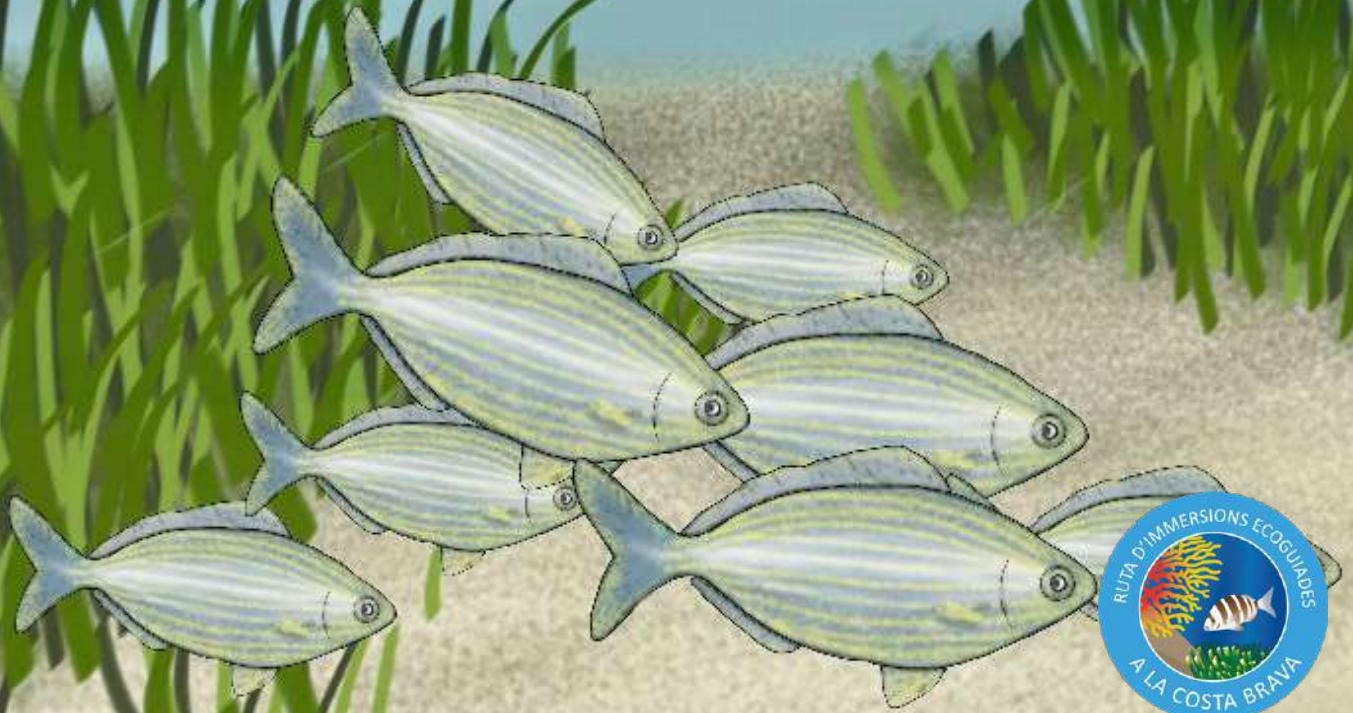
