Change is real. Our purposes and our values are not things that have always existed, and will always exist, somewhere beyond space and time. They have come into existence as a consequence of our own activities, and those of our ancestors. They have been and are being evolved.

— Michael Ghiselin 1995

INTRODUCTION

There has been much self-congratulation of late amongst those on the Right of Australian politics. The Australian Greens failed to capitalise on the implosion of the Democrats, and the Coalition will soon hold power in the Senate. But the Australian Greens aren’t going to go away. Their House of Representatives’ primary vote has slowly climbed from one to seven per cent since 1990 and environmentalism is only likely to grow as the religion of choice for urban ‘atheists’. The Coalition may not always be successful in its strategy of seeking to alternately placate and outsmart the Australian Greens. A better approach may be to redefine environmentalism in accordance with modern theories of evolutionary biology and in accordance with policies that will deliver tangible environmental benefits given the current pressures on the global environment.

THE IMPORTANCE OF HAVING YOUR OWN VISION

It is a fact of life that if you don’t have your own plan, your own vision, then you will likely be recruited into implementing someone else’s plan. Over recent decades, Australian governments have been recruited into implementing the vision of environmental activists—essentially the visions of organizations such as the World Wide Fund for Nature (WWF) and the Australian Conservation Foundation. These organizations don’t undertake much tree planting and don’t grow any organic food. They exist to recruit others to implement their plans, their vision of what is best for the environment. This includes a future free of genetically modified foods, where agriculture is heavily regulated and tree clearing banned.

In its report, ‘Taming the Panda: The Relationship between WWF Australia and the Howard Government’, The Australia Institute shows that, over the last eleven years, funding to WWF has increased by more than 500 per cent and is now around $11 million annually. A significant proportion of WWF Australia’s growth over the past 11 years can be attributed to revenues from Federal Government sources, rising from around $740,000 in 1995–96 to a high of almost $3.7 million in 2001–02. In total, WWF Australia has received over $15 million in government grants in the period 1996–2003, with almost $13.5 million of this having been awarded between 1998–99 and 2002–03!

While the Australian Greens give the impression that their policies are based on science and ‘natural concepts’ of environment, they are, to some extent, a re-invention of the tired old Marxist, totalitarian model. Furthermore, and somewhat paradoxically, their ideological foundation appears to be largely a re-mapping of traditional Judeo-Christian beliefs and myths, including the concept of an original Eden. Yet, unlike early conservationists, who saw man as having an important management role tending and looking after the landscape—Noah built the ark to save the animals from The Flood—the Greens generally advocate a ‘hands off, leave it to nature’ approach. Within this framework, Man is in a state of sin wherever he attempts to modify or control the landscape, and technology is inherently bad.

The views of the Australian Greens accord somewhat with what was the accepted paradigm preceding the writings of Charles Darwin. Indeed, Darwin began The Origin of Species by Means of Natural Selection with the comment that ‘Until recently the great majority of naturalists believed that species were immutable productions, and had been separately created’. Darwin then went on to present a powerful case for the concept of evolution through natural selection.

It is now widely accepted that there was no original Eden—no original ‘pristine state’. Competition, adaptation and natural selection, sometimes against a backdrop of cata-
strophic climate change, have driven the evolution of life on earth. In his paper *Perspective: Darwin, progress and economic principles*, Biologist Michael Ghiselin makes the point that evolution is a form of progress with progress defined as the accumulation of useful innovations. He also makes the point that progress has no connotations of good or evil—what is ‘good, bad, or indifferent is not progress itself, but its consequences’.

The Federal Government really has a stark choice. Public policy on environmental issues can be based on the best science or on the belief systems of environmental fundamentalists.

**FEEDING THE WORLD AND REDUCING OUR ECOLOGICAL FOOTPRINT**

In 1968, when the world’s population was about 3 billion, renowned environmentalist Paul Ehrlich wrote, ‘The battle to feed all of humanity is over. In the 1970s the world will undergo famines—hundreds of millions of people are going to starve to death.’ Ehrlich’s predictions did not come true. Instead, as a consequence of modern high-yielding agriculture—including the use of fertilizers, pesticides, irrigation and new crop varieties—farmers now feed twice the number of people from essentially the same land area, 1.5 billion hectares.

The world’s population is predicted to increase by another three billion people before stabilizing at around 9 billion in 2100. This represents many more people to feed and clothe. Given this global outlook, people who really care about the environment should be looking to support efficient farmers—farmers who can produce a lot of food and fibre from the smallest area of land and with the least amount of water so that more land does not need to be brought under cultivation, and minimal extra water infrastructure developed.

In this regard, Australian producers are extremely competitive, able to produce, on average, for example, significantly more rice, sugar and cotton per hectare of land and megalitre of water, than farmers in any other region of the world. The next big efficiency gains in terms of reducing water use and also reducing pesticide inputs—in other words, in terms of reducing our ecological footprint—will potentially come from genetically modified (GM) crops. Yet the Australian Greens are anti-GM because they are essentially anti-innovation, anti-technology, anti-change. The tangible environmental benefits of GM are being ignored because it seems that they hate technology more than they care about the environment.

