Submission to the Productivity Commission Enquiry into the
Impacts of Native Vegetation and Biodiversity Regulations.

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3rd July 2003.

History.

The area of Western Australia where my husband and I farm was allocated as Conditional Purchase land in the early 1960's, further neighbouring land was allocated up to 1974, when the massive rise in the cost of superphosphate made development uneconomic. Potential farmers came from all over the world with the dream of developing a farm of their own and a better way of life for their families. They endured considerable hardship and sub-standard living conditions as they strove to build a farm out of the bush.

This area is adjacent to the Fitzgerald River National Park, "part of an ancient (2500-2900 million years old), and essentially stable, crustal segment known as the Yilgarn Craton. Granite and gneiss are the predominant rock types with minor enclaves of altered sedimentary and mafic igneous rocks." (Fitzgerald River National Park draft management plan, June 1989) Agriculture W.A.'s Soil Guide describes the Jerramungup plain; "Dominant soils are alkaline grey shallow sandy duplex soils, alkaline grey deep sandy duplex soils, grey non-cracking clays and alkaline grey shallow loamy duplex soils. Sandy gravels and pale deep sands are also found" They forgot to mention the red loam and clays that are a feature of the Jerramungup area and tend to be so high in Magnesium that they set like concrete when dry. Not a very inspiring description, no wonder there was only a couple of pastoral operations until the War Service Land Settlement Scheme in the '50's developed the area from Albany north to Jerramungup.

In spite of the difficult soil, the variable seasons, the tendency to rain at harvest, the isolation and remoteness from markets, people did develop their farms and some have made money. Certainly the produce from this area has enriched the state and by the combined efforts of the pioneers there was a thriving community at Fitzgerald for nearly 30 years. Now the population has diminished so that the school has closed and we have changed from being an isolated community to being people who live too far from town. Those who know the area have bought more land, but it is hard to encourage newcomers to move in to an area with so few people.

Conditional Purchase Terms.

Under the terms of the Conditional Purchase agreement the farmer had to live on the farm, fence, water, and pasture a set area, and boundary fence it before he could pay off the purchase price to the State Government and get freehold title. There were inspectors who went around checking that the residency condition was being kept. Naturally the settlers had different financial resources and differing abilities to earn off farm, and different attitudes to clearing. Those with the resources and the inclination cleared the whole farm very quickly regardless of topography; much cheaper and easier to chain the lot and burn it than to go around creeks and rock outcrops and leave shade and shelter. The whole attitude to clearing was different then with major creeks included in blocks.

The terms of the Conditional Purchase Lease allowed for the "Minister for Lands,…… his heirs and successors to resume and and enter into posession of any part of the said land which it may

at any time……be deemed necessary to resume for roads etc, etc without making any compensation in respect thereof, so, nevertheless, that the lands so to be resumed shall not exceed one-twentieth part of the whole of the lands aforesaid….” Refusing permission to clear must be the same as resuming, even though it is not for any of the useful purposes outlined, so they are not allowed to resume more than 5% of the land.

Upon freeholding, the terms of the Crown Grant has similar provisions for the resumption of land for “any other works or purposes of public use, utility or convenience……without any compensation….that the land so resumed shall not exceed one-twentieth part in the whole of the lands aforesaid, and that no such resumption be made of the part of any lands upon which any buildings may have been erected ……or on which any other improvements as defined by the Land Act 1933, have been made, without compensation….” Thus we have it very clearly stated that the Government may not resume more than 5% of the land, and that if improvements have been made, compensation must be made. I contend that the Government has no right to control what we do with any more than 5% of our land, and that that control has to be for the construction of a public benefit, not for the detraction from it.

Soil Type and Vegetation.

The native vegetation declines rapidly from the Yate trees of the Jerramungup red loam to low mallee scrub consistent with the poor soil rather than the 400mm rainfall. Apart from the Yate trees in creek lines the mallees seldom reach more than 3 m in height and have an understorey of small, narrow leaved shrubs, with a high proportion of native poison plants. These are highly toxic and grow vigorously after clearing; there is no antidote and no treatment for gastrolobium (1080) poisoning. The native vegetation is ideally designed not to transpire water, trees turn the edges of their leaves to the sun to protect their stomata, and most of the shrubs have very narrow leaves with few stomata. The mallees store water in their enlarged roots to reduce their dependence on rainfall.

