

## Protecting White's Seahorse

White's Seahorse (*Hippocampus whitei*), also known as the Sydney Seahorse, is a medium-sized seahorse that is endemic to the east coast of Australia. The species is named after John White, Surgeon General to the First Fleet, and is one of four species of seahorses known to occur in NSW waters.

There have been large population declines of White's Seahorse over the past two decades due to the loss of their natural habitats. As a result, White's Seahorse is now listed as an endangered species in NSW, making it Australia's only threatened seahorse species and the second endangered seahorse worldwide.

### HABITAT AND ECOLOGY

The White's Seahorse prefers shallow coastal embayments and estuarine habitats (usually less than 10 metres) but can be found in depths up to 18 metres. It occurs in eight estuaries on the NSW Coast, being most abundant in Port Stephens, Sydney Harbour and Port Hacking.

Sponge gardens, seagrass meadows and soft corals are important habitats for White's Seahorse. They are also often seen on artificial habitats such as swimming net enclosures and jetty pylons. They wrap their tails around an object to hold them in place for feeding or for stabilisation during turbulent water conditions such as storms. White's Seahorses have small home ranges and sometimes remain in the same habitat for several years.

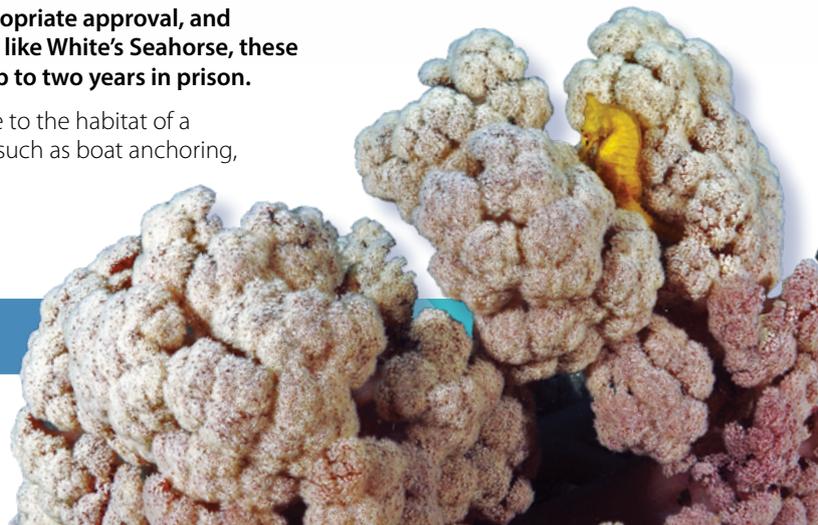
White's Seahorse can live for up to seven years and display long-term monogamy to their partners. During the breeding season, which runs from September to February, the female transfers her eggs into the male's pouch which is under its abdomen. The male fertilises the eggs inside the pouch, aerates the developing embryos and provides physical protection for them. The pregnancy period is about three weeks. Males birth up to 250 young and can reproduce 8 times during the breeding season.

### IDENTIFYING A WHITE'S SEAHORSE

The White's Seahorse can grow up to 16cm (from the tip of the tail to the top of the seahorse crown). They can be highly variable in colour, from pale to black depending on their mood and the colour of the habitat they are living on. Their ability to camouflage, combined with their secretive behaviour, often makes them very difficult to spot in their natural habitat.

**It is illegal to catch and keep, buy, sell, possess or harm White's Seahorse (or any other threatened species in NSW) without appropriate approval, and significant penalties apply. For endangered species like White's Seahorse, these penalties can include fines of up to \$220,000 and up to two years in prison.**

There are also significant penalties for causing damage to the habitat of a threatened species without approval through actions such as boat anchoring, dredging, construction and maintenance works.



## WHY IS WHITE'S SEAHORSE A THREATENED SPECIES?

Loss of natural habitats is the main cause of declines in White's Seahorse numbers, as the coastal estuaries and embayments in which they occur are subject to significant human population pressure. For example, in Port Stephens, over 90% of the soft coral and sponge habitats have declined at sites where the seahorse used to be abundant, mostly caused by the installation of boat moorings, boat anchors and smothering due to sand movement. In Sydney Harbour, seahorses now predominantly rely on artificial habitats, such as man-made protective swimming nets and pylons, as human population pressure continues to cause essential natural habitats to disappear. These nets are periodically repaired and cleaned to remove the marine growth which can lead to further displacement of seahorses and population declines. DPI Fisheries has been working with councils to develop practices which avoid damage to seahorses during net cleaning and repair.



