



Jerry Vanclay, Professor of Sustainable Forestry at Southern Cross University in Lismore, northern NSW.

Achieving a quiet revolution in forestry education

BY JERRY VANCLAY

Australia has more forestry programs than ever before, but still too few undergraduate forestry students. Jerry Vanclay muses on why this is so and what can be done about it.

There is a shortage of graduate foresters in Australia today. During the last 12 months, Australian employers recruited at least 11 entry-level foresters from abroad; probably over 20% of recruitment at this level. While some new blood is good, 20% foreign recruitment represents a problem, especially when Australia is on the brink of a second-rotation boom in both forests (i.e. the clearfall and replant of the MIS plantations) and foresters (the 54/11 superannuation phenomenon which is expected to precipitate the retirement of many baby-boomers).

Six universities now offer a bachelor's degree in forestry: Edith Cowan (WA), Melbourne and Tasmania have a 3-year degree, and the ANU, University of Queensland and Southern Cross University have a 4-year degree. Most universities have an environmental science program with some forestry content, but few of these produce graduates with skills sought after by the forest industry. The existence and diversity of the six forestry programs reflects the current challenges facing the profession:

- Many institutions;
- Few students (in total, as well as at each institution);
- High costs of study (e.g. fees, housing);
- Few scholarships;
- Poor view of the forestry industries by many school-leavers.



Students on a field trip inspecting Bell Miner Associated Dieback in native eucalypt forest: (L to R) Therese Moffat, Aleisha Backo, Denise Rall



FEATURE

These pressures mean that many students balk at the high cost of a 4-year forestry degree in a distant centre, and choose a shorter course at an institution close to home. This contributes to the shortage of forestry graduates, and to the high recruitment costs experienced by many forestry agencies. Dwindling numbers of enrolments also makes it difficult for forestry programs to maintain a rich diversity of specialist forestry electives, and to retain skilled staff to provide the best instruction in all areas of forestry. As in many areas of the industry, a 'critical mass' is needed. What can be done to address these issues?

CHANGING ATTITUDES TO FORESTRY

The challenge is not just one of attracting school-leavers to consider a forestry degree; it's about changing society's attitude towards forestry, so that high school students who may be thinking about a forestry career no longer get constant negative feedback from the media, from parents and teachers. That's an industry-wide challenge, too big and too important to leave to any one player. Sure, universities may be the first to be affected, but the whole industry depends on sufficient well-qualified people.

There is no single 'silver bullet' to resolve this, as the issues are complex, but it is important that the industry works together to enhance our reputation in the community at large, and amongst school-leavers in particular.

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Setting the Standards



FEATURE

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(L to R) Joe Carter (now with Qld DPI Forestry) and Cheten Thinley (now with the Renewable Natural Resources Research Centre, Yusipang, Bhutan) doing fieldwork in a mixed-species trial planting.



Staff and some students who graduated in April 2002 – (L to R) Back row: Jerry Vanclay, Doland Nichols, Phil West, Mark Steers, Michael McLean, Tim Potter, Ross Miller, Jamie Bousfield, Andrew Wallis. Front row: Alison Specht, Paula Ibell, Martin Davies.

Productivity Commissioner Neil Byron once remarked that people have no difficulty differentiating the butcher and the shepherd, but frequently confuse the logger and the forester. We need to find constructive ways to communicate the message that 'butchering' trees is just one small task within an industry more generally devoted to wise use of a renewable resource.

There are lots of good stories about contributions by foresters and tree-growers to good environmental and social outcomes, but all too often these are not heard. I'm often disappointed when I see David Attenborough and other 'nature celebrities' narrating part of the story about a cute creature and its habitat, without revealing that many of the animals they feature can co-exist with wise land use.

There is a challenge here that needs some brave action: I'm aware of some forest growers who have some rather special organisms on their land. It's my contention that many of these organisms are there *because of*, not in spite of, their decades of land husbandry.

I'd encourage them to speak out, and be proud of their achievements in simultaneously making an income and maintaining biodiversity. But sadly, the risks are great, and landholders have a legitimate fear that some bureaucracy will restrict future activities on that land.

A perverse disincentive for adaptive collaborative management of land!

One of the great mysteries of life is that annual monocultures are poetic:

*"... No finer sight was ever seen
Than waving fields of golden grain
True to His promise God has been
And earth has harvest once again..."*

'A fall wheat field', William Hunter, 1897.

Compare this with a similar enterprise over a longer time-scale (timber harvesting in plantations or native forests), which is seen by many as akin to a crime, even though in most of its many guises, forestry is more benign than agriculture. This is a thorny one, because photographs taken immediately after logging often look dramatic, even though recovery may be quick.

Nonetheless, I think that the way forward is to work with the media to try to educate the public, to give them a better understanding of forestry. I'm not an enthusiast of the "so sue them" approach, which I fear will deepen, rather than bridge the divide.

ENGAGING THE URBAN PUBLIC

If we want to shape the future of forestry, we have little choice but to engage the urban public. Notwithstanding Senator Barnaby Joyce (who hails from St George), much of Australia's land use policy is shaped by the politics of marginal seats, often in urban electorates. If we want good land use policy and legislation that encourages adaptive management, we have to engage political candidates and the broader electorate. Sadly, this is often seen to be too hard: it's easier to follow the multitude than to lead them. A quick comparison of university

forestry programs suggests that some of the newer 3-year forestry degrees are trying to appeal to the urban school-leaver, rather than to challenge them. Sadly, this may reinforce existing prejudices rather than develop fresh insights.

It is not my intention to mention only the gloomy outlook and the thorny challenges; there is a bright side. Many of our forestry students are bright young things, full of enthusiasm to save the world through wise use of resources. They get promising careers: most of our graduates have good job offers even before they finish their final exams (if they are prepared to move away from Lismore). They are the envy of many fellow students in other disciplines.

Many foresters have stimulating and satisfying careers. I'm sure that you've heard a derogatory joke about a lawyer or an accountant lately. Have you heard one about a forester or a forest grower? Doesn't that tell you something about our standing in the community? We do have a good story to tell, and we should share it, and in doing so, begin to educate the broader community.

There are some quite specific things that could be done to encourage more students to study forestry. Greater investment in universities, scholarships to assist mobility amongst students, and bonded scholarships to allay student fears about future employment prospects – all would help to change the landscape quickly. But these things are beyond the reign of AFG. For most of us, quietly telling the broader community about our success stories may be the best way forward.

MEETING SKILLS SHORTAGES IN SITU

I'm quietly optimistic that we've turned the corner, and that things are beginning to change. Following the IFA conference in Mt Gambier in April (in which skills shortages were identified as a burning need), Southern Cross University (SCU) received a request from a group of foresters in the Green Triangle, asking us to offer our forestry program there.

We've done some research, and were impressed with the enthusiasm throughout the community for this initiative. As a result, SCU will begin to offer a 4-year Bachelor of Applied Science in Forestry in Mt Gambier in 2006 – and the response has been so enthusiastic that it looks like we may need to restrict the intake.

The degree will be offered in a series of intensive modules (each two weeks in duration, with 60 hours face-to-face instruction), to facilitate participation by people currently working in the industry. Now the Green Triangle is somewhat different to the rest of Australia, because the forests industries are the major employers, and everybody knows somebody employed in forestry. But the attitude of the community to this new development is fantastic, and there is scope to build on their enthusiasm, and on the enthusiasm of others who are optimistic about the future of forestry.

My view is that we can achieve a quiet revolution through optimism, continuing to engage the broader community, and sharing our success stories...

