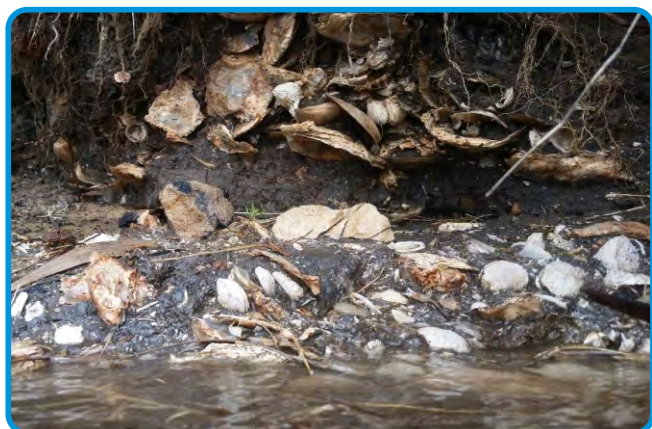


Western Australia FISH FACT SHEET



SHELLFISH REEFS

Shellfish reefs are the most threatened marine habitat in the world and Western Australia is no exception to this phenomenon. 85% of all shellfish reefs have been lost worldwide and in the southwest of WA, Oyster Reefs are now functionally extinct (The Nature Conservancy).



Oyster shell washing up on the banks of estuaries in southwest WA tells the story of the reefs that once existed in these systems.

Oyster reefs as fish habitat

Oyster Reefs create nursery sites for juvenile fish with lots of great food sources for growing fish including shrimps, worms, and other invertebrates. They also provided water quality benefits to the estuary by filtering huge amounts of water and reducing erosion by providing shoreline protection.

Where did the reefs go? Oyster reefs once provided complex fish habitat in many estuaries throughout southwestern Australia. These reefs supported a dredge fishing industry in the late 1800's where oyster shell was desired for its high lime content and for use in land reclamation activities. While dredging of oyster shell stopped over a century ago, oyster reefs have shown no signs of recovery. This is likely to be due to a combination of overfishing, disease and changes in land use.



Areas where oyster reefs once provided habitat is now largely made up of soft sediment and a few remnant shells (left). Oyster shell from these reefs was used for land reclamation activities, here excavation works turns up oyster shell in Victoria Park, Western Australia (right).

SHELLFISH REEFS

Causes of reef loss

Dredging



Physically removes oyster reefs and the hard substrate that spat require to settle on.

Changes in land use



Clearing of catchments and changes in land use have caused increased sedimentation and nutrient input into our estuaries, reducing water quality and the survival of oyster spat.

Disease



Bonamia is a parasitic protist that is likely to have a negative impact on oysters.

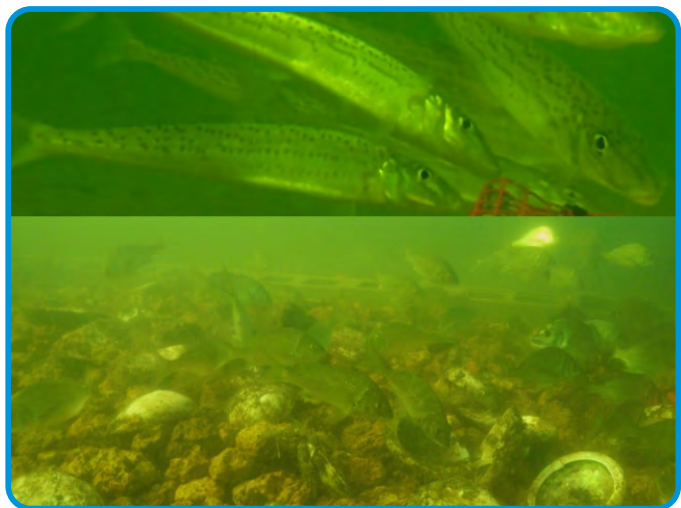
Habitat restoration



The lack of natural recovery shows that habitat restoration is required to promote oyster reef growth. This restoration generally involves ensuring there is adequate hard substrate and oyster spat in a system. Currently Western Australia's first restoration efforts to bring back this crucial habitat are underway in Albany. Here oyster reef restoration is already providing new habitat for key species such as Black Bream, King George Whiting and Skippy. The project has also highlighted several other estuaries in the south west that may be suitable for shellfish reef restoration, including the Swan River Estuary.

Above: Restoring hard sediment is a crucial stage in oyster reef restoration, here rubble is being deployed in Oyster Harbour, Albany.

Right: Black Bream and King George Whiting checking out the oyster reef restoration project in Albany, Western Australia.



WESTERN AUSTRALIA