

# GUIDE TO FINDING AND PHOTOGRAPHING SYDNEY'S PYGMY PIPEHORSE

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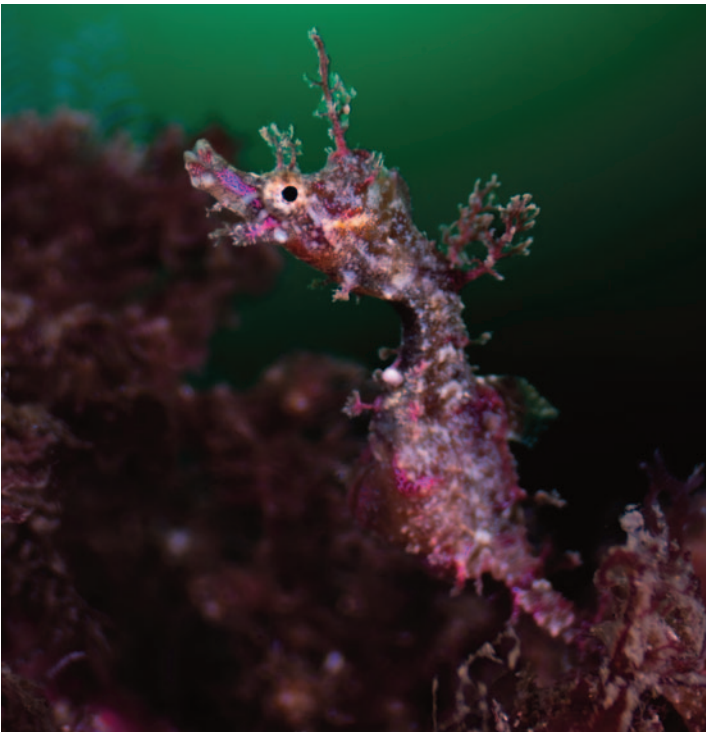
Sydney's temperate waters are full of hidden gems, but few are as captivating or elusive as the pygmy pipehorse. A close relative of seahorses and pipefish, these tiny fish are masters of disguise and a favourite subject for myself and other dedicated macro photographers in the Sydney area. This guide covers where to find them, how to photograph them and how to interact responsibly with these fragile creatures.



Above: A close focus wide angle portrait



Red colour morph in the pygmy pipehorse



Above left and right and below: A variety of the colour morphs observed in the pygmy pipehorse

## MEET THE PYGMY PIPEHORSE

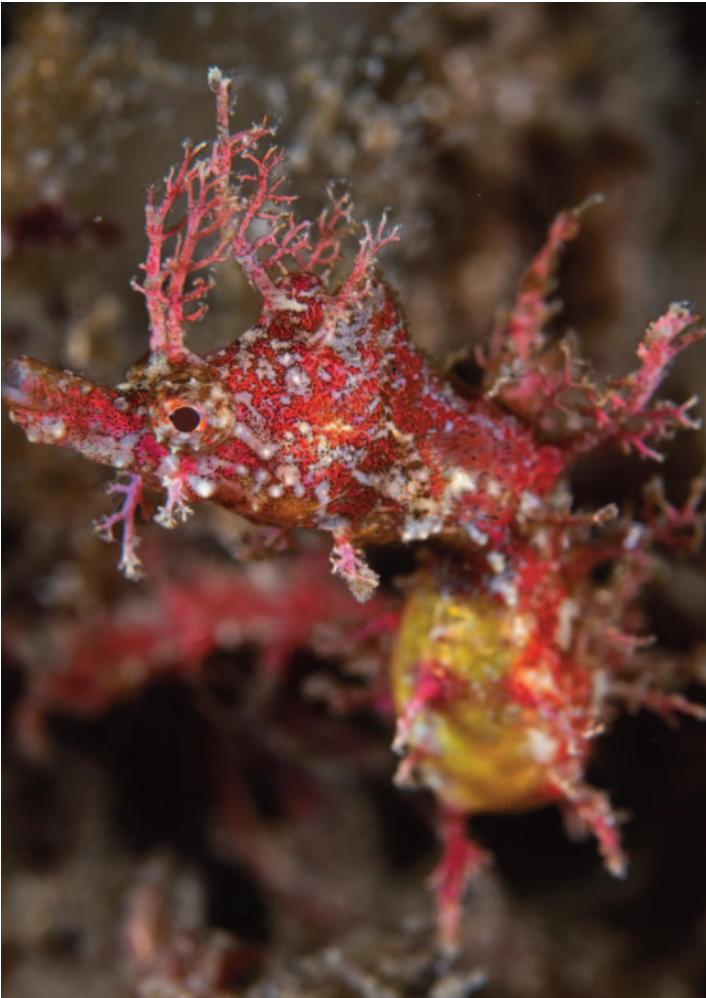
The Sydney pygmy pipehorses (*Idiotropiscis lumnitzeri*) typically measure between 2 and 5 centimetres. They are covered in fleshy filaments that aid in their camouflage and come in a wide range of colours, including pale creams, vibrant reds, muted purples and metallic golds.

