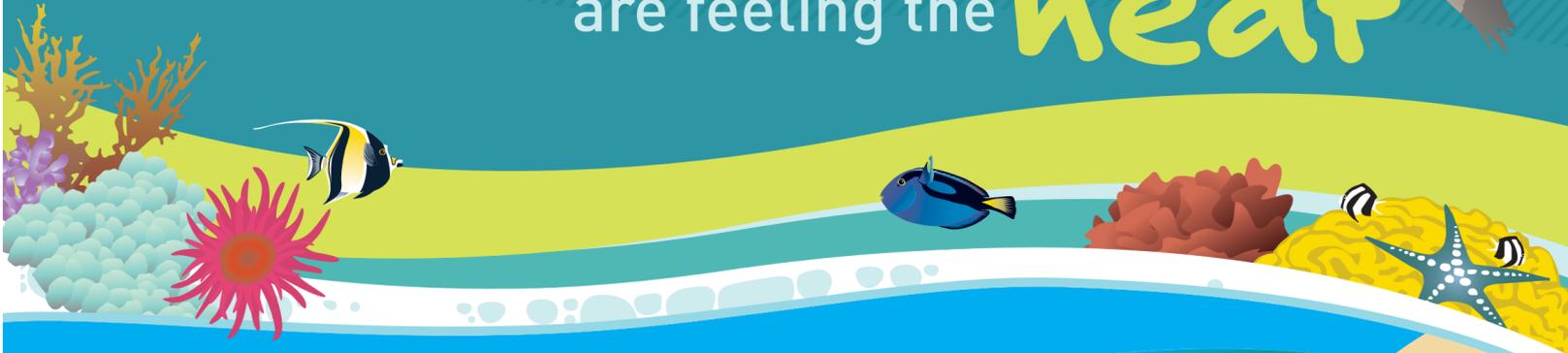


# Seabirds are feeling the heat



## Seabirds and their chicks are under threat from climate change

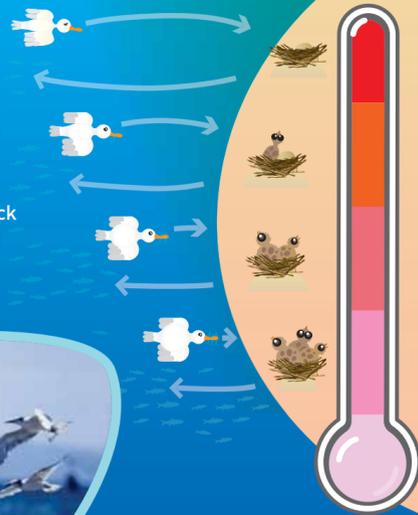
We all know 'birds of a feather flock together', but climate change is causing major problems for the 1.5 million seabirds that live on the Great Barrier Reef.

Seabirds nest on islands and sand cays and feed themselves and their chicks on fish found nearby.

As climate change warms coastal waters, fish move further away trying to find cooler water and seabirds have difficulty finding food.

Sometimes seabirds can't find enough fish to feed their chicks and in cases of extreme weather, none of the chicks survive.

Many seabirds nest on islands in burrows, in tussock grass or in low shrubs and trees. Sea level rise is expected to threaten seabird nesting habitat.



## Signs of decline

Climate change is already threatening seabird populations and has been blamed for dramatic declines in seabird populations on the Great Barrier Reef with tens of thousands of seabirds failing to breed due to food shortages caused by warming waters.

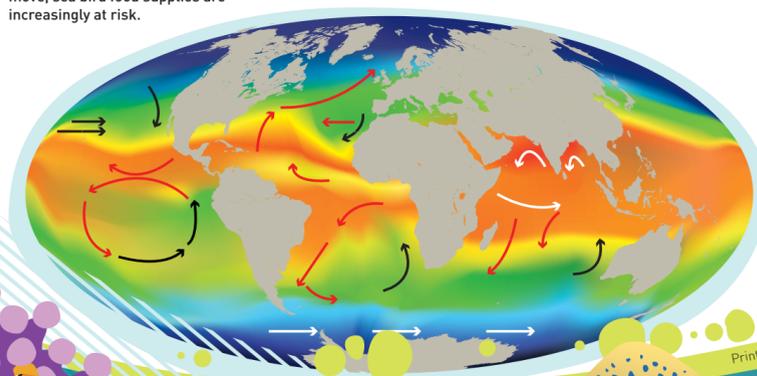
As climate change alters ocean circulation patterns and fish stocks move, sea bird food supplies are increasingly at risk.

- > Populations of great and lesser frigatebirds declined by six to seven per cent each year between 1992 and 2004. These populations have not yet recovered.
- > On Raine Island, in the northern Great Barrier Reef, populations of at least 10 of the 14 breeding seabird species are in decline. Numbers of common noddies have fallen by 96 per cent, sooty terns by

84 per cent, bridled terns by 69 per cent, and red-footed boobies by 68 per cent. The cause of the declines is attributed to reduced food supplies caused by changing climate.

- > On the Swain Reefs, near Rockhampton, the number of brown booby nests has dropped from 350 in 1975 to less than 30 since 2000.
- > On Heron Island off the coast of Gladstone, the black noddy population had been rising since early last century, but the number of active nests fell from about 70 000 to 30 000 between 1996 and 2000 with mass death of adults and chicks in 1998, an extremely warm year.

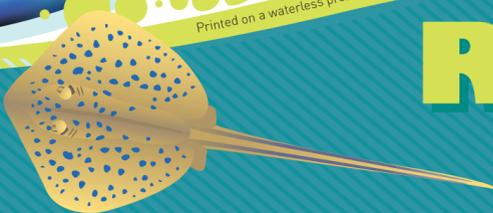
- > In 2002, another year of abnormally high sea surface temperatures, almost none of the huge numbers of wedge-tailed shearwaters that normally nest annually on Heron Island succeeded in raising young.
- > Off Heron Island in 2003, a 1°C increase in sea temperature reduced feeding frequency of shearwaters from one night in two to one night in five.
- > In 2006, a similar rise in water temperature resulted in the number of daily meals fed to the chicks of black noddies falling from three meals a day to half a meal each day.



Printed on a waterless press using environmentally responsible print techniques and sustainable paper stocks.



Australian Government  
Great Barrier Reef  
Marine Park Authority



# REEF Beat 8