10 July 2009

Dr. Frank Podger
A
Eulogy

I am very proud that Frank's families have asked me to speak today.

I can't do justice to this unique man in the time available but I thought it was important to speak firstly, about Dr. Frank Podger the scientist and then, briefly, Frank the man I knew as a good friend.

My first encounter with Frank was when I was a second year forestry student at the University of Western Australia in 1963 46 years ago- I was attending a seminar by the distinguished University of California plant pathologist, Professor George Zentmeyer' who was speaking on the devastating group of plant pathogens that formed the Genus Phytopthora –literally the "plant destroyers".

I remember nothing about what Professor Zentmeyer said at that seminar. But indelibly imprinted in my mind still -46 years later- was the question time that followed his presentation. It was not unlike question time in the Australian parliament .....only all the questions came from a solidly built man at the back of the audience who peppered the Professor with a series of clinical questions about one member of this group of pathogens Phytophthora cinnamomi —the "cinnamon" fungus.

When question time finished there was no opportunity to talk to the visiting Professor the man who asked all the questions –Frank Podger- whisked him away, as I learnt later, to the Department of Agriculture.

Let me put this event in context.Over more than 15 years prior to this seminar Western Australian foresters had witnessed sudden collapse and death of tens of thousands of hectares of our unique Jarrah forest-not just the trees but almost all the vegetation. It was and is still recognized as one of if not the most startling collapse of a forest ecosystem that had ever been seen.

By the time Frank was appointed by the Federal Government to undertake research on what had become know as Jarrah Dieback every conceivable hypotheses on what was the causal agent had been proposed and to some degree investigated. Some idea of how intractable the problem is illustrated

by the fact that a theory that the problem was caused by drought was closely followed by one which proposed that water logging was responsible.

Frank with the meticulous approach that was the hallmark of his science rigorously examined and rejected all of these theories.

The breakthrough came when Frank was driving on the road from Pinjarra to Dwellingup-.....and I must digress at this point.

Frank drove a vehicle like Rommel rode his command tank –constantly sweeping the horizon from left to right with his binoculars—the difference was Frank did not have binoculars..... and Rommel was not driving at the same time.

Another of Frank's scientific attributes was his incredible capacity to read and keep up with the literature. This paid off because when he crossed the railway line on that road he saw to the right a shelterbelt of radiate pine trees which were progressively dying. He immediately remembered a recent publication by a New Zealand scientist Professor Frank Newhook who had reported the association between the soil borne fungus Phytophthora cinnamomi and the death of shelterbelts of radiate pine.

Frank confirmed that a soil borne pathogen was potentially the causal agent of Jarrah dieback in a series of simple but elegant experiments which demonstrated that if you took soil from a dieback site and planted jarrah in it they died.

Returning to that seminar.... little did I know at the time but Frank whisked George Zentmeyer –who had with him the magic selective media- to a laboratory where with George Doepel they isolated and identified Phytopthora cinnamomi from the tissue of dying jarrah seedlings.

Within weeks this major discovery was reported in an international journal. It was one of the most significant plant disease breakthroughs that had been reported.

I would like to say and that was history but that was not the case .His discovery was not popular because its implications to management of the jarrah forest, our water catchments and timber industry were very

significant. Frank had to contend with a number of genuine and self interest driven skeptics including an imported Professor who insisted that the fungus was not an introduced pathogen.

At the time I felt some sympathy for him because he was under attack and he did not waver .....in retrospect, after I came to know him, I regretted that I had felt sympathy ..... the fact was he enjoyed the battle!

Frank went on to complete the challenging task of meeting all the rigorous research which was required to prove beyond doubt that Phytopthora cinnamomi was the causal agent of Jarrah dieback. His Masters Degree based on this research was one of best I have ever read and he received international recognition for his work when he was awarded the International Union of Forest Research Organizations Medal.

He went on to complete his Doctorate in New Zealand. Ironically his supervisor was Professor Frank Newhook.

He made a major contribution to forest science during the time he worked in the CSIRO in Tasmania He was the scientist who first identified the impact of Phytopthora cinnamomi in the heath lands of Tasmania which alerted scientists in Western Australia to the devastating impact of this fungus on one of the most biodiverse ecosystems in the world –the heath lands of Western Australia.

