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The Australian Rangeland Society

PEOPLE: THE MOST IMPORTANT ELEMENT FOR ENVIRONMENTAL INTEGRITY IN THE RANGELANDS

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ABSTRACT

This paper looks at the trends of declining terms of trade and declining populations in the rangelands and the social, economic and environmental implications of those trends. It discusses the need for intelligent and relevant science to assist in slowing those trends. It strongly recommends to the Australian Government that it recognizes these trends and puts in place long term strategies to assist in ceasing them. It also calls on the Australian Government to recognize the valuable stewardship role that producers in the rangelands play in caring for the environment.

INTRODUCTION

My children are the 5th generation to live on "Thackaringa" which is a wool growing enterprise close to Broken Hill in western NSW. My expertise lies in wool production, unlike many of you who would be cattle producers. I am not qualified to talk on indigenous issues or health. However, I am qualified to talk on drought and, being a woolgrower, to talk on weak commodity prices over a significant period. I have had plenty first hand experience of both in the last 14 years!

We hear stories about bush kids who have never seen the sea, or the three year old from Tibooburra who bursts in to tears when a rain drop gets him on the brow, well Hugh turned 15 on 1/3/04 and saw green grass for the first time in his memory in October last year! So, reflecting on the past 14 years for this talk, the negatives easily came to mind. However, I also made a list of the positives and it is very clear that the positives far outweigh the negatives and that we have a great future.

I'm glad to be talking here today with people who are as keen as I am to ensure the survival of the rangelands as a productive landscape of huge importance to the Australian economy. Equally important, however, is the survival of the rangeland environment with its iconic beauty that is recognized world wide as being unique.

But I'm particularly keen to raise awareness about the impact of the negatives on the people who are the stewards of the rangelands. My feeling is that they require smart science, smart support and smart communications in order to cope better as families and as productive and sustainable businesses. We need to ensure there is continued support for those people who manage rangelands properties, so they remain in productive and viable, healthy communities and that these landscapes have the best of care well into the future.

Some of you would remember ten years ago at the Katherine Conference, when Bob Wynne delivered a paper entitled "Likely Survivors in the Wool Industry in the Australian Rangelands". Well most of us have survived this far. Three years ago my father, who will turn 80 this year said, "this is the toughest seven years we have ever had". Yet there have been very few properties change hands in this district over that period. That is pretty fair indication of the commitment that the people of the rangelands have.

The social well being of people in the rangelands, not surprisingly, is directly dependant on the

economic situation at the time and on climatic conditions. As the cost-price squeeze tightens, the impacts of drought have an even greater social impact. One of the difficulties in considering social and economic risk in the rangelands is that not only are there a very diverse number of land systems / bioregions represented, but every family's situation is different. It would be a total waste of time in this or any other forum to discuss what I believe for example is the best way to market one's wool clip. What works for one operation may not suit another for a whole host of reasons. Also each person is the best one to judge their own situation, provided they have the tools to make the necessary decisions.

The greatest asset by far that the rangelands have, is the people who live there. We are not here for the easy or convenient living, we have made a choice to be here because it is our long-time home, we are an integral part of it and we (the rangelands and the people) are both reliant on each other for our well being and survival. I consider it a privilege to live in the rangelands and am totally committed to managing the environment for which I am responsible, in such away that it will continue to improve and return to (as near as possible) a pre-white settlement condition. My kids feel the same (even knowing the financial returns!), because it isn't just about those financial rewards. I think that my peers are of a similar opinion although they may not articulate it the same way. **The greatest threat** to the rangelands is the loss of people. Table 1 shows the national decline in people involved in agriculture since 1950 and the decline in net output value.

Table 1. Structure of Australian Farming 1950 -1990 from Godden, D. (1997).

	1951-52	1961-62	1971-72	1981-82	1991-92
Farms (' 000) (a)	203	202	188	174	124
Total area of farms (m ha)	441	475	500	491	466
Workforce (' 000) - total	477	453	407	380	374
– Employers / self employed			240	236	221
– unpaid family			23	12	23
– wage & salary			145	132	130
Female work force	31	42	42(b)		
Capital stock (excl. unimproved land value)	41,473	57,888	92,597	99,122	89,872
Output volume (1989-90 = 100)	35	52	74	85	97
Gross output value (87-88 = 100) (c)	80	85	90	100	85
Net output value (87-88 = 100) (c)	22	168	149	109	39

Sources: ABARE (1994), Powell and Milham (1990)

Notes: (a) several changes in the definition of "farm" from the mid- 1980s reduced farms counted, (b) 1970-71, (c) $ gross and net output value respectively, divided by Consumer Price Index

Figure 1 shows the steady decline in the price of wool since AD 1270 (source: G. Redden, Elders Limited, Adelaide).

