

Noosa Biosphere® Reserve Foundation Ltd

MEDIA RELEASE

Monday, 17 February 2020

Oyster reefs the basis for a healthy river system

The Noosa Biosphere Reserve Foundation (NBRF) has responded to media interest in the Noosa River Oyster Reef Trial Project.

A three year oyster reef pilot study was funded in part by NBRF as it followed independent research on how to restore water quality, marine habitat and biodiversity in marine and estuary environments like the Noosa River.

Oyster reef restoration is becoming widely used in coastal and estuary management around the world because of the range of ecosystem services they provide including critical water filtration and promotion of habitat growth.

The decline in oysters in the Noosa River is not unique. Around 85 percent of all the world's shellfish reefs have been lost due to human influences.

"While there were challenges the project succeeded in answering the essential questions that it was designed to test," newly appointed NBRF chair, Rex Halverson said.

A University of the Sunshine Coast research team conducted the oyster reef pilot project – a first in Queensland – using biodegradable coconut mesh bags filled with recycled oyster shells donated by local suppliers. These shells were then manually cleaned and the natural reefs constructed by hand.

After just one year of monitoring, the scientists found that oysters successfully settled and grew rapidly at every trial site.

The trial reefs showed strong recruitment of juvenile oysters, with vigorous growth. All reefs had spat – the term for juvenile oysters – settlement with an average of 300 spat per square metre. Some juveniles had grown to 60mm in diameter. The trial sites also recorded higher numbers of fish species than at nearby control sites.

Marine ecologist Dr Simon Walker, who oversaw the project, said that the trial reefs were designed as natural substrate to assist oyster reefs to recover.

"Dead oyster shell needs to be put back as this is the best and most natural place for baby oysters to thrive," he said.

At around 18 months into the trial, it was found that 10 of the 14 trial reef sites had been damaged.

"This may have been caused by increased recreational boating during the Christmas holiday period and the increased presence of fish drawn to the test beds attracting boaters," Mr Halverson said.

The removal and disposal of the damaged reef structures was a condition of the state approval for the trial program. The remaining four reef sites continue to be monitored until the completion of the program later this year.

The success of this trial prompted internationally recognised science-based conservation group The Nature Conservancy (TNC) to invest \$1.2million towards a more extensive, permanent reef system in partnership with the Noosa Council. NBRF is not involved in this new project.



"The Noosa River is central to the local economy and community's wellbeing," Dr Simon Walker said. "It is time that we focus attention on supporting the River to ensure it is as healthy as it can be, so it can continue to support Noosa," Dr Walker said.

The mandate of the NBRF is to support scientific research and projects in the Noosa Shire that align with the goals of the UNESCO Man and the Biosphere Program. For more information, visit www.noosabiosphere.org.au.

Ends.

Media enquiries

For more information or interview, phone Alison Cooper, media liaison on mobile 0416 288 054 or email to alison@alisonjanecommunications.com.

About Noosa Biosphere Reserve Foundation

The Noosa Shire as a region is distinct from other, more developed urban areas on the Sunshine Coast in Queensland and elsewhere in Australia, and has achieved global recognition for the high values of its natural environment. In 2007, this exceptionalism was internationally recognised with the United Nations Educational, Scientific and Cultural Organisation (UNESCO) consenting to the designation of our Shire as the Noosa Biosphere Reserve under its Man and the Biosphere program (MaB). The Noosa Biosphere Reserve Foundation (NBRF) is a not-for-profit organisation established by the Noosa Shire Council to support projects and ideas that align with the aims of the UNESCO Man and the Biosphere Program. www.noosabiosphere.org.au

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