

Fisheries of Pumicestone Passage 2021 - Recognising shifted management baselines in the face of accelerating marine environmental decline

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OzFish Unlimited - Pumicestone Passage Chapter

PCC Webinar, 16-18 February 2021



OzFish Unlimited – Established 2015



Helping fishers restore habitat
across Australia

“more habitat = more fish”



OzFish Unlimited – High profile ambassadors

Fishing media

*"It's not rocket science.
Look after habitat,
reduce over-harvesting
and fish numbers
will boom!"*
- Steve 'Starlo' Starling



Starlo



Michael Guest



Al McGlashan



Scott Hillier

OzFish Unlimited – Many different chapters (43+)



- Queensland
 - 8 chapters
- New South Wales
 - 17 chapters
- Victoria
 - 8 chapters
- South Australia
 - 6 chapters
- Western Australia
 - 2 chapters
- Northern Territory
 - 1 chapter
- Tasmania
 - 1 chapter

see <https://ozfish.org.au/ozfish-chapter-map/>

OzFish Unlimited – Many different fish habitat projects

- Riparian revegetation and fencing
- River resnagging
- Water quality and oyster health monitoring
- Litter cleanup and water quality improvement
- Fish passage remediation
- Seagrass restoration (seeds for snapper)
- Oyster shell recycling and shellfish reef restoration
- Catch and release fishing competitions (funds raised go to habitat activities)
- Carp/Tilapia fish outs (as education tools)
- School and community education on waterway health

For more, see

<https://ozfish.org.au/ozfish-projects-map/>



Why do we need groups like OzFish in PP ?

- Pumicestone Passage provided sustenance and cultural services for indigenous peoples for thousands of years and was a highly productive fishery immediately following European settlement 1823.
- However, by the 1890's eutrophication and sedimentation from catchment clearing began to damage the oyster dredge fishery.
- By the late 1960's the oyster industry was in rapid decline due to emergence of QX disease due to sediment + immune suppression due to chemical runoff from agriculture and forestry.
- Today we see the ecological decline continue with accelerating frequencies of algal blooms and fish kill events. PP needs help.

Accelerating decline of ecological health
throughout the 20th and 21st centuries



Why do we need groups like OzFish in PP ?



Algal blooms and fish kills signal decline in environmental quality is directly affecting fisheries

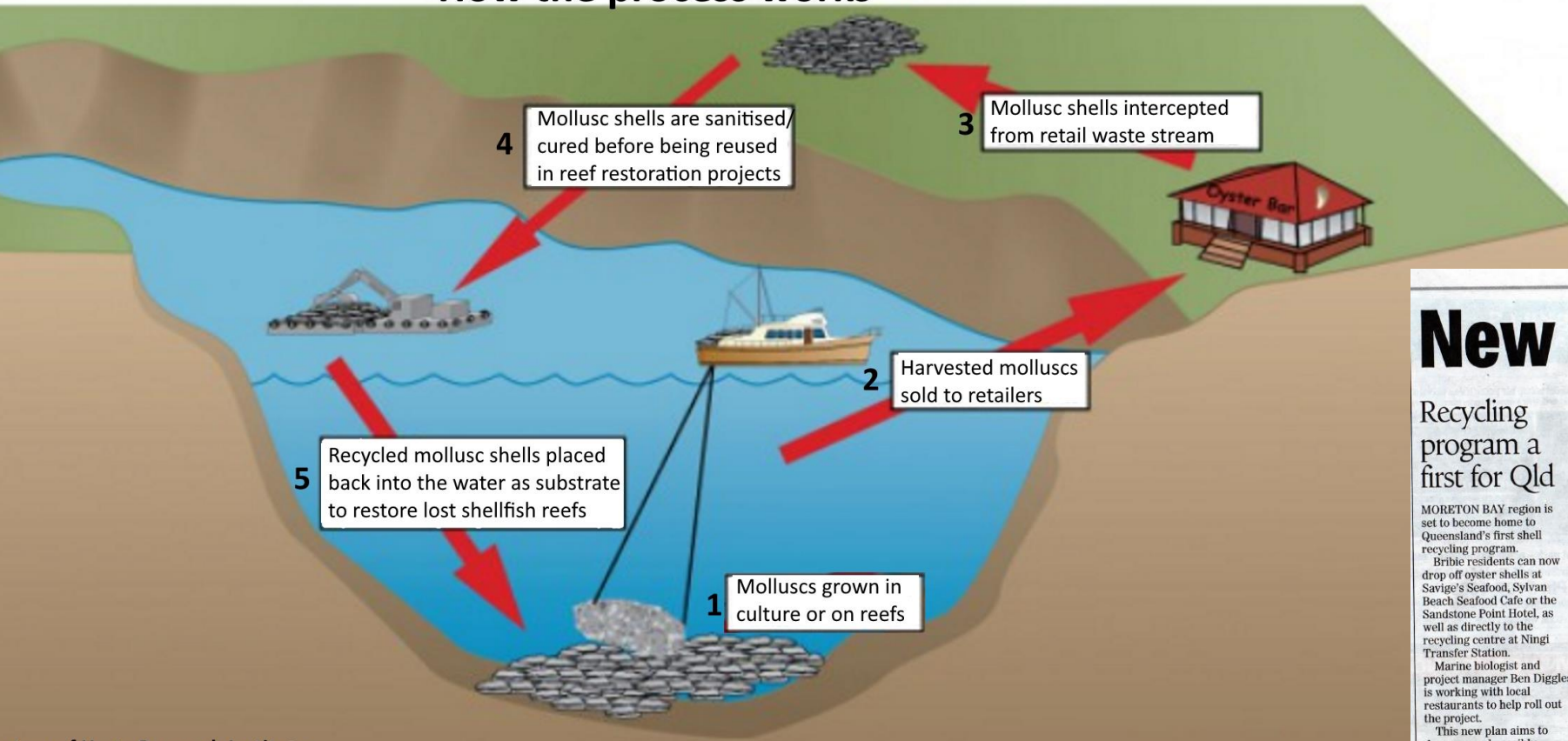
Why do we need groups like OzFish in PP ?