"In 1950-51, the gross product of the farm sector was $1.83 billion which represented 26.1% of Australia's GDP, in 1990-91 that figure increased to $11.1 billion but agriculture's share of Australia's GDP declined to 2.9%" (Burdon 1996).

"In 1911, 43 per cent of the population lived in rural areas. This had fallen to 14% by 1976, before stabilizing in the past 25 years" (Beer *et al.* 2003).

This decline in population in the bush is a double edged sword. Not only is the work force depleted but social activity declines and the urban/rural gap widens. Subsequently, there is less empathy for the bush from within those urban areas.

"For much of the 20th century there was a relatively even social and economic landscape in Australia. This was particularly true for the period between the end of WW2 and the mid 70s. There is a large and growing gap between the incomes of those Australians living in the capital cities and those living in the rest of Australia" (Beer *et al.* 2003).

It is therefore hard for many Australians to comprehend the serious cash flow problems experienced in the bush. There was a period in the 1800s when wool was a more valuable commodity than gold and the high wool prices of the 1950s wool boom is still in the minds of some who consider some of us to be "whingeing arrogant cockies". Well 50 years ago that may have been true in some cases; some of the TV programs and magazines currently available don't do our image a whole lot of good either.

If you look in the back of the document *Social Impacts of Drought* by Charles Sturt University – a report to NSW Agriculture and NSW Premier's Department, there is a long list of Commonwealth Government drought assistance measures. To the casual observer it would appear we are well catered for.

On looking at the annual reports from the Wentworth/Balranald Rural Counselling Service which formed in 1991, one can see that debt levels fluctuate somewhat. I quote from the 2001/2002 report that the average debt per farming enterprise on their books was $515,000 and average equity was 64.4%. These people are not bad operators; ten years of drought and low commodity prices are influences that they cannot control.

Some families made the decision to eat into their farm equity in order to educate their children. It is absolutely critical that children in the rangelands get a good education not only for their own well-being but also for the health of the rangelands.

The cost price squeeze will continue and the hard-nosed economic rationalists will say, "Get big or get out". I cannot support that theory broadly across the rangelands. There probably are some examples where an operation is too small, but we cannot afford to lose any more people. If for example, I buy out my neighbor, I have to run that new piece of country with a similar labor force as I have now. I then significantly increase our workload. The reality of it is that the opportunities for weed control, rabbit control, fox control, pig control are more limited. You might say that can be fixed with better management, but that's not the issue; a larger workload is the reality. It's not to say either that the big operators aren't responsible managers; they are in my experience. Different land systems require different management strategies, work forces, types of animals etc. **Bigger isn't necessarily better for the rangelands.**

SHOW US THE SCIENCE!

There is a dire need for relevant science in the rangelands, and the delivery of that has to be intelligent, regular and practical. My most vivid memory of the 1973/74 rainfall event was 'ill thrift' in sheep, particularly young sheep. I can remember the RLPB Ranger on his lice inspection at shearing time saying, that he "hadn't seen a decent mob of weaners anywhere in the district". I had suspicions of the cause, but without the science and despite my challenges to the hierarchy, I was reminded "you can't get worms in the Western Division".

