





MEDIA RELEASE 21st AUGUST 2020

Small start to coral recovery in the Great Barrier Reef but large increase in coral trout

- Hard coral cover showed signs of initial recovery on the Great Barrier Reef
- Coral trout have grown larger and are more numerous since 2004
- The effect of last Summer's marine heatwave and coral bleaching will not be known until further surveys are completed this year

Marine scientists recorded small increases in coral cover on the Great Barrier Reef according to underwater survey results released today (21 August 2020).

The Australian Institute of Marine Science's (AIMS) Annual Summary Report on coral reef condition for 2019/20 is drawn from surveys undertaken between September 2019 and June 2020, with most of the reefs surveyed before last Summer's mass coral bleaching event.

The full effects of this event on coral cover will not be known for some months and may set back the Reef's recovery.

Coral cover is a widely used measure to describe the proportion of the reef surface covered in live hard coral.

The report found that while there was considerable variation in coral cover between the 86 reefs surveyed, more than two thirds had slightly increased coral cover.

In the Central region between Hinchinbrook Island and Mackay, hard coral cover increased on average from 12% in 2019 to 14% in 2020.

Coral cover in the Northern Great Barrier Reef was stable, while it marginally increased in the Southern region.

These slight increases indicate recovery had begun after the Reef had been subjected to multiple disturbances from bleaching, cyclones and coral-eating crown-of-thorns starfish outbreaks.

This year, the Southern region had the highest cover of all three regions at 24%, and historically has been the most dynamic, with strong recovery from 2011 (9%) to 2017 (32%). This recovery was reversed from 2017 to 2020 due to crown-of-thorns starfish outbreaks in the Swains sector. Coral cover is currently just over half of what it was in 1988 (at 40% this is the highest year recorded by AIMS).

In addition to monitoring the coral, which is providing habitat for many other sea creatures, AIMS also examined fish communities. A noteworthy result this year was that coral trout numbers continued to increase on reefs inside "no-take" marine reserves compared to reefs open to fishing.

The report found coral trout in these "Green Zones" are larger and more numerous, with nearly twice as many of the fish compared to the number in "Blue Zones".

Coral trout are one of the most valuable species of fish targeted by both recreational anglers and commercial fishers in the Great Barrier Reef.

AIMS has been monitoring the Great Barrier Reef for more than three decades. AIMS data is the largest, longest and most comprehensive information source on the health of the Great Barrier Reef providing a continuous record of change in reef communities.

The Great Barrier Reef is a national icon and a key habitat provider for thousands of fish and invertebrate species. It supports 64,000 jobs in Queensland and contributes \$6.4 billion to the Australian economy.

Comments attributed to Dr Mike Emslie, leader of AIMS' Long-Term Monitoring Program

"This monitoring program has been conducted continuously for 35 years. Our surveys along the length and breadth of the Great Barrier Reef tell us that the reef is resilient, but this resilience has limits.

"The slight increases in coral cover across much of the Great Barrier Reef this past year are encouraging but the full effect of the mass bleaching on coral mortality will not be known for several months.

"The Reef is taking repeated hits from coral bleaching, cyclones and crown-of-thorns outbreaks. While we have seen the Great Barrier Reef's ability to begin recovery from these pressures, the frequency and intensity of disturbances means less time for full recovery to take place.

"The coral trout in the protected Green Zones of the Reef are bigger and there's a lot more of them than in reefs open to fishing.

"As numbers of coral trout in protected areas increase and they grow larger in size, they produce more offspring. Some coral trout larvae are transported from Green Zones and re-seed populations in Blue Zones, which means more fish available for anglers.

"The new result confirms that the science behind the Marine Park's rezoning continues to benefit Queenslanders."

Comments attributed to Dr Britta Schaffelke, Research Program Director - Great Barrier Reef

"This report from AIMS' Long-Term Monitoring Program provides the most extensive and comprehensive record of coral condition of a single reef ecosystem available in the world.

"The 35 year-long dataset of the AIMS' Long-Term Monitoring Program helps to determine long-term trends in the condition of coral communities across the Great Barrier Reef. It shows that the condition of the mid-shelf and outer reefs have declined in response to the cumulative impacts of marine heatwaves, cyclones and outbreaks of the coral-eating crown-of-thorns starfish.

"This survey season has revealed that Great Barrier Reef reefs were beginning to recover from the recent disturbance history, however the third mass coral bleaching event in five years from several weeks of sustained, unprecedented, high sea temperatures may set-back recovery.

"Reefs may take up to decades to recover from severe coral loss, but the more frequent onset of these events is reducing the time for recovery."

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Images and video available: https://cloudstor.aarnet.edu.au/plus/s/w6iEqxb1PsdZzpo

Report details

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More about the Australian Institute of Marine Science

The Australian Institute of Marine Science (AIMS) is Australia's tropical marine research agency. In existence for almost half a century, it plays a pivotal role in providing large-scale, long-term and world-class research that helps governments, industry and the wider community to make informed decisions about the management of Australia's marine estate.

AIMS science leads to healthier marine ecosystems; economic, social and environmental benefits for all Australians; and protection of coral reefs from climate change.

More here: https://www.aims.gov.au/