

# Scientists call for no-take coral sea park

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More than 300 eminent scientists from 21 other countries around the world today urged the Australian Federal Government to create the world's largest no-take marine reserve in the Coral Sea.

"[Marine reserves](#) are an important tool for managing and restoring ecosystems. They protect brood stocks for sustainable fisheries and rebuild distorted foodwebs. We know how well they work because of the differences that we observe again and again between different marine zones under existing management schemes. Already, the recent rezoning of the [Great Barrier Reef](#) has resulted in a doubling of coral trout and other commercially important species" says the Director of the ARC Centre of Excellence for Coral [Reef Studies](#), Professor Terry Hughes.

"The Australian Government's draft plan for a marine reserve in the Coral Sea is a significant step forward - but misses a unique opportunity for Australia to demonstrate global leadership in marine stewardship, by declaring the Coral Sea within Australia's EEZ as the world's largest no-take area," according to the statement, signed by more than 300 scientists.

"The Coral Sea adjoins the Great Barrier Reef, and because of its remoteness is one of the most intact oceanic ecosystems in the world. Together the two reserves would constitute the world's largest protected [ocean ecosystem](#) – at a time of growing concerns over the widespread loss of megafauna, corals and other marine life closer to shore," says Professor Hugh Possingham, Director of the ARC Centre of Excellence for Environmental Decisions.

"We believe that an increased level of protection would be of immense benefit to Australia and to the world, at negligible cost. The Coral Sea is one of only a handful of places in the world where a very large oceanic no-take park could be created within a single national jurisdiction," the scientists said.

Their statement identifies six main reasons for extending the level of protection in the proposed marine reserve:

- Most of the shallow [coral reefs](#), cays and sublittoral reefs of the western Queensland Plateau and the seamounts of the southern Coral Sea will not be fully protected in the Government's proposed reserve.
- The reefs of the Coral Sea need more protection: under the current plan only 2 new reefs out of 25 will receive a high level of protection. These reefs are important for recharging the corals of the GBR.
- Deep sea systems and seamounts need greater protection. The area contains Australia's largest deep trough system, which attracts large numbers of feeding and spawning fish, birds and whales.
- Ocean ecosystems need better protection from long-line fishing vessels, which threaten populations of yellowfin tuna, barracuda, sharks, turtles and seabirds.
- Catch-and-release fishing in the Coral Sea should be banned because of the high losses caused by predation and barotrauma, and its impact on shark populations
- It is much more cost-effective to manage a single, large no-take zone with simple boundaries than a variety of differently classified zones .

"A reserve of this scale and level of protection would provide

unprecedented refugia for top ocean predators that are fast disappearing elsewhere in the world," Professor Terry Hughes said.

"Such a reserve will help to improve the resilience of the region's coral reefs to climate change, and provide a globally significant scientific reference site," adds Professor Bob Pressey of CoE CRS and James Cook University.

"We believe that our recommendations will have minimal social and economic costs because there is very little current use of the Coral Sea region - but the recommendations will boost Australia's international reputation as a leader in marine protection and as an eco-tourism destination," he adds.

"Fully protecting the [Coral Sea](#) will provide a lasting legacy for future generations to enjoy and will reinforce the excellent levels of [protection](#) already achieved in the GBR," Professor Hughes said.

### **More information: References**

Ban N.C., Adams V., Pressey R.L. & Hicks J. (2011). Promise and problems for estimating management costs of marine protected areas. *Conservation Letters*, 4, 241-252.

Beger M., Babcock R., Booth D.J., Bucher D., Condie S.A., Creese B., Cvitanovic C., Dalton S.J., Harrison P., Hoey A., Jordan A., Loder J., Malcolm H., Purcell S.W., Roelfsma C., Sachs P., Smith S.D.A., Sommer B., Stuart-Smith R., Thomson D., Wallace C.C., Zann M. & Pandolfi J.M. (2011). Research challenges to improve the management and conservation of subtropical reefs to tackle climate change threats. *Ecological Management & Restoration*, 12, e7-e10.

Bode M., Bode L. & Armsworth P.R. (2006). Larval dispersal reveals

regional sources and sinks in the Great Barrier Reef. *Mar Ecol Prog Ser*, 308, 17-25.

Ceccarelli D.M. (2011). Australia's Coral Sea: A biophysical profile. In. Report for the Protect our Coral Sea Coalition Australia.

Ceccarelli D.M., Choat J.H., Ayling A.M., Richards Z.T., van Herwerden L., Ayling A., Ewels G., Hobbs J.P. & Cuff B. (2008). Coringa-Herald National Nature Reserve Marine Survey – 2007. Report by C&R Consulting and James Cook University to the Department of the Environment, Water, Heritage and the Arts Canberra.

Game E.T., Grantham H.S., Hobday A.J., Pressey R.L., Lombard A.T., Beckley L.E., Gjerde K., Bustamante R., Possingham H.P. & Richardson A.J. (2009). Pelagic protected areas: the missing dimension in ocean conservation. *Trends Ecol Evol*, 24, 360-369.

Great Barrier Reef Marine Park Authority (2009) Great Barrier Reef Outlook Report. (Great Barrier Reef Marine Park Authority, Townsville).

Robbins, W. M. Hisano, S.R. Connelly, and J.H. Choat (2006). Ongoing collapse of coral-reef shark populations. *Current Biology* 16: 2314-2319.

van Oppen M.J.H., Lutz A., De'ath G., Peplow L. & Kininmonth S. (2008). Genetic traces of recent long-distance dispersal in a predominantly self-recruiting coral. *PLoS ONE*, 3, e3401.

Young J., David McKinnon A., Ceccarelli D., Brinkman R., Bustamante R., Cappo M., Dichmont C., Doherty P., Furnas M., Gledhill D., Griffiths S., Hutton T., Ridgway K., Smith D., Skewes T., Williams A. & Richardson. (2011) A. Workshop on the ecosystem and fisheries of the Coral Sea: an Australian perspective on research and management.

Rev Fish Biol Fish, 1-8.

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