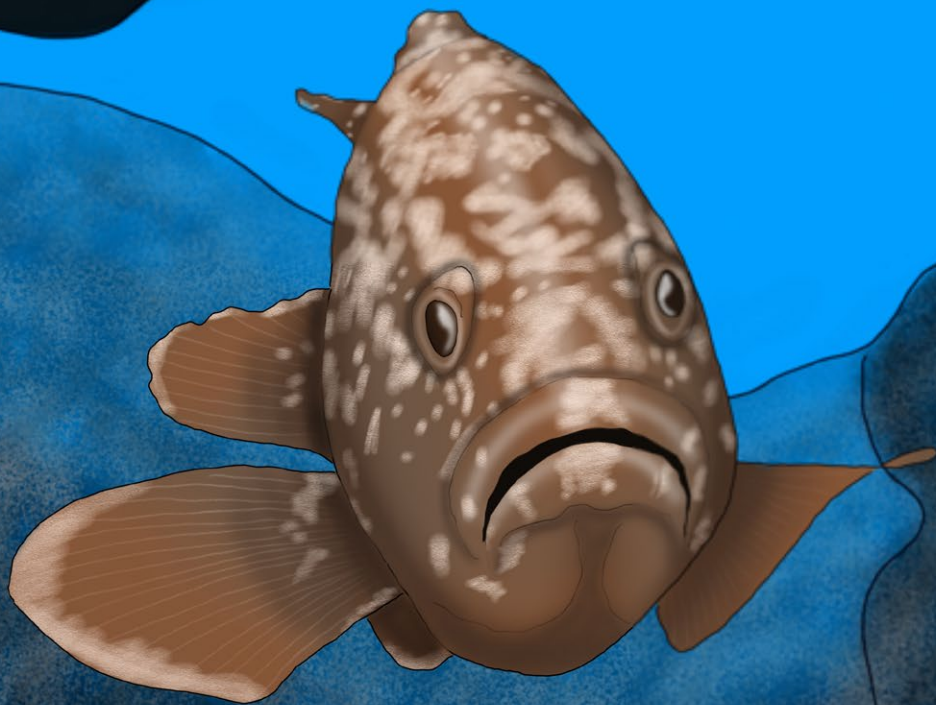
