Photographing a temperate wonderland

By Sue Morrison and Ann Storrie

Subjects that get eaten just as you're about to click the shutter button, crabs that masquerade as a sponge or a piece of seaweed, and whales that make themselves scarce at the quietest approach are just a few of the problems encountered when taking underwater photographs. Sue Morrison and Ann Storrie share their experiences in photographing underwater life for their new book, *Wonders of Western Waters*, on the marine life of south-western Australia.

In the waters of the south-west of Western Australia, creatures as bizarre as the leafy sea dragon float among the weed, while 60 tonne southern right whales give birth to calves just metres from the shore. Temperate water species rival those of the tropics in form, colour, diversity and number. There are certainly fewer corals in the cooler zone, but more than twice as many seaweeds and seagrasses flourish in temperate Australian waters than in our tropical seas. Countless invertebrates such as worms, molluscs, sponges, corals, echinoderms and crustaceans also thrive in south-western waters. They may be a little more cryptic, in either size, behaviour or camouflage, than their tropical counterparts, but part of the appeal of temperate water diving is the fun of finding them. To photograph them is another challenge.

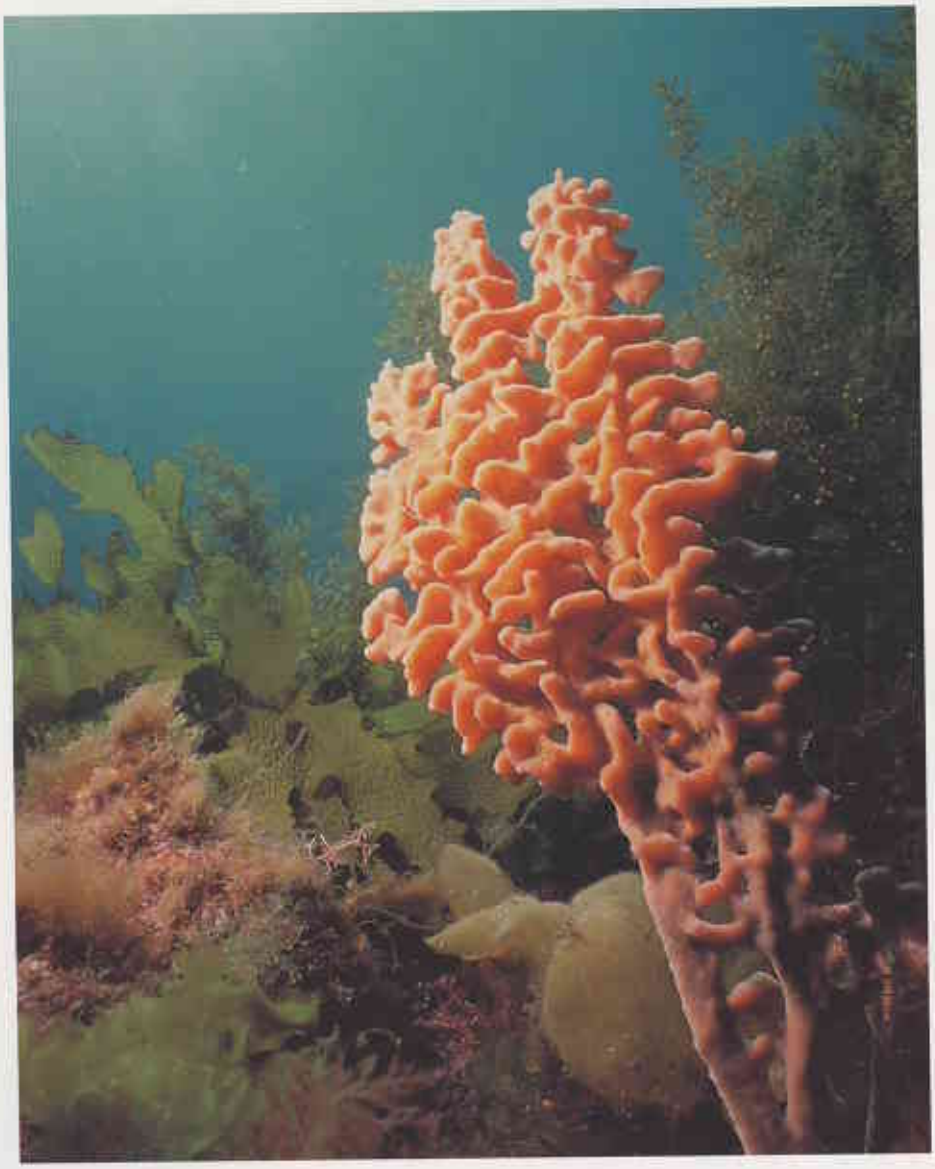
WONDERS OF WESTERN WATERS

Our new book, *Wonders of Western Waters*, has just been released by the Department of Conservation and Land Management (CALM). It describes many of the fascinating plants and animals of our temperate waters. Encompassing an area from the proposed Jurien Bay Marine Park to the Recherche Archipelago off Esperance, the book includes many commonly encountered creatures and plants, as well as a few rare but interesting species. It has detailed descriptions and information about the natural history of each species that will help divers find the various plants and animals underwater.

