

Scientists call for protection of Australia's subtropic seas

November 22 2010

Leading scientists and marine managers have called for a greater national effort to protect vital 1000-kilometre stretches in the middle of Australia's eastern and western coastlines.

In a major statement entitled The Coffs Harbour Subtropical Reefs Declaration, they urge increased focus and better management for reefs south of the [Great Barrier Reef](#) and WA tropical coral zone, explaining that these more southerly areas are expected to become critical refuges for northern tropical marine life under [global warming](#).

The declaration follows a workshop by researchers and marine managers at Coffs Harbour in September which concluded that the subtropics will play a key role in safeguarding Australia's tropical marine life as ocean warming drives it southwards – especially if northern coral reefs die off, as some scientists fear.

The Coffs Harbor Declaration was made by a new expert group called the Sustainable Subtropical Reefs Alliance (SuSRA), which has been established to advocate for greater ocean research and conservation on coastal areas between Sydney and Bundaberg on the east coast and Perth and Shark Bay on the west coast.

Among its signatories are scientists from five of Australia's east coast universities – Tasmania, Sydney, Southern Cross, Queensland and James Cook, marine park managers, and the CSIRO (Queensland and [Western Australia](#)).

“The subtropics are really about life on the edge - where tropical and temperate marine species meet and mix in a rich diversity,” said Professor John Pandolfi of the ARC Centre of Excellence for Coral Reef Studies and The University of Queensland.

"There is already evidence that tropical species are migrating southwards in response to warming, making the subtropics all the more important.

“Unfortunately we only have a limited understanding of what's out there and what's happening to it, on which to base our future management – and this gap in our knowledge needs to be closed quickly, so we can integrate the management of our entire coastal regions better.”

The eastern subtropical coastline, and increasingly the west too, are among Australia's fastest-growing regions, throwing surging human pressures on ocean ecosystems, The University of Queensland's Dr Maria Beger said.

“These environments are already under major stress from changing climate and oceanic currents – and to this we are adding increased activities like pollution, runoff, coastal development and fishing,” she said.

“We need to ensure we protect the resilience of this region, as well as the northern coral zones.

"At the same time, the future of our central coastal communities, their industries and their lifestyle depends on preserving a healthy marine environment.”

The Coffs Harbour Declaration states that the eastern and western coasts of Australia are amongst the longest latitudinal tracts of subtropical coastal marine habitat in the world, encompassing beaches, rocky

foreshores, offshore islands, shoals and reefs.

Changes in fish and coral distribution now being observed by scientists have made it imperative to re-evaluate conservation plans for the central coasts and strengthen them where necessary, it states.

The declaration highlights seven priorities for improving the management of Australia subtropical marine environment:

1. Integrate science and resource management across federal, state and local agencies to ensure better planning and management of subtropical marine areas;
2. Study how social, economic and political factors affect the management of coastal resources and the services they in turn provide to coastal communities;
3. Understand the existing ecology and map existing coastal habitat;
4. Evaluate threats to marine resources from land-based activities, benchmark their past and current status and monitor changes;
5. Determine pathways for tropical marine 'invaders' moving into the [subtropics](#) due to climate change, and the impact on local species;
6. Determine which sites (refugia) are critical to preserving subtropical marine fish, corals and other species in the event of profound environmental change;
7. Investigate natural variability of existing subtropical marine areas (so as to detect unusual changes).

The declaration says: “We call upon practitioners, managers, researchers, funding bodies and governments to recognise that these priority areas require urgent attention and investment to enable effective and efficient decision making for the future of subtropical reefs.”

More information: The full text of the Coffs Harbour Declaration is available at: www.coralcoe.org.au/

Provided by University of Queensland

Citation: Scientists call for protection of Australia's subtropic seas (2010, November 22)
retrieved 26 April 2024 from

<https://phys.org/news/2010-11-scientists-australia-subtropic-seas.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.