His friends from Tasmania are represented here today by Don White. They have asked me to pass on there condolences to his family and friends in Western Australia.

Among there many reminiscences they described was the ritual weekly visits Frank led to the Prince of Wales Hotel and they asked me to inform you all that they will today be having drinks together in honor of Frank at one of his favorite watering holes.

I was fortunate to have Frank work with myself and my colleagues in CALM when he left Tasmania. He was able to use his knowledge of plant pathology and forest management to add weight to our endeavors to control plant diseases in our unique vegetation.

Frank was one of the most astute observers of nature that I know and his knowledge was not restricted to plant pathology although his contributions in this area were not restricted to Phytopthora. His understanding of fire ecology, for example, was more advanced than most.

But he was also a person who could provide advice, support and skills in the difficult political environment which surrounds conservation and land management.

There are endless stories which I could recount about Frank Podger. His capacity to be disorganized and absent minded is legendary.

His meticulous and analytical approach to environmental problems did have its downside particularly when it came to writing. Franks desire for perfection often was at the expense of meeting deadlines. Thirty six years after he made an eloquent presentation to a workshop on Phytopthora I am still waiting for the chapter in the book we had planned to publish which he promised me would be completed within a week after he returned to Tasmania.

Frank was very... frank. His performance at seminars again was legendary. I like this quote from one of my Western Australian colleagues which encapsulates his style:

"Frank was a courageous warrior, and he ruthlessly pursued enemies of good science and logic - the ideologues, the illogical and the idiots. Science needs people like Frank. Frank was willing to challenge the status quo and the paradigms of the day and in doing so Frank did not endear himself to everyone. I recall saying to Frank after he had dismantled someone's argument in a less than tactful manner during a scientific seminar,

"Gees Frank, you really upset so-and-so with your comments about the quality of his science", to which Frank replied – "Science is not a bloody popularity contest – it's a search for the truth" "

I have tried to tell you a little about Dr. Frank Podger the scientist. I would like to tell you a little about Frank the man from the perspective of one of his friends.

It is a fact that he could be quite frightening when he was defending the faith whether it be science or politics. But although I did not always agree with him I was always reassured by the fact that he had no hidden agenda. I relished the fact that when I was with Frank that I had accesses to a person of complete honestly, fantastic wit and high intellect ..... what I saw was what I would get.

It was sometimes uncomfortable but ultimately reassuring to know that I had no chance of getting tickets on myself.

But Frank was also a man who had the capacity to show great compassion and loyalty. I first experienced these characteristics when as a nineteen year old student in Canberra, who had just learnt that my ball had came out of the barrel and there was a more than reasonable chance that I would be spending some time in Vietnam. I was the subject of some unkind ridicule by fellow students. It was Frank who came vigorously to my defense.

I saw often saw him exhibit this characteristic.

In the latter stages of my career as a public servant Frank was a member of close band of loyal friends who helped me through some difficult situations. I knew when times were tough he was always there

I believe the ultimate a measure of any person is the way they feel and deal with their children. Frank passed the test..... he was a loving and very proud father and he often talked about his children with me.

I was privileged to know and work with Frank. I want to say to his family..... on behalf of his friends and colleagues.....we will never forget him.....and..... we will miss him.

Syd Shea

10 July 2009

Valued forester

THE environment has lost an outstanding campaigner and researcher with the death of Frank Podger.

The WA forest pathologist died on June 29.

Dr Podger will leave a lasting legacy in the Tatiara. He worked with the late Geoff Cotton from Keith to make governments and environment departments aware of the lethal eucalypt disease, now known as Mundulla Yellows.

He visited the Tatiara a number of times and was instrumental in naming MY.

Dr Podger was involved in the first MY workshop at Mundulla and played a vital role in securing government funding for research into the cause of the yellowing and dieback.

He earmarked Professor John Randles to lead the team of SA University researchers that continues to investigate the cause.

