


URBAN ANTICS

Chess Knights in Armour



observe, they are also in danger of being commercially exploited for use in home aquariums and taken for use in traditional Chinese medicine.

Pipefish of the family Syngnathidae are stick-like creatures identified by their elongate snouts and bodies encased in relatively thick bony armour.

Seahorses are the most fascinating of the pipefish as they have long been held to have magical properties. In ancient Greece, fishermen who found them washed ashore, believed they were the young of giant stallions that pulled Neptune's chariots across the waves. The Romans, like the Chinese also thought they had a magical and medicinal property and used them as an aphrodisiac.

The Western Australian seahorse (*Hippocampus angustus*) is found in areas of calm shallow water off our suburban beaches especially on broken bottom and *Posidonia* sea grass areas.

Unlike other pipefish, the seahorse is reminiscent of a chess knight. The head is at right angles atop a vertically swimming body encased in bony plates and it has a slight potbelly and a prehensile tail. A local mature specimen is about 200 millimetres long.

The eyes of a seahorse swivel independently, contributing to excellent diurnal vision, and sounds are made, amplified and emitted for communication. A dorsal fin provides propulsion while two ear-like pectoral fins give manoeuvrability and stability. The tail is important for grasping seaweed, seagrass, rocks or coral. Prey consists mainly of tiny crustaceans and fishes that are ambushed and sucked with a long tubular snout.

Seahorses are cryptic creatures; they can change across a wide range of colours in seconds, shed long skin filaments and allow camouflaging micro-organisms to settle on them. They remain virtually invisible for long periods, betrayed only by the rolling of

the eyes as prey is tracked.

The most astonishing thing about a seahorse is that the male gets pregnant. After a lengthy and involved courtship, the female places her ovipositor into a pouch on the male's abdomen and transfers eggs. The eggs are then fertilised by the male and they embed to the pouch walls where they are nurtured. The embryos hatch into the now somewhat 'potbelly pouch' where they are nourished on a 'placental' fluid. After some two to six weeks and a vigorous labour, fully formed miniature sea horses are born.

And such is life. After release to the sea, the adults no longer care for their young seahorses. At some three millimetres in length, they enter the plankton or attach to benthic or bottom-dwelling plants, where out of 20-1500 young, only a few survive.

BY JOHN HUNTER

DID YOU KNOW

- In Australian waters, there are about ten described species of seahorse, many pipefish species and two amazing sea-dragons—total of 100 Australian species in the family Syngnathidae.
- Many species of seahorse give birth in the hours prior to dawn and usually on full and new moons, when tides are highest.
- Crabs are probably the most active predators as well as skates, rays and other fish. However being torn loose from their holdfast during storms causes major mortality.

It seems to have been exceptionally cold these last months. After wallowing in the heated confines of various enclosures, sharing air-borne bacteria with friends and family, there is now a strong desire to rejuvenate in that prehistoric placenta of life on Earth, the sea.

To hover with mask, snorkel and flippers, observing the weird and wonderful world of marine life, is something to look forward to in the coming months.

Most fish are fusiform or torpedo-shaped and never cease to amaze for their speed and agility. On the other hand, jellyfish, especially from below, become simple translucent dumplings, huffing and puffing in their soupy surrounds as they seemingly go nowhere and everywhere.

Pipefish are the dainty denizens of our inshore marine recreation areas and are thoroughly worth more than just a 'quick squizz'. While having a special place in science and being easy to

LANDSCOPE

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Can WA's sharefarming plantations also help fight greenhouse gases? See 'Farming Carbon' on page 17.



With increased numbers of travellers, the Canning Stock Route is in need of some TLC. See 'A Track Winding Back' on page 10.



The job of a CALM Wildlife Officer is as much about dealing with people as it is about protecting our native wildlife. See 'On the Wild Side' on page 23.



The Esperance Lakes Nature Reserves are a haven for water birds and a significant international wetland. See 'Picture the Lakes' on page 36.



There are billions of tiny white shells lining the 150-km Shell Beach in Shark Bay. But why are there so many concentrated here? Find out more on page 49.

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COVER

Two years into the Western Shield program and already three Western Australian native species have been brought back from the edge of extinction, and others are growing in abundance. 'Bouncing Back', on page 28, looks at the successes of the first two years and at where we hope to be at the turn of the century.

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