sector. As it provides an excellent introduction to, and summary of, the sector and its potential it would be an ideal hand-out for those frequent local and overseas requests for information on New Zealand forestry.

#### W. R. J. Sutton, Strategic Development Executive Tasman Forestry Ltd

## **DSIR declares war on wasps**

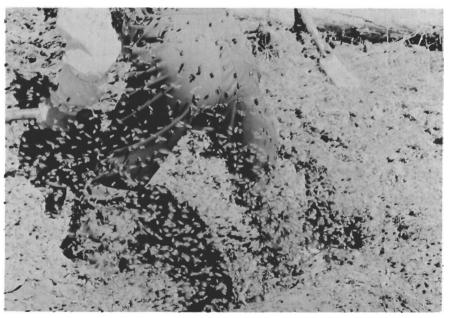
The Department of Scientific and Industrial Research has declared war on wasps.

Wasps have always been regarded as a pest, but the arrival in New Zealand in recent years of a second species, the Common wasp or *Vespula vulgaris*, has caused a population explosion which could have serious consequences.

DSIR scientists are so concerned about the dangerous and disruptive effects of wasps they have introduced a parasite into New Zealand to feed on wasp nests with the aim of reducing the number of wasps.

This biological control programme is already underway in the South Island and is about to be extended to the North Island if territorial authorities wish to contribute financially to the research.

A scientist at DSIR's Entomology Division at Lincoln, Dr Barry Donovan, who is in charge of the programme, said the traditional methods of controlling wasps using poisons, petrol or kerosene,



DSIR scientist Dr Barry Donovan under attack from wasps as he collects a large wasp nest at Kaituna Valley, Banks Peninsula.

were hazardous. Even just locating the wasp nest could be dangerous.

"Poison-baiting has never really worked permanently," he said. "The parasites in the biological control programme seek out the wasp nests themselves. Wasps are the only things they live on. They would be able to find even very small wasp nests.

"If the parasites do their job they will provide a permanent long-term, lowcost solution. If it works it will work forever," he said.

Dr Donovan pointed out that biological control was also part of the move toward reducing reliance on chemicals and of providing a more acceptable solution without polluting the environment.

"However there is a risk that the programme may not work," he said. "We cannot guarantee success."

Wasps have traditionally caused pain and fear. In New Zealand they have caused the death of a seven-year-old girl and caused allergic reactions which have knocked some people unconscious. They have forced schools to be closed, campers to leave camping grounds and frightened away tourists.

Wasps can seriously disrupt business activities. They have attacked and stung workers in food shops, forests, orchards, vineyards and sawmills and disrupted work in many of these industries, particularly forestry and sawmilling. They also spoil the fruit of commercial and home orchards.

Dr Donovan said there had been reports of increasing numbers of wasps in the South Island and this was causing concern. This reported increase has been blamed for damaging the beekeeping industry and for having an adverse effect on native wildlife by feeding on insects and honeydew which native birds normally feed on.

He said there was no doubt wasps were a problem in New Zealand and becoming more so with the arrival on the scene of the second species.

The first arrival in the 1940s was the German wasp, *Vespula Germanica*, which is believed to have arrived at Te Rapa near Hamilton on aircraft parts flown in during World War II.

The second immigrant, the Common wasp, described as a vigorous colonizer, slipped in, probably to Wellington and Dunedin, a few years ago.

Six nests were discovered in Dunedin in 1983. The nests were six times the size of Northern Hemisphere nests and produced 23 times as many new queens. They are now spread throughout the country. The scientists believe the absence of natural enemies, the mild climate and abundance of food, such as insects and honey, are fostering a population explosion.

The parasite the DSIR has introduced from Europe is a natural enemy of



## Inducing trees to flower earlier

The world's need for wood is great and growing year by year.

To increase the production and harvesting of seeds for planting new forests for commercial purposes, scientists, led by Dr Alan Longman, at the Institute of Terrestrial Ecology, near Edinburgh, Scotland have developed a technique to induce trees to flower earlier and at a height which makes the gathering of the seeds easier and produces a better crop.

One of the team, Jan McP Dick, having drilled a tiny hole in the stem of a young conifer, then injects it with a few

wasps. It is known to attack both the Common and the German wasps, with a preference for the Common ones. The adult parasite is rather midge-like and resembles many insects already found in New Zealand.

The parasites attack only wasp nests. They lay their eggs in the nests where the wasps are developing and when the parathousandths of an ounce of the plant hormone gibberellic acid which encourages the young tree to produce both male and female cones from which the seeds can be gathered to propagate the species.

After the injection has been made, the wound in the stem is sealed to eliminate any possibility of contamination or infection.

Foresters have previously had to wait up to 25 years for a conifer to flourish, but this Scottish-pioneered technique now makes it possible to crop small clonal trees in a mini-orchard from five years old.

sites' eggs hatch, the grubs which emerge feed upon and kill the developing wasps.

DSIR's Entomology Division is asking all territorial councils – city, county and borough councils, as well as those in beekeeping, forestry and associated industries – to contribute to the cost of the biological programme to control wasps.