The Western Australian Government’s decision to ban GM canola in April this year in response to Greenpeace’s campaigning illustrates the contradiction. In banning GM canola, WA canola growers are now restricted to the continued production of a variety that is dependent on management with atrazine, a herbicide being phased out in Europe on the basis that it poses an unacceptable environmental risk. The WA Department of Agriculture acknowledges that dependence on atrazine is a problem because of concerns over groundwater contamination.

Most State governments have now banned GM crop plants in response to purported environmental concern. GM cotton is granted exemptions on the basis that it is grown primarily for fibre. Yet approximately 35 per cent of the vegetable oil we consume in Australia is made from GM cottonseed and this oil is currently sold alongside vegetable oil from conventionally grown canola!

GM cotton has been an impressive success, now grown on 90 per cent of cotton farms in NSW and Queensland, with the latest varieties reducing pesticide use by 75 per cent. Environmental activists are ignoring cotton as a source of vegetable oil so that they can invoke the precautionary principle and wrongly suggest that vegetable oil derived from GM canola would be a ‘first’.

Given the global situation, the opposition of the Australian Greens and naive environmentalists more generally to GM crops is untenable and a clear illustration of their narrow and backward-looking approach to environmental protection. If we redefined our approach to environmentalism as progressive, optimistic and evidence-based, GM crops could be seen as a ‘useful innovation’, an example of how technology can facilitate the production of more from less and in this way reduce our ecological footprint and our need to cultivate more land.

**NATURAL SYSTEMS ARE DYNAMIC SYSTEMS**

GM crops are not the only items on the activists’ hit list which governments have banned. In a similar fashion, the Queensland and New South Wales Governments have also introduced new legislation to ban broad-scale tree clearing. This is also in response to campaigning and despite a huge increase in the area of woody vegetation.

The Federal Government has supported the bans, purportedly with the overriding objective of increasing carbon sequestration, driven by a fear of climate change and a desire to meet Kyoto targets (even though Australia has not ratified the Kyoto Protocol). A likely outcome will be the further encroachment of woody plants in remnant woodlands and grazing lands and a significantly re-
duced livestock-carrying capacity. The estimated economic cost in rural and regional Queensland is just under $1 billion dollars. In addition, there has been no consideration given to the impact of a likely doubling of tree cover over this area on surface water and ground water supplies, potentially as far south as Adelaide. In the USA and South Africa, increased tree cover has been shown to impact seriously on stream flows and urban water supplies. Furthermore, in advance of the legislation, the Queensland Government went to great trouble to suppress the findings of a report prepared by its own officers that detailed the detrimental impacts of uncontrolled woodland thickening on a range of environmental and economic values, consequent to the clearing bans.

In New South Wales, while the Government was focused on banning tree clearing to protect perhaps 20,000 hectares of native vegetation, close to 3,000,000 hectares of forest and native vegetation were incinerated in bushfires. The extent and intensity of the bushfires was at least in part a consequence of the ‘hands off, leave it to the bushfires’ philosophy that had prevented adequate controlled burning.

The environmental campaigning has, in essence, been driven by a belief that pulling down and/or cutting down trees is inherently bad. This approach accords with a static concept of nature; the idea that trees don’t re-grow in ‘Eden’. Cutting down trees, along with taking water from rivers for irrigation, has almost the status of an original sin.

The reality, however, is that trees do re-grow. Vast areas of the Australian landscape were deliberately maintained as grassland and open woodland, as opposed to forest, by the Aborigines through the use of fire. Remove fire from this landscape and the species assemblages—the ecology—naturally changes. Whether this change is good or bad constitutes a value judgment, but to deny the change is to close one’s eyes to the reality of the situation.

If we were to embrace a new environmentalism that acknowledges that landscapes are dynamic, the need for active management of Australia’s vast rangeland areas would become obvious. The research focus could change to understanding the triggers for environmental change. Active management is often most critical and cost-effective during short periods of climate change. For example, the establishment of widespread woody weed occurs when there are above average autumn rains in western Queensland.

Furthermore, by acknowledging that change is natural, it may become more evident that ‘preservation’ will require active management. This may seem counterintuitive, but given that change is the only constant in the natural world, the protection of particular environments with particular species assemblages is likely to necessitate a high level of active management. Indeed, a new environmentalism based on the notion of a dynamic landscape, may provide increased opportunities for activism where, in the past, for example, policies have virtually promoted neglect in some National Parks.

Public understanding of the dynamic nature of natural systems could redefine the environmental debate and might well marginalize the Australian Greens. This is an approach that a Liberal Government ought to be able to understand and sell, because liberalism works with, not against, dynamic systems. Indeed, the dynamic nature of natural systems and the general course of evolution can be likened to Nobel laureate F.A. Hayek’s view of liberalism. In Why I am not a Conservative, Hayek writes ‘the main point about liberalism is that it wants to go elsewhere, not to stand still’.

