

## Every dog has its day

To suggest that Dr Bernie Hyland is reluctant to be profiled is calling a spade a spoon. 'I'd rather you waited 'till I'm dead,' was his initial response. 'Even then you'd be wasting your time.'

The senior scientist from CSIRO's Tropical Forest Research Centre on the lush Atherton Tablelands much prefers verdant jungle recesses to the public limelight. But in keeping himself to the forest, Hyland has arguably come closer than anyone else to unravelling the tropical rainforest's much-touted botanical diversity.

For 35 years, armed with a hard hat, a shanghai (slingshot), a brush-hook (long machete) and on occasions his dog, Hyland has traipsed Australia's northern jungles in search of new and rare specimens.

The heavy gear is needed to procure samples of fruit and blossoms from high up in the canopy. Hyland uses his trusty slingshot to catapult a lead sinker and fishing line across a desirable branch, followed by some rope.

'You often need two people to pull down the limb,' Hyland says. 'Really, it's amazing that over the years no one has been seriously hurt.'

While Hyland may shy away from personal publicity, he has been up-front in bringing the fruits of his labours to the public. After years of painstaking research and data-banking, Hyland has adapted his descriptions of 1056 rainforest tree species into an innovative computerised identification system.

The system, Australian Tropical Rainforest Trees, was developed jointly by the CSIRO Division of Plant Industry, LaTrobe University and the University of Adelaide. Unlike dichotomous keys, the innovative system enables trees to be identified using features of leaves, fruits, flowers, bark, families, seedlings or geographic distribution in any order or combination.

'We think it's the first time that anybody anywhere has actually done a computerised key for the whole (arborescent) flora of a major vegetation type,' Hyland says.

A similar key for rainforest shrubs will

be out late next year (1996). Vines, epiphytes, parasites and herbs will follow, although Hyland, now 58, says he doesn't know whether he'll be around to see it out.

Hyland was born in Brisbane, but spent his childhood on the move from one small town to another as his father, a teacher, followed work. As a 12-year-old, Hyland won a tour of surrounding forestry centres. 'All I knew then was that I wanted to work in the bush,' he recalls.



Dr Bernie Hyland: packaging his knowledge of the rainforest for all to see.

After high school he completed a five-year forestry course and headed north to the Queensland Department of Forestry in Atherton, where he studied the natural regeneration of prime cabinet timbers.

Confronted with more than 160 commercial timber trees, Hyland hatched his concept for an identification key. He ended up developing a card key, as 'back then (the '60s) there were only two computers in Queensland: at the Treasury Department and at Queensland University'.

But Hyland had soon amassed too much information for any card key to handle. He pushed for an advanced system, prodding his superiors for funds and linking with various computer experts. In

hindsight, he thinks he might have got his way 'to keep me occupied and out of other people's hair, as it was obvious to any thinking person the job was impossible'.

Hyland's aversion to attention is countered by a strong independent streak. The father-of-three says it might be the Irish in him. He recently visited his grandfather's hometown in Cork, and was struck by the 'utter green beauty' of the place. Having spent his working life in lush rainforest, he never expected to find a place even greener.

Nevertheless, Hyland is emphatic about being a Queenslander, first and foremost. He even has it listed under 'nationality' in his 'CV'. Indeed, his roots are almost literally in the Cairns hinterland, having formally described every species of tree there. With help from other botanists, he has also described about 80 previously unknown tree species of the Wet Tropics.

Such a plethora of new trees is bound to test imagination when it comes to defining their names. Fortunately a herbarium director with an 'elfish sense of humour' imparted some useful advice early on in Hyland's career: 'You can call it what you like Bernie, and there's nothing anyone can do about it.' Hyland, also fond of mischief, promptly named one species after his dog, and hasn't looked back since.

Another species came to him by way of the respected botanist Dr Geoff Tracey. 'I thought it was a hoax at first,' Hyland says. 'The seeds were an iridescent blue-green like beetles' wings. We referred to it as Tracey's puzzle.' And thus *Margaritaria dubium-traceyi* was concocted, sealing another anecdote for posterity.

So did anyone name any plants after him? 'Oh yes,' Hyland says with a laugh. 'And they are generally trotted out in the most derogatory terms in this office.' Like *Diplogottis bernieana*, for example.

But it seems another colleague is having some fun with taxonomy as well. *Hylandia* is a monotypic tree genus endemic to north-east Queensland. In a nice touch, however, it is commonly known as blushwood.

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