

Monitoring natural shellfish recruitment for the Pumicestone Passage Shellfish Habitat Trial in Moreton Bay, QLD, Australia.

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OzFish Unlimited

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Pumicestone Passage Reef Project



Sydney rock oysters (*Saccostrea glomerata*)

Dec 2017 Deployments – Three subtidal reef types

shell in cages



biodegradable reefs
(BESE reefs)



2 m dia. patch reefs



All deployed in 3-5 meters of water in a 1 ha area of PP

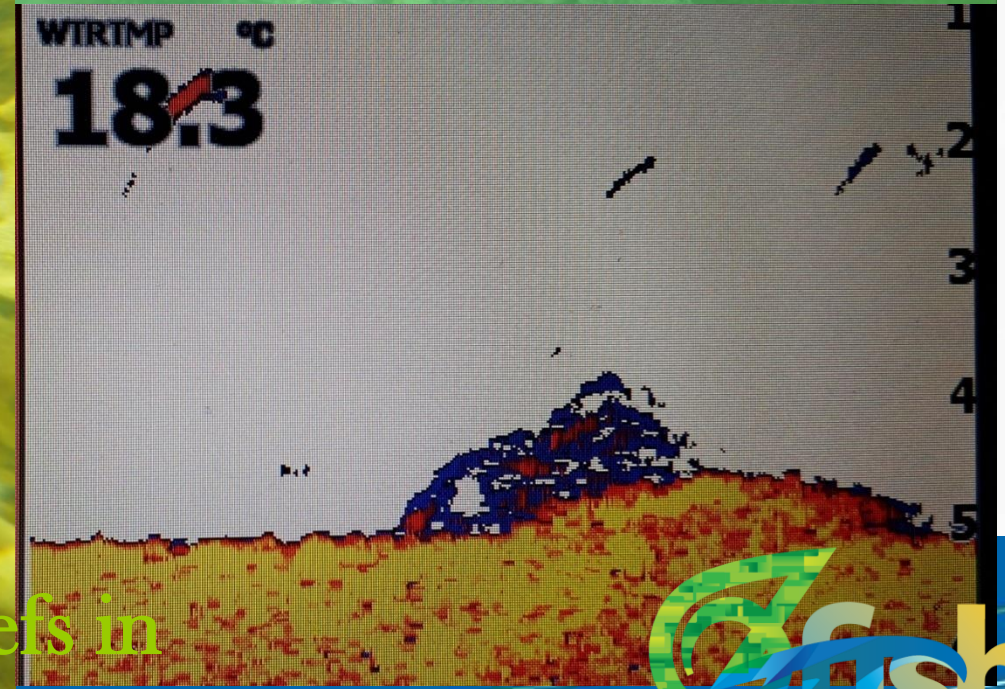
Restoring subtidal shellfish reefs in
Pumicestone Passage