‘HEALTHY’ VERSUS ‘PRISTINE’
As Australians, we have clearly not really thought through how we want our landscape—forests, waterways, grasslands and rangelands—to be managed, or the consequences of not managing them. In addition, we have not thought through the implications of ‘healthy’ as opposed to ‘pristine’. In the context of the Murray River, ‘pristine’ or ‘natural’ during drought may equal dead fish and stressed red gums as surface water recedes and groundwater levels drop.

Governments are currently compiling environmental indicators with a focus on the pristine rather than the healthy. For example, a Murray-Darling Basin Commission study found that insect populations on the bottom of the Murray River were healthy in the 1980s, but in a poor state in 2001. Yet the 2001 assessment also concluded that there had been an improvement since 1980. The contradiction has arisen because environmental scientists in 2001 made their comparisons relative to a purportedly completely natural, pristine environment defined as pre-European settlement—but well watered. The 1980s study accepted that there would be a dominance of insect species in the Murray that favored slow rivers for irrigation, has almost the status of an original sin.

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The reality of the situation.
problem, however, with this approach is that there are actually such things as too many kangaroos and dingoes, too much water, and too many trees. In fact, too many trees are threatening the golden shouldered parrot on Cape York—it is losing its safe ‘grassy’ nesting sites because of too many trees. I suggest a better approach might be the dual goals of ‘healthy’ and ‘biologically diverse’.

Some years ago, I worked with officers from the Queensland Department of Primary Industries Fisheries Group in the development of a new system and philosophy for the maintenance of drains on cane farms—recognizing that these artificial waterways were potentially valuable fishery habitat. We determined that long-term benefits could accrue from the active management of these areas, including the periodic removal of mangroves and sediment (practices that had been prohibited under the Fisheries Act 1994) as well as through the incorporation of artificial wetlands, retention and sediment ponds. A critical issue was timing the on-farm management works in accordance with the flowering/fruiting cycle of marine plants and the migration patterns of local fish species.

Paradoxically, at the same time as we were advocating healthy, biologically diverse artificial drains, including the removal of flood gates and a freer water exchange between on-farm drains and adjacent rivers and streams, the Federal Government was drawing up legislation to isolate cane farms within coastal catchments and insisting that there be a single point of water discharge. This was a result of overarching policies developed at the Great Barrier Reef Marine Park Authority (GBRMPA). The GBRMPA officers could not see any habitat value in better on-farm drainage management because these officers had a very blinkered ‘original Eden’ concept of nature. To them, farms were a sore on the landscape; something to be isolated and contained.

The value of active management is also relevant to the issue of old growth logging in Tasmania. In this regard it is worth reflecting that populations of forest animals, like communities of the liberal-minded, often flourish after a sweeping away of obstacles to free growth. This may require the occasional clear-felling/burning of some mature or senescing forests—to let in the sunshine and let seeds germinate and new, young trees grow. Some wildlife, including the Leadbeater’s Possum, require more than one forest growth stage for their survival: one for nesting and another for feeding.

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In contrast, the 1992 National Forest Policy Statement focused on increasing the area of old growth forests in reserves. In accordance with this policy, the area has increased by 1.2 million hectares since 1995 and now constitutes 71 per cent of the total 5.2 million hectares of old growth forest covered by Regional Forest Agreements. But this was never going to be enough for the Australian Greens. Their endgame is ‘leaving forests alone’ which can have the effect of stifling nutrient cycling and energy flow. Interestingly, of the 14 million hectares of forests (equivalent to 8 per cent of Australia’s forests) that have been assessed by growth stage, 6.6 per cent is classified as in the regeneration stage, 11.8 per cent is regrowth, 57.4 per cent is mature and 24.2 per cent is classified as senescent.

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**CONCLUSION**

Before the recent federal election, many people feared that the Australian Greens would hold the balance of power in the Senate after the poll. It was envisaged that this might make reasoned political decision-making on environmental issues even more difficult than it has been over recent years. The election, however, threw up something different. Naive environmental activists have, at least for the moment, a greatly diminished power to threaten and play wedge politics. Theoretically at least, the Federal Government has an opportunity to develop well-thought-through policies. There is no gun to the head.

Redefining environmentalism, both in accordance with how natural systems actually operate and in terms of promoting agricultural technologies and systems that will tangibly reduce our ecological footprint, would indeed be an ambitious undertaking. It would involve a belief in what Hayek describes as the long-range power of ideas, and the preparedness to let change run its course, even if we cannot predict where it will lead. It would involve reconsidering the evidence from ecology and evolutionary biology, but also making value judgments based on a very different vision for the future.

The Australian Greens did not invent conservation, though they have sought to redefine it in their own image. It is time that thinking Australians from both the Left and Right of politics considered alternatives. The Australian Greens’ interpretation of our landscape and the workings of technology are at least 150 years out of date. They conflict with the realities of evolution and human need and cannot deliver environmental protection or a better world.

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