



The Bendigo & District Environment Council Inc
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Bendigo and District Environment Council Inc (BDEC) is a non-profit organisation whose main interest is the conservation of the natural environment and Australia's progress towards the achievement of ecological sustainability.

Committee Secretary
Senate Standing Committee on Environment, Communications and the Arts
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600
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Inquiry into the operation of the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*

"We find ourselves ethically destitute just when, for the first time, we are faced with ultimacy, the irreversible closing down of the earth's functioning in its major life systems. Our ethical traditions know how to deal with suicide, homicide and even genocide, but these traditions collapse entirely when confronted with biocide, the killing of the life systems of the earth, and geocide, the devastation of the earth itself."

— ***Father Thomas Berry***

"The Senate notes the continuing decline and extinction of a significant proportion of Australia's unique plants and animals, and the likelihood that accelerating climate change will exacerbate challenges faced by Australian species". (Terms of Reference)

There is only one way that a process is judged to be a success or failure and that is by its results. The admission by the Senate that there is a continued decline and extinction of a significant proportion of Australia's flora and fauna is still occurring is an indication of the failure of the present structures dedicated to the preservation of species across the landscape.

Our society, as is the case with most others in the world today, is dedicated to growth, especially consumptive growth and as a result destructive pressure is continually applied to the natural world.

- *'In its broadest ecological context, economic development is the development of more intensive ways of exploiting the natural environment'. ~ Richard Wilkinson*

The facilitation of development is in most cases placed against the interests of the natural environment. This can be seen everywhere, but at the moment it is most starkly evident with the present problems of continued consumptive growth with its associated increased carbon in the atmosphere and the decline and destruction of the Murray/Darling.



Bendigo - Heart of the Box - Ironbark Forest.

EPBC Act

EPBC Act is a significant part of the effort to save species but it continues to fail the natural environment. It fails because of the onus of proof that a particular action taken will damage a given species is, in most if not all cases, complex and difficult.

At this stage it is futile to go through the Act clause by clause, in spite of its obvious faults such as the lack of an holistic approach, or the need to take cumulative affects into consideration and numerous escape clauses, because the root problem responsible for the ineffectiveness is a philosophical one. The problem is contained within the whole structure of the Act and how it is administrated. It is the problem of proof.

When data is collected and judgements are made concerning the prospects of a given species the final decision about its future is a guess, even if it is an educated guess. No one really knows with certainty what will happen in the future. It does not matter if the judgement is made whether the species will or will not suffer terminal damage; it is still a judgement that is based on guess work.

The judgements may be scientifically based on data collected, but because a hypothesis is not formulated and tested to see if what is being proposed actually happens, the judgments have more in common with religion than science. Certainly the pressure to allow development to take place is intense, so any doubt about the future of the targeted species is usually exploited in favour of promoting development at the expense of the natural environment. This may not be the intention of the Act but because proof is so very difficult it is the end result.

“In order to be a real scientific theory or model, it must be falsifiable. This means that a given model of reality must make testable predictions, such that if one were to design an experiment to test those predictions and the data correlated well with the predictions, then one's theory would be supported, BUT that does not make the theory or model TRUE.

On the other hand if one designed the experiment and the data did not correlate at all with one's prediction within specific boundary conditions, then one's theory would be FALSE. No amount of supporting evidence would ever make one's theory true, but any amount of evidence against one's theory -- some little amount or a lot -- would render it false within those boundary conditions.

Scientific theories cannot provide us with truth, rather they are models of what we as humans perceive the world to be.” Sir Karl Popper: Paradox of Science & Truth: [DK Matai](#) - March 13, 2007

It would be possible to produce models to show the outcome of actions decided upon, but they would require a much greater level of expertises than is presently used. Anyway look at the enormous difficulty that is presently being experienced with the climate models and they are being worked upon by the very best the most qualified.

The Precautionary Principle

We propose that the only way to make the legislation effective in achieving the conservation of species, something everyone wants, is to allow the precautionary principle to override the facilitation of development when doubt occurs. The question is how to judge that the doubt is sufficient to override the wish or perceived need for a particular development?

The problem our age has to deal with is that we have run out of time as far as the preservation of species is concerned. It appears from the comparison of past data and current observation that the

world has entered a period of mass extinctions and as such the time has come to give flora and fauna the benefit of the doubt whenever a conflict of need arises.

