Australian Threatened Species

Australian Sea-lion *Neophoca cinerea*

Conservation Status

Australian Sea-lion Point Labatt.
Photo by WWF-Canon/John Gibbons

Commonwealth: Vulnerable *(Environment Protection and Biodiversity Conservation Act 1999)*

South Australia: Rare *(National Parks and Wildlife Act 1972)*

Western Australia: Specially protected fauna *(Wildlife Conservation (Specially Protected Fauna) Notice 2003)*

What does it look like?

The Australian Sea-lion is a handsome pinniped—fin-footed mammal—with a blunt snout and tightly rolled external ears with front and hind flippers. Pinnipeds are marine mammals, which includes seals, sea-lions and walruses.

Australian Sea-lion males are typically chocolate brown and can reach more than 2 metres in length and weigh up to 300 kilograms. Females are smaller and their colouring is generally silvery ash-grey above and yellow to cream on their under-parts. Females can grow to more than 1.5 metres in length and weigh up to 80 kilograms.

Where is it found?

The Australian Sea-lion is the only pinniped species which is endemic to Australia. It is also the least numerous pinniped species in Australia. They are currently found from the Abrolhos Islands (Western Australia) to the Pages Islands (South Australia), although their historic range was far more extensive.

Australian Sea-lions are unique in having large numbers of small, genetically isolated populations, low reproductive rates, high site fidelity and poor dispersal.

The sea-lions typically breed and haul-out on rocks and sandy beaches on the sheltered sides of islands, although there are several small colonies on the Australian mainland. An important feature of colony sites is shallow, protected pools in which pups congregate. The waters adjacent to breeding colonies are also important feeding areas.

Unlike other pinnipeds that were harvested in Australia during the late 18th, 19th and early 20th centuries, Australian Sea-lion populations have not yet recovered, and at some localities there is recent evidence of continued population decline.

The estimated size of the Australian Sea-lion population is less than 10,000, with 80 per cent occurring in South Australia and 20 per cent in Western Australia. Only five of the 73 known breeding sites for Australian Sea-lions produce more than 100 pups each year, representing 57 per cent of all pups born. These sites, all located in South Australia, are Dangerous Reef, The Pages Islands, West Waldegrave Island, Seal Bay and Olive Island.

Did you know...

- Australian Sea-lions feed on a wide variety of prey including squids, fish, shark, rock lobsters and sea birds.
- Pups are generally weaned around 18 months, usually when the mother is set to give birth to a new pup. If mothers do not pup in consecutive seasons they have been known to nurse their pups for as long at 40 months.
- Australian Sea-lions can swim great distances to find food but they always return to the same sites and don't undertake migrations.

Changing climate: a major threat

Why is changing climate a problem for Australian Sea-lions?

Globally, the 1990s were the warmest decade for at least 1000 years, and 2005 has been listed as one of the hottest years on record[1]. Increases in sea-surface temperature and ocean acidity will impact on a range of ocean species including plankton, which forms the basis of marine food chains, to corals, fish, seabirds, penguins, seals and sea-lions[2].

A significant threat to the Australian Sea-lion is warming waters—reduced and irregular prey availability could result in lower reproduction and increased mortalities. Many parasites and microbes which cause diseases in marine animals also grow faster in warmer waters and animals already stressed by rising temperatures may be more susceptible to infection[3].

Climate change projections for Australia also predict rising sea levels and extreme climate events[4]. As nearly all female Australian Sea-lions return to breed at the site where they were born[5], it is suggested that once their original habitat is lost, "there is very little chance of it being re-established in the short-term"[6]. If, as the Intergovernmental Panel on Climate Change (IPCC) has predicted, sea levels rise by approximately 9–88 centimetres between now and 2100[7], then many island and mainland breeding and haul-out sites may be altered or lost.

What is being done?

The *Environment Protection and Biodiversity Conservation Act 1999* provides protection for the Australian Sea-lion by making it an offence to kill, injure, take, trade, keep or move a listed threatened species in Commonwealth waters without a permit.

Management Plans are also in place for a number of areas which are home to breeding populations, for example Kangaroo Island in South Australia. Population surveys at various breeding and haul-out sites with occasional pupping are on-going.

A *Draft Recovery Plan for the Australian Sea-lion* was released for public comment in 2005 and is available online at: www.deh.gov.au/biodiversity/threatened/recovery.

How you can help

- Minimise disturbance of sea-lions in the water and at coastal sites.
- Reduce the quantity and impacts of marine debris in Australian waters.
- Support the protection and management of key coastal and marine sites and volunteer in sea-lion surveys through National Parks.
- Support programs to reduce the discharge of pollutants into the aquatic environment.
- Walk, cycle or use public transport.
- Save on heating and cooling costs by insulating, draught-sealing and shading, while setting thermostats appropriately. For more information see the 'Heating and Cooling' fact sheet of the *Your Home Technical Manual:* www.greenhouse.gov.au/yourhome/
- Switch off lights, appliances and equipment when they're not needed and install energy-efficient fluorescent lamps such as compact fluorescent lights.
- Minimise waste of packaging and materials—refuse, reduce, re-use, recycle.
- For other tips on saving energy around the home, go to the Australian Greenhouse Office web site: www.greenhouse.gov.au/gwci/index.html

Australian Sea-lions, South Australia. Photo by WWF / Frédy Mercay

Contacts and references

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You can also find out more information about Australia's threatened species by visiting **www.deh.gov.au/biodiversity/threatened** or contacting the Department of the Environment and Heritage Community Information Unit, email ciu@deh.gov.au, or freecall 1800 803 772.

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- McKenzie, J., Goldsworthy, S., Shaughnessy, S., McIntosh, R., (2005) *Understanding the impediments to the growth of Australian Sea-lion populations*. SARDI, South Australia.

Footnotes

1 wwf.org.au/ourwork/climatechange/whatis/

2 www.panda.org/about_wwf/what_we_do/marine/problems/climate_change/index.cfm

3 panda.org/about_wwf/what_we_do/marine/problems/climate_change/altered_lifestyles/index.cfm

4 www.deh.gov.au/biodiversity/migratory/waterbirds/shorebird-plan/background-paper.htm

5 Campbell, R. "Marine Species Protection Program Completed Projects: The Populations Genetics of the Australian sea lion, Neophoca cinerea" www.nht.gov/nht1/programs/mspp/genetics.html

6 Campbell, R. "Marine Species Protection Program Completed Projects: The Populations Genetics of the Australian sea lion, Neophoca cinerea" www.nht.gov/nht1/programs/mspp/genetics.html

7 "Sea level rise 'is accelerating'" BBC News, 2006, newsbbc.co.uk/go/pr/fr/-1/hi/sci/tech/4651876.stm

Threatened Species Network

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