## SEAHORSE HOTELS

To recover dwindling numbers, NSW DPI Fisheries is partnering with SEA LIFE Sydney Aquarium, University of Technology Sydney (UTS), Sydney's Indigenous Gamay Sea Rangers and Transport NSW, in a world-first conservation project. The team has developed and installed artificial habitats in strategic locations for White's Seahorse, called "Seahorse Hotels". These novel structures are purpose built and designed to simulate natural seahorse habitats which have been lost. The hotels start as artificial habitats, but are rapidly encrusted by algae, sponges and corals once placed in the marine environment. Over time, the weight of this marine growth causes the artificial structure to collapse leaving a new natural habitat behind and perfect homes for seahorses. A breeding program is underway at SEA LIFE Aquarium and the first year of juveniles have already been successfully stocked on the hotels to bolster natural populations in Sydney Harbour.



## WHAT ARE WE DOING TO HELP WHITE'S SEAHORSE?

- » The breeding program and the rollout of Seahorse Hotels in Sydney is helping to create new habitat for White's Seahorse and enhancing wild populations of this species.
- » Working with relevant authorities to minimise impacts on White's Seahorse habitats and water quality. This includes reducing the impact of public and private boat moorings that are important habitats for the species.
- » Guiding councils and other organisations to develop practices which avoid damage to seahorses during construction and maintenance of marine infrastructure including swimming net cleaning and repair.



## DISTRIBUTION OF WHITE'S SEAHORSE IN NSW

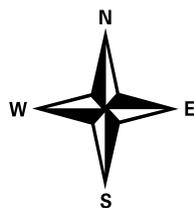
Tweed Heads



Forster

Sydney

Sussex Inlet



### SIX THINGS YOU CAN DO TO HELP

1. Take a moment to study this guide and familiarise yourself with the appearance of the White's Seahorse.
2. If snorkelling, swimming or diving near White's Seahorse, do not touch or interfere with them or their habitat.
3. Lift your propeller when driving your boat at low tide in areas with seagrass beds, and don't drop your anchor in seahorse habitats such as soft corals, seagrasses or sponges.
4. Always seek planning approval for any waterway structures such as jetties, pontoons and dry docks. Pontoons and dry docks must not be placed over seagrass as they create shade and cause seagrass to die.
5. Report illegal or suspect fishing activities by:
  - » Contacting your nearest Fisheries Office
  - » Using the Fishers Watch phone line 1800 043 536; or
  - » Completing the online report:  
[www.dpi.nsw.gov.au/fishing/compliance/report-illegal-activity](http://www.dpi.nsw.gov.au/fishing/compliance/report-illegal-activity)
6. Participate in the NSW DPI Threatened Species Sighting Program. If you see a White's Seahorse, take a photo, record the details and complete the online form:  
[www.dpi.nsw.gov.au/fishing/species-protection/report-it](http://www.dpi.nsw.gov.au/fishing/species-protection/report-it) as well as through iSeahorse and iNaturalist: [www.inaturalist.org](http://www.inaturalist.org)

## WHAT IF YOU ARE UNSURE?

All syngnathids (seahorse, seadragon, pipehorse or pipefish) are protected in NSW. If you catch any syngnathid in NSW, immediately release it back to the water unharmed. Significant penalties apply for taking, attempting to take, harming, possessing, interfering with, buying or selling threatened or protected species or for damaging their habitat without the appropriate approvals.

## FURTHER INFORMATION

For more information on White's Seahorse or other threatened species in NSW, visit the NSW DPI website: [www.dpi.nsw.gov.au](http://www.dpi.nsw.gov.au)

Alternatively contact the NSW DPI Threatened Species Unit by emailing: [fisheries.threatenedspecies@dpi.nsw.gov.au](mailto:fisheries.threatenedspecies@dpi.nsw.gov.au)

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*Photos by D. Harasti and J. Keating*