



*We invite you to the next exciting MCRP marine seminar!*

*Beaumaris Life Saving Club*

*Tuesday 21 February 2017 at 7.00pm for a 7.30pm start for a brief AGM, then the talk begins at 8.00pm*

*Drinks and nibbles pre and post talk*

*We look forward to seeing you there!*

## Restoring the lost kelp forests of Port Phillip Bay

### ABSTRACT

The Reef Ecosystem Evaluation Framework (REEF) project funded by the Victorian Government was established to examine the effect of sea urchins and potential anthropogenic stressors (sediment and nutrients) associated with urbanisation on the local and system-wide dynamics of rocky reefs in Port Phillip Bay (PPB), Victoria.

REEF determined that overgrazing by the native purple urchin has been responsible for extensive kelp bed loss in the western and northern regions of PPB. In many areas where kelps have been lost, reefs are now covered in a turf-sediment matrix, which is incompatible with kelp recruitment and bed re-establishment. With funding from the National Environmental Science Program (NESP), and the Rural Industries Research and Development Corporation (RIRDC), researchers from the University of Melbourne have initiated research aimed at reversing this environmental change. The presentation will show their developing methods for urchin harvesting, reef rehabilitation, and kelp bed recovery, and their future plans for partnering with Parks Victoria to begin the challenge of restoring reef habitats in PPB.

### BIOGRAPHY



Stephen Swearer is a Professor of Marine Biology at the University of Melbourne.

At heart he is a larval fish biologist, with a keen interest in understanding how ecological processes that occur in early life influence dispersal and the dynamics of marine populations. His research recently took a more applied focus by developing trans-disciplinary approaches for addressing environmental impacts in coastal marine ecosystems, in order to inform better water, pollution, and fisheries management policies.

In 2016 he became Director The National Centre for Coasts and Climate (NCCC), a soon to be officially launched centre at the University of Melbourne, with funding from the National Environmental Science Program. NCCC seeks to transform coastal science so that it is more future-oriented, solution-driven, and embedded in policy processes. Its mission is to identify the best on-ground actions for addressing climate change impacts in Australian coastal ecosystems, by improving understanding of how:

- (1) coastal vegetated habitats influence carbon accumulation rates;
- (2) coastlines are likely to respond to climate change; and
- (3) ecological engineering solutions enhance the capacity of coastal ecosystems to adapt to climate change.

How to get there?

**Beaumaris Life Saving Club**

**Beach Road, Beaumaris - Melways ref 86 C9**

We are at Ricketts Point, to the left of the main car park, along the gravel track.

There is also foot access from Beach Road.