It cannot be a surprise, least of all to governments or government agencies that we are in a crisis as far as ecological sustainability is concerned; the natural world is in a mess. No one can say and be taken seriously, that they are unaware of this crisis, but if they are unaware, we have included the opinion of some people who are in the forefront in the battle to save biota.

Reality must take precedence over public relations, because nature cannot be fooled.

-- Unknown.

- Professor Myers spoke at the National Press Club on March 16th 2006 about the mass extinction of animal and plant species being a greater threat to the world than global warming. Professor Myers, who has been a senior adviser on biodiversity to the United Nations, the World Bank and the White House, said the Earth was experiencing the largest mass extinction of species in 65 million years. He said there were about 10 million species and half could be lost if governments did not act quickly.
- In the book "The Sixth Extinction, Biodiversity and its Survival" Richard Leakey states that 'there have been at least five occasions when nearly two-thirds of living species disappeared from the face of the earth. These are natural disasters. But today humans stand alone, in dubious distinction, among earth's species: homo sapiens possess the ability to destroy entire species at will, to trigger the sixth extinction on the history of life.' 'I believe we face a crisis – one of our own making – and if we fail to negotiate it with vision, we will lay a curse of unimaginable magnitude on future generation.' Richard Leakey. The Sixth Extinction Biodiversity and its Survival
- Edward O Wilson writes in "The future of life" that "The biota continues to fall before our remorseless expansion, in ever-rising numbers across ever-broader arrays of plants and animals. Where originally it was mostly large land-dwelling animals that were afflicted, now fishes, amphibians, insects and plants are, for the first time, vanishing in large numbers. The dawnless night of extinction is also descending upon rivers, lakes, estuaries, coral reefs, and even open sea.' And that the extinction rate is 'somewhere between one thousand and ten thousand times the rate before human beings began to exert a significant pressure on the environment."
- Professor Hugh Possingham from the University of Queensland's Centre for Ecology stated on the ABC's Saturday Breakfast with Geraldine Doogue, 17Dec 2005, during a discussion concerning bio-diversity banking that, "Australia's got to make a choice: how much more biodiversity does it want to lose? At the moment we're losing biodiversity as fast as we've ever lost it. There's an extinction debt, so the rule of thumb says that if you destroy 90% of the vegetation in a region, you'll eventually lose 50% of all species. But most of those species are still hanging on, but they will not hang on forever." He went on to say "there's an enormous time lag, a the time lag of restoration and a time lag of the extinction, that these time lags could be up to three-hundred years and that standard business practices of economics and market forces do not seem to deal with time lags."

- Prof. Harry Recher pointed out in 1999 that if we are to prevent further loss of avifauna and achieve ecological sustainability we urgently need among other things to restore functional ecosystems to a minimum of 30% of the landscape. (Recher, H. F. – “The state of Australia’s avifauna” j Australia Zoologist, 31 (1), June 1999, pp11-27)
- Stephen Boyden, lecture in Biology of civilization, said in 2004 that if a society is not ecologically sustainable it cannot, in the long term, be sustainable in any other way. (Ockhem’s Razor ABC Radio National, 12th December 2004.)

The loss of biodiversity and global warming exacerbate each other. “as extinction increases then so also global warming which in turn causes more extinctions and so on, into a downward spiral of destruction”. Life supporting “services are best rendered by ecosystems that are diverse. Yet through intention and accident, humans have introduced exotic species that turn biodiversity into monoculture”. (Jerry Coyne, professor in the department of ecology and evolution at the University of Chicago, and Hopi E. Hoekstra, associate professor in the department of organisms and evolutionary biology at Harvard University: “Diversity lost as we head towards a lonely planet”: the Australian Inquirer, 10/11/07).

Applying the precautionary principle is the only reasonable thing left to do. The dramatic decline in the ecological health of the natural environment is of our doing and can only end in tragedy, not only for the many species that are our companions on this planet, but also for our descendants.

The problems that are associated with the effort to protect and enhance Australia’s biodiversity will not be solved unless the precautionary principle is given a default position in the legislation and in our decision processes. In other words, unless the onus is put on those who wish to proceed with a development to show that they will do no harm to the natural environment before their application for a permit is approved, the legislation will fail in its effectiveness to protect the environment and conserve biodiversity.

This may appear to be extreme, but because we have entered an extinction event, that is extreme, the consequences of extinctions are very serious; the measures used to try and halt what can only be described as an ecological crisis should be a match.

Stuart Fraser: BDEC Convenor.