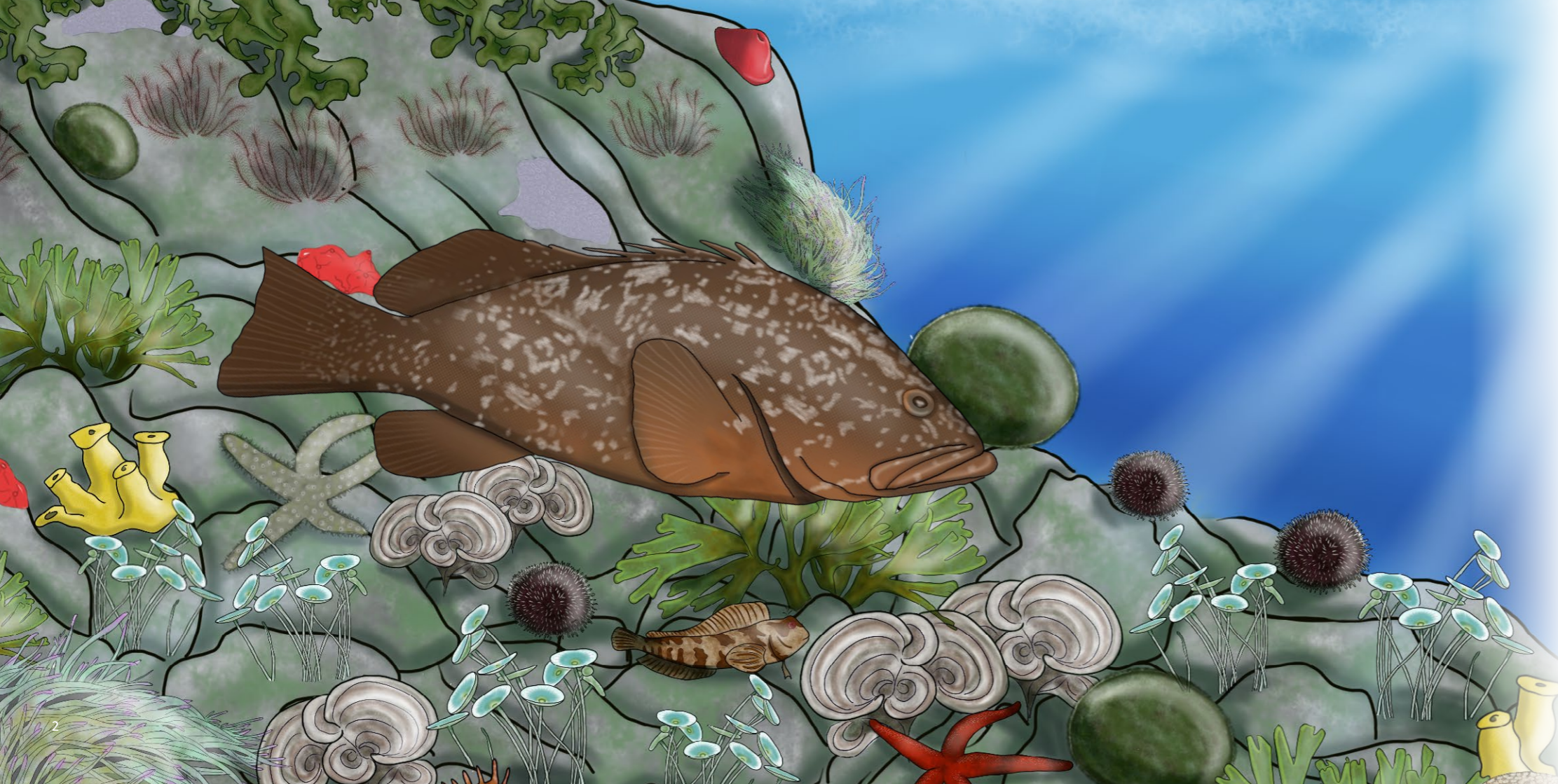


