Fact Sheet

12 Threatened Species

Biodiversity

Threatened Species Issues

Around one quarter of all species of plants and animals recorded in South Australia are considered to be threatened. The loss and fragmentation (breaking up) of habitat in South Australia before vegetation clearance laws were put in place is one of the most significant threats to our native plants and animals. Most of the agricultural zone has been cleared of native vegetation, and much of the remaining vegetation is in small, isolated patches, which makes it vulnerable to degradation and disturbance.

Climate change will greatly increase pressure on our natural systems as temperatures increase and climatic events such as drought become more extreme. With predicted sea temperature rises, increased storm surges and higher sea levels, some coastal and marine ecosystems are also at risk. The conservation status of the state's marine species and communities is largely unknown. How South Australia's species and ecosystems will respond to these climatic changes is uncertain.

Other processes that are threatening our native species include:

- competition and land degradation from invading species (eg rabbits and feral goats),
- inappropriate livestock grazing,
- predation by feral cats and foxes,
- invasion of weeds, and
- loss of drought refuges.

Trends

The number of plants, animals and ecological communities at risk is **increasing.**

Recovery efforts have **increased significantly** across the state, but they are less than required to minimise the potential for species loss.

"Our native plants and animals are a focal point for tourism, which produces a significant amount of money for the state."

Threatened Species

What is the Current Threatened Species Situation?

Condition indicators

Number of extinct, endangered and vulnerable species and ecological communities

In South Australia, 1,136 (16.8%) of the 6,773 plant, mammal, bird, reptile and amphibian species recorded in the state are listed as threatened. There are 28 mammal, seven bird, three freshwater fish and 26 plants that are presumed to have become extinct in South Australia since European settlement. Since 2000 the number of threatened flora and fauna has increased by 4% and 26% respectively. No species have been moved off the 2000 list of threatened species due to population recovery.

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Regionally threatened species

There are many species and communities that are considered to be secure across the state in terms of total numbers, but considered to be threatened within a certain region. Other species and communities are declining at a rapid rate but do not yet meet State or Commonwealth criteria for being listed as threatened. Birds in the Mount Lofty Ranges face such a situation. Loss of vegetation and fragmentation of the remaining vegetation has placed many of the region's bird species at risk. It is predicted that unless drastic action is taken to restore habitat on a large scale, and reduce other threats, approximately half of the birds in the Mount Lofty Ranges will become extinct in that region.

A total of 183 species that occur in South Australia are threatened at the national level – this is around 11% of all the threatened species in Australia. There are also five ecological communities in South Australia that are listed as endangered or critically endangered on a national level.

An ecological community is a group of species that interact with each other and are adapted to particular conditions of soil, topography, water availability and climate. The community needs all of its different components to survive. These threatened ecological communities in South Australia include the swamps of the Fleurieu Peninsula, peppermint box grassy woodland, buloke woodlands of the Riverina and Murray Darling Depression bioregions, iron-grass natural temperate grassland and the community of native species dependent on natural discharge of groundwater from the Great Artesian Basin.

Species listed as threatened in South Australia — 2007

In South Australia, the term 'threatened species' includes three different classifications: Endangered, Vulnerable and Rare.

	Plants (as a % of the total number recorded in SA - 5858*)	Mammals (as a % of the total number recorded in SA - 180#)	Birds (as a % of the total number recorded in SA - 473#)	Reptiles (as a % of the total number recorded in SA - 235#)	Amphibians (as a % of the total number recorded in SA - 27#)
Endangered** Likely to become extinct in the future	187 (3%)	47 (26%)	42 (9%)	9 (4%)	0
Vulnerable Likely to move into the endangered category	196 (3%)	20 (11%)	32 (7%)	9 (4%)	4 (15%)
Rare At risk due to low numbers	431 (7%)	32 (18%)	89 (19%)	35 (15%)	4 (15%)
Total	**814 (14%)**	**98 (54%)**	**163 (34%)**	**53 (23%)**	**8 (30%)**

Source: DEH #Total numbers of fauna species from the Biological Database of South Australia (BDBSA) Fauna Taxonomic system (i□
(includes all current species accepted to occur officially in SA) *Includes species considered to be extinct in South Australia.

