

# THE WORLD OF GORGONIANS AND CORALS







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Gorgonians and corals are part of one of the most biodiverse marine habitats: coralligenous ones.

There are many sessile organisms, i.e., ones that are fixed to the rock, such as calcareous algae, bryozoans, sponges, polychaetes, tunicates... but gorgonians and corals are the most colourful organisms due to their size and treelike shape. They form true forests which burst forth in colour, illuminated by our torch.

In addition to giving structure to a habitat, gorgonians and corals are an excellent indicator of the state of conservation of the Costa Brava seabed, however, unfortunately they are threatened by the warming seawater due to climate change.

## IS IT A GORGONIAN OR A CORAL?

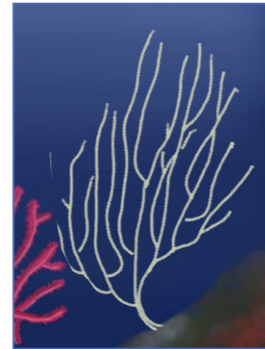
Both belong to the group of cnidarians and the part we see at first glance are the branches formed by hundreds of small polyps, which are the true protagonists. The polyps of both the gorgonians and the corals have a crown of tentacles that surrounds the mouth, and despite their small size they can be seen with the naked eye.

The difference between corals and gorgonians is based on their consistency, corals have the most rigid structure, with slower growth and they don't form such long branches as the gorgonians do, thus (being more flexible), we can see them moving with the marine currents.

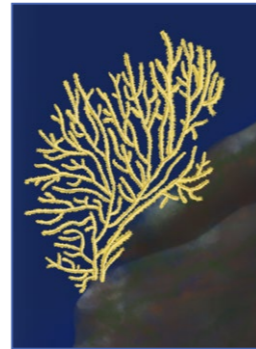
It is easy to distinguish between the most characteristic species of gorgonians, since we can identify them by their colour: red gorgonians (*Paramuricea clavata*), the white gorgonian (*Eunicella singularis*) or the yellow gorgonian (*Eunicella cavolini*).



**Red gorgonian**  
*Paramuricea clavata*



**White gorgonian**  
*Eunicella singularis*



**Yellow gorgonian**  
*Eunicella cavolini*

## CORALS, GORGONIANS AND JELLYFISH, HOW ARE THEY RELATED?

At first glance it would be said that they aren't related at all, some live stuck on the rocks and form colonies, while jellyfish are taken by the current; some are tiny, and others can measure more than 20 centimetres; some are not threatened by any predators while jellyfish are part of the diet of lots of marine animals.

However, all belong to the same group, the cnidarians and among other things, they all capture food in the same way, in suspension with their tentacles as well as the high percentage of water in their composition. Also is their urticating capacity, (in fact the name cnidaria refers to this fact) since they both have specialised cells that cause itchiness and discomfort if they are touched.



**Pink jellyfish**  
*Pelagia noctiluca*



## A VERY SLOW AND DIFFICULT GROWTH

Colonies usually grow perpendicular to the current and they form branches that open like a fan to increase the surface contact area with the water. Each polyp spreads its open tentacles waiting for the current to bring the food in suspension within reach.

Growth varies between species, but it is very slow, between 3 and 5 millimetres per year, with white gorgonians growing faster.

It is for this reason that great care must be taken when visiting areas of gorgonians and corals, since they can break with the slightest bang, and they take a long time to recover.

In the case of the purple and yellow gorgonians, we can observe small, purple-coloured balls at the feet of the branches between spring and summer. These are the eggs they have laid, which will be dispersed by sea currents and create new colonies



## RED CORAL

Unlike gorgonians and other corals, red coral is a species sought after due to its fishing interest with specific regulations which can be fished, but only with special licenses and limitations. Major extractions have been carried out for years due to its high economic value, it has come to be called "red gold", threatening its survival.

It is one of the slower growing corals and exists almost exclusively in the Mediterranean; to grow it needs hard rocks to adhere to and not too much light.

## WHERE THEY CAN BE SEEN

The Costa Brava is an area rich in gorgonians and corals and there are many places where they form splendid colonies.

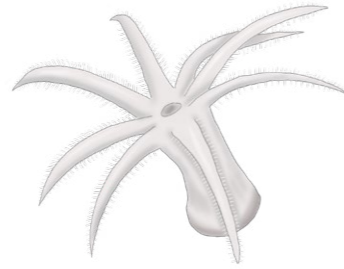
Their layout is determined by the light, and they are seen from about 10-15 metres deep and even less in the case of white gorgonians and some species typical of the sandy bottomed seabed.

The places most suitable for coloured gorgonians are the vertical walls with currents, where they form true multi-coloured tapestries. The coral is found at depths of more than 20 metres and in the roof of the caves, where it grows upside down.