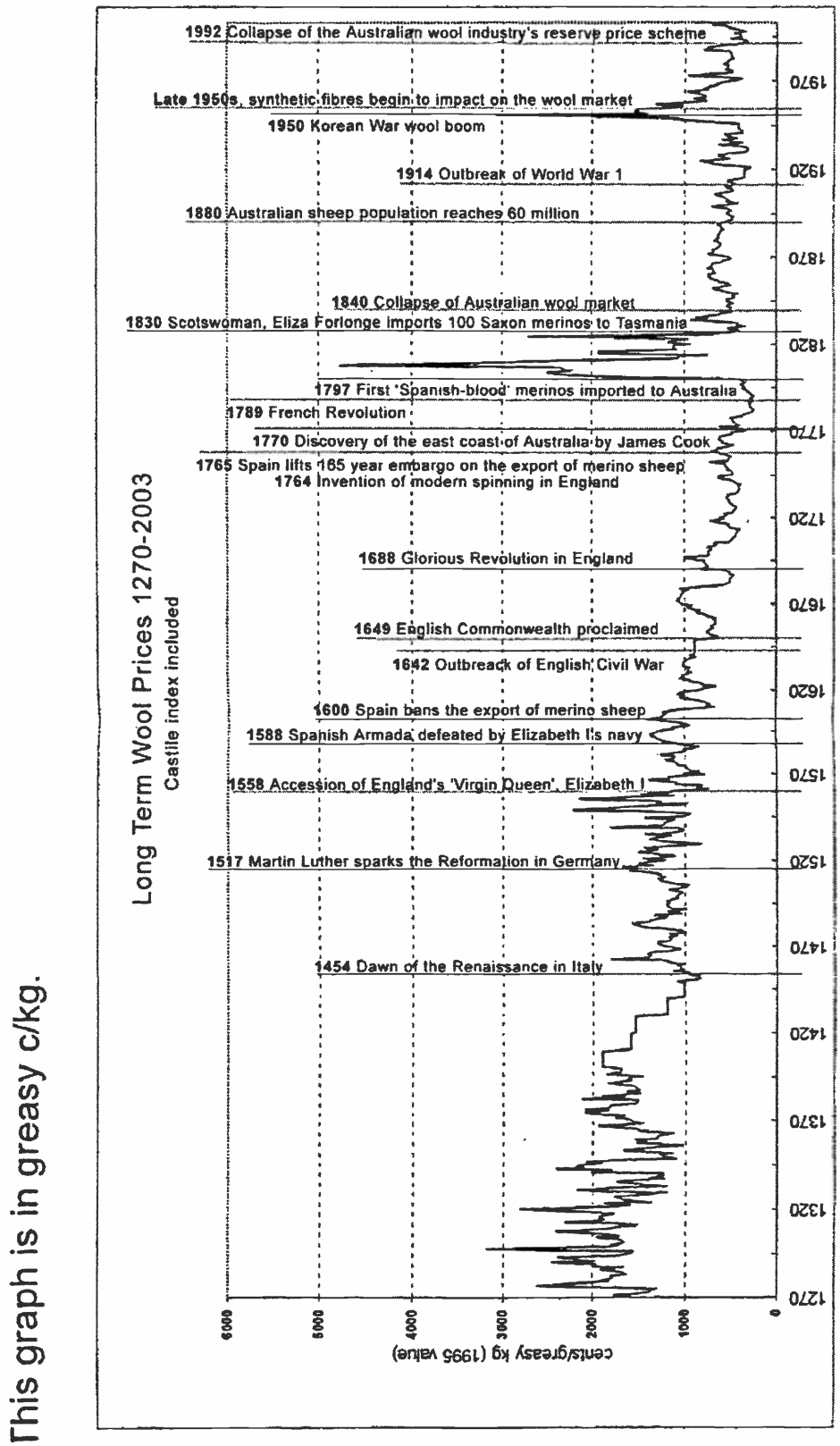

Figure 1. The steady decline in the price of wool since AD 1270. (Source: G. Redden, Elders Limited, Adelaide).

Well 30 years on not much has changed, except that in the last 15 years our flock has carried a very significant internal parasite burden three times that we know of. The last time it cost $50,000 in lost production before worms were identified as the cause of ill thrift, because it was considered to be "too dry to be worms". That $1.5 million in lost production over the 30-year period would be pretty handy right now! Approximately 9.5 million kg of wool go through the Adelaide Wool Stores each year, so assuming we were not special and that all wool producers have suffered similar losses, that equals $7.6 million in one year and $228 million in 30 years, based on the $0.80/kg loss we suffered in 2001. The government would have saved a fair bit of drought relief and other support measures if everybody had saved a proportionate amount of that lost production dollar and invested it wisely. The income tax received by the government would have more than covered the cost of putting some extension officers in the field to advise on these matters.

I tried for two years to obtain training on how to do faecal egg counts – to no avail. In desperation, I drove across the state and was shown how to by a friend, another producer. That was the most productive 2,400 kms I have ever driven. It is dead easy; I could show all of you before my 20 minutes are up, how to do it. One really has to seriously challenge the relevant Government authorities for not recognizing this problem and not assisting producers to learn how to recognize and deal with internal parasites. This is not the only state where this situation exists.