Unlike upright seahorses, pygmy pipehorses often lie horizontally or upside down, clinging to algae or sponge-covered rock using their prehensile tails. They tend to stay close to their home rocks and rarely stray far from their chosen patch of algae, making them a reliable subject for repeat visits.

## TIPS FOR FINDING THEM

### Choose the right sites

In my experience, the best places to find pygmy pipehorses in Sydney are along the rocky reefs of Botany Bay, particularly on both the north and south shorelines. These areas typically feature red algae-covered rocky substrate at depths generally below 10 metres, which is the preferred habitat for pygmy pipehorses. The relative protection from large swells along these shores allows the algae to thrive, creating ideal conditions for these tiny fish to live and hide. Dive sites such as Bare Island and Kurnell offer relatively easy shore entries, meaning you are not limited by boat schedules and can spend as much time as your gas allows searching for and photographing these cryptic creatures.



Both sites have produced regular sightings, often in shallow depths perfect for extended macro sessions.

### To find new individuals

Start by slowing down. It's not unusual to spend a large portion of the dive in a relatively small search area. Look closely for subtle clues like a curled tail or the flick of a tiny head. One of the most helpful techniques is to study the motion of the algae substrate. As the surge pushes water back and forth, most of the fixed life sways in a steady rhythm. Pygmy pipehorses, however, often move just slightly out of sync.

Their bodies are usually a bit stiffer than the surrounding growth, causing them to lag behind the surge ever so slightly. That small delay in movement can be an important giveaway. Focus your search on algae-covered ledges, low sponge gardens and the sides or tops of boulders. Once your eyes adjust, you'll start to notice just how many of these cryptic creatures are hiding in plain sight.

### Dive the same site repeatedly

One of the best ways to find more pygmy pipehorses is to keep diving the same spot again and again. Once you spot one, remember exactly where it is, either in your head or by jotting it down on a slate. These little fish don't usually move far and can stick to the same rock or algae patch for weeks or even months. Over time, you can build a route of familiar spots where you know you'll find them, so you're not wasting dive time searching.

This also means you get to watch how they change or behave differently over time, which can make your photos more interesting. Plus, the more you see the same individuals, the better you'll get at approaching them gently and catching those perfect shots without disturbing them.



A diver searches for the elusive pygmy pipehorse

## PHOTOGRAPHY TIPS

### Gear selection

Use a dedicated macro lens, with both 60 mm and 100/105 mm lenses working well for pygmy pipehorse photography. For tighter close-up shots, adding a +5 to +15 diopter can help fill the frame and capture fine detail. For more creative compositions, consider using wet optics such as macro-to-wide converters. These allow you to include some wider habitat context, showing the pipehorse in its environment rather than just an isolated portrait.



A wider angle can give a unique perspective

If you plan to upgrade or add anything to your photography gear to improve image quality, start with lighting. A quality strobe, or preferably two strobes, will make a far greater difference to your final images than upgrading your camera or lens. Good lighting enhances colour, contrast and sharpness while allowing you to control shadows and highlights. Investing in reliable strobes gives you more creative control and consistently better results when photographing these small, often subtle subjects.

### Isolate the subject

Pygmy pipehorses are masters of camouflage, often blending into the algae and This makes it difficult for them to stand out clearly in an image. One of the most effective ways to improve your composition is to isolate the subject from the background, creating a cleaner, more engaging photo. There are several techniques that can help:

### USE A SNOOT

A snoot allows you to concentrate your strobe light into a narrow beam, illuminating only the subject while leaving the background in shadow. This not only removes visual distractions but also adds dramatic contrast and focus. A well-placed snoot shot can turn an otherwise cluttered scene into a striking portrait. However, not all snoot photos have to be a single spotlight on the subject with a completely black background. Incorporating some ambient light can balance the image by softly revealing textures and colours in the surrounding environment.



A wider aperture helped blur the potentially distracting background elements

This combination often creates a more natural and visually appealing photograph, adding depth without losing focus on the pygmy pipehorse.