Clearing and fertilizing the land has made a huge change to the soil chemistry and structure; the application of superphosphate and trace elements of copper and zinc enables large trees to grow where previously only blue mallees and heath would grow on the light sand. Crops and pastures do well and this area is renowned for the advances in dryland lucerne growing. Lime is needed to balance the magnesium in the red clay at a rate of 6 t/ha over several years, and potassium is needed on virtually all soils. Unfortunately the vested interests in the fertilizer companies are still stuck on phosphate and nitrogen to grow crops so there is a growing problem with acidity and soil structure.

Fresh and saline aquifers are a part of the original landscape; we first struck water at 12 feet when drilling for our first dam, two years after clearing. There are also fresh water soaks, the kangaroos dug them out before we enlarged them, the deep sand patches hold fresh water underground, which then comes to the surface with the clay. We can plant pine trees and tagasaste on the sand hills to control recharge and lucerne on the lower ground to use the ground water, they are useful tactics to deal with the variable climate, summer rainfall and droughts.

Those settlers who did not blanket clear their farms, who left shade and shelter and creek lines, had a more expensive and difficult job of clearing, and then had to cope with the extra cost of fencing off the bush because of the native poison. Those who could not afford to do all the clearing in the first ten years, or like us started late, were caught by the increase in superphosphate and fuel prices in 1975, and found it impossible to catch up. The price of basic superphosphate doubled to $40 after the bounty was removed in 1974, then the oil crisis produce an escalation of costs of diesel and superphosphate, the basic tools for development.

Economic Conditions.

General agricultural terms of trade have declined considerably over the following years so that developed farms have reduced viability; it is so much harder in a developing situation. Wool growing was the core business for farms around here until 1990 when our incomes were cut by 2/3rds,

cropping provided the funds for development. Low grain prices in the late '80's, followed by the wool collapse, meant that when clearing bans were in the offing we could do nothing about it, we abandoned our newly cleared land for 15 years and certainly couldn't have cleared any more. We could only contemplate clearing with the bank understanding that we would sell soon after to clear the debt; the past 13 years have taken most of our inherited money into the black hole and increased our borrowings to the limit where we could never trade our way out.

The impact on our farm of having 30% of the land uncleared is considerable, for a start the kangaroos and emus that live in the bush do considerable damage to crops and fences and eat more than their share of pasture. Over 6 months of last year's drought the 'roo shooter took 600 'roos averaging 48 kg dressed weight, that is the equivalent of 1200 lambs we could have sold @ $70; $84,000. In 2000 we tried to grow lupins and every one was picked up by the emus as it germinated, last year's barley crop was eaten and flattened to such an extent that our share cropper will not crop the northern block again, we have suffered similar damage in every crop. In the 2000 drought we lost 200 ewes that we had been hand feeding for 8 months when the emus knocked down a gate and they got in to the new country and ate poison. We saw them that morning and moved them at once but they still died. Any sheep that get out of their paddocks can wander into the bush and disappear, so when we suspect that sheep have been stolen there is no way we can prove it, not that that would do us any good either.

Because we cannot crop the northern paddocks the pasture has deteriorated and erodium has taken over; not only does this damage the wool, but it is a poor water user and will contribute to the ground water. Pasture needs to be renovated by cropping, and there are new species we would like to introduce that would be more beneficial and productive. We cannot seed pasture or crops if we cannot control the grazing.

My husband would like to retire from hard broadacre farming after a fifty-year working life, but we cannot sell the farm with the bush as part of it. No one is going to buy a farm with 910 ha of bush in the middle of it and emus and kangaroos in plague proportions. No one will buy a farm where they pay 30% extra rates on land they can't use. In order to appeal to the Minister against the decision we have to have a Soil Conservation Notice served on the land, that implies it is in some way subject to degredation, so not only would no one buy it, no bank would lend them money to do so.

It may be posible to put the bush on a separate title, but I can't imagine anyone wanting to buy a featureless block of 450 ha or 280 ha 500km from Perth. I am told that subdivision is not allowed if it produces an unviable, i.e. less than 1214 ha block of land. To divide off the bush, CALM has to assess it to be worthy of preservation, free of weeds or die-back, and in a healthy state of growth.

The Risk of Salinity.

