

The Sea of the Dragons

By Erik Henchoz

Their name evokes medieval stories of dragons and knights, legends from olden times and fabled adventures. Indeed, the Seadragons are small and defenseless creatures that exhibit unusual and fascinating colors and shapes.

The Seadragons are close relatives to the more common Seahorses and Pipefishes, live in shallow waters and belong to the family Syngnathidae. They are divided in two species: the Leafy Seadragon (Phycodurus eques), which lives in the temperate waters of the southern coasts of Australia, and the Weedy Seadragon, (Phyllopteryx taeniolatus) which lives and reproduces along the coast of Tasmania

The Weedy Seadragon and the Leafy Seadragon have a similar biology and lifestyle, but they are very different with regards to form and color. The Leafy Seadragon has long and branching leaf shaped protrusions and depending on the individual, the habitat, the diet and the stress level, their colors may change between yellow, green and brown. The body profile of the Leafy Seadragon is really astonishing: it swims using

the drive created by the pectoral fins, located close to the neck, and the dorsal fin, which is located on the tail. The Leafy Dragon moves in a horizontal position, and it doesn't have a prensil tail; these aspects differentiate it from the Seahorse.

It is a shy and reserved animal, and it hides within thick vegetation on the sea bottom where it is rich in algae and aquatic plants. This is a fascinating ecosystem where sea life from both temperate and tropical ocean climates mix, creating a strange world with surprising animals.

It is a master of mimicry, with a body covered by long thorns and

Top - Leafy sea dragon

Camera: Nikon D300Housing:
MDX-D300 Sea&SeaFlash: 2 YS-110
Lens: 60 mm AF-Micro Nikkor
F/2.8 DF-STOP: F 13
Shutter speed: 1/125
ISO: 200
Focus: autofocusimage

Right - Carey Harmer filming a Leafy sea dragon

Camera: Nikon D300Housing:
MDX-D300 Sea&SeaFlash: 2 YS-110
Lens: Nikon AF DX 10,5 f/2,8 G
IF-ED F-STOP: F 8
Shutter speed: 1/125
ISO: 200
Focus: autofocusimage



osseous plates, and it swims with extreme elegance within luxuriant marine prairies looking for food. It doesn't chew its food, but it sucks it up using a long nose which terminates with a small toothless mouth. Its diet consists of minuscule crustaceans and microscopic plankton, which it is able to hunt undisturbed due to its unique ability for camouflage.

The Weedy Seadragon, also called the common Seadragon, lives in the same waters of the Leafy Seadragon, but it is also possible to find it in colder waters. For example, it is easy to encounter the Weedy Seadragon along the Tasmanian coast, while it is swimming in luxuriant ocean prairies and Kelp forests.

The colors of the Weedy Seadragon are very different to the ones of the Leafy Seadragon and are surprising: brown and dark green for the individuals that live in shallow waters and purple-red and orange for those that live deeper. While the Leafy Seadragon and Weedy Seadragon are similar, the primary difference of the Weedy Seadragon is the lack of prominent protrusions: it has smoother appendages, which have the same color as the body. Like the Leafy Seadragon, it lives in shallow waters and it most comfortable between the big and thick leaves of Kelp and it prefers sandy and debris covered sea bottoms, as well as algae fields.



Leafy sea dragon

Camera: Nikon D300Housing:
MDX-D300 Sea&SeaFlash: 2 YS-110Lens: 60 mm AF-Micro Nikkor F/2.8 DF-STOP: F 20Shutter speed: 1/125ISO: 200Focus: autofocusimage

The quest for Tasmania's Weedy Seadragon

Because Seadragons are rare, shy and adept at camouflage, it is very difficult to find, observe and photograph them.

After a long trip, with countless hours on a plane, we found ourselves immersed in a nearly surreal



Ketty swimming with a Leafy sea dragon. Camera: Nikon D300Housing: MDX-D300 Sea&SeaFlash: 2 YS-110Lens: 20 mm AF Nikkor F/2.8 DF-STOP: F 13Shutter speed: 1/125ISO: 400Focus: autofocusimage

atmosphere. We are in Tasmania, more than sixteen thousand kilometers away from home. It is already evening, and there was just enough time to arrive at the Eaglehawk Diving Center, after driving through breathtaking landscapes, and fall asleep exhausted.