OzFish volunteers monitor fish kills, undertake fish rescues at Bribie and Beachmere Lake

Community says: Lets try to fix it e.g. Restore shellfish reefs

Mollusc shell recycling: How the process works



Courtesy of Harte Research Institute

Solutions to problems need raised awareness
and active intervention by the community

New life for oyster shells

Recycling program a first for Qld

MORETON BAY region is set to become home to Queensland's first shell recycling program.

Bribie residents can now drop off oyster shells at Savage's Seafood, Sylvan Beach Seafood Cafe or the Sandstone Point Hotel, as well as directly to the recycling centre at Ningi Transfer Station.

Marine biologist and project manager Ben Diggles is working with local restaurants to help roll out the project.

This new plan aims to decrease and possibly eliminate the threat of transferring Pacific oyster mortality syndrome into the region's shellfish populations.

Dr Diggles said it was a highly contagious herpes-like virus that could infect not only oysters but also scallops, clams and mussels.

"The virus multiplies and causes mass mortalities once water temperatures increase above 20 degrees from winter lows," he said.

Dr Diggles said the oyster



HELPING HANDS: Jy Raleigh, Jamie Diggles and Harvey Sheppard show that oyster recycling is something the whole community can get behind. PHOTO: CONTRIBUTED

shell recycling program was the only way to remove the threat of the virus.

"They are dried out first in the sun and rain for a couple of months, which kills off any diseases or pests that may be on or in the shells," he said.

"They will then be pressure-washed with fresh water to clean them before being bagged and readied for placement back into the water."

Dr Diggles said the help of local residents was critical.

"Through shell recycling, everyone can contribute to restoration of a critical missing link in the local marine environment," he said.

"The more people who help, the faster we can accumulate shells for reef substrate and the sooner we

can get started with actual restoration.

"Each oyster shell recycled and placed back into the water at an appropriate location at the right time of year can form a new home for up to 10 new baby oysters."

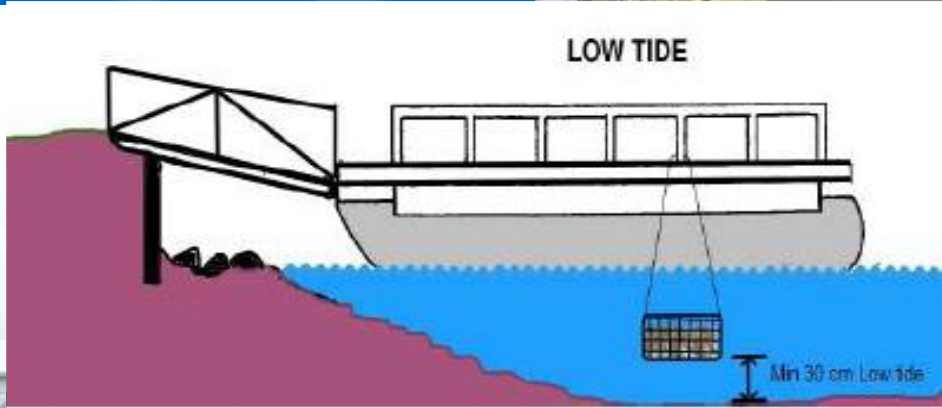
bribieweekly.com.au Friday, July 7, 2017

Shellfish Reef Restoration requires oyster shells



OzFish volunteers recycle and sanitise oyster shell substrate at Ningi Transfer Station

Shellfish Reef Restoration requires oyster shells



Oyster gardening by residents and OzFish volunteers on Bribie Island supply live oysters for shellfish reef trials

Trial shellfish reefs require fence modules



OzFish volunteers manufacture better fence modules for oyster reefs to protect against anchor damage

Trial shellfish reefs require invertebrate monitoring

- OzFish volunteer divers collect grab samples of oyster shells to quantitate natural oyster recruitment.
- Get underwater pics and videos to allow the local community to see what's going on.



Robbie Porter
OzFish Central Moreton

OzFish volunteers monitoring subtidal shellfish reef restoration in Pumicestone Passage

Unfortunately for Pumicestone Passage....

- Restoration project, although highly successful, is seen as a trial only. Moreton Bay Marine Park regulations do not allow wider restoration of shellfish reefs at this time.
- The park was established in 1993 on a shifted management baseline which does not recognise the historical loss of these critical ecosystems, or accommodate their restoration.
- For this reason, there are currently no ongoing community oyster gardening projects or shellfish reef restoration projects, and shell recycling is in a holding pattern with nowhere to put the shell.

Unfortunately for Pumicestone Passage....

- The local community has been sidelined (COVID has not helped).
- Meanwhile, water quality continues to decline in the face of relentless catchment development, increasing risk of more algal blooms and fish kills.
- Only by a concerted effort to cleanse runoff and permit/promote active restoration of underwater habitats such as shellfish reefs will Governments and community be able to slow or reverse the decline of this highly stressed and degraded estuarine ecosystem.

OzFish value our corporate and public support



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BCF customers can donate to fish habitat projects at the cash registers



More information.....

<https://ozfish.org.au/about/>

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

<https://restorepumicestonepassage.org/>