WEATHER PREDICTING – WE HAVEN'T GOT IT RIGHT YET

The area of weather predicting is relevant and very topical at the moment. There is a good deal of skepticism in the bush as to the accuracy of the predictions and I believe some of those arguments to be valid. However, short term weather predicting is pretty accurate, and a very valuable tool, particularly for producers in cold regions. I can also think of a producer in this region who looked at the weather on the Internet, saw that thunderstorms were imminent, shifted his sheep off the black ground to the red ground and saved potential losses of 3,000 head. While long term weather predicting may be useful for production forecasts on a national scale, it has all sorts of dangers for producers in the arid and semi-arid zone. We must never lose sight of the fact that it is **arid** and **semi-arid** and **unreliable** and manage accordingly.

I do think that the two departments who have been touting climate modeling viz. agriculture and meteorology have acted extremely irresponsibly over the last few years while the current drought has been upon us. Their prediction in September 2002 was that it would not rain until Christmas, then in January 2003 it would not break before April, well here we are in May 2004 and it still hasn't broken. So they got it terribly wrong and many people based their drought management strategy on those predictions. Not only did their fodder bills continue to increase, but on the whiff of a bit of rain 12 months ago, some began to restock – prematurely.

In January 2003 I rang the local ABC after hearing the current prediction and asked them to stop putting bad-news drought stories on air "before some one jumps off a windmill on a short rope". They are playing with people's emotions when they are already under extreme and long term pressure. I doubt that if I were offered an apology for their way of reporting (both the ABC and the departments from whom they sourced their stories), that I would accept it, as I believe their actions to be unacceptable.

THE RANGELANDS ARE SPECIAL AND NEED SPECIAL ATTENTION AND INDUSTRY/GOVERNMENT SUPPORT

What must never be overlooked is that agriculture in the arid and semi-arid zone is very different from agriculture in the higher rainfall cropping zones. We have to work **with** nature not against it and we must not try to push the system to beat the cost/price squeeze. There is a very real danger that the

science applied to higher rainfall areas is extrapolated for our areas and is pushed upon us. An example of that followed the severe and sudden drop in wool prices in 1991, when there was a very strong push to encourage producers to reduce their micron to 19 or less. That push came from both the government and sectors within industry.

Fortunately, in this part of the country most producers resisted that push because they knew that "you can only produce what the country will allow" and that you have to have big framed sheep to handle the conditions when they are tough. The fine wool growers will tell you it is very difficult to grow fine wool and we know the discounts for vegetable fault etc. are high so you really need to balance these things up before doing anything too radical. I suspect that a lot of the finer-woolled rams have not survived the conditions. There are however some positives to the finer wool push which we in the rangelands can utilize.

In 2004 we are told we have to have big meaty merinos to accommodate the increasing demand for mutton, and the basis between the fine edge of the wool market and the medium is significantly narrower currently, so fine wool is less attractive price wise. However we do know that will fluctuate. You can't have both fine wool **and** big frame. This again highlights the need to take a long-term view and not be too sensitive to markets.

Producers need to balance all aspects before making changes to their produce. For example, the Australian sheep flock has fallen from a high of 180 million head in the early 1990s to less than half of that today. Consequently of course mutton is up, simply because of supply and demand. Also if producers in the higher rainfall zone shift to a finer flock then there is less of our type of wool on the market. This has proved to be the case – again, the supply and demand factor.

Certainly we in the rangelands can take advantage of agricultural research in the higher rainfall zone. For example, we can by buy better genetic material when we buy bulls or rams. Some of the advances in technology with respect to livestock, whilst aimed at the higher rainfall zone, also have relevance in the rangelands.

BACK TO CORE BUSINESS

For some reason there seems to be plenty of support for producers wishing to try out new commodities but little support for core business. This is very short-sighted when one reflects upon the number of new commodities that have gone by the wayside in the last 20 years. I can report that in 2002 the merinos did better than anything else on "Thackaringa", the red kangaroos left by July, those that stayed died, the eastern and western greys and euros nearly all died, the emus died, most of the goannas, the sleepy lizards, the crows and the goats died and we didn't see any wrens, chats or parrots for a year. Other people in the district made similar observations. If I need to run something other than merinos in the future to remain viable that is OK but whatever I do my produce must be quality. The key for me is living here and taking good care of "Thackaringa".

Not that I am opposed to someone having a go, and trying something else, but they have to be aware of the pitfalls and if they are to import an "exotic breed" (damaras) into a traditional wool growing area they also need to be aware of the potential for a class action against them for contaminating clips around them. Especially as we hear more negative feedback from our customers in relation to contamination of wool by foreign fibers. I can see a real issue developing here which has some very serious social ramifications.