Soon it is morning, we are still jet lagged, but Mick and Karen are waiting for us at the Diving Center; in few minutes we will be ready to search for the dragons.

The two managers of the diving center are experts on this subject.

A kind woman welcomes us with a smile, while her husband Mick peers at us from a distance. Karen is an expert Marine Biologist and Mick, who has a strong Australian accent, is a real Irish sailor born in Tasmania.

The adventurous trip to the small dock of Eaglehawk Neck was made using an old yellow off-road vehicle and a cart bulging with diving equipment.

The navigation was also an adventure: the wind and the navigation in the blue water make me

understand why Mark is wearing special boots and a waxed sailor jacket. He is an expert of this stormy sea and he will be our captain and diving guide for the rest of the day.

After twenty minutes of the rough sea, we arrive at our destination completely soaked. The landscape is phenomenal: a small bay protected from the wind and waves of the Tasmanian Sea. The colors of the rocks are spectacular, the typical orange lichen that colonizes them makes them seem magical and fascinating. The water is cold, the Kelp abundant and a short distance away from us a sea lion wanders undisturbed.

A few meters below the surface of the water we discover a completely new marine habitat: white sand area alternate with large expanses of algae. In these waters the Kelp grow very fast and its leaves cover most of the sea floor. It is here, at a depth of a few meters, that we will try to take pictures of the Sea Dragon.

Incredibly, after a few minutes our dream comes true; Mick takes us underwater, and with him we see two beautiful Weedy Seadragon specimens. Two adult male and female seadragons of about thirty centimeters in length approach us at a shallow depth.

It is an exciting encounter, as the male is incubating eggs. The eggs, swollen and almost ready to hatch, are attached to two special areas of the tail where special cavities contain and oxygenate them.

As with seahorses, the female produces the eggs and subsequently gives them to the male. In the case of the seadragons the eggs are literally attached to the tail of the male mate, who will lovingly attend to them. For the next six weeks, he will be the one who will care for them, hiding in

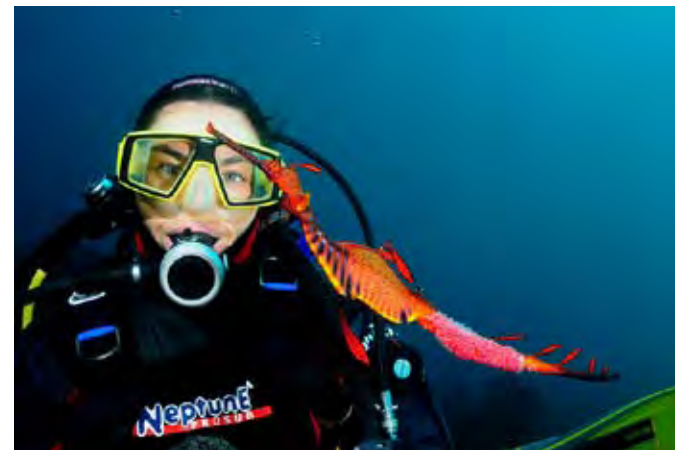


Weedy sea dragon: a male with eggs. Camera: Nikon D300Housing: MDX-D300 Sea&SeaFlash: 2 YS-110Lens: 20 mm AF Nikkor F/2.8 DF-STOP: F 10Shutter speed: 1/125ISO: 200Focus: autofocusimage

the Kelp, waiting for the fateful moment when the eggs will hatch. During the last days of incubation, the eggs will perceptibly change their color and they will become red-purple. Only now will the male will inflate his tale, helping the eggs hatch and release give birth to the young. A unique moment, the young dragons are completely developed and ready to start the struggle for survival, as only a small percentage of the newborns will reach the adulthood.

