

AUSTRALIA'S GREAT SOUTHERN REEF

'The Great Southern Reef is an extensive and valuable ecosystem ... that not very many people know about.'

Australian Academy of Science

'The Great Southern Reef is a fantastic example of how the natural world can thrive when we leave it alone. However, more must be done, because right now the Reef faces extreme threats'

Dr. Sylvia Earle, Founder, Mission Blue

Lorraine Chaffer, Education consultant

Image source: Ocean Imaging / Great Southern Reef

WHAT IS IT? WHERE IS IT? WHY IS IT UNIQUE? WHY SHOULD I KNOW ABOUT IT?



Video 1

Introducing Australia's Great Southern Reef

<https://www.youtube.com/watch?v=cLWCpejKrEc>



Video 2

Story of the Great Southern Reef, Australia's

underwater forests – https://www.youtube.com/watch?v=LMgXuG_xu5g

ECOSYSTEMS AT RISK

A case study of an ecosystems at risk to illustrate its unique characteristics including:

- Spatial patterns and dimensions
- Biophysical interactions
- The nature and rate of change which affects ecosystem functioning (integrated throughout)
- Human impacts (both positive and negative)
- Traditional and contemporary management practices



Giant Australian Cuttlefish. Source: Ocean imaging: Great Southern Reef



The Weedy Seadragon, unique to the GSR. Source: Ocean imaging Great Southern Reef

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OPENING CREDITS

This resource has been created to provide a Geographical perspective on Australia's Great Southern Reef using the following resources PLUS the references and links at the end of this document.

1. Great Southern Reef website – <https://greatsouthernreef.com>
2. Teachers of the Great Southern Reef Facebook Group* – <https://www.facebook.com/greatsouthernreef/>
* Stefan Andrews is the creator of both the website and Facebook Group. Stefan is a marine biologist, videographer and marine educator.
3. Australian Academy of Science. Who's heard of the Great Southern Reef? – <https://www.science.org.au/curious/earth-environment/whos-heard-great-southern-reef>
4. The 'Great Southern Reef': social, ecological and economic value of Australia's neglected kelp forests. Scott Bennett, Thomas Wernberg, Sean D. Connell, Alistair J. Hobday, Craig R. Johnson and Elvira S. Poloczanska. CSIRO. Marine and Freshwater Research – <https://www.publish.csiro.au/mf/Fulltext/MF15232>
5. Kelp Forest Restoration in Australia. Layton, C., Coleman, M., Marzinelli, E., Steinberg, P., Swearer, S., Vergés, A., Wernberg, T. and Johnson, C., 2021. *Frontiers in Marine Science* – <https://www.frontiersin.org/articles/10.3389/fmars.2020.00074/full>
6. Reef Life Survey – <https://reeflifesurvey.com>
7. Sydney Institute of Marine Science (SIMS): Operation Crayweed. Restoring Sydney's Underwater Forests – <http://www.operationcrayweed.com>
8. BBC Travel Australia's forgotten other 'Great Reef' – <https://www.bbc.com/travel/article/20200922-australias-forgotten-other-great-reef>
9. National Geographic. Great Southern Reef – <https://fieldnotes.nationalgeographic.org/expedition/greatsouthernreef>
10. Stefan Andrews (Ocean Imaging), John Turnbull (#MarineExplorer), Cayne Layton, Haig Gilchrist, Sydney Institute of marine Science, (SIMS) and @saltywings on Instagram for photographs used in the resource

USING THIS RESOURCE

Visit the Great Southern Reef website for information and teaching resources
<https://greatsouthernreef.com>

Join the Great Southern Reef Facebook Group for teachers to keep up to date with new information and events <https://www.facebook.com/greatsouthernreef>

Visit the GTANSW & ACT GREAT SOUTHERN REEF Google Site – <https://sites.google.com/view/gtanswactgreatsouthernreef>

The Google site is a digital version of the contents of this article with videos and documents embedded and important resources hyperlinked. The site also includes fieldwork and virtual fieldwork options. Some content from the article has been reduced and additional resources embedded

Use the media reports to develop teaching and learning activities.

For Stage 5 there is a comparative study on the GTA Website with this edition.

**GREAT
SOUTHERN
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