9 months later – 2 meter dia. patch reefs

Sept. 2018

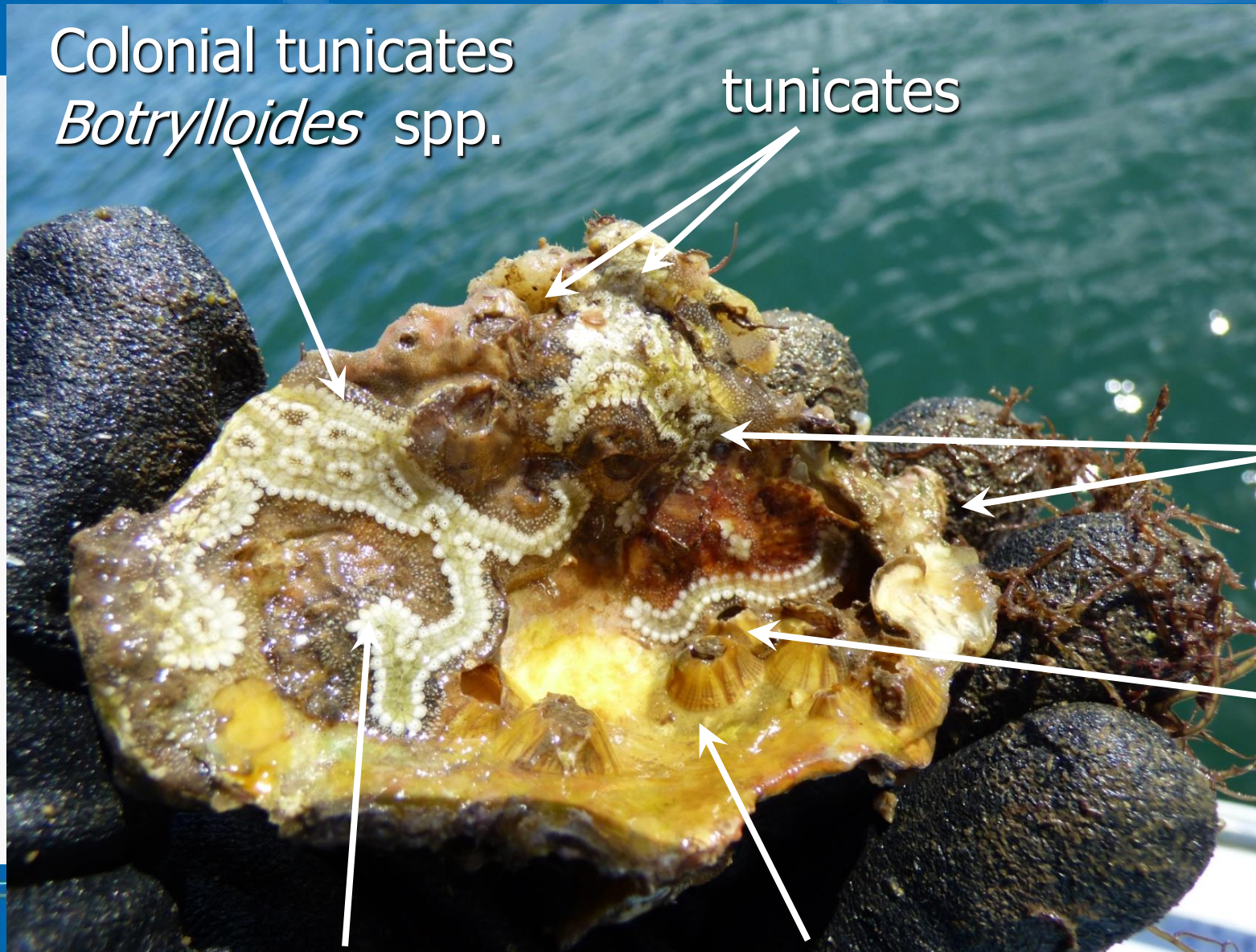


Dec. 2017



Restoring subtidal shellfish reefs in
Pumicestone Passage

Intent: Monitor invertebrate recruitment



Colonial tunicates
Botrylloides spp.

tunicates

oyster spat

encrusting algae

"Mini Reefs"

(single oyster shell
9 months after
2017 deployment).

macroalgae

barnacles

Invertebrate recruitment monitoring – Methods

- OzFish Unlimited divers collect grab samples of oyster shells ($n = 100$) from 2 areas from each 2018 deployment (7m) patch reef every 3 mo.
- Compare against grab samples taken from 2017 deployment patch (2m) and cage reefs (9, 21 and 24 mo.).
- Quantitate natural oyster recruitment.
- Get underwater pics and videos to allow local community to see what's going on.

