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CASE STUDY: BIODIVERSITY AND CARBON MARKETS

The Great Reef Census
Citizens of the GBR

The Great Barrier Reef is a global icon renowned for its stunning biodiversity and ecological significance. However, it faces unprecedented threats from climate change, pollution, and other human activities. The Great Reef Census is an innovative, citizen-powered initiative designed to gather critical data on the reef's health.

This project leverages the collective efforts of volunteers, marine fleets, tourists, and technology to monitor and protect this vital ecosystem. The Great Reef Census provides a holistic approach to reef management and protection by integrating local knowledge and global participation.

OVER 100,000 PHOTOS TAKEN ACROSS 600 REEFS

The Great Reef Census utilises a diverse fleet of vessels, including dive boats, tourism vessels, tugs, and even superyachts, to capture comprehensive images of the reef. This massive data collection effort provides invaluable insights into the health of the Great Barrier Reef.

The project has successfully gathered over 100,000 photos from more than 600 reefs. These images are not just pictures, they are crucial data points for assessing the impacts of coral bleaching, identifying areas needing restoration, and tracking changes in reef health over time. The data collected through the Census supports informed decision-making and targeted conservation strategies, ensuring the long-term sustainability of the reef.

"The Great Reef Census is a massive people-powered way of getting broad-scale reconnaissance of the Great Barrier Reef. With the reef being the size of Germany or Japan, understanding what's happening on such a large scale has become increasingly important as we face more threats from climate change and other factors."

Andy Ridley, Founder, Citizens of the Great Barrier Reef

HOW IT WORKS

The project employs a multifaceted approach to data collection and analysis:

Collaborative data collection: A diverse array of volunteers work together to capture images across over 600 reefs. These images are then uploaded greatreefcensus.org

Virtual volunteering: It takes 1 minute to analyse an image, and each must be reviewed 5 times. Volunteers can log onto greatreefcensus.org and help analyse the images, contributing valuable data that supports conservation efforts.

Advanced technology: Using a combination of AI, machine learning and citizen science, the project processes and analyses the collected images to identify key indicators of reef health, such as coral cover.

Community engagement: The Census involves local communities, Traditional Owners, schools, tour operators, and global corporations, fostering a sense of stewardship and raising awareness about the importance of protecting the reef.

WHY IT MATTERS

The Great Reef Census offers numerous benefits to the Great Barrier Reef and the global community:

Informed conservation: The data collected through the Census informs targeted conservation and restoration efforts, helping to protect and preserve the reef for future generations.

Educational impact: The initiative educates the public about the importance of reef conservation and the role everyone can play in protecting this vital ecosystem.

World-class innovation: While developed to support the Great Barrier Reef's conservation efforts, the system and technology developed by Citizens of the GBR can be applied to any reef ecosystem around the world.

Cairns, as the gateway to the Great Barrier Reef, plays a crucial role in the success of the Great Reef Census. The local community's involvement is vital, ensuring the data collected is comprehensive and representative of the reef's diverse environments.

"The Great Reef Census virtual volunteering program gives opportunities to people who traditionally haven't been able to participate in reef conservation. This program allows us to go to them and give them something they can do from their laptops or offices that can help protect the Great Barrier Reef and actually make a difference."

Nicole Senn, Engagement Manager
Citizens of the Great Barrier Reef

100,000+
Images contributed

600
Unique reefs surveyed

11,000
Participants have analysed images

20+
Global organisations involved

SUPPORT THIS PROJECT

Join us in positively impacting the environment and supporting the health of the Great Barrier Reef.

For more information or to participate visit greatreefcensus.org

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