Dr Podger appeared on the *Landline* program about MY, and was a co-author of the glossy *Mundulla Yellows – a new tree-dieback threat.*

He was active in lobbying politicians for MY grants and was vocal in his criticism of the SA Government for funding a Victorian research team in preference to the pre-eminent SA scientists.

Dr Podger had been a forest pathologist at the Department of Conservation and Land Management for many years and worked for more than 50 years on diseases in native vegetation in Australia.

In 1967 he proved that Phytophthora cinnamomi was the cause of jarrah dieback. For this he received an achievement award from The International Union of Forest Research Organisations.

He later helped to develop strategies and policies for its management.

More recently he co-wrote an important book on eucalypt diseases.

The West Obituaries

Edited by Torrance Mendez

Dieback pioneer an inspiring scientist

FRANK PODGER
Discovered cause of dieback

Born: Bunbury, 1933
Died: Marangaroo, aged 75

No one knew why hundreds of thousands of hectares of native forest were collapsing and dying in the 1950s and early 1960s. In the end a moment of inspired brilliance by Frank Podger unravelled the conundrum now dubbed jarrah dieback.

The young botanist was hired by the WA Forests Department to identify a plant predator that was as efficient as it was lethal. For more than 15 years it had devastated the landscape, turning once luxuriant forest into serried ranks of ghostly grey trunks.

The destructive agent did not only target the jarrah species. It pole-axed all vegetation, laying waste to swathes of prime South-West bush.

When drought was thought the culprit, Frank Podger methodically debunked the theory. Blame shifted to waterlogging. Another myth. Frank Podger devoured scientific papers in his search for clues.

The answer came to him in broad daylight when driving between Pinjarra and Dwellingup. As usual, his eyes were darting left and right, scanning the scenery, and, as he crossed a railway line, they locked on a shelterbelt of dying radiata pine trees.

In a brainwave, he recalled a scientific paper by New Zealand plant pathologist Frank Newhook, linking the soil-borne cinnamon fungus — Phytophthora cinnamomi — to the death of shelterbelts of radiata pine.

Hurriedly, Frank Podger demonstrated that a soil-borne pathogen was potentially causing jarrah dieback; healthy jarrah planted in soil from a dieback site would die.

It was lateral thinking at its best. The cinnamon fungus had been introduced and spread largely by human activity; roads in virgin bush were inadvertently built from soil from contaminated areas.

The tropical water-loving fungus attacked all commercial horticulture, pine trees and 1000 species worldwide, including 100 in WA. No one had expected it to wreak havoc in WA's dry climate and wipe out 25 per cent of Stirling Range National Park.

The discovery led to a memorable 1963 seminar in Perth with renowned US plant pathologist Professor George Zentmyer, who talked about a group of plant pathogens known as Genus Phytophthora, the plant destroyers. Frank Podger asked a series of incisive questions before whisking the professor to the Department of Agriculture.

That led to a visit by another US plant pathologist who worked with Frank Podger to prove his jarrah dieback theory; Frank Podger isolated and identified the cinnamon fungus from the tissue of dying jarrah seedlings. Within weeks the breakthrough was recorded in an international science journal, Plant Disease Reporter.

But the finding had major implications for management of jarrah forest, water catchments and the timber industry. Sceptics included an imported professor who insisted the fungus was not an introduced pathogen.

Frank Podger dumbfounded critics in a masters degree that addressed their queries. For his effort, he received the prestigious International Union of Forest Research Organisations Medal, before completing his doctorate in New Zealand, fittingly, under Professor Newhook.

In the 1970s Frank Podger worked with CSIRO in Tasmania, where he first identified the impact of cinnamon fungus in that State's heathlands and alerted scientists to its devastating impact on WA heathlands, home to one of the most biodiverse ecoystems on the planet.

As well, he was the first to notice that Mundulla Yellows disease had also arrived in urban areas of WA. In retirement, he risked his superannuation to finance searches for the disease across the nation, in a series of scientific surveys. The plant-killer poses a threat to Australian flora but its cause remains a mystery.