WE NEED TO THINK AND ACT LONG TERM

This highlights the need for long-term thinking and actions. Producers in the rangelands do not have the ability to be as flexible as others in agriculture who may be able to switch readily from one commodity to another. We are limited in what commodities can be produced, i.e. we can't switch from wheat to fat lambs to barley to pigs at the whim of the markets. Most of us are specialist producers. We either produce all wool or all beef so if our market is down, gross receipts are down by the same percentage. If, however, you produce three or four commodities you would be unlucky for all to be down at the same time. Those outside the rangelands do not seem to recognize this. It needs to be understood by them that our needs are different and that we cannot deal with the cost/price squeeze by pushing the system. We have to be productive within the limits of the environment. Control of internal parasites is the classic example – it is very simple and relatively cheap to increase production if internal parasites are controlled.

Funding bodies seriously need to consider the value of long-term research projects – particularly in rangeland areas. It is only with such projects that the broad variation in climatic conditions – and the subsequent implications – can be captured. Short-term projects, while valuable in their own right, cannot possibly cover the range of conditions and the resulting unpredictable rangeland responses. For example, the lack of response in Mitchell grass in certain areas of Queensland this year (after very dry years followed by summer rain) may have been explained had there been a long term pasture research project set up in the most affected relevant area. In any case, at least the events leading up to the situation would have been recorded.

THREATS

Australia does **not** have a good record of proactive management by government of its natural resources. Luckily Australian land managers do though – the Landcare movement has demonstrated this – proactive communities, pushing the boundaries, asking the questions, doing the research and the tough work and asking the rest of the community and government to come along with them. They say government is not the leader and is only dealing with the common ground – it's so much more important that government listens and moves with the needs of the times.

Our inaction on rabbits is a classic; myxomatosis was discovered in 1896, and the Australian Government was alerted to the virus as a potential solution to the rabbit problem. It took until 1950 to get it released by a small team of scientists who were struggling for funding. Rabbit calicivirus disease appeared in China in 1986 and its release in Australia was under threat from funding being withdrawn – fortunately it escaped! Since then only a very few scientists have been able to do limited monitoring upon the virus and Dr Brian Cooke, Australia's leading rabbit researcher, has left to work in another country because he tired of short term funding cycles and the financial insecurity which that brought with it.

Since we completed ripping all the warrens on "Thackaringa" in March 2003 we have observed tracks of the endangered, and thought to be locally extinct, hopping mice (*Notomys*), not seen since 1860 when Burke and Wills moved through the area. From the initial sighting of tracks in December 2003, we now believe there must be thousands as the tracks are everywhere. Clearly, for the environment to recover, myxo and RCD on their own are not enough, a point which has been proven before. I hope by the time of this conference I will have had time to trap some of these animals and be able to report more specifically on them. Insufficient activity on control of cane toads and feral pigs is also of great concern to me.

EXOTIC DISEASE

I believe this to be one of the most serious threats to the rangelands. Unfortunately it is probably not a matter of **if** but **when** Australia experiences an outbreak of exotic disease. Should an outbreak occur it is highly likely that it will be devastating to the rangelands, economically, environmentally and socially and the impacts could be felt for decades.

While we have an Australian Government team to deal with the response to an outbreak, I don't see any proactive team with a plan to minimize the spread. As feral pigs are the most likely vectors for exotic disease, a plan to strategically "eradicate" feral pigs from significant areas of Australia would surely be worthwhile. This was attempted by The Lake Eyre Basin Coordinating Group but the Australian Government changed funding guidelines yet again, which severely restricts that community group from any on-ground actions in the immediate future. Their pig proposal initially met with some skepticism from a few who can now see the merit of such a proposal, especially since the current drought has done much of the work. It may be 50 years before we have such a broad scale drought again, so we missed a good opportunity. That doesn't mean that we cannot be successful with appropriate plans in the future.

SUPPORT

On reading the report by Queensland DPI on the FMD outbreak in England it was very clear that there was insufficient emotional support for **all** those involved. The conclusion in that report states "the impact of a FMD event on farm families and other families is significant and enduring. People experiencing post-traumatic stress are likely to need support and help over the medium to long term. Contingency planning must take into account that ongoing services will need to be provided long after the emergency has passed. Recovery of farm businesses may be a slow process for many farmers. It is essential that adequate services are available to help farmers during the recovery process." Dixon (2002).

With the current urban/rural gap in Australia I fear that lack of sensitivity and support would be duplicated here. I have felt that lack of sensitivity during recent times. During the current drought one extension officer said she appreciated that she could turn on a tap and have running water where those producers outside of town couldn't. Not everyone is as astute or thoughtful as that person.