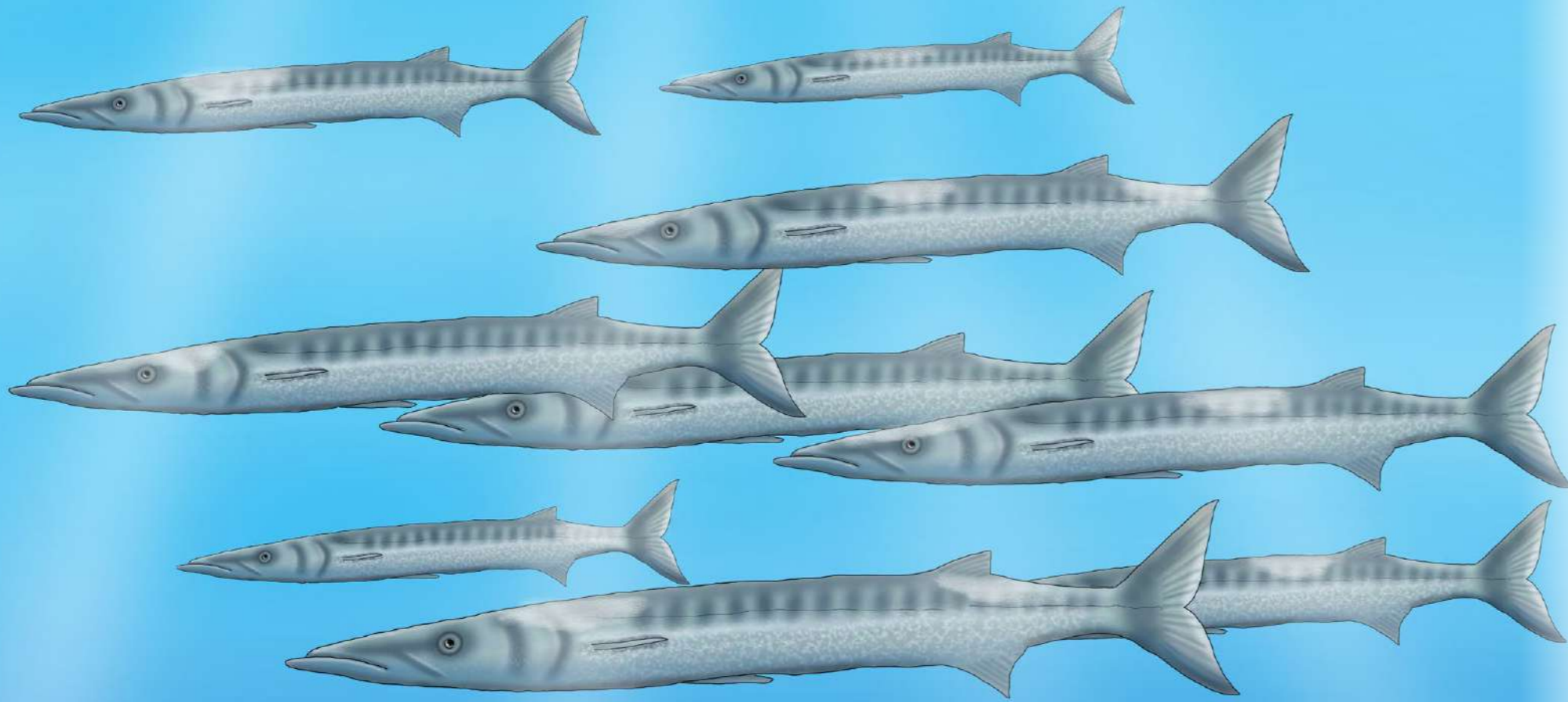