Colour photographs, almost all of which were taken by the authors, illustrate the 163 species described in the book. Although the authors are now experienced underwater photographers, their road to success has not always been plain sailing. Mixing electronic equipment with salt water is always a risky pastime, and equipment failure (nearly always due to human error) is a fundamental problem. The underwater medium also adds a totally new dimension to photography. Subjects look closer and larger under water than in air, there is always movement, which renders a tripod useless, artificial light must be used to show true colours under water, and particles within the water have a dreadful habit of appearing in photographs. However, once you have mastered the theory of underwater photography, finding and recording the creatures is the next exciting step.

KNOWING WHERE TO LOOK

To successfully photograph marine life, it is helpful to observe the behaviour of marine animals and to note where different plants and animals live. Such observations, combined with



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Main: Colourful ledges inhabited by invertebrates and fish life occur on reefs all along the south-western coast.
Insets: (left) Australian sea lions often take a great interest in divers and cameras.
Photos – Ann Storrie
(right) A cuttlefish displays its colourful arms.
Photo – Sue Morrison

Above: Brittle stars are often found under rocks and can move quickly if uncovered.
Photo – Sue Morrison

Left: Sponges are some of the easiest subjects to photograph—they don't move!
Photo – Ann Storrie

Right: Sue Morrison photographs a hard coral with her macro lens.
Photo – Peter Morrison

Below right: This hermit crab is well camouflaged by a growth of algae on its shell.
Photo – Sue Morrison

a knowledge about the biology of your subjects, provide a good grounding for taking rewarding pictures.

Knowing where to look within different habitats is invaluable. Free-living worms, small crabs and shrimps, feather stars, brittle stars, tiny sea cucumbers, urchins, small molluscs, blennies and gobies often hide under rocks, lumps of dead coral or other debris. It is fascinating to turn these over and watch numerous miniature marine creatures scuttle for cover. Of course, you need to have your camera set up for the shot before turning over a rock, or your subject will escape before it can be captured on film. Brittle stars are among the more difficult subjects. They disappear down crevices like greased lightning and are extremely fragile. There's no point in holding onto a disappearing arm, or it will just break off. It is best to let it escape and find another individual. Even when you have the reluctant subject in the desired position, there are sure to be other problems to contend with, such as clouds of silt that you disturbed when moving the rock. Often, you will be waiting for the water to clear, with a finger poised on the shutter button, when an inquisitive wrasse will stick its nose in and gobble up the subject! Always remember to gently return the rock to its original position, or many of the small animals may die.

HIDE AND SEEK

Some animals, like sponge crabs and spider crabs, rely on camouflage to avoid predators. If you see a sponge ambling across the sea bed, you will inevitably find a small sponge crab beneath it. Spider crabs, too, are skilled at planting lush gardens of seaweed and small invertebrates on their backs and the resulting growth completely disguises their body outline.

Other animals, such as anglerfish, use camouflage so they can ambush their prey. The shape and colour of these fish often match those of nearby sponges. They sit perfectly still on a sponge and wait for small fish to approach the 'lure' on their head. Once the prey is close enough, the anglerfish rapidly opens its mouth and sucks in the victim. Once you have found them, such subjects are relatively easy to photograph, as they are not fast swimmers and sit still, relying on their disguise for protection.

A few animals form specialised partnerships with other species. For example, a tiny crab (*Zebrida adamsi*) lives between the spines of the purple sea urchin (*Heliocidaris erythrogramma*). The crab is purple and white and thus blends in perfectly with the urchin. It is well worth peering between the spines of these urchins to see if one is hiding there. A small flotilla of juvenile fish often hide under the bell of large jellyfish. Here, they gain protection from predators by clustering among the stinging tentacles. These are nearly impossible to photograph well, as the fish swim around to the opposite side of the jellyfish, making the photographer quite giddy.

Above: The anglerfish looks just like a yellow sponge. Only the black, beady eyes betray its presence.

Left: The Busselton Jetty wonderland. This is a beautiful, easy dive and a photographic paradise.
Photos – Ann Storrie

CREATURES OF THE NIGHT

It is well worth exploring some of your favourite dive sites at night, when a completely different armada of creatures is active. Many nocturnal animals rely on the cover of darkness to protect them from predators, while others use the dark to help them sneak up on prey. At night, reefs and other underwater structures abound with crabs, prawns, shrimps, shells, octopuses, cuttlefish, feather stars, basket stars, brittle stars, urchins and various species of fish, such as catfish, rays and flatfish. Many of these animals can be photographed easily, as long as you don't shine your torch directly on them and only illuminate them briefly.