### USE A WIDER APERTURE

Shooting with a wider aperture (lower f-number) narrows your depth of field, helping to blur out busy or distracting backgrounds. This technique works especially well when the subject is slightly elevated from the substrate or when the background is set back from the focal plane.

It adds a sense of depth and draws the viewer's eye directly to the pipehorse, especially when combined with good lighting and careful subject selection.



Prominent individuals such as this pair are more worth your time

### CHOOSE YOUR SUBJECT CAREFULLY

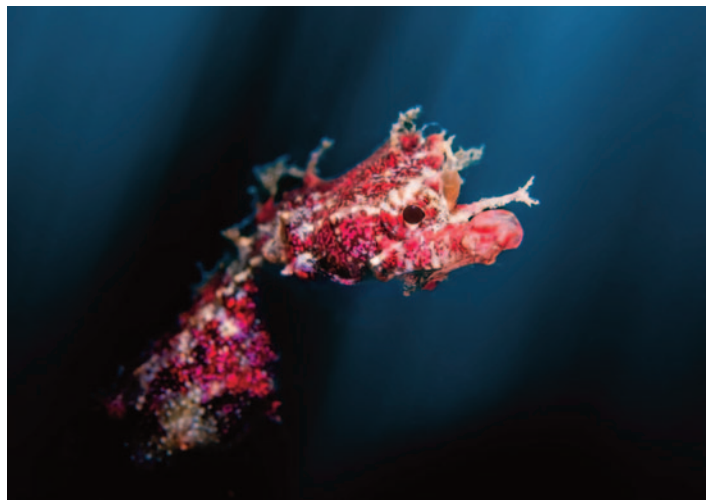
Not all pygmy pipehorses are positioned equally for photography. Some are buried deep in the algae or tangled awkwardly in sponge where clean shots are nearly impossible. Look for individuals that are perched off the substrate or sitting a little higher, where their shape is more clearly defined. If a particular subject is too difficult to isolate, it's often better to move on and use your dive time more effectively.



Patience was rewarded in this case as the pipehorse lifted its head clear of the substrate

### BE PATIENT

These animals may be still for long periods, but small changes in posture can dramatically improve a shot. Waiting for a pipehorse to lift its head, turn slightly, or arch its back can make the subject stand out more clearly from the background. Sometimes just holding your position and observing quietly is enough to capture the moment that brings the image to life.



Red individuals contrast well with ambient blue backgrounds



A pair rise into the water column to exchange eggs

### Watch for key behaviours

Photographing behaviour adds depth to your images. Look for signs of courtship like head bobbing, or movement between perches. If you're lucky enough to find a pair, observe from a distance and avoid disturbing them.

If you sit back and observe long enough, you can be rewarded with some fascinating mating behaviour where two courting individuals link tails and drift up into the water column to exchange eggs.

### Stylistic choices

Let the subject's colour guide your creative decisions. Reds and golds reflect strobe light beautifully and lend themselves to dark backgrounds or high-contrast lighting. Paler subjects might suit a softer, more pastel-toned approach. Experiment with colour temperature, composition and exposure to bring out the best in each individual.

### ETHICAL CONSIDERATIONS

Photographing pygmy pipehorses is a privilege that requires care and respect. These animals are small, fragile, and easily stressed, and their habitats are just as delicate.

Responsible behaviour helps ensure they remain a part of Sydney's vibrant underwater world.

### Avoid touching or repositioning

Never touch or try to move a pygmy pipehorse for a better shot. Even gentle contact can injure them or cause them to abandon their perch. Let the animal behave naturally and work with the pose it offers.

### Control your buoyancy and movements

Good buoyancy is essential. A single fin kick can damage algae beds or dislodge the fish itself. Stay off the bottom, move slowly, and always check where your body and gear are positioned.

### Share locations responsibly

Consider who you're sharing finds with. Publicising exact spots can lead to overcrowding or harm. Share privately with trusted divers, and use the opportunity to promote careful, respectful practices.

Being mindful in your approach allows you to enjoy and photograph these fascinating fish without putting them at risk.

FINAL THOUGHTS

Photographing pygmy pipehorses is both challenging and deeply rewarding. Their tiny size, expert camouflage and often awkward positioning make them one of the most difficult subjects to capture well, but also one of the most satisfying.

Every successful image feels earned through patience, careful technique and close attention to the environment.

These elusive fish offer a unique glimpse into the hidden richness of Sydney’s underwater world. While they may not grab attention like larger marine animals, pygmy pipehorses embody the quiet beauty and diversity found in even the most modest-looking patches of reef.

For those willing to slow down and observe carefully, they reveal an entirely different side of the ocean.

