

Australian state buys cattle station to help Barrier Reef

June 22 2016



Global warming has been wreaking havoc on the Great Barrier Reef, contributing to an unprecedented bleaching event this year that saw much of it whiten and almost a quarter of corals die

A huge cattle station that pours sediment into the Great Barrier Reef was bought Wednesday by the government as efforts are stepped up to help the World Heritage site bounce back from mass bleaching.

Global warming has been wreaking havoc on the reef, contributing to an unprecedented bleaching event this year that saw much of it whiten and almost a quarter of corals die.

The reef, which teems with marine life, is also under pressure from farming run-off, with the 560 square kilometre (216 square miles) Springvale Station near Cooktown in northern Queensland one of the worst culprits.

Queensland Environment Minister Steven Miles said Springvale contributed huge amounts of sediment run-off to the northern part of the Barrier Reef, the worst hit by the bleaching caused by warming sea temperatures.

"Sediment and the attached nutrients have a range of impacts on the reef, so this 56,000 hectare land purchase was critical," he said after the government bought the property for Aus\$7 million (US\$5.2 million).

Run-off from the land carries sediment to the reef where it blocks light, smothers marine organisms and reduces coral and seagrass growth.

"We need to make sure the reef has the best chance to recover from this (bleaching) event by making sure water flowing from the catchments is as clean as possible," he added.

Coral bleaching

Occurs when corals expel their photosynthetic algae

1

Coral polyps are translucent



2

They receive colour from algae such as **dinoflagellates** that live on them in a **symbiotic relationship**

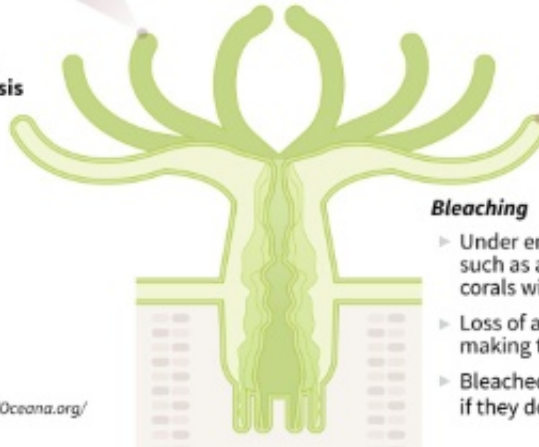


3

Algae use nitrogen, phosphorus and other **metabolic waste from coral** to generate energy from the sun via **photosynthesis**

4

Oxygen and other **organic products of photosynthesis** help coral to grow



Corals are made up of colonies of **polyps**, lifeforms related to anemones and jellyfish



Bleaching

- Under environmental stress, such as a change in temperature, corals will expel algae
- Loss of algae causes coral bleaching, making them vulnerable to disease
- Bleached coral will eventually die if they don't regain algae

Source : NOAA/NationalGeographic/Oceana.org/
teachoceanscience.net

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Coral bleaching

"That includes stepping up effective erosion control measures on the gullies and rivers in far northern Queensland."

The government said it planned to remove all cattle from Springvale before rehabilitating the land to reduce erosion.

Scientists have said parts of the 2,300-kilometre (1,429-mile) long reef will take at least a decade to recover, and the World Wide Fund said

good water quality was key to its survival.

"Never before has a government bought land to protect the water quality of the Great Barrier Reef," said WWF-Australia spokesman Sean Hoobin in hailing the decision as "unprecedented".

"Large volumes of mud wash off this station and out into [reef](#) waters which stresses the coral.

"Action to reduce sediment pollution from Springvale will help the surviving coral to bounce back."

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