We submitted a Request for Permission to clear land to the Commissioner of Soil and Land Conservation on the 5th April 2002, asking for permission to clear 15 % of our land, 465 ha out of the 910 ha of bush remaining on the 3032 ha we own. This allows for fragile sandy ridges, generous creek lines, 50m wide shelter/fauna belts, and about 200 ha of mort and black mallee woodland to be left uncleared. Nadene Schiller, Land Conservation Officer at Jerramungup Dept of Agriculture carried out a property inspection on 3rd July. Her report was quite thorough and pointed out that all clearing is likely to contribute to salinity. She ignored the evidence of our own piezometer bores but quoted some "within a five kilometre radius of the property". We have nine piezometers which we monitor quarterly, two of them follow an aquifer that runs out of the 458 ha area of bush which reaches right up to the watershed. The one on the edge of the bush is the most sensitive to rainfall, after 181 mm of rain in January 2000 it rose to 0.62 m below ground level, two other piezometers in pasture showed no effect.

The bush is old, it was last burnt in 1947, and it is not growing, so I don't see why it should be assumed that it uses water. The rejection of our application, which was sent on the 29th April '03,

quoted the Leaf Area Index of the bush as 5-6 sq m of leaf area per sq m of ground. I have not troubled to strip a mallee of its leaves, as I know they would not take any notice if I did, but I know that eucalypts have a very efficient system of closing their stomata to prevent transpiration. Since they are not increasing their biomass their only use of water is in transpiration. Water usage by soft leafy plants such as lucerne, clover and cereals must be higher as they cannot control transpiration and their biomass is being harvested, either in terms of tonnes per hectare of grain, or in sheep, which represent a total removal of fluid and biomass. Unfortunately the "salinity industry" is so well developed that any arguments fall on deaf ears; since the problem became public knowledge any original or contradictory ideas are seen as heresy.

There are various scientific papers studying the water use of eucalypts, all I have found use planted, growing trees, but Paul Raper in his "Agroforestry Water Use in Mediterranean Regions of Australia" covers the subject well. In his Summary; " in general, healthy trees planted in alleys or small plots, with fresh groundwater at between two and four metres depth, will use more water than the native vegetation did prior to clearing". He continues to research the water usage of different species, finds that E. Occidentalis, the highest water using tree native to this area, is the lowest user with transpiration rates under 200mm per year. Our experience with Occidentalis planted in a CALM trial forestry plot last July shows they have grown to 1.6 m in 10 months, having started in a particularly dry winter. Pine trees were shown to have evapotranspiration rates from 96% to 105% of rainfall and tagasaste from 103% to 120%. We have successful pine and tagasaste plantations. Our own and other local monitoring is showing a reduction in subsoil water of at least 0.5 m/yr under lucerne, but all evidence falls on deaf ears. Our argument is that if we were allowed to clear we could install preventative and curative measures, but with untouched bush we can do nothing.

The assumption that clearing will lead to salinity is based on the farming practices of fifteen years ago, now with no-till seeding and dry manuring we can build up the humus in the soil, which enables it to store up to 100 mm of rainfall in the top ten centimetres of soil. The addition of lime will balance the high magnesium which binds the soil particles together, thus improving the absorbtion of water. Most of the saline areas one sees when driving around the country are being dealt with and improving, those who depend on the salinity industry do not want to admit that.

The letter we received rejecting our application to clear made it plain that none of our arguments had any chance of being considered, against the usual assumption of innocence the act allows the Commissioner of Soil and Land Conservation to refuse our application on the grounds that it *might* cause salinity and the Environmental Protection Authority to refuse it on the grounds that there *might* be a threatened species. There is no recognition that the bush is part of our farm; is in fact unimproved farmland. No consideration is given to the fact that the bush imposes a financial burden on our farm and there is no provision for compensation. Even if there were a shortage of natural bush in the area it is not fair that we should have the burden of protecting it unaided.

The Cost of Inaction.

The prevailing opinion that the bush can be left to look after itself was convincingly disproved with the devastating fires in many parts of Australia last summer. One that didn't hit the headlines was started by lightning near Peak Charles, not far from the Lake King – Norseman track, it was left unattended and in favourable conditions a few weeks later, it burnt out 3-400,000 ha on its way to the coast about 200 km away. It was only the extreme bareness of the paddocks that saved CALM (Conservation and Land Management) from a big insurance claim. That area is nothing but black sticks, a far hotter fire than can be considered normal even for bush, and it will be many years before any recovery will be seen. We do not consider CALM to be adequate custodians for any more land. There are huge areas of bush which is all liable to go up in smoke to the north of us, as well as the Fitzgerald River National Park to the south, we don't want a large fire risk in the middle of our farm.

Impact on Fauna.