# AS IF THEY WERE ONE: SCHOOLS OF FISH, FROM SALEMAS TO BARRACUDAS





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One of the scenes that is most interesting when doing a dive, is to see a school or a shoal of fish. Sometimes they are enormous shoal of fish and other times a single species swimming synchronised in a school, as if they were an everchanging single organism in constant movement.

There are species that always live in schools and some only group together at certain times of the day or at certain seasons during the year.

## SCHOOLS OF FISH

Fish group together into large schools for various reasons, and don't always do so continuously.

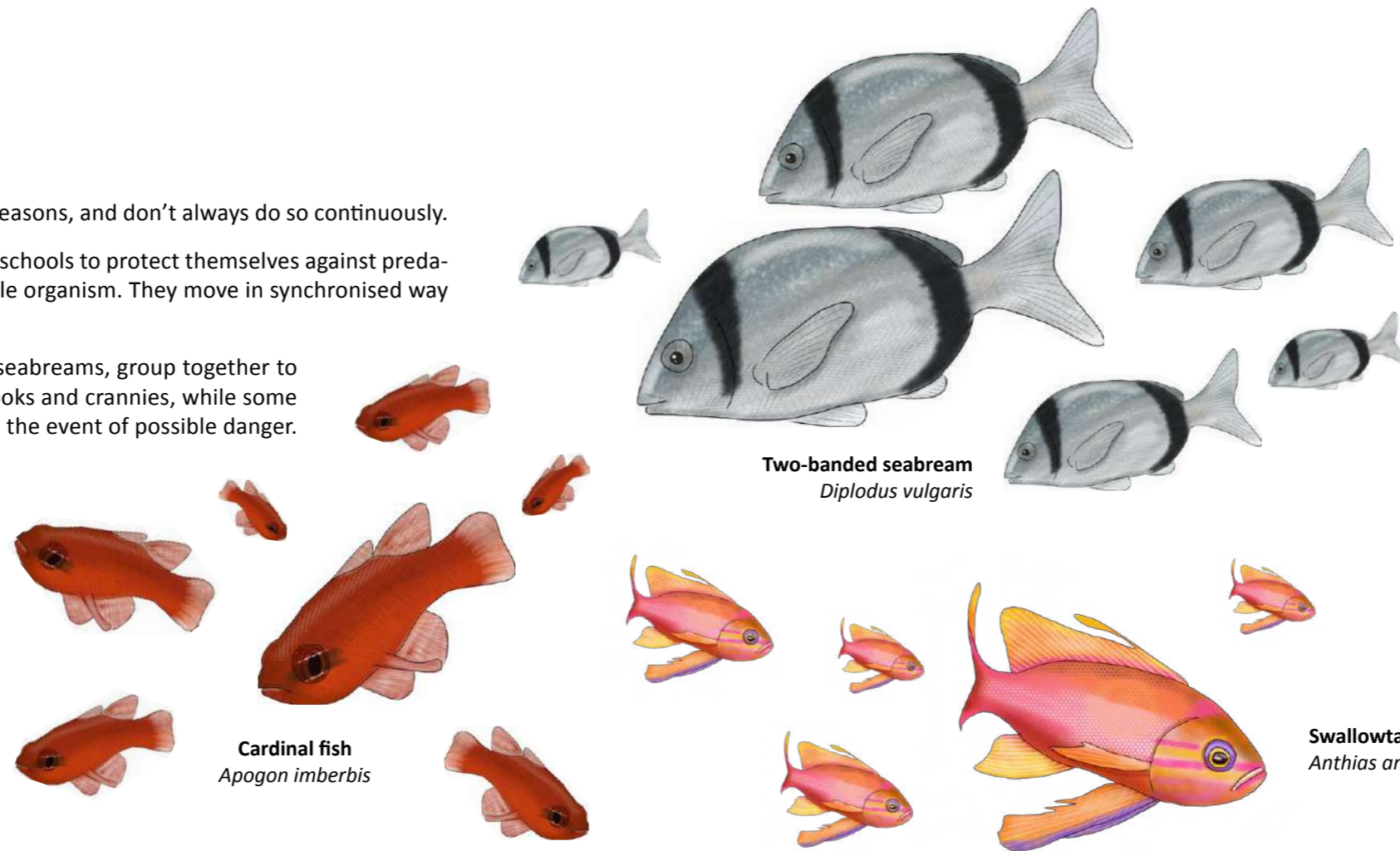
Sardines and anchovies, among others, form large schools to protect themselves against predators by simulating that they are a much larger single organism. They move in synchronised way creating aesthetic changing shapes.

Other species, such as salemas and two-banded seabreams, group together to be able to eat in the posidonia or in the calmer nooks and crannies, while some keep on the look out to warn the rest of the fish in the event of possible danger.