Octopuses make highly interesting subjects, because different individuals have different characters. Many are curious and cannot resist watching you. They may eventually extend a tentacle and gently touch your camera. Others are shy, like the one Sue spotted recently in Cockburn Sound. It was peering out from an old pipe, but when she approached, it picked up two large shells and held them up to cover the hole! Night time is also an opportunity to view sleeping animals that are difficult to approach during the day, especially fish. This is a photographer's delight. They too are easily disturbed by bright lights, so don't be tempted to illuminate them for long.

SEASON BY SEASON

Animal numbers usually fluctuate on a seasonal basis. For example, many species congregate to breed at a certain time of year. Molluscs, such as sea hares, collect in large numbers and form long chains to mate, each acting as a male to the animal in front and a female to the animal behind. Thus distracted, the subject is easy to approach and photograph.

Some animals migrate great distances during the year. Humpback whales swim north in the autumn, but well offshore. When they return south in spring, however, they stay close to the coast and provide a wonderful opportunity to view them. To photograph one of these magnificent animals is not an easy task, as Ann can testify. The best opportunity is from a whale-watching boat, rather than under the water!

Weather conditions and ocean currents also have a dramatic impact on the number and variety of species. In

Right: Although flatworms are relatively easy to photograph, it is amazing how quickly they can move when you are trying to focus on them.
Photo – Ann Storrie

Below right: The cute faces of false Tasmanian blennies are irresistible to photographers. Look for them in the sawn-off railings of the *HMAS Swan*, and on jetty pylons.
Photo – Sue Morrison

rough, winter weather, many animals hide in protected spots, some go to deeper water, while others may perish. This is not a good time to engage in photographic pursuits. One of the greatest influences on the variety of species in the south-west is the warm, southerly flowing Leeuwin Current. It flows in the autumn and winter, bringing many tropical and sub-tropical species to southerly latitudes. It is interesting to watch for the start of the current in April–May and spot the huge variety of larval fish and crustaceans arriving under floating sargassum (a seaweed) and jellyfish. Plankton is extremely rich, and a close look at 'murky' water near the surface often reveals a rich collection of beautiful jellyfish, comb jellies, salps and other bizarre planktonic creatures. These are not always easy to photograph, but it's well worth a try.

The more you learn about marine life and where to find it, the more interesting your dives become. Besides observing the larger species, take time to slow down and examine smaller inhabitants of the marine world. If you are dedicated enough to take photographs of these wonderful subjects, you will be doubly rewarded.

TRY, TRY AND TRY AGAIN

Besides knowledge of your subject, the other important qualities of a successful underwater photographer (and, in fact, any nature photographer) are patience and persistence. Since time is always critical under water, this can be difficult. Much of the dive can be spent finding a subject, and to be patient when you have only 10 minutes bottom time left can be extremely frustrating. Choosing the right equipment and lenses helps, especially if you are photographing a shy fish.

Take the false Tasmanian blenny, for example. This perky, adorable little fish lives in discarded shells, in holes in the reef, on jetty pylons and in shipwrecks. The blennies that inhabit the sawn-off railings of *HMAS Swan* have become so used to divers that they seem to pose as you place a closeup framer around them. A few years ago, however, Ann spent many dives chasing these little darlings around the pylons of the Busselton Jetty. Now, with a 105 millimetre lens in a housing, the fish are not disturbed by a closeup framer. Patience is still required to capture that blenny 'look' at the right moment, but the task is a lot easier.

The photograph in the book that took the most patience and persistence was of a southern right whale calf. Ann had obtained a special licence from CALM to swim with these animals, and was aboard the *Southern Image* off Point Charles in the Fitzgerald River National Park. Female whales and their calves were positioned every 100 metres or so along the bay, often only 50 metres from shore. With so many animals from which to choose, you would assume that it was simply a matter of dropping over the side of the dinghy, quietly swimming up to them, and taking a photograph. In fact, Ann spent four days hopping in and out of a dinghy for stretches of three to four hours at a time, and only managed a couple of publishable photographs. It was cold, the water wasn't particularly clear, the autofocus on the housed camera could not focus due to lack of contrast, and the whales would quietly disappear as soon as we hit the water. But what an experience when a couple did stay for a glimpse of us. To be just a few metres away from a 15-metre mum with her small, six-metre calf by her side, was truly a moment worth the effort. The photograph was a bonus.