THE GREAT GROUPERS





THE GREAT GROUPERS

The grouper is one of the most characteristic species of our coast and an identifying symbol of the dives that can be experienced on the Costa Brava.

It's a big fish, usually calm and very territorial and an indicator of a very good state of conservation of the seabed. Observing this fish is always a reason for joy and many divers define them as an objective that must be seen during their dives.

For a long time, the great groupers almost disappeared from our coasts due to overfishing, but since marine reserves and environmental protection policies have been established, which have restricted underwater fishing, we are able to see them again, especially adult males with their imposing size.

THE GREAT GROUPERS

Although there are several species of groupers, it's the *Epinephelus marginatus* which reach a really large size, with some adult males exceeding one and a half metres in length.

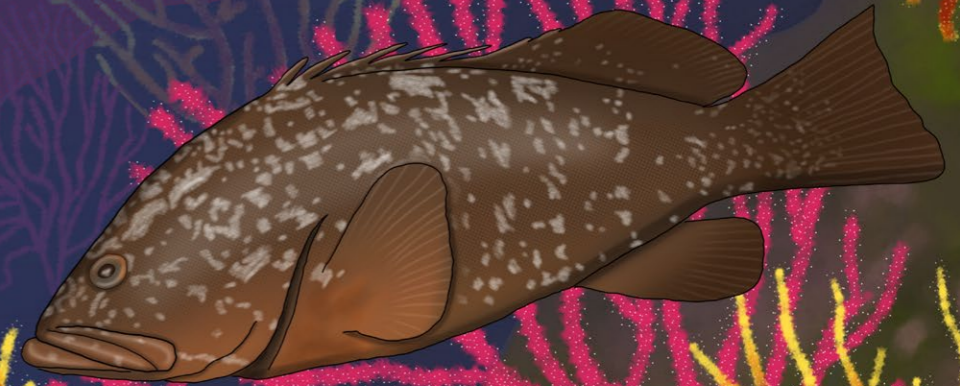
They are brown in colour with clear spots that enables them to camouflage between the rocks, and although the large specimens are also found at greater depths, we can see smaller specimens in much shallower waters, often associated with small cavities and rock shelters where they seek refuge.