Mulletts also form schools (in this case smaller) to stir up the seabed and raise up any possible sediment as much as they can, thus making it easier to feed themselves better.

Several species, such as gilthead seabreams and groupers only come together to reproduce, and they are solitary during the rest of the year.

In summer, the barracudas approach the coast-line by forming schools and often swim together, generating a very characteristic circle.



**Two-banded seabream**  
*Diplodus vulgaris*

**Cardinal fish**  
*Apogon imberbis*

**Swallowtail sea-perch**  
*Anthias anthias*

## DID YOU KNOW THAT:

There are fish that only form schools during the day, to move around and feed safely and at night they sleep on their own, such as blotched picarels and salemas. In contrast, there are those that hunt separately, and which come together in moments of less activity, such as barracudas.

Some species are grouped into schools of fish of the same age, which will stick together throughout their life cycle, whereas others are mixtures of different ages and there are even cases of shoals of fish formed by distinct species.

## HOW DO SCHOOLS OF FISH FORM?

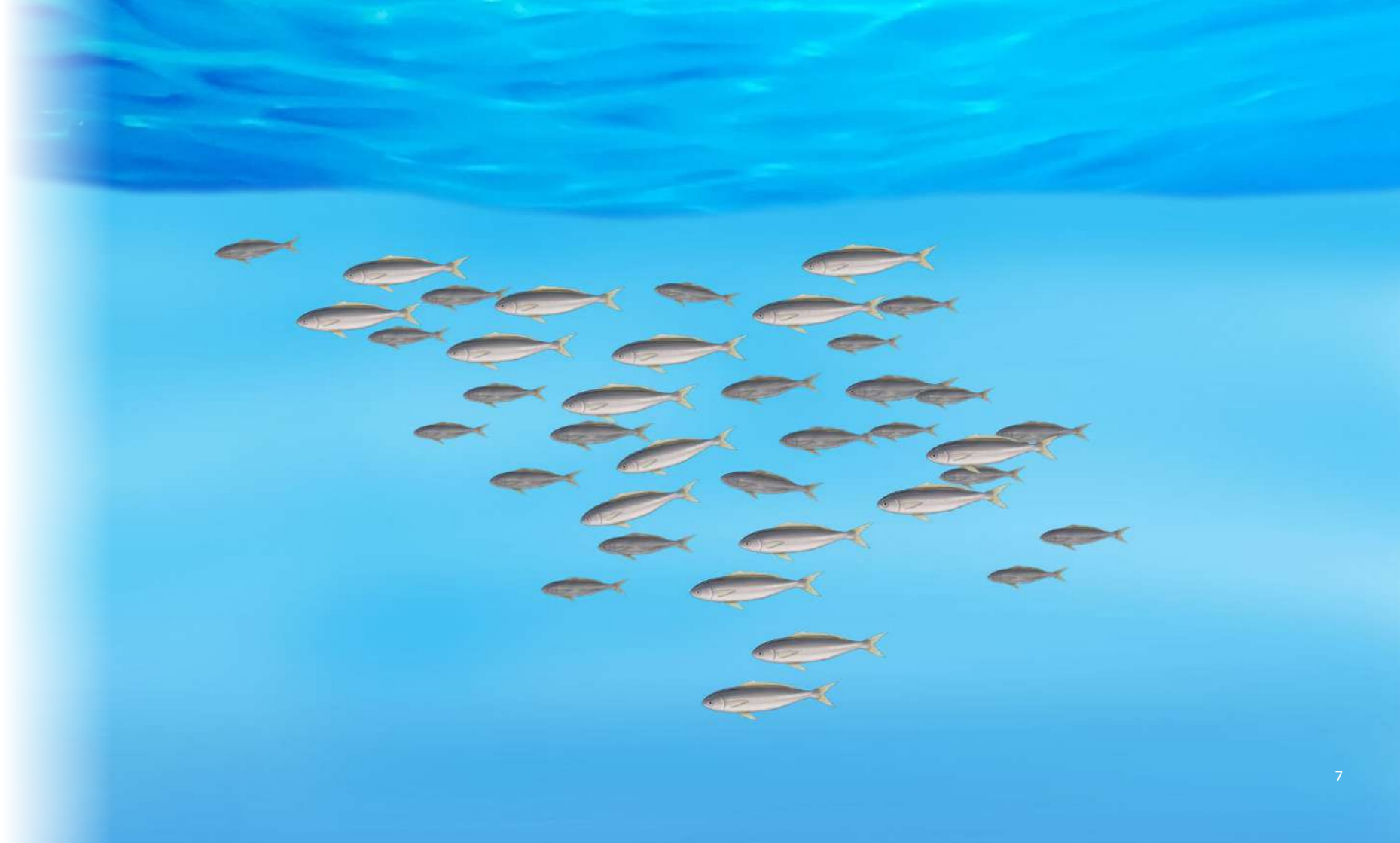
This is a question that has not yet been determined in all cases.