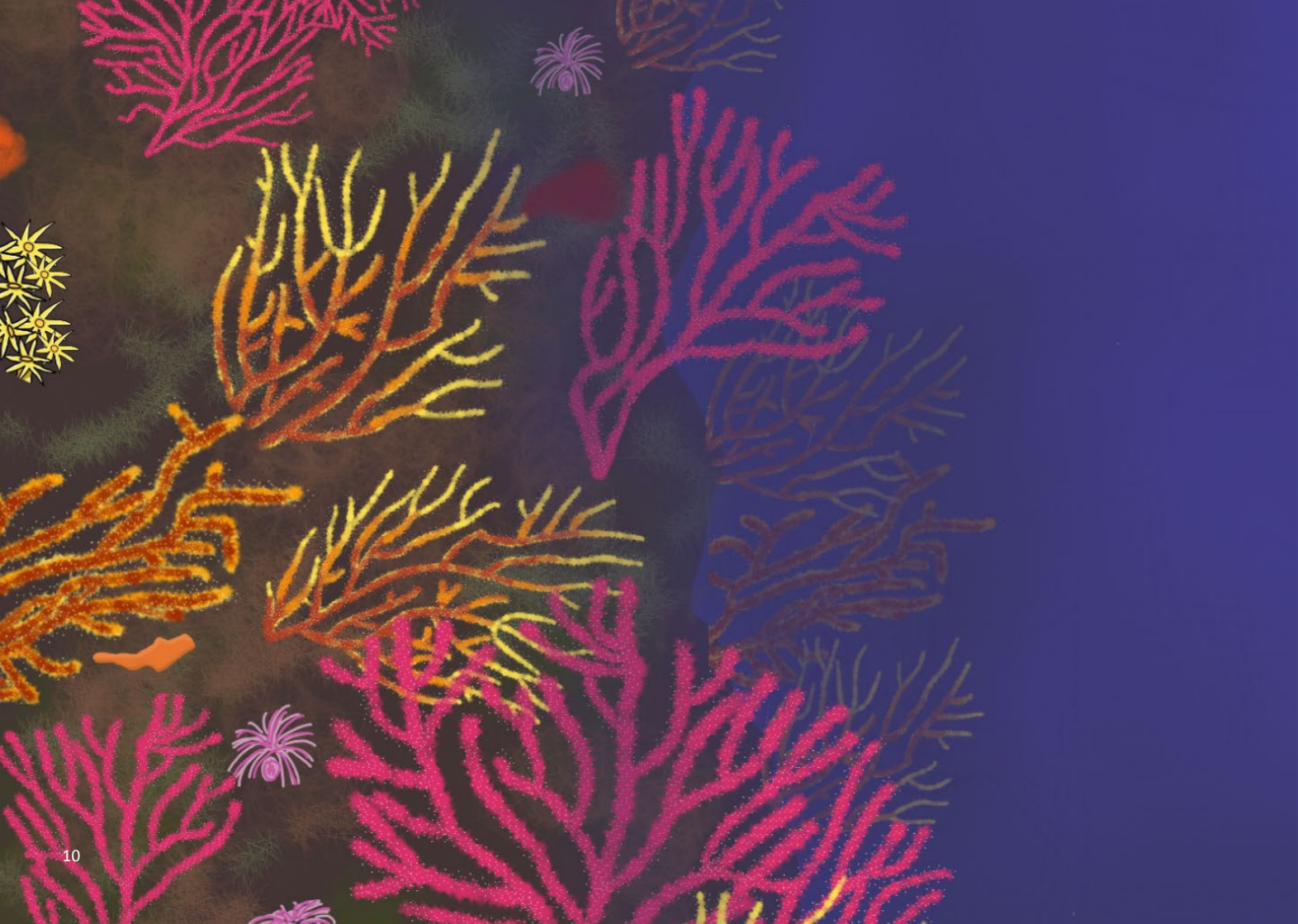
## HOW TO SEE THEM

If we observe them as a whole we shouldn't get too close, as this mid distance gives a better perspective of the framework they form. In order to see the polyps, we will approach them slowly, without reaching a distance that could cause an impact with them.

It is essential to bring a torch in order to fully enjoy the show of colours they display.







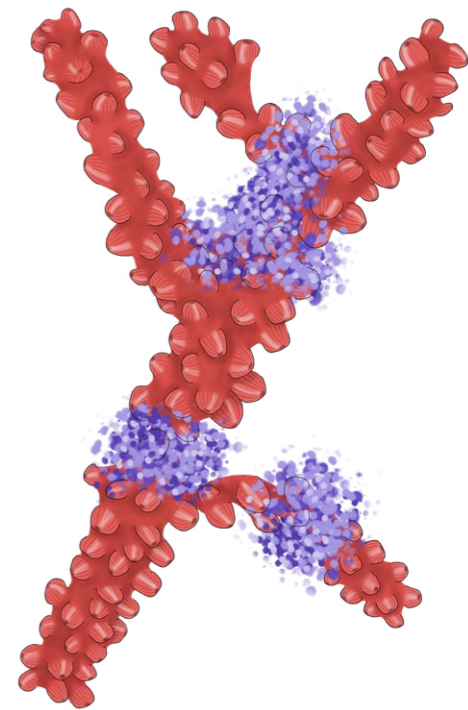
## PRECAUTIONS

The branches are fragile, and a little bang can easily break them. They take years to recover, so in this environment you have to take special care of your buoyancy and ensure your equipment is firmly attached.

## ALSO

It's interesting to know that when a piece of coral or a gorgonian falls to the seabed it does not die immediately, it is when it is covered with sediment that polyps cannot survive and die. That is why conservation projects are carried out to "rescue" broken branches and try to replant them.

In the coralligenous areas we also find calcareous algae, bryozoans, sponges, polychaetes, tunicates, etc. We recommend you see the "**Without feet or head**" section, to gain greater knowledge and fully enjoy each dive in this habitat.





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