

Restoring Melbourne's Lost Shellfish Reefs

85% of shellfish reefs have been lost worldwide, making it the most threatened marine habitat on earth*.

Mussel reef
© Paul Hamer

In an Australian first, The Nature Conservancy has partnered with the Victorian Government and Albert Park Yachting and Angling Club to trial approaches to restoring Port Phillip Bay's lost shellfish reefs.

Native oyster reefs and mussel beds are nature's water filters and provide homes and food for a huge range of sea life including many important fish species.

Sadly, by the mid to late 20th century, shellfish reefs had virtually disappeared from 'the bay' and from most of our southern bays and estuaries. It is thought that this loss was related to over-harvesting by destructive dredge fishing, pollution and disease. However, with the end of dredge fishing and improvements in water quality, the time is now right to bring these important habitats back.



Shellfish reefs provide nursery grounds for fish
© Brent Womersley



Simon Branigan during restoration works
© Ben Cleveland

“As the project progresses there will be many opportunities for community involvement.”

~ SIMON BRANIGAN
Estuaries Conservation Coordinator



Mussel deployment
© Paul Hamer

“Oysters are nature’s water filter. A single oyster can filter at a rate of up to 4 or 5 litres an hour! That’s enough to fill a bathtub in a day.”

~ DR BOZE HANCOCK
Marine Restoration Scientist



Juvenile oysters set on scallop shells
© Inga Feitsma

Returning shellfish reefs to the bay

Bringing experience from shellfish restoration projects around the world, we’re testing a range of innovative methods with our partners along with the assistance of The University of Melbourne to re-establish native shellfish reefs.

As part of the Reef Restoration Project, native flat oysters are raised at the Victorian Shellfish Hatchery, Queenscliff. During the spawning stage millions of oyster larvae are released and settle on recycled scallop shells. The larvae are then left to grow into juvenile oysters for a 3-6 month period on commercial farming leases in the bay. During the early growth stage, one of the approaches our teams are trialling is to lay limestone rock onto the seafloor to provide a solid foundation for the juvenile oysters to be placed on and grow into reefs. Tonnes of surplus mussels sourced from farms are also placed at the trial sites and will naturally clump together to form a new mussel bed.

Our shellfish reef restoration work doesn’t stop in Port Phillip Bay. We are also focussed on bringing back lost shellfish reefs in other southern states as part of our Great Southern Seascapes Program.

To find out more, please visit www.natureaustralia.org.au



Port Phillip Bay restoration sites



Saltmarsh
© Lynne Hale



Transferring oyster larvae
© Alyson Boyer Rode