

Australia and New Zealand

How similar is our forestry?

This is the International Year of Forests, and New Zealand is hosting the ANZIF meeting in Auckland, in May. Time to turn our thoughts outwards. The New Zealand forestry profession can be very introspective, and often forgets how very different we are. We are mostly dealing with privately owned exotic plantations, growing unsubsidised wood for export in the most profitable way we know, often with minimal concessions to other forest values. It's not like that everywhere or maybe even anywhere else.

New Zealanders travelling abroad are often confused with Australians - the two peoples are sometimes regarded as identical. While it may be true that the predominant European settlers of both countries have common origins, it is undeniable that the landscapes, climates, ecosystems and indigenous inhabitants are radically different. Rather than sharing the same continent, the two nations might be at opposite ends of the world. No, the Sydney Harbour Bridge does not link the two countries - Europeans are often surprised to discover that the distance from Sydney to Christchurch is almost as far as London to Moscow and, in forestry terms, may be separated by a similar cultural distance.

With highly variable countries such as both New Zealand and Australia, "average" can be a fairly meaningless term, but a Google search of average temperatures and rainfall for each of the countries cannot fail to contrast the climates. New Zealand hillside typically receive about twice Australia's rainfall per hectare with the latter recording prolonged droughts and (recently) heavy floods - not merely because of unusually high precipitation, but also because of the much flatter terrain in that old and weathered continent. To pick one spectacular example of the rainfall differences, take the Murray-Darling basin. It has an area four times the entire size of New Zealand, and the river flows at a long-term average of 24,000 gigalitres/year, but in most years only half of this reaches the sea and in dry years much less. NZ's largest river by volume is the Clutha - with a catchment area almost one-fiftieth of the size - flowing at a comparable 15, 500 gigalitres per year, nearly all of which reaches the sea.

Of course, climate is more than rainfall. Whereas Australia extends into the warm tropics, New Zealand encounters arctic conditions in its mountains. And the soils are also poles apart: the word 'salination' is used every day by Australian foresters but is almost unknown in New Zealand.

Our indigenous vegetation is like chalk and cheese. NZ podocarps are notoriously slow growers - our older

houses are made of 700-year old rimu - whereas the fast-growing *Eucalyptus* genus includes wonderful commercial species, grown worldwide. It is such valuable timber, it has even been declared the National Tree of Ethiopia. This throw of the evolutionary dice was NZ's blessing, and Australian's curse: we couldn't grow profitable crops of NZ natives, and so consigned our indigenous forest to conservation and recreational parks. Over 99% of our timber now comes from exotic plantations, planted like crops of tall wheat. The public accept this, albeit unenthusiastically. In the last 25 years, New Zealand's "arboreal apartheid" has had the benefit of considerably reduced stress for foresters. We no longer have to juggle conflicting goals, cursed by accountants and investors on the one hand, by local resource exploiters on the other, and by conservationists and recreationalists in a third direction. Our Aussie colleagues, in contrast, are still fighting the battles we experienced a generation ago. Their native forests are too valuable NOT to harvest; we should feel sorry for them!

The distinctions go on: the Australian fire regime is quite alien: they have frequent dry lightning - we have some lightning but it is nearly always mixed with heavy rains. The result is that their flora is often fire-adapted (perhaps enhanced by 50,000 years of Aboriginal fire-stick burning) whereas ours is not. Forestry insurance companies - and European re-insurance companies in particular - have only just woken up to the fact that fire in Australia is ten times the threat that it is in New Zealand.

But the opposite is true for wind: our mountains lie at right angles to the prevailing Westerlies. All trees dislike wind, so this is not good news. The implications are profound: we cannot extract trees in a series of production thinnings as, for example, do the South Australians. If we production thin at all, we can only risk it once - when the trees are sufficiently large to make the operation worthwhile but not so large as to endanger the residual crop.

With all this in mind, the Journal asked the Australian members of the NZIF to put pen to paper and outline their thoughts on the differences between forestry in the two countries, and the lessons we could learn from each other. Four people replied - thank you kindly - and their contributions follow this editorial. Some of them touched on the above points but others delved into such things as the rate of new-land planting, choice of species, ownership patterns and agroforestry systems. Read on, and see you at the ANZIF Conference in May!

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