In the case of fish that are grouped into schools of individuals of the same age and that spawn their eggs in calm waters instead of letting them drift; they complete their life cycle together right from the outset, they are born, grow up and always live together with the group. Moreover, when two groups meet, they may join together to form a larger one.

As for migratory fish, as is the case with certain flocks of birds, despite these fish living alone or in small groups, their instinct pushes them towards their destination, and they meet and join larger groups in their journey there.

Reproductive concentrations remain a mystery. We know that the purpose is to synchronise the spawning and increase the probability of the eggs being fertilised, but we don't know why they go to a specific point (beyond the fact that they usually look for sheltered and fairly shallow areas) or whether they are able to communicate with one another.

In the case of salemas, gilthead seabreams, blotched picarels, two-branded and white seabreams, we know that they can be found in the areas where they feed and that is where they form groups to protect themselves from predators. We also know that these groups are not closed, they share spaces and the number of individual fish that form part of it can vary greatly; however, we don't know if there is any particular mechanism that helps them find each other.



## WHERE TO OBSERVE THE SCHOOLS OF FISH

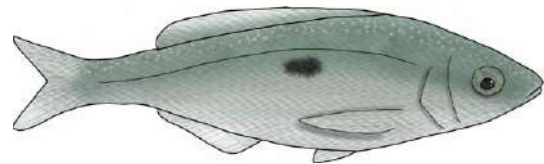
As we have mentioned, each species will form schools in different places and at different times of the year:

The salemas and blotched picarels on sea meadows and posidonia and the two-branded, saddled and white seabreams near the rocks in areas with moderate currents, in both cases at a wide range of depths.

