LETTERS

P. contorta as an alternative

Sir,

In the article on alternative species (NZ Forestry 40(2)) I note the following statement: *Pinus contorta* "must be a leading contender" as a contingency species to replace radiata pine "where out-of-season frosts are a significant hazard".

I have not come across any properly-conducted experiments to substantiate this assertion. Is it an example of "it stands-to-reason" folklore?

The means for establishing radiata pine on the highest frost flats in Kaingaroa Forest were demonstrated by the FRI Forest Establishment section over 20 years ago. As a component of these trials, radiata pine, muricata pine and *P. contorta* were compared. It caused a good deal of surprise to find that *P. contorta* were significantly damaged by a frost in early December. I believe the temperature was –8°C. Radiata pine withstood this temperature rather well.

C.G.R. Chavasse

Sustainability of planted forests

Sir,

I was interested to read the report by A.G.D. White (NZF, Aug. 95 p.41) that Mr Rosoman "pleaded journalistic licence for overstating his case in order to capture the attention of the public" and I also agree with him that Colin O'Loughlin's reply (NZF, Feb. 95) was too gentlemanly.

Greenpeace deals in half truths and to call it "journalistic licence" is a cop out. In the school of irreverent logic a half truth is by definition a half lie. If we refer to the Fair Trading Legislation, half truths are lies and are regarded as deliberate attempts to mislead.

The attacks by Greenpeace and similar organisations are something that should not be dismissed lightly. They should be rebutted strongly by foresters and forest owners at every opportunity.

Rosoman (NZF, Feb. 95 p. 10) lumps the wood utilisation industries with "plantation forestry". No matter what species of trees that are grown, including indigenous species, there will be a utilisation industry somewhere and these should be considered separately from "plantation forestry".

These industries are big enough to fight their own battles.

The arguments on biodiversity ignore the effects that have been made over the last 100 years to find as many species as possible that could be grown for timber in New Zealand and, in particular in the last 50 years, to find species that could take the place of *P. radiata,* should that species strike trouble. The now most unjustly maligned NZ Forest Service planted many acres of other conifers and broadleaf species. Farm foresters have tried even wider ranges of species; I myself have been involved in big expenditures investigating the use of eucalypt spp., acacia spp., *Pinus attenuata* hybrids, hemlock and some native species including *Phormium tenax.*

Greenpeace prefers to make out that forest owners have done nothing in this way. They have put forward "ecoforestry solutions for a responsible plantation industry" which includes "the diversification of species that are being planted, including natives". This could only be done by the investment of public funds at the time when the Department of Conservation has difficulty getting sufficient allocated to it for its present works. Wasn't the chief reason for axing the Forest Service that it was uneconomic?

New Zealand forestry is of a very high standard. The moves that are being made to impose monitoring and certification by a "quasi" body will lead to less forest being planted. This would be undesirable for both the country's economic well-being and as a means of bringing about an "ecoforestry solution".

The Institute should stay well clear of all commitments to bodies with high-sounding names and stick with the proven ones such as Farm Forestry, Royal Society, Royal Forest and Bird and Federated Mountain Clubs, and avoid all those that have political (and often hidden) agendas. These can be too easily infiltrated by people with ulterior motives. The Institute must stay a professional body and not be dragged into quasi-political associations.

J.E. Henry

Native bush and biodiversity

Sir,

Firstly, I would like to commend the New Zealand Forestry magazine editorial board for welcoming open debate of issues in the columns of the magazine. It is a strength that few resource management or conservation magazines can match.

In the August 1995 issue of NZ Forestry, Graeme Jespersen of Far North Afforestation claims they have never cleared " ... what any reasonable person would recognise as New Zealand native bush or forest." Mr Jespersen conveniently failed to define what he refers to as native forest and what he refers to as scrub. I have visited the area near Waitahue twice, and the photo in the May NZ Forestry shows an aerial view of the extent of the clearance. It is a sight reminiscent of the bad old days of forest crushing that most plantation managers now cringe at. It was not young manuka/kanuka regeneration but mixed broadleaf/podocarps/tall kanuka/manuka. If this is not forest, then Aotearoa's forest cover has just taken a big dive.