The Leafy Seadragon from the Peninsula of Yorke

Kilometers and kilometers of corn follow each other endlessly, and everywhere there are animals of every type: from parrots to sheep, from kangaroos to reptiles typical of the Australian continent. We are now thousands of kilometers away from Tasmania and the wonderful images of the Weedy



Ketty diving with a Weedy sea dragon. Camera: Nikon D300Housing: MDX-D300 Sea&SeaFlash: 2 YS-110Lens: 60 mm AF-Micro Nikkor F/2.8 DF-STOP: F 22Shutter speed: 1/100ISO: 200Focus: autofocusimage

Seadragon taking care of his eggs is still in our mind, while we are travelling on the endless and straight road that leads to Edithburgh. The Peninsula of Yorke, approximately two hundred and fifty miles from Adelaide, will surprise us. There we will admire and photograph of one of the most beautiful animals of this area: the Leafy Seadragon.

Edithburgh is a small and secluded town on the sea, located on the southern tip of the peninsula. Carey Hamer, an Australian diving instructor and video maker, will be our guide for this new adventure. He's a genuine expert of the Leafy Seadragon who can boast of celebrated achievements in his work with documentary and video footage. We dive below some docks, structures that have been built for cargo ships and are also used by local fishermen and divers.

These are the areas where it is most likely to encounter these shy and harmless animals: a



The coast near Edithburgh - Yorke peninsula - South Australia
Camera: Nikon D300
Lens: Nikon AF DX 10,5 f/2,8 G IF-ED F-STOP: F 11
Shutter speed: 1/500
ISO: 200
Focus: autofocus
image

few meters deep immersed in lush life, a rich habitat for aquatic plants and algae. In only a few dives we can finally photograph the Leafy Seadragons.

The first is a young individual not yet a year old, evident by its coloring which is darker than that of adults. Remaining close to one of the wooden pylons of the dock, it observes us and it follows us with its eyes while we are photographing it in its natural habitat. It moves gently, seeming to fly, and its branchy protrusions sway like they were

moved by the wind.

Further ahead, a couple of adult dragons show themselves: approximately thirty five centimeters long, they have the typical yellow-green colors with fantastic ramifications and white decorations on the nose. Graceful and elegant, they move gently due to their small pectoral and dorsal fins. They look at us, they turn, they move down and then they move up, like in an underwater dance. Grace and tenderness: they are extremely photogenic animals who use mimicry

as their only tool for survival. Around us there is a marvellous underwater habitat full of life: only a closer look is needed to discover seahorses, pipe fish, flocks of beautiful Old Wife (*Enoplosus aratus*), huge blue swimmer crabs (*Portunus pelagicus*) and small but potentially dangerous blue ringed octopus (*Hapalochlaena maculosa*)

Thin and fragile animals, the Seadragons can be attacked by an external parasite, the *Creniola laticauda*, able to pierce through their tough armor and then eat the blood and the other body fluids until the victim dies. The greatest danger, however, is man. Urbanization, pollution and the bad habits of wanting dragon specimens in both public and private aquariums have made it so that, year after year, it is always more difficult and rare to find these animals.

Carey takes this issue seriously and we, lovers of nature and of the underwater world, agree with his ideas. The Australian government is doing a lot to protect these friendly inhabitants of the sea, passing laws for their protection and conservation. Unfortunately, the laws are not enough to protect them. The Seadragons are known and admired around the world for their beauty, but few people understand the importance of preserving the habitat where they

live and procreate. Inevitably, they became an endangered species, with their high sensitivity to the slightest pollution and their high mortality rate while they are juveniles. They depend on us for their survival, and our decisions and behavior will determine their future.

For the last time, we admire these beautiful and fascinating creatures, knowing that soon we will return to observe and photograph them. They are unique and endemic to this amazing continent that we call Australia.

Erik Henchoz

Special thanks to Karen Gowlett-Holmes, Mick Baron of Eaglehawk Diving (www.eaglehawkdive.com.au) and Carey Harmer (www.leafyseadragontours.com.au) for the support and the diving assistance.