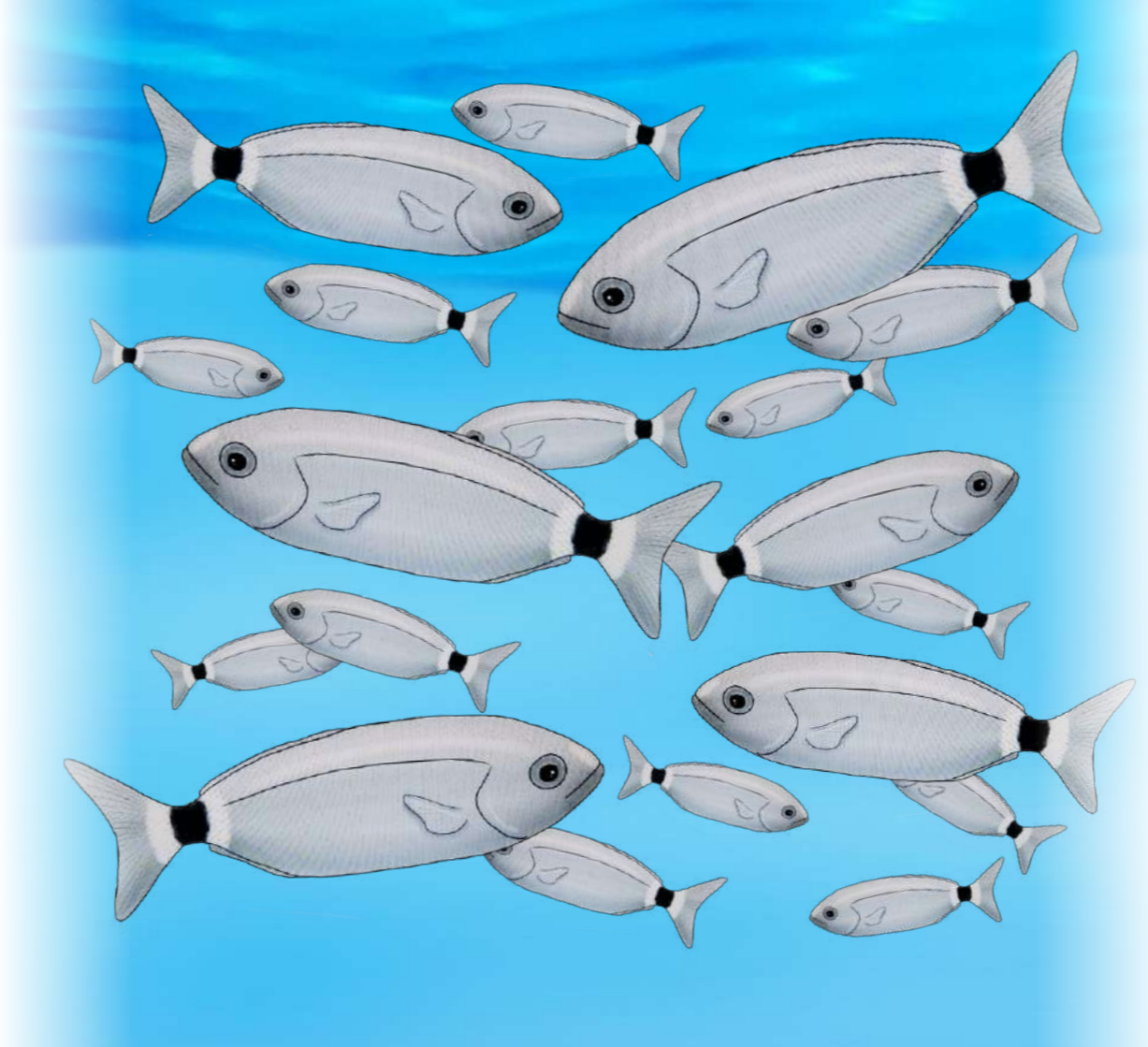
We'll see the barracudas forming the characteristic circles in areas associated with deep waters and reefs, the striped seabreams on the capes and small points at a distance from the rock.

As for the gilthead seabreams we will find small schools on the sandy bottoms in areas which has fresh water flowing into it and small groups of brown meagres take shelter under deep rocks that jut out from the seabed.

Sardines and anchovies will pass through from September onwards, in the less sheltered areas.



**Picarel**  
*Spicara maena*



## HOW TO SEE THEM

Observation of the schools of fish will vary slightly depending on the species, but the key is to always make a very calm approach, avoiding noises, sharp movements and with a minimal movement of arms and fins. This will allow us to get very close without scaring them.

In the case of schools of sardines or anchovies, it's easier to see them from a distance, being able to appreciate the magnitude of the school much better.