They are from the family of serranids, and like many other fish of this family, they have a strong territorial nature. This means that they are always at the same point, and it makes it easier to observe them.

Within its territory there are several stable refuges where they spend most of the time and rocks where they hide momentarily, and which also serve as a base to hunt fish, octopuses and other animals that provide them with food.



Grouper
Epinephelus marginatus

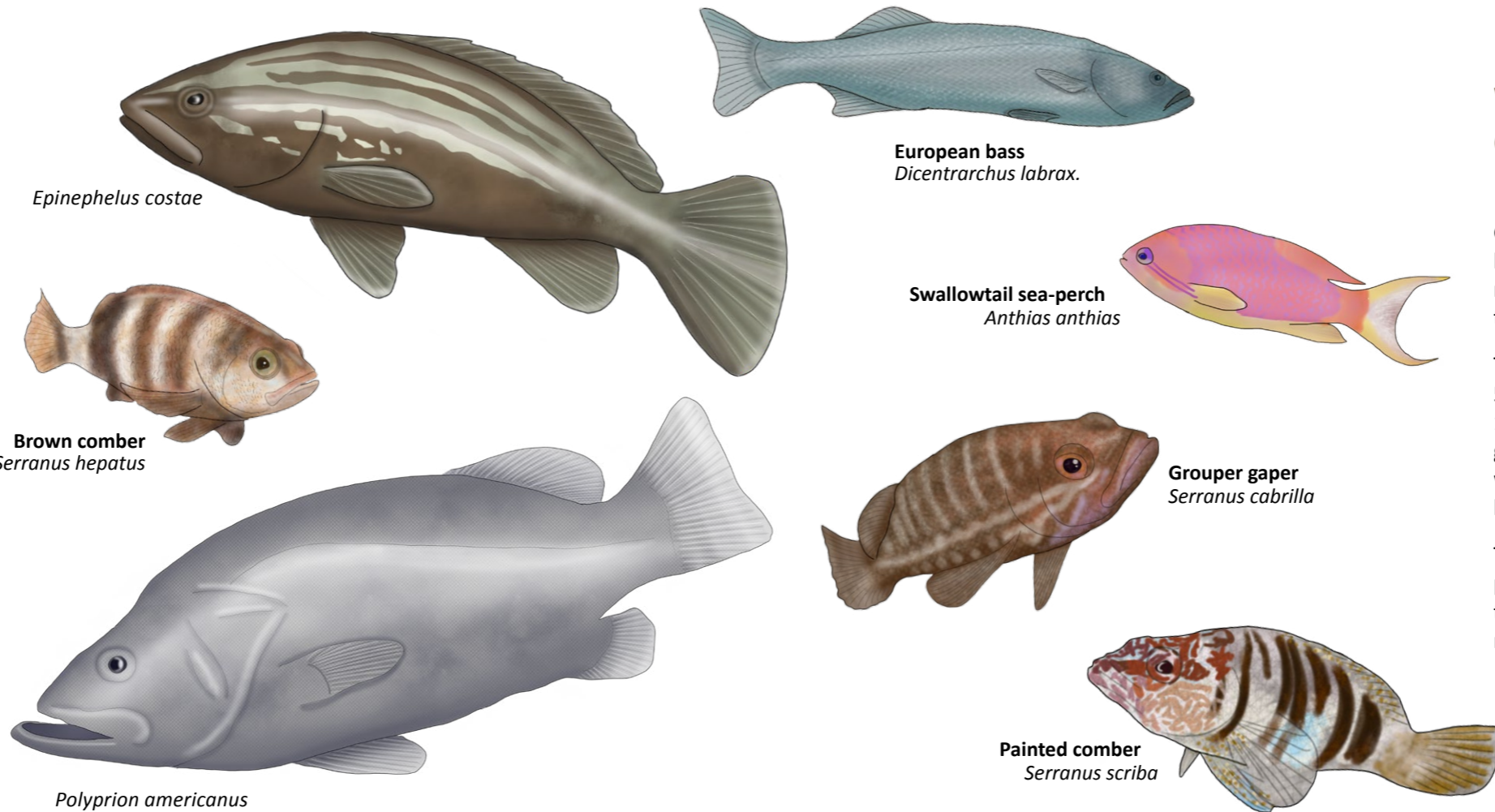


DID YOU KNOW THAT:

Apart from the groupers we know, we can find two more species in Catalonia, the *Epinephelus Costae* and the *Polyprion americanus*, however they are much less abundant and much more difficult to see due to their characteristics.

The *Epinephelus Costae* is distinguished by its longitudinal stripes and is smaller and highly wary, whereas the *Polyprion americanus* prefers deep waters, so only experienced divers who practice technical diving get to see them.

In addition, from the grouper family we can find other species in our waters: the brown comber, the european bass, the swallowtail sea-perch, the grouper gaper and the painted comber.



WHY ARE ALL THE GREAT GROUPERS MALE?

Groupers are hermaphrodites, they are born without a defined sex, and they reach sexual maturity as females between 5 and 6 years.

They'll continue to be females for about 5 or 6 years more, until they reach 10 or 12, when they will develop as males, the gender that will remain until their death, which following their natural course will be between 16 and 18 years.

Thus, it is necessary that a part of the population reaches at least 10 years of age to guarantee the reproduction and continuity of the species.