The NZ Forest Accord definition of native forest is as quoted by Mr Jespersen, and therefore does include closed-canopy kanuka stands and emergent podocarp areas. It strikes me as ironic that plantation planters are willing to call two-year-old, one-metre-high pine trees a forest but object to considerably older and taller native trees being called a forest. The Accord also gives recognition to habitat of threatened native species such as kiwi. The Waitahue block crushed by Far North Afforestation included kiwi habitat.

Furthermore, Mr Jespersen should read my May letter again. I never claimed that FNA was a signatory of the Accord. Indeed, that FNA is not a signatory is the main problem. And what nonsense for him to suggest that adherence to the Forest Accord would cause " ... the national economy to be devastated ... " . Then in the next sentence he requests " ... we must start talking common sense."

It is commendable that Kohntrol have 1012% of the areas they manage in native vegetation, but crushing 18 ha mixed podocarp/kanuka regeneration to marginally raise the IRR and therefore investor attractiveness is not commendable. The green market of the future, where selling wood products from land cleared on native forest will be difficult, will undoubtedly expose the short-sighted "poor advice" by any forest consultant who recommends this practice. It was not only the "green" groups that signed the NZ Forest Accord but most of the plantation growers in the country. I wait with interest to see if the NZ Institute of Forestry will ratify the Accord.

I welcome the raising of the biodiversity issues on the central plateau by J.E. Henry in the May issue of NZ Forestry. My understanding of the central plateau is that ecologically it was in a successionary shrubland phase on the way to indigenous forest. Recent raw pumice layers generally overlay previously developed forest soils. The pumice areas were on their way to

indigenous forest, only to be interrupted by plantations and agriculture. It may be that pine trees facilitated an increase in biodiversity but "good biodiversity" is not measured by the number of species. Biodiversity, which refers to the indigenous component, is about the gene pool, species, ecosystems and landscapes naturally occurring. "Good" biodiversity has nothing to do with a greater number of species. There are more exotic plant species in New Zealand than native. It is about recognising and protecting that which is unique to New Zealand.

This means protecting and restoring ecosystems that have been modified or degraded through past use, including in the case of the pumice lands, shrubland ecosystems and successionary phases. We have a responsibility, in particular to future generations, to ensure nature's successionary and evolutionary processes take their course at least in representative areas in the land. It may be that the pine plantations are now a valuable resource and that we all need wood. However, the market is coming to view the plantations as more of an asset if they incorporated native protected ecosystems. Furthermore, I would question the amount of wood that we need, considering the huge amount of paper and packaging wastage. Recent reports by Friends of the Earth (UK) and Rainforest Action Network (USA) re-commended that sustainable consumption levels will require cuts in wood consumption of 65% in the UK and 75% in the USA.

Grant Rosoman
Forests Campaigner
Greenpeace

Barr responds – a pertinent answer?

Sir,

The editorial in the last issue of the NZ Forestry (August 1995) journal leads with this quotation, " ... ask an impertinent question and you are on the way to a pertinent answer".

It is a stimulating piece of writing which moves me to so many pertinent answers that I scarcely know which to select. But it also could stimulate some that could be classed as impertinent, coming from one who has spent 60 odd years in farming and only 50 interesting years in forestry.

Yes, I think there is an ever-growing trend to growing timber on faster rotations – good fat pruned logs at 30 years. But do these regimes need to be of higher capital input? I think not. Nor do they have to be of higher volume at the expense of quality, pruned pine, cypress or eucalypt.