Threatened Species

Responding to Threatened Species

A recovery plan is a document that outlines the management actions required for the 'recovery' of a particular threatened species, groups of species or ecological community. The plan provides details on the threats and risks to that species and how to minimise or remove these. It also identifies knowledge gaps and research needs. In South Australia, 82 species have formal recovery plans, 185 have plans in preparation and a further 120 species have no formal recovery plans but have actions related to their recovery. The plans to minimise or remove threats and risks to species are often not put into action due to shortfalls in program funding.

'Bounceback' is a successful ecological restoration program that has been operating in the Flinders Ranges, Vulkathunha Gammon Ranges National Parks and on surrounding properties since 1992. A dramatic reduction in grazing pressure has been achieved through the control of rabbits, feral goats and kangaroos. This means that some threatened animals have more access to food. A reduction in fox and cat numbers has also meant that local native species have begun to recover.

> "A reduction in fox and cat numbers has also meant that local native species have begun to recover."

Taking Action for Threatened Species

- Investigate doing some volunteer work with your local Landcare or Bushcare group.
- Plant some native trees and shrubs, local to your area, in your backyard or neighbourhood.

Impacts of

Losing our Threatened Species

Any loss of native plants and animals contributes towards a loss of biodiversity. Biodiversity is important to the processes that make life possible.

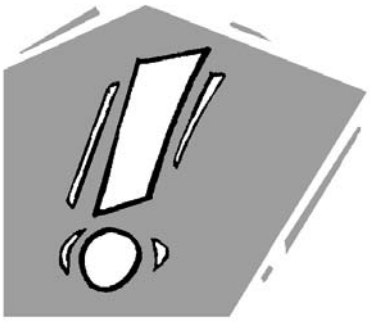
Economic

The genetic material in plants and animals can deliver social, economic and environmental benefits through the biotechnology industry. This includes the development of disease resistant crops and drugs to help fight diseases. Our native plants and animals are also a focal point for tourism, which produces a significant amount of income for the state.

Cultural

Many Australians place a high value on native plants and animals that contribute to recreation activities and a sense of cultural identity and spiritual enrichment. Many native plants and animals are central to Aboriginal and Torres Straight Islander cultures.

Threatened Species



Attention!!

What impact could climate change have on native species?

Temperature and rainfall play key roles in determining where plants and animals can live, grow and reproduce. As temperature and rainfall levels change due to climate change, some plants and animals will come under increasing stress. This could cause long-term changes that may result in species loss or an increase in the number of threatened species.

Changes in climate may also cause the timing of species' lifecycles to change (breeding seasons could be earlier or later). The breeding season of the Cape Barren Goose is dependent on the flush of new, green grasses, which occurs with the first big rains of the year. This is called the break of the season, and if the timing of this changes then the lifecycle of the geese may also change. This could have implications for survival of their young later in the year.

Some species may have to move further north or south to keep up with changing climatic zones. Species with limited climatic ranges and rates of dispersal (movement), and with specialised habitat requirements are particularly vulnerable to extinction and are less likely to adapt with climate change.

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Research Ideas

about Threatened Species

1 What is meant by the term 'threatened species'?

2 How have human activities impacted on threatened species in your community, South Australia, Australia and globally?

3 What does the State of the Environment report tell us about threatened species in South Australia?

4 What might happen in the future if things continue as they are?

5 What are government, business and industry doing to recover threatened species in South Australia?

6 What can we do individually, or in communities, to reduce our impact on threatened species in South Australia?

Resources

For more detailed information on the issue and actions you can take see the State of the Environment report for South Australia 2008.

This is available at:
www.epa.sa.gov.au/soe

This fact sheet is part of a set of 20 fact sheets about the key environmental issues identified in the State of the Environment report 2008, produced for the Environment Reporting Education Resource. You can access the fact sheets and learn more about taking action for the environment at the Education Resource website: www.epa.sa.gov.au/soe.
For more information call the Environmental Education Unit of the Department for Environment and Heritage (08) 8463 3911.

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EPA South Australia

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