INNOVATION

The people of the rangelands seem to have a thirst for knowledge and readily embrace new technology. Three developments that have contributed enormously to the well being of the rangelands are poly pipe, myxo and motor transport of livestock. They have been with us for 50 years now and I still see those developments having an impact. There is a plethora of new tools which we use that make us better and more efficient. For example, back line treatment for sheep and cattle, many with nil withholding period; email; GPS; poly tanks; UHF radios; electronic ear tags, important for national flock/herd health security status; Telstra's phone system; electronic scales; scanning devices; OFTA machine for measuring micron in the paddock; solar pumps; comfortable 4 wheel drives and motor bikes; digital cameras; new pumping technology; the list just goes on and on. All these things are enabling us to produce more without increasing stocking rate, in fact often we can reduce stocking rate, for example, by spreading waters.

We have educational organizations like Rangelands Australia, government run education seminars and some very good consultants running programs to help us be smarter. There are also tourism opportunities for some. The report on The Lake Eyre Basin Heritage Tourism Project is a very worthy

document, as it is the first whole-of-basin, cross-border perspective on tourism and related natural resource management issues.

AUSTRALIAN GOVERNMENT POLICIES

I believe that Australian agriculture has a very bright future; we are well positioned geographically to access the high growth and populous markets of Asia as those countries develop. Our isolation should, if we are smart and vigilant, enable us to keep ourselves free of exotic disease. One of the real marketing advantages of the rangelands is our very limited use of chemicals and that our operations are sustainable so we can legitimately claim to be "Clean and Green".

There are a number of critical issues which we as exporters face:

- The exchange rate
- Interest rates
- Trade liberalisation, notably the Free Trade Agreement with the US and also changes to the EU.

The Australian Government needs to recognize the role of agriculture in the rangelands, not only in our contribution to the GDP but to our environmental contribution, when making policy.

FUTURE

I am very confident of the future but the Australian Government needs to recognize the trends and act now on these issues, not in 30 years when we may have really serious problems to contend with. Government needs to recognize the contribution that we give to the integrity of the rangelands – we have continuity of commitment, unlike short-term funding cycles. We have a vested interest in maintaining and improving the land. We need to be far more proactive in our approach to some of the problems like feral pigs, rabbits, cane toads, weeds etc.

Two of the great successes in Australia's history are the BTEC (Brucellosis and Tuberculosis Eradication Campaign) program and the Landcare movement. I think the BTEC program was a huge undertaking and an amazing success because of the commitment of those involved but it is also a great example of long-term thinking. That kind of thinking and strategy can be applied to other issues like feral pigs with equal success.

If I had been told in 1988 that I had 28,000 rabbit warrens and that I would have ripped all of them by 2003, I would have said that both statements were ridiculous. That achievement was only possible because of total commitment from those involved, in particular, my eldest children Emma and Charlie who took a year off between secondary school and university. Without their help it would not have happened in the time frame. Also financial support from the Australian Government meant that a 30-year plan was reduced to 15 years and with that a whole host of environmental benefits occurred that much sooner. So to say that feral pigs can be eliminated from vast areas of Australia, with the exception of some unique spots, is not an unrealistic goal, provided a long-term coordinated approach is taken and we use the naturally arid environment strategically to our advantage.

The rangelands are in good heart, the improvement in the last 50 years is just fantastic, and it just keeps on getting better as we deal with some of the issues, notably rabbits. Every year in spite of seasonal conditions, I see more plants, more animals, more cover, different species etc. It is clear that despite this drought being far longer and intense and financially crippling than possibly any other drought since white settlement, the country is much better covered that in previous "drys".

The Australian Government needs to get serious about some sort of reward system for land managers for their land stewardship efforts. I don't support a hand out system, but the US support wheat, cotton and rice to the tune of $4b pa (Financial Review, 28/4/04), obviously in US dollars and that figure is more than the value of the Australian wool clip, so clearly they recognize the need to support their farmers. I have over the last couple of years had some discussions about how this issue be approached. It is difficult, and there are plenty of reasons why a system would be unworkable but as an issue of national priority we need to sort through it and come up with some answers.

CONCLUSION

I'll continue to argue that it is crucial to have longer-term thinking and recognition that our communities really suffer under adverse conditions. I'll also argue that the people of the rangelands really are in the best position to care for the rangelands. However, they are going to need support if we are to have, and continue to have, viable and sustainable operations and vibrant and healthy ecosystems.

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