Above: An underwater photographer's dream—to have a southern right whale calf swim up and look into the camera, before flicking its tail to catch up to mother.
Photo – Ann Storrie

Below: Ann Storrie prepares to photograph a soft coral.
Photo – Wayne Storrie

Animals don't have to be large, or fast moving, to be difficult to photograph. A sedentary tube worm can drive you to distraction. You carefully approach, just a little closer for composition, and the animal retracts its beautiful tentacles into its tube. You patiently wait for it to extend its tentacles again, only to have them disappear, even earlier this time. You give up and try another worm, then another and another. Even nudibranchs can cause their fair share of frustration. If you touch them, their feathery gills contract, and they squidge up like a piece of jelly. The alternative is to wait until the nudibranch crawls onto an appropriately coloured background, with no distracting sponges or hydroids around it. This can be akin to watching grass grow.

READ AND ENJOY

When knowledge, timing and patience come together to produce an attractive underwater photograph, the effort can be worth it. It is incredibly rewarding to have work published, enabling you to pass on your knowledge and enjoyment to others. We hope that readers will derive as much pleasure from *Wonders of Western Waters* as we have had in producing it. We also hope the book will stimulate interest in the marine environment, help divers to appreciate the underwater world on our doorstep, and encourage readers to adopt a conservation ethic. Please enjoy what we have now, conserve it for the future, and entice others to do the same.

Sue Morrison, a technical officer at the WA Museum, and Ann Storrie, a technical officer at Royal Perth Hospital, have been diving and taking underwater photographs for some time. Sue's interest in underwater photography began with her degree in zoology and while learning to dive in the murky waters of the UK, whereas Ann took up diving and underwater photography to expand her hobby of nature photography, and because she hated using a tripod! *Wonders of Western Waters* is their second book. Sue and Ann previously teamed up to write and photograph *The Marine Life of Ningaloo Marine Park and Coral Bay*, also published by CALM. Both books are available from bookshops as well as online from the NatureBase Bookshop, http://www.calm.wa.gov.au

Winner of the 1998 Alex Harris Medal for excellence in science and environment reporting.

LANDSCOPE

VOLUME FIFTEEN NUMBER 1, SPRING 1999

In 'Photographing a Temperate Wonderland' (page 10), photographers Sue Morrison and Ann Storrie share their experiences .

In 'Those Spotted Things' (page 22), we see how fox-baiting and captive breeding continues to swell populations of this popular native mammal.

Snakes. You either love them or hate them, but how do we live with them? See story on page 45.

Many farmers and landowners are turning to plantation pine for a variety of good reasons. Five of them tell us why. See 'A Crop of Forests' on page 38.

As habitat changes, so do species populations. But just when does a species become threatened? See 'Healing the Land' on page 49.

FEATURES

REGULARS

COVER

The magnificent gorges of Karijini National Park are a refreshing retreat from the arid plains above. They also have a fascinating geological history.
See story on page 28.

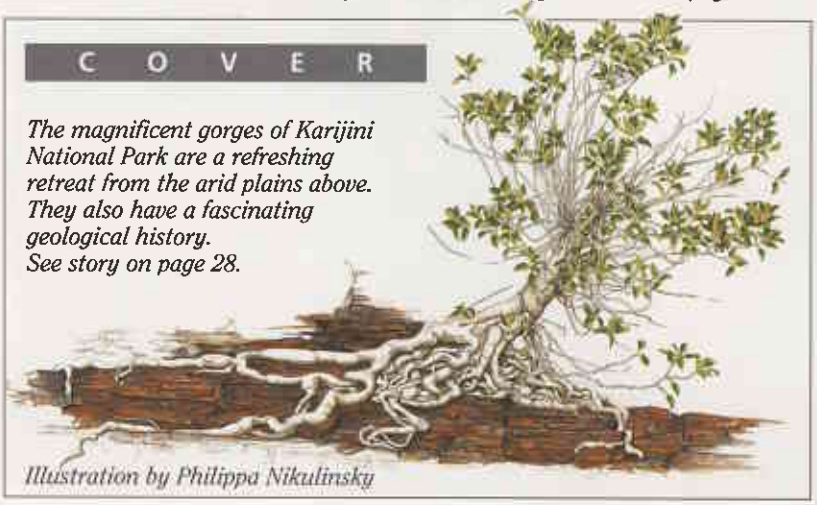

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Illustration: Gooitzen van der Meer, Ian Dickinson
Marketing: Estelle de San Miguel ☎ (08) 9334 0296 Fax: (08) 9334 0498
Subscription enquiries: ☎ (08) 9334 0481 or (08) 9334 0437
Colour Separation by Colourbox Digital
Printed in Western Australia by Lamb Print

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Published by Dr S Shea, Executive Director
Department of Conservation and Land Management,
Dick Perry Avenue, Como, Western Australia