The native fauna have adapted well to agricultural land use, in nearby areas the early settlers commented on a complete lack of wildlife. Kangaroos are the obvious example, as the water we supply enables them to breed without restraint. The smaller marsupials also benefit from the improved feed and water and would live in quite small areas of bush provided the kangaroos were controlled. With limited bush we are better able to control foxes and there would be the ability to patch burn like the aboriginals did. We have a great variety of birds in the paddocks, when riding through the bush one sees or hears very few; we have also had mallee fowl eating the chook feed and grazing in the paddocks. A mix of cleared land, planted trees and bush would seem a good compromise.

Other impacts of Conservation Legislation.

Domestication.

The policy of prohibiting the keeping of native animals or collecting seed from National Parks is a classic example of misguided conservation, smaller marsupials could probably have adapted well to living in suburban gardens as pets, thus reducing the number of domestic cats which go wild. The unique plants in the Fitzgerald are at risk of extinction in wildfires, and whole paddocks of Qualup bells have been ploughed in because they could not be sold. Reptiles and birds that are being smuggled out of the country could be replaced by a legitimate trade in captive bred animals; if only people were allowed to breed and sell native animals.

Vermin Control.

Recent restrictions on the use of Strychnine poison for emus have made control nearly impossible, we used to be able to get strychnine from the Shire office, now we have to pay for the A.P.B. officer to come out and administer the poison, rather ineffectively. Since they regularly raise clutches of a dozen chicks, and bring them out of the bush just as the crops are ripening, it is not uncommon to find 50 or more emus in one paddock. They flatten more crop than they eat, and strip the heads off as they run, then charge into the fence, frequently breaking posts.

Livestock Protection.

The native poison is a huge problem; it is heartbreaking to have a big lamb die on the way to the yards right in front of you. One moment it’s walking along happily, the next it lies down with convulsions and dies. Lambs are particularly prone to eating through fences, all our road reserves are full of poison, and they don’t get a second chance. A very clever scientist, Dr Keith Gregg of Murdoch University School of biological sciences was funded by the Queensland graziers to find a solution to their problem with the gidgee (I think) tree, which is only poisonous at certain times of year. It is also a gastrolobium toxin so when he managed to modify the bacteria in the rumen to deal with gastrolobium toxin without killing the animal it was very exciting. Unfortunately the conservationists were worried that the bacteria might colonise the gut of pest animals that ate carcases, i.e. foxes and dingoes, or cross into donkeys. In extensive trials Dr Gregg showed that only a few of the bacteria could colonise the hindgut of non-ruminants, which wouldn’t do them any good in processing 1080. When I last spoke to him he was sickened by the number of animals he had had to poison to satisfy the conservationists, and had very little hope of being funded to finish the work. If his vaccine was released, it would be cheap to apply as it is transmitted between animals in their breath, so one would really only need to treat the rams; the animals would get a chance to learn that poison plants don’t taste nice, and it would save us much heartache and money.

Weeds.

This is probably the cheapest agricultural land in the country and yet there has been little demand from outside the area, so some landholders have got very big holdings and are running them extensively. This has helped allow the invasion of African Lovegrass, a tussocking grass with tall seed stalks that is unpalatable to stock and resistant to every chemical. It flourishes on roadsides and then invades paddocks; the main roads department have been unable to kill it even with a grader. I foresee

it becoming a worse problem than salinity in ten years time. In order to have healthy agricultural land we have to have a healthy economic environment and a positive outlook from farmers.

Mental Health.

I have suffered considerable anxiety and stress trying to develop the farm, seeing our debts rise each year, especially in the past 6 years of frost and drought, wishing we could clear the remaining land. Not to be allowed to finish the job and dealing with the opposition that comes mainly from political considerations has added to the depression. Last year I finally sought help and will probably be on medication until we sell the farm. On hearesay evidence, more than half the population of Jerramungup and surrounds are on anti-depressants.

Conclusion.

Property rights have long been recognised as one of the foundations of society, if people cannot trust that their efforts and investment will be respected then they will give up making the effort and investment. There is no accountability or transparency in the current process of denying approval for clearing; there is no offer of compensation for loss of use and damage done. In order to appeal the decision we have to allow a Soil Conservation Notice to be issued against us, and be prepared to wait for years as our appeal is ignored. We as developing farmers are treated as pariahs in the press, the work of 34 years is derided as being responsible for all sorts of environmental ills, no mention of the public who have eaten our food and bought imported goods with the balance of trade that we have provided. If the vocal conservationists had homeless people living in a third of their house, and raiding the fridge every night, they might understand how we feel. It is especially annoying to read that permission to clear is being granted to developers who want to build housing estates, this underlines the city-centric attitude of the government.

Mrs Augusta K. Saunders.