

Biodiversity

Preamble

Natural ecosystems support our health by filtering our air, providing fresh water and food, regulating our climate and protecting against the spread of disease and pests. They also foster our psychological and spiritual wellbeing and serve as places of recreation and sources of nature-based jobs in tourism and other vocations. Furthermore, with up to half of all medicines used by humans derived from nature, protected ecosystems are a form of innovative capital for future medical advances.

Ecosystems are the foundations of biodiversity, the infinite variation in life forms. Human resilience in the face of sudden and catastrophic shifts to the planet's life-support systems is strengthened by this variety of life.

Doctors for the Environment Australia (DEA) is focussed on the complex interaction between human health and our natural environment and is therefore interested in environmental restoration and the protection of biodiversity to promote human health and social stability. A global environment that supports biodiversity is better able to support human health. This is a topic of utmost urgency, given the alarming decline in biodiversity in recent years.

Due to the complex interplay between biodiversity and other threats to natural ecosystems, policy on biodiversity involves other areas of DEA's work. Our policies on climate change, unconventional gas, the coal industry, population, agriculture and forests all support the protection of ecosystems because the preservation of biodiversity is essential for human health.

Position

Recognising the deep connections between biodiversity and human health, Doctors for the Environment Australia supports the following:

Overarching legislative framework and biodiversity funding

1. The introduction of a new national framework of environmental laws as proposed by the Australian Panel of Experts on Environmental Law (APEEL).
2. Substantial and immediate increases in government funding to address the current biodiversity crisis in Australia.

Population and economic issues

3. The development of a population policy which includes considering projections on climate change and water resources.
4. Expertise to be developed within Treasury on circular economies and full cost accounting with links to organisations for new economic thinking.

Biodiversity hotspots and threatened species

5. Legislative change to make threatened species protection non-discretionary.
6. Greater co-ordination of recovery efforts between Commonwealth, state/territory and local authorities.

7. A comprehensive monitoring system to ensure that recovery plans are implemented and successful.
8. The establishment of an independent watchdog to oversee environmental policy and force parliaments to act to protect species if this is not occurring.
9. Adequate funding of species recovery plans.
10. Control of key threatening processes, including those that cause habitat loss and degradation, invasive species, pollution, disease and overharvesting.

Forests and land clearing

11. The permanent protection of all intact ecosystems including old growth, remnant and high conservation value forests as well as the sustainable management of plantation forests. Some highly biodiverse regions will need great protection, as will water catchments, whereas other areas will be amenable to access for recreational activities.
12. Cessation of ongoing broad-scale land clearing.
13. The extinction of Regional Forest Agreements which have facilitated overharvesting of native and old growth forests nationally contributing to a loss of biodiversity.
14. A national approach to and regulation of deforestation and land clearing, with the Federal Government having sufficient constitutional power to override states and territories where they are not complying with and/or meeting national environmental plans and targets.

Climate change mitigation and response to extreme weather and other disasters

15. Urgent mitigation of climate change to limit global warming to less than 1.5°C (see DEA policy: [Action on Climate Change and Health; Governance and Strategy](#)).
16. Sustainable management of existing biodiversity in disaster-prone regions to bolster resilience to climate change and aid in relief and recovery efforts post-disaster.

Invasive species

17. Expanded efforts to control invasive species, including support for research, funding for key invasive species management activities and improved reporting of management outcomes.
18. Expansion and strengthening of the national reserve system, with adequate funding for threat management within the existing protected area network.
19. Adequate funding of efforts to protect species outside reserves, recognising that investing in the continued expansion of Australia's protected area network without addressing threats beyond the existing protected area network will benefit few threatened species.
20. Expansion of Indigenous ranger and farm stewardship programs, recognising the vital role these can play in managing habitat and threats to biodiversity outside of protected areas.

Mining

21. Thorough and independent health and environmental impact assessments prior to the approval of any new mine; these must look at the cumulative impact of multiple mines within a region, their impact on water flows through the region, air quality and the impact of transport both to and from the mine, including shipping's impact on the marine environment.

Marine parks, fisheries and coastal regions

22. Full reinstatement of Australia's national network of marine parks as initially established in 2012.
23. Greater transparency in the labelling of fish for consumption with respect to its threatened status and mode of catch.

24. Greater research into the wellbeing of marine and other aquatic environments in the face of expanding commercial development and other threats.
25. Enhanced coastal protection, including improved management of farms, mines and ports to prevent downstream coastal impacts.
26. Protection and restoration of mangroves, salt marshes, coral reefs and seagrass beds to reverse the adverse impacts of human activity.
27. Thorough and independent health and environmental impact assessments prior to development in and adjacent to coastal areas; these must examine not just individual projects but also the cumulative impacts of multiple projects.

Agriculture and food production

28. Changes to agriculture with a move away from environmentally destructive farming methods and a move towards methods to increase soil integrity, decrease erosion and salinity; these changes also include protecting bees and other pollinators essential to food production by moving away from pesticides that have harmful effects on them.
29. Ensuring continuing diversity in food species by preserving and utilising heirloom varieties.

Aboriginal and Torres Strait Islander partnerships

30. Recognition of Aboriginal and Torres Strait Islander knowledge and skills in biodiversity and conservation.
31. Expansion of movements towards recognition and promotion of Aboriginal and Torres Strait Islanders' cultural connection to Country and the substantial contribution that Aboriginal and Torres Strait Islander knowledge is making in tackling Australia's biodiversity and other environmental problems.
32. Expanded and fair resourcing of programs involving work on Indigenous lands.

Research and Education

33. Greater research and education on the importance and interconnectedness between biodiversity, natural systems and human health, with the prioritising of funding to research and conservation efforts through creation of a biodiversity fund.
34. Medical schools to incorporate this interconnectedness between biodiversity and health into medical student teaching and to highlight biodiversity loss as an important threat to public health.
35. Inclusion of ecocentric perspectives in national school curricula to provide Australians with broader awareness of the relationship between nature and human health and a deeper understanding of living natural systems.

Nature based health interventions

36. Incorporation of nature-based health interventions and biophilic design into our health system including gardens within and around hospitals and community health centres, guided nature walks other outdoor exercise programs to promote physical activity and address psychosocial problems.
37. Promote the value of and endorse the provision of biodiverse natural areas in school grounds, early learning centres and other places where children congregate to improve air quality, provide natural shade and enhance mental restoration.
38. Support community and government initiatives which promote the value of nature play for child development and wellbeing.

November 2019

DEA Scientific Committee

Prof Colin Butler
 Prof David de Kretser AC
 Prof Robyn McDermott
 Prof Emeritus Sir Gustav Nossal AC
 Prof Fiona Stanley AC

Prof Stephen Boyden AM
 Prof Peter Doherty AC
 Prof Stephen Leeder AO
 Prof Lidia Morawska
 Prof Hugh Possingham
 Dr Rosemary Stanton OAM

Prof Emeritus Chris Burrell AO
 Prof Michael Kidd AM
 Prof Ian Lowe AO
 Prof Peter Newman AO
 Prof Lawrie Powell AC
 Dr Norman Swan