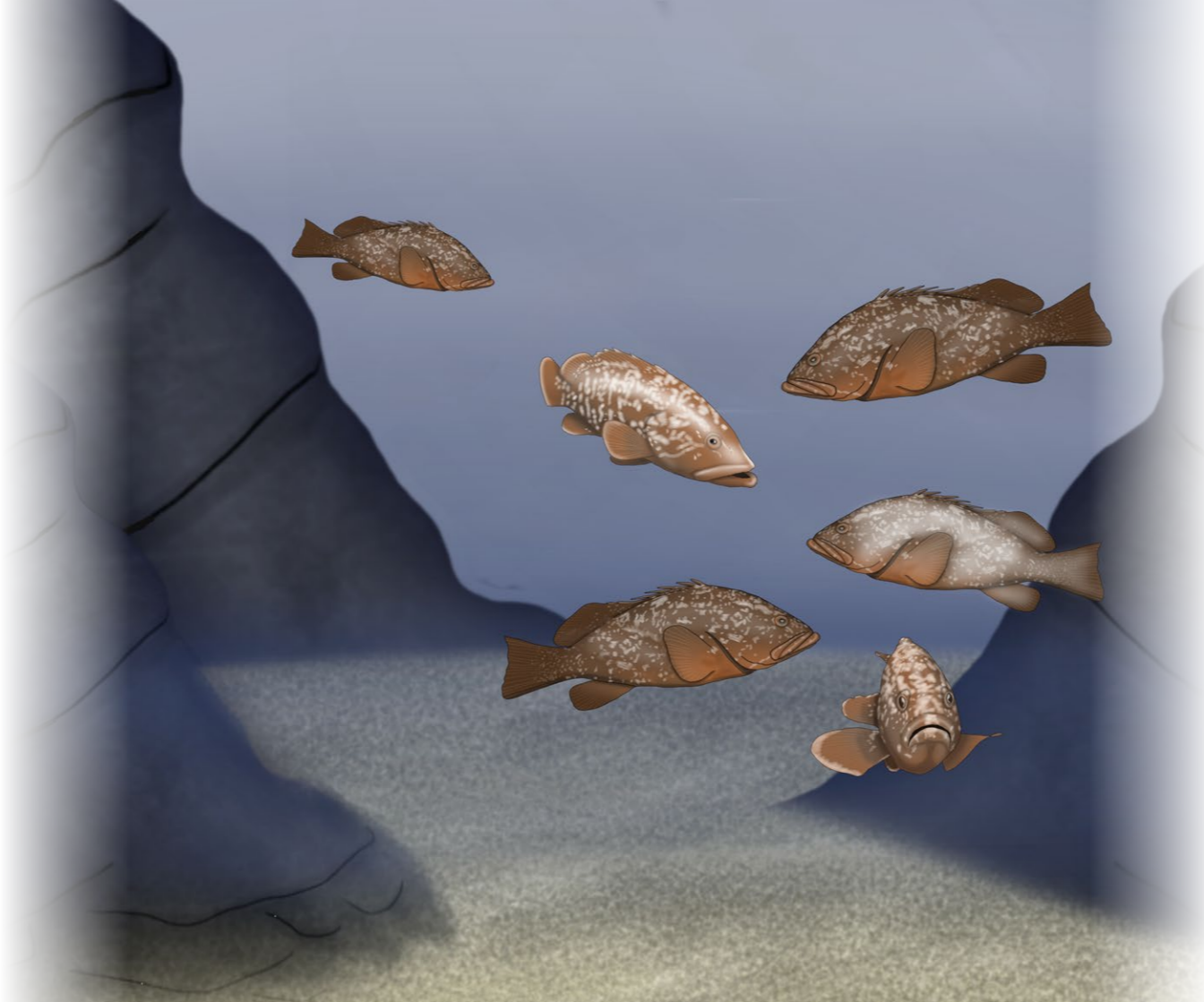
A HIGHLY OBSERVED REPRODUCTIVE CYCLE

The groupers' reproductive cycle has long been a subject of multiple interpretations by divers as well as the subject of various studies, as it has been very difficult to observe the complete reproduction process.

It is now known that during the breeding season, in the months of July and August, the adults of an area usually congregate in very small places. There are large groupers found in these areas, given that it is necessary to consider that the females will be at least 5 years old and the males 10 years old.

At a certain moment and in a synchronised way, the males and females initiate a mating dance and swim from the seabed toward the surface in a spiral to finally separate suddenly at the same time as they spawn the eggs.

The fertilised eggs then drift away. Only a small number will become viable and will become adult groupers.



WHERE THEY CAN BE SEEN

Fortunately, the Costa Brava has many protected areas where grouper populations have been able to recover exceptionally well. In these areas it is a very common fish that can even be observed from the surface and where it is easy to see some splendid, large-sized specimens from 20 metres distance, always near walls or rocks.

Unfortunately, in other areas they continue being fished and are difficult to see, as well as not being large enough in number to form reproductive congregations. In these places we'll have to look for caves and holes or in depths where underwater fishermen do not arrive.

Given their territorial nature, our guides will know where to find them and we'll be able to enjoy a fantastic encounter that we will surely remember.

HOW TO SEE THEM

To observe them we must take the usual measures in these cases: ensure a calm, slow approach, and maintain a prudent distance.

It has been observed in many places that the groupers are calm and get close to the divers, due to the fact that in areas where diving is practised, underwater fishing and the use of fishing gear isn't. This will easily allow us to get a close look at some of the large specimens. However, we must avoid getting too close to them, since they are territorial animals which may feel threatened by the presence of a diver who is too near.

