Good news for some corals, not so good elsewhere



Coral reefs off Moorea, Tahiti, have been able to rebound from bleaching events. ${\tt istockphoto/Xavier Marchant}$

Some of the world's corals may be able to escape destruction under climate change according to an international team of scientists studying a coral reef off Moorea, a French Polynesian island in the Pacific.

The researchers found that the corals rebounded on five occasions in the past 18 years despite sustaining heavy damage from four bleaching events and one cyclone.

Team member Dr Lucie

Penin of the ARC Centre of Excellence for Coral Reef Studies in Townsville says the corals were even able to recover after the reef had been swamped by weeds.

However, she points out that the corals studied lie on the outer reef slope, that Moorea is not heavily populated, and that the main human impact has been fishing. The team concluded that the lack of human pressure and relatively low levels of pollution have been key factors contributing to the reef's resilience.

Dr Penin says that in the early 1990s, seaweeds had taken over more than half of the reef in the wake of cyclone and bleaching damage. However, key coral species were able to re-colonise the reef in subsequent years. 'It shows that a fast recovery, in just a decade, is possible under the right conditions,' she adds.

The IUCN, however, offers a less optimistic outlook. In a recent detailed analysis of its 2008 'Red List of Threatened Species' it concluded that many marine species are experiencing potentially irreversible loss due to over-fishing, climate change, invasive species, coastal development and pollution.

This includes at least 17 per cent of the world's 1045 shark and ray species, six of the seven marine turtle species and at least 27 per cent of the 845 species of reef-building corals. The analysis of the 44 838 species on the IUCN Red List showed that at least 16 928 species are threatened with extinction.

Whales 'worth more alive than dead'

More than 13 million people joined whale-watching tours in 119 countries last year, generating tourism revenue of more than US\$2.1 billion (AU\$2.5 billion), according to a report by the International Fund for Animal Welfare (IFAW).

The report, 'Whale watching worldwide', shows that the growth of the whale-watching industry in Asia, the Pacific, South America, the Caribbean and Europe has significantly outpaced global tourism growth rates over the past decade.

Around 3000 whalewatching operations globally now employ an estimated 13 200 people, prompting the Minister for the Environment, Peter Garrett, to comment that 'whales are worth much more alive than dead'.

In Australia, more than 1.6 million people went whale-watching last year, generating almost AU\$264 million in ecotourism revenue. Tasmania had the fastest average annual growth rate since 1998, with 37.6 per cent annual growth, followed by New South Wales with 14.7 per cent.



Diving with minke whales in Queensland – collecting scientific data and tourism dollars. Jaap Barendrecht

More water, sequestration if Goulburn logging stopped

Ending logging in the wet montane forests of Victoria's Goulburn River catchment – already damaged by the Black Saturday fires and part of a controversial pipeline scheme to divert water to Melbourne – would deliver an additional 3800 gigalitres to the river this century, around six times Melbourne's annual water use.

This was one of the findings from a report commissioned by the Australian Conservation Foundation (ACF), which estimated the 'saved' water to have an economic value of around \$1.68 billion.

The report, 'Woodchipping our water: a case for reassessing



Logging coupes visible in the upper Goulburn catchment.

the use of the Goulburn Broken catchment's wet montane forests', argues that the logging of mature forests in the headwaters of the catchment is threatening the Goulburn's significant water production and carbon sequestration potential. It also argues that ecologically mature forests are more resilient to bushfire than disturbed regrowth forests.

The Goulburn River supplies water to Shepparton, Bendigo and Ballarat, and to major irrigation industries such as horticulture before it eventually provides flows to the Murray.

The ACF has called for the Victorian Government to end logging in the catchment and implement a \$12 million restructure package to provide new economic opportunities for the region.