



REVIEW

Keepers of the reef

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Keepers of the Reef is an informative nonfictional picture book focussed on the ecological interactions of animals and algae that call the Great Barrier Reef home. The text and illustrations take the reader on a journey to explain the importance of a coral reef ecosystem and the roles that herbivorous fishes play in keeping the system healthy. Despite there being many coral reef picture books currently available, *Keepers of the Reef* stands out from others by focusing on the herbivory feeding behaviour of the fish—an ecologically important interaction that to my knowledge, has not been explored in a picture book before.

In the first part of the book, we are introduced to the Great Barrier Reef, its diversity and significance. This bigger picture then homes in on the corals themselves, taking us through the different shapes and a diagrammatic illustration of the life cycle of a coral. Next, the reader is introduced to the importance and different types of algae. We learn about how a coral garden can shift to an algal garden if the algae are left to grow undisturbed. This sets the scene for the focus of the story—the keepers of the reef. The reader learns how herbivorous fish play different roles on the reef but ultimately work together to limit the growth of turfing algae. The various “keeper” roles are described by Sharon using catchy descriptions such as the brusher, the cropper, the scraper, the excavator, and the browser. Towards the end of the book, the main threats facing the Great Barrier Reef are presented together with innovative solutions scientists are developing and adopting for coral restoration. The balance of creating both environmental empathy and scientific understanding is delivered in a well-balanced and clever way to ensure minimal impact of creating ecophobia to the young reader (ecophobia defined in: McKnight, 2010). The book finishes with an invitation to do our part to help protect the reef through activities that can be conducted at home and within your community. The ideas provided are achievable to a young reader and are coupled with bonus coral points allocated to each activity. The book concludes with a glossary, further reading and websites, providing a useful resource to extend knowledge on the topic.

Throughout the book, the illustrations are saturated with pastel watercolours drawing on the array of colour often seen in a coral reef. To add a touch of interest and connection with the reader, two young children are seen throughout the pages. We see the children on the beach with a turtle

at the beginning of the story and then follow them underwater where they are equipped with snorkelling gear. At the end of the book, the children are part of the call-to-action section where we see them conducting the suggested activities. What I like here, is that the implied reader can connect with the story by imagining themselves snorkelling in the ocean or by helping to protect the ocean through achievable actions such as planting a tree or picking up litter.

Keepers of the Reef is intended for children between 6 and 8 years old, but I believe this book has wider scope, particularly if being used as an educational tool to learn about marine science. For example, I found several links with the Foundation to Grade 6 levels of the Australian Curriculum (version 9.0, Australian Curriculum Assessment and Reporting Authority, 2022) in learning areas such as Science, HASS and the cross-curriculum priority, Sustainability. Ocean themed picture books have been shown to be a useful tool to learn marine science concepts linked to the Australian Curriculum (Francis, Venzo, & Bellgrove, 2021), and this book has the potential to achieve this. Biological concepts such as biodiversity, classification, adaptation, feeding behaviours and life cycles can be further explored in the classroom. *Keepers of the Reef* can ideally be used for any inquiry-based learning focussed on coral reef ecosystems where not only scientific concepts covered in the unit, but themes around climate change, sustainability and scientific discovery can be embedded in the unit, providing a suitable platform for an interdisciplinary approach to learning.

The need to incorporate marine science in formal education has been in the global spotlight since 2004 (Costa & Caldeira, 2018), where growing evidence reveals that ocean education is lacking in school curricula across the world (Gough, 2017). We rely on our oceans, and if we want to continue to do this, we need to manage our oceans in an equitable and sustainable manner. One step to achieving this is through creating an ocean literate society and this can start with the younger generation in formal education settings by finding creative ways to embed the seven ocean literacy principles (Fauville, Strang, Cannady, & Chen, 2019) into the Australian Curriculum. Familiar tools such as picture books can be an effective way to do this (Freitas, Bellgrove, Venzo, & Francis, 2022), and *Keepers of the Reef* is not only a fun book to add to your child's book reading repertoire at home, but is ideally placed to enhance ocean literacy in primary schools in Australia.

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