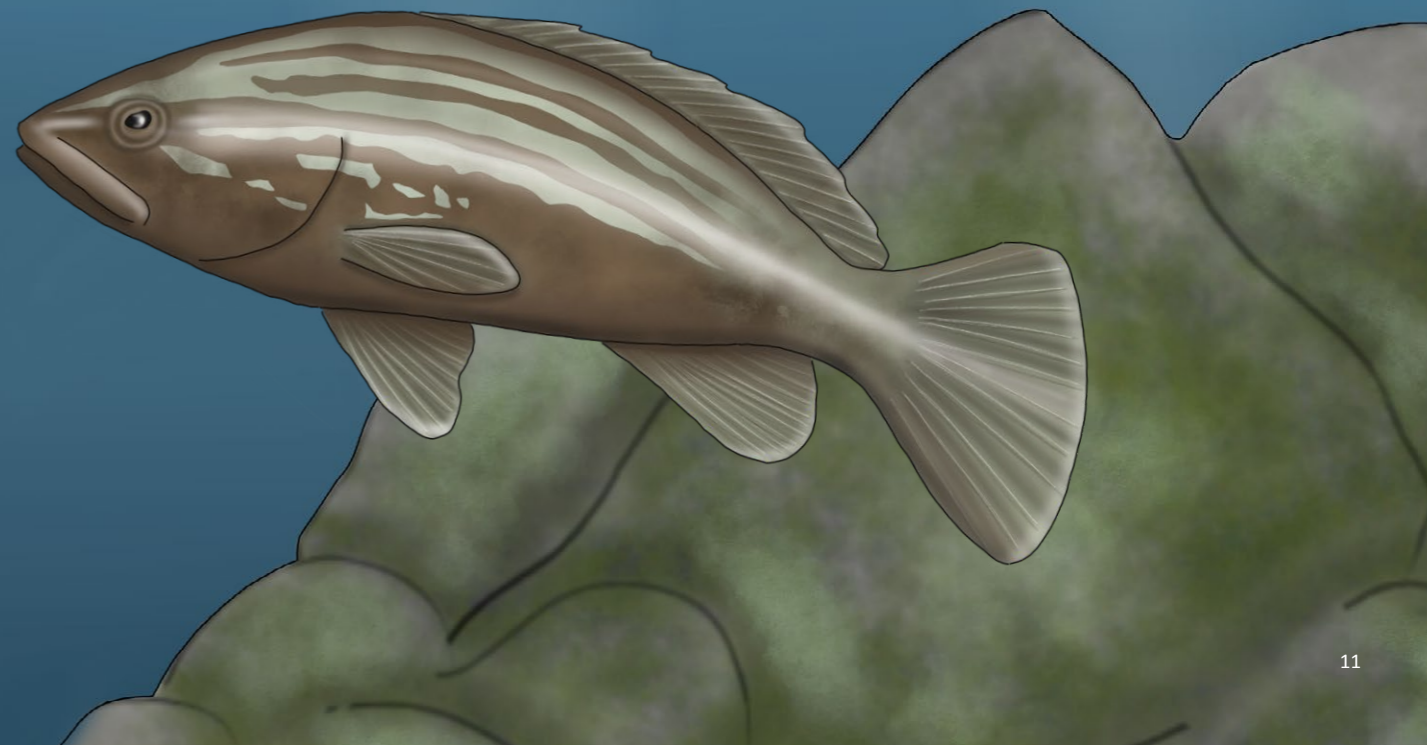
PRECAUTIONS

As always, we have to be careful to not touch the seabed and not grasping hold of the rocks if it isn't for safety reasons.

In this case we would like to add a specific precaution: don't use a flash or focus the torch directly into the eyes of these fish, especially when they are still in their dens.

ALSO...

The territorial nature of the groupers causes some large specimens to be old acquaintances of the Costa Brava's diving centres' guides; and they not only know where to find them, they also know what type of character they have. They will give us the guidelines to ensure a safe and satisfactory observation.





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