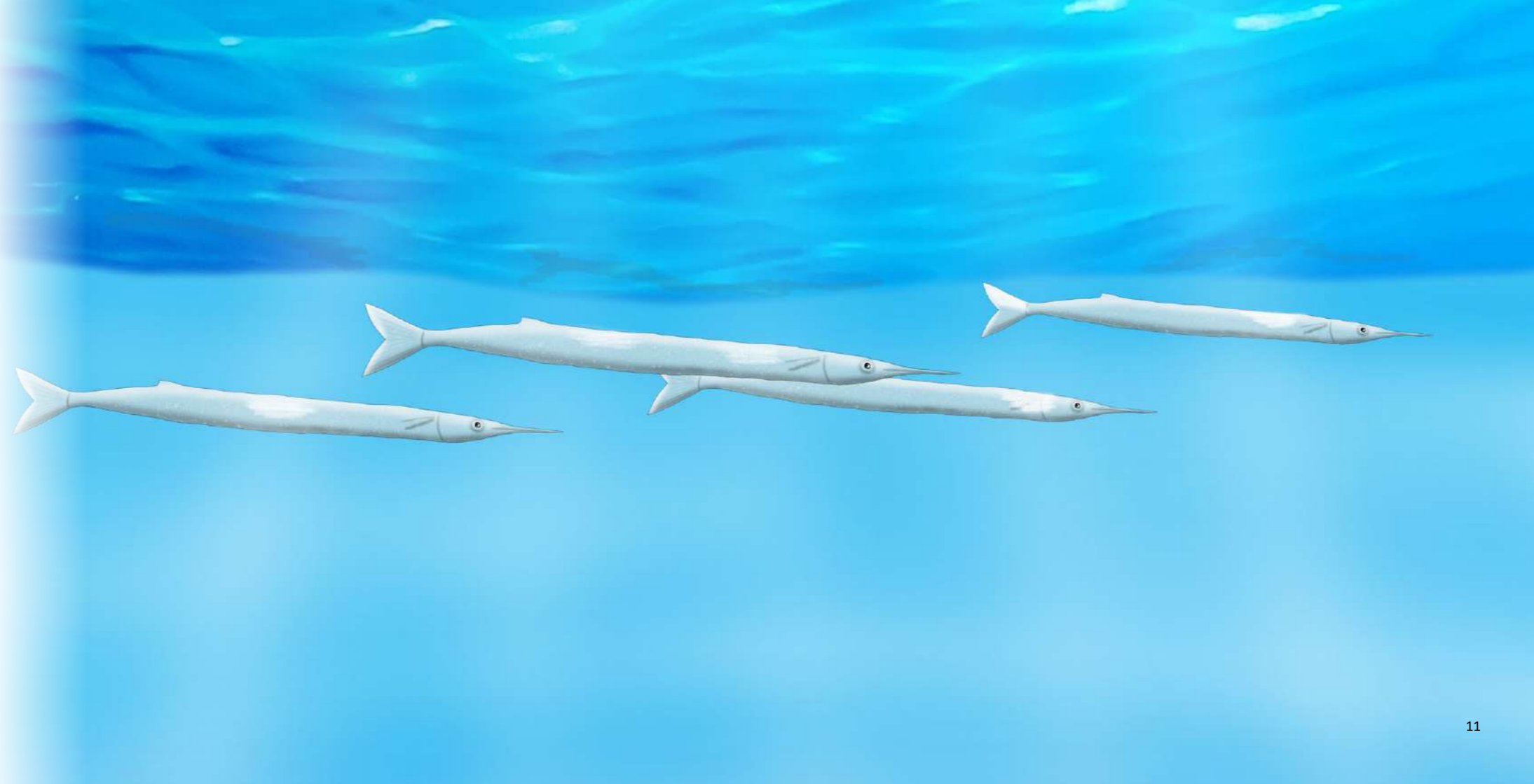
## PRECAUTIONS

It is very important not to interfere with their normal behaviour. This can be very easy to do and often tempting, causing a school to disperse or change direction by swimming amongst them or by moving our arms or fins, but this is something that must be avoided without question.

A safe distance and gentle movements will enable us to enjoy the display, observing a shoal of fish developing its usual activity.

## DID YOU KNOW THAT?

Squid, sardines, anchovies, etc. are just some of