When farm foresters became interested in forestry as a diversity in land use, regimes suggested to us were to plant six feet by six (2500 sph) with mandatory blanking up. Then came the killer, a working plan as long as your arm; thin and prune, thin and prune down to 400 sph: far too many. It was a work-heavy and expensive job imposed on busy people. Were these the "robust forests" of the past of which the editor writes? I hope not. I would expect the "robust forests" to be the Fenton board regimes, or some that Sutton advocated for clearwood production.

Agroforestry – Low Input and Simple

Later in his article, the editor writes of a low-input system with its "organic" or "permaculture" connotations and its "hippy" undertones.

Let me set out one of several low-input farm-forestry regimes. Yes, we do have hippies in our ranks; very welcome they are too, and often stimulating.

This is a common agroforestry regime:

1. Plant 450 s/ha pines in groups of three at 8 metre centres, or in pairs if of aged cuttings.
2. Sail or stability prune any bushy top heavy trees at 18 months – a few hours work per hectare.
3. At three years of age or height 3-4 metres, form prune the selected trees. This is the start of the pre-emptive pruning (as first proposed by Franklin). The method involves removing any ramicorns, correcting the leader if necessary, removing any coarse rogue branches and lightening any basket whorls. If aged cuttings are used, the form will be good and little work is needed. This operation takes less than a minute. A tree selection can be made at this stage and surplus trees removed.
4. A clear lift is made at DBH 12-14 cm and continued up to 10-11 cm, which usually leaves a green crown of three metres or half total height. Under the pre-emptive pruning regime the correction of the residual green crown is then done, tidying up basket whorls (the big trouble), leaders and so on. Epicormics are rubbed off, even in the lower whorls of the green crown.
5. This pruning procedure is repeated to a height of either 6.3 or 8.5 metres.

Is this high technology? I think not. But it is certainly low-input as to work and capital. After working on this method of silviculture even in my late eighties, I found pruning to be a pleasure. My teenage grandsons could be taught the rudiments in a few hours. Forestry can be a simple procedure compared to farming.

Foresters' Attitude to Change

Foresters have a name for being very suspicious of change. Why else would they have stuck to those fundamentalist regimes of 60 years ago until the recent past? A train trip from Hamilton to Rotorua through the back end of the Mamuku Forest can be typical of what one sees around the back roads of the Pumice Plateau, masses of dead and dying trees. I think timber regimes of the present should be simplified, keeping basic ends in view. Perhaps a look across the fence to observe what the farm foresters are doing would help.

Farm foresters have adopted other work-easy regimes: the one-shot silviculture over gorse (as proposed by Bunn); the group plantings of one eucalypt at 10-metre spacings surrounded by four close-planted pines (Terlesk); close-spaced, in-row planted pines and eucalypts wide-spaced between rows (MacKay, Barr, Tombleson and Moore); eclectic thinning of close-planted double rows of pines through gorse: I could go on. All of these regimes are low-input and efficient methods of growing early pruned fat trees.

This is not intensive silviculture, it is "Timely Tending" (Barr and Colley). As Mick O'Reilly, one of our Farm Forestry members, said at a seminar: "We do our thinning before we plant our trees".

I could go on but I will restrain myself, except to point out to foresters on the Pumice Plateau that they are growing pulp on some of the most sought-after dairy land in New Zealand. Large herds of 600-700 cows are being run on that potentially rich no-mud land. The largest cheese factory in the world has been built at Lichfield within sight and smell of Tokoroa. Watch it you lot!

Neil Barr

The Editor replies to Neil Barr

I seem to have netted some by-catch; certainly the targeted fish aren't biting. My arguments are not with farm foresters, who I think largely display the integrated decision-making to which I was referring.

Though in saying that, only considering agroforestry is also a mistake. Regime choice must relate to individual farmers' objectives, resources, and particularly to their constraints and options. Not everyone has the expertise, time, land or inclination to pursue agroforestry management, nor should they.

I think, more and more, that one of the most important considerations for forest growers, and especially for farm foresters, is having options. It means having some other "less commercially viable" species, or managing for a so-called "non-profitable" production thinning contingency –