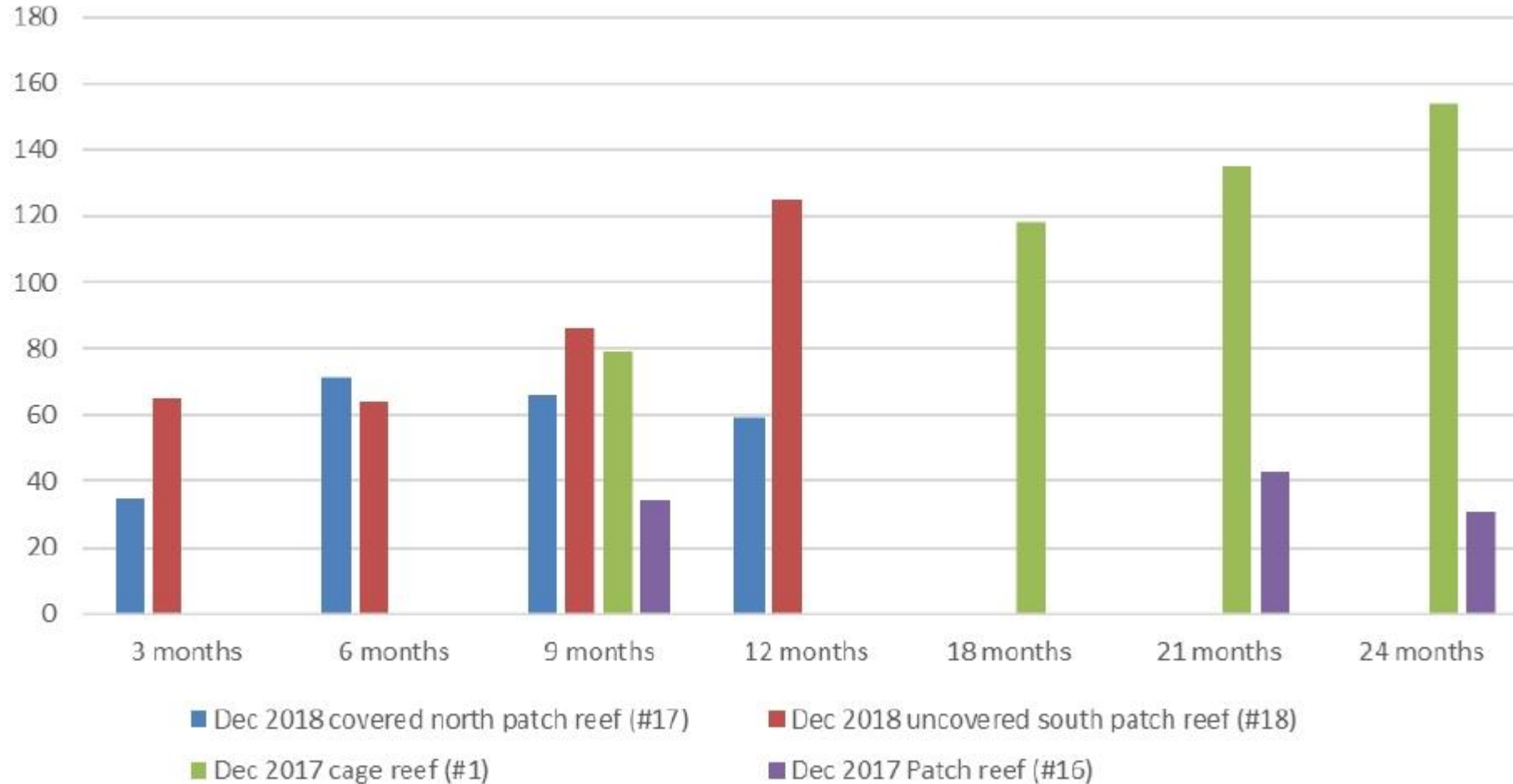


Robbie Porter
OzFish Central Moreton

Restoring subtidal shellfish reefs in
Pumicestone Passage

Pumicestone Passage – Results

Mean spatfall per 100 shells for various reef types



- 7 m dia. patch reefs outperform 2 m dia. patch reefs.
- Multi-year recruitment in cage reefs.

Pumicestone Passage – Results



- Multi-year recruitment provides up to 10 oyster spat/shell for cage reefs. Due to less predation in cages ?

More information.....

Invertebrate monitoring reports,
underwater pics and videos available
at:

www.restorepumicestonepassage.org

and

<https://ozfish.org.au/chapters/ozfish-pumicestone-passage-chapter/>



Project Partners

Thanks to:



Joondoburri Land Trust

Sebastiani Oyster Farm

Pumicestone Passage Fish Restocking Assoc.

Kabi Kabi First Nation