As a fire-effects ecologist, Frank Podger understood the role of fire in shaping the landscape. When a consultant to WA's former Department of Conservation and Land Management, he supported prescribed burn-offs. At Dwellingup, he identified a giant tree that had survived logging and showed how tall trees suppressed light and water from reaching the undergrowth; take the big trees away and the undergrowth received more light and water, promoting denser growth and creating fire hazards.

In the Darling Scarp he lent his name to a magnificent species of ghost gum found to be dieback-resistant; eucalyptus laeliae Podger and Chippendale.

All his achievements survived rigorous scrutiny. Dishevelled and seemingly absent-minded, he reputedly did not suffer fools gladly, though he was fiercely loyal and was the life and soul of pub gatherings. The story of the international scientist, however, began in heart-rending circumstances.

Francis Denis Podger was born in Bunbury on August 10, 1933, eldest of four children to postal officer Stephen Podger and wife Mavis. Frank's father suffered post-traumatic stress from World War II, leaving young Frank to find solace in nature in nearby woods.

Family problems were insurmountable and Frank and a brother, Keith, were packed off to Swan Boys Orphanage. It was cold comfort. Frank, then aged nine, trekked to school barefoot up to 4km a day. There was food rationing and he contracted rickets.

But he developed a fine intellect; he learned how to entertain and protect himself and others at the worst of times. The Anglican Church sent him to Guildford Grammar on a scholarship and, at 17, to study botany at the University of WA.

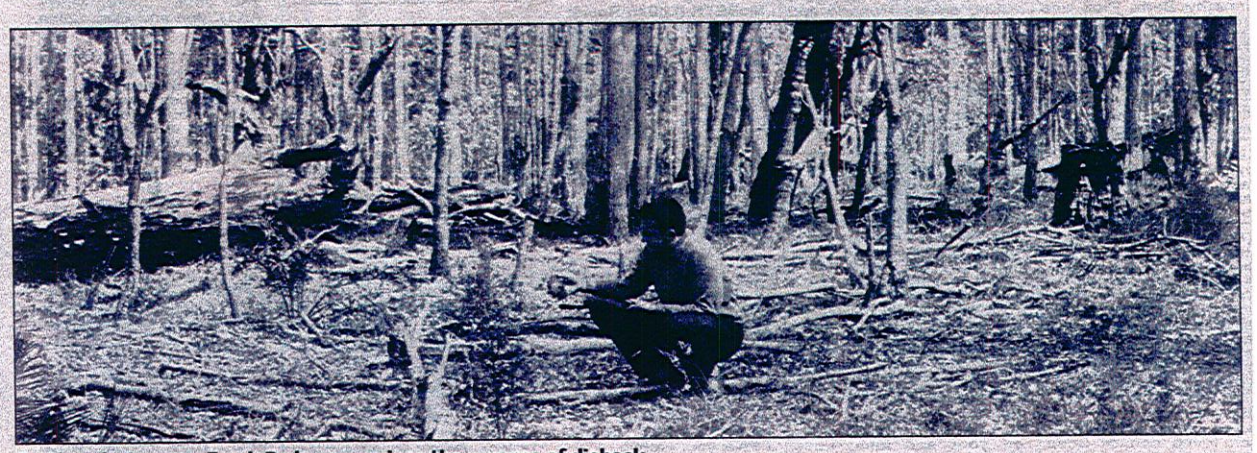
When at the forestry department he charmed Antoinette Stewart at a party. She admired the bright but disordered young man and impressed him by placing a copy of Einstein's Theory of Relativity in plain view when he visited her home. They married and had five children.

Frank Podger was an instinctive scientist. Shunning bureaucracy, he brought an intensity and clarity to his work that inspired peers. Witty and acerbic, he could debunk others' work, candidly arguing that science was not a popularity contest.

Yet his approach was poetic. He often remarked that those who had walked before him had taught: "The history of the trees of the forest is writ large in their architecture for those who observe carefully."

Frank Podger died in Marangaroo on June 29. He was 75. He leaves children Lisa, Cathy, Julie, Aaron and Adam, and their mother, six grandchildren, and a second, long-estranged, wife.

Torrance Mendez



On the job: A young Frank Podger examines the ravages of dieback.