

Community based sustainable fishing education project

Protecting Fish Habitat

The importance of fish habitats -how fishers can protect them

What is good fish habitat?

Good fish habitat is somewhere where fish like to shelter, feed and breed. Fish nursery habitats are particularly important. Types of fish habitats include;

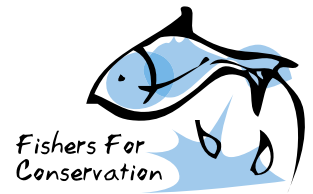
Mangroves are the forested areas within the high tide zone. In South Australia only one species of mangrove grows - the Grey Mangrove *Avicennia marina*. They are usually covered in water and are therefore the day-to-day habitat for many fish. They are particularly important in sheltering smaller and juvenile fish and providing an important food source.

Saltmarsh exists in the areas in behind the shoreline or mangroves and receive less tidal water. Some saltmarsh is only wet during king tides. Saltmarsh features small ground cover and bushy plants that are highly salt tolerant. Don't be fooled!!! These are among the most important fish habitat areas - especially as a food source for fish. They also makes a safe nursery habitat for fish when covered with water. Saltmarsh is particularly important to some crabs as they spend much of their time in this type of habitat.



Mangrove and Saltmarsh habitat are important to healthy ecosystems and happy fishers.

Seagrasses generally occur where they are sheltered from excessive wave action and water is shallow enough for the light to filter through the water and support photosynthesis. SA's Gulfs and Bays are prime seagrass habitat. They are a very important food source and breeding area for many fish. Seagrasses also form day-to-day habitat for many types of fish.



www.ffc.org.au



Seagrass is crucial to the life cycle of many popular recreational fish. Excess nutrients and other pollution has led to extensive loss of seagrass near Adelaide.

Reefs are important fish habitat and are subject to a range of impacts such as smothering by excess sediment from land run-off.

Photo: Noarlunga Reef
© S. Leske



The Warriparinga Wetland (pictured) was established in 1998 to improve the water quality of the Sturt River.

Reef areas are places that we love to fish and they are attracted by the food and shelter. Many of the juvenile fish that sheltered in the saltmarsh, mangroves and seagrass while they were growing up, migrate to the reefs to live.

Wetlands are important for keeping the water quality of our rivers, creeks, estuaries and coastal waters good enough for the fish. They act as filters, ensuring anything nasty (including excess nutrients and sediment) in the water is caught before it enters downstream environments. They also provide a food source, both for resident fish and when food is washed downstream. Wetlands can also be the breeding and nursery areas for non resident fish that need to migrate upstream in order to breed.

How can we help protect fish habitat?

Key elements for healthy fish habitat may include:

- Water of good quality
- Snags, reefs or other structures
- Plants for shade, to hide in and provide food
- Food sources, in the sediment, in the water and growing on the plants
- Safe passage to the next habitat (connectivity)
- Diverse and healthy species – unbalanced ecosystems can occur when the above conditions are not met, there is overfishing, or pest species invade.

Protecting these key elements is critical to the future of fish and fishing and there are a number of ways you as an individual fisher can help.

What can you do to help on the water?

- Be aware of what you are putting into the water. Don't let rubbish, even little bits of line and bait bags, end up in the water. If you see litter, on or offshore, pick it up and dispose of thoughtfully onshore.
- Avoid changing oil or filling fuel tanks on or near the water (i.e. the boat ramp) as those nasties will run straight into the water. If you must fill tanks on the water be careful, use a funnel and avoid spillage.
- Avoid moving snags, reef, animal or plant structures in the water. If you do need to shift something in a river or estuary for safe boat passage, make sure you don't move it far and that it stays mostly in the water – never take it out of the water completely.
- When fishing on reefs, be aware that your anchor could be damaging the favourite fish 'café'. Drift if you can or place the anchor just off the reef on sand. Let the rope out to get you back over the reef to fish.
- Avoid the transport of pest species (invasive or feral species). See FFC Info Sheet #6 *Destructive Fishing Practices and Recreational Fishing* for more details.
- Support and observe measures to protect habitat such as reserves and Marine Parks protecting saltmarsh, mangroves or underwater habitat.

Days ahead of the Kyoto Protocol coming into effect scuba divers highlighted the impact of climate change on marine ecosystems. Recreational fishers too can be a powerful voice for change Photo © Koh Tao Dive Operators Club/Marine Photobank



What can you do to help on the shore?

- Remember that, unlike sewage, stormwater does not get treated before passing into our creeks, rivers and the sea. What you put on your lawn, your garden or driveway will end up in the stormwater drains and add to the nutrients, soil and chemicals in the downstream environment.

Simple changes you can make include:

- Avoid the use of toxic chemicals like pesticides, herbicides and pool chemicals.
- Keep nutrients like fertilisers and pet and plant waste out of stormwater drains.
- Wash the car on the lawn instead of the driveway.
- What goes down the sink and other household drains can affect water quality. For example phosphorous, common in many washing detergents, is very difficult for water treatment facilities to deal with.
- Recycle greywater, switch to low phosphorus 'green' detergents and washing machine powders.
- Check out www.stormwater.org.au and click 'give me more information' for further advice.
- Climate change will impact on fish habitat, do your bit to reduce fossil fuel use and reduce emissions.
- Be careful of the plants you are driving on or standing on. If you do need to drive or walk over vegetated areas, go out the same way you came in to minimise damage.
- Support protection and revegetation of dunes, river/creek banks, wetlands, and broader catchments. The land, rivers, lakes and oceans are all interlinked as rain washes down catchments. Participate in and support your local environmental organisations such as Natural Resource Management Boards, 'Friends Of' groups, Landcare groups and Coastcare groups.



Australian Government

Department of Agriculture, Fisheries and Forestry

Recreational Fishing Community Grants Programme



www.ffc.org.au

This information sheet has been produced by Fishers For Conservation as part of the Community Based Sustainable Fishing Education Project and was made possible by Federal Government funding as part of the Recreational Fishing Community Grants Programme.