

Biodiversity

"The oceans are of great importance to biodiversity simply because they are so vast."

Professor Andrew Beattie,
Macquarie University

Biodiversity bouillabaisse

Each time we go to the fish markets or enjoy a hot parcel of fish and chips sitting on a beach, it brings us a little bit closer to the staggering variety of life in our oceans. The seas are a vast soup of life – covering three-quarters of the surface of the earth and plunging to a depth of 11 km.

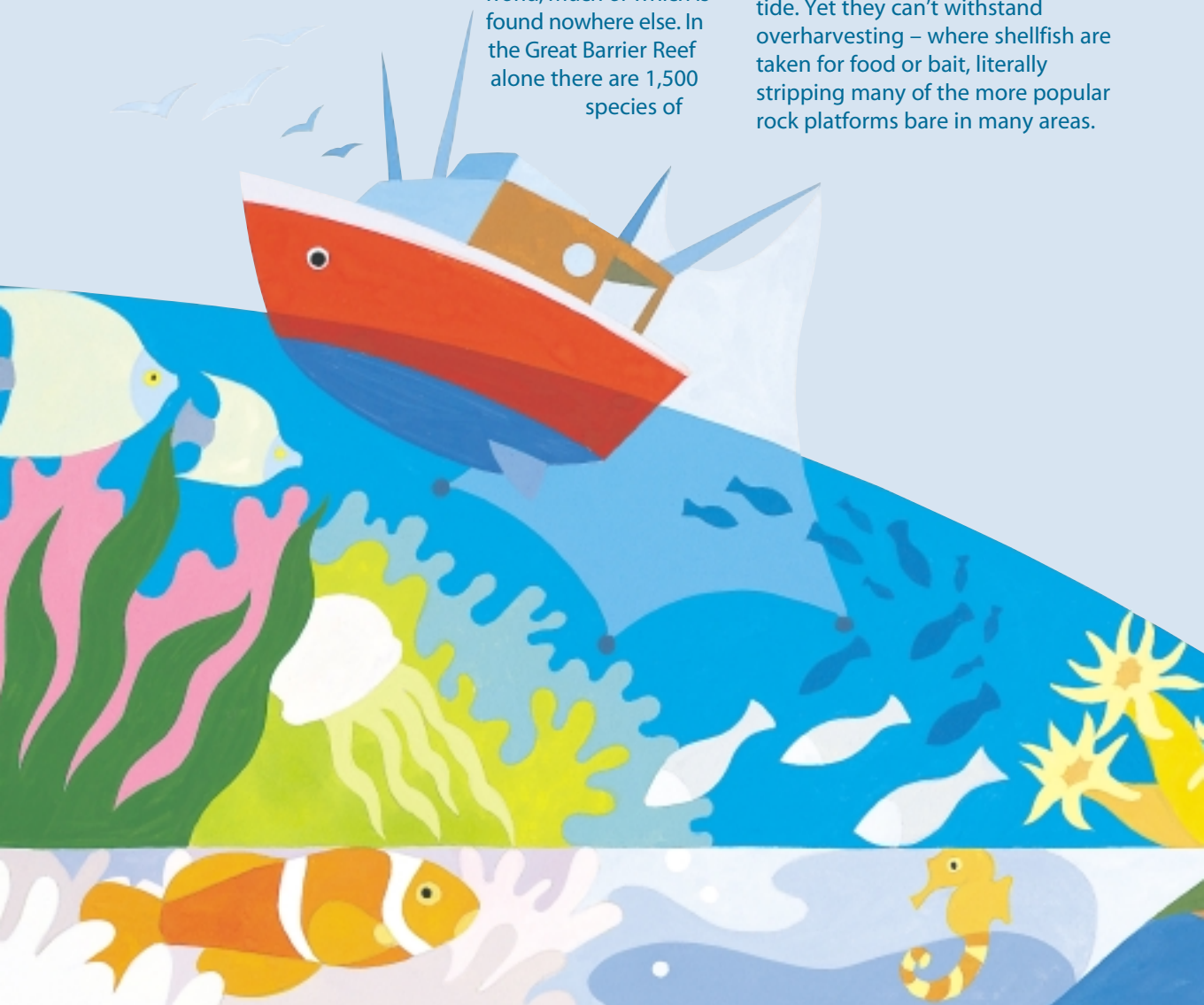
Australia has responsibility for 16 million square km of oceans, containing some of the richest biodiversity in the world, much of which is found nowhere else. In the Great Barrier Reef alone there are 1,500 species of

fish.

Overfishing and pollution are threatening our rich ocean resources. One of the hardest hit species is the southern bluefin tuna. After decades of unsustainable harvesting the breeding stock of the tuna today is a mere 10 per cent of what it once was.

Rocky ripoffs

One of the great pleasures of visiting the beach is pottering among the rock pools searching for special colours and shapes. Here at the shoreline lives a wealth of biodiversity. The hardy animals and plants have adapted to the impact of pounding waves and can survive regardless of whether they are submerged or left high and dry at low tide. Yet they can't withstand overharvesting – where shellfish are taken for food or bait, literally stripping many of the more popular rock platforms bare in many areas.



afloat

The ones that got away

For many Australians there is nothing more relaxing than fishing on a river. In many country pubs we see the mounted heads of huge fish caught in days gone by from the local river. Yet many publicans will tell a sorry story that the fish are no longer there, especially species like silver perch and silver barramundi.

Most fish need free-flowing rivers with natural changes in depth, temperature and salinity over the seasons in order to live and reproduce. Recreational fishing, agriculture, irrigation and urban development have altered many of our rivers and depleted fish stocks. Rivers are suffering from over-extraction of water, increasing salinity, nutrients and chemicals, artificial dams, removal of riverside vegetation and introduction of exotic species such as European carp. These changes have left native fish species struggling to survive.

Freshwater environments are particularly special because many species are restricted to just one or two river systems. The black grunter fish, for example, is only found in the Prince Regent and Roe rivers which flow into the Timor Sea. If these rivers were substantially altered, the black grunter could become extinct.

People making a difference

An organisation called Native Fish Australia represents people who are working actively to protect our native fish species. Although not a fishing club, many NFA members are anglers and NFA events often include fishing. NFA encourages the use of only ethical and sustainable angling in the wider community and promotes strategies for long-term protection of rivers and lakes.

Native Fish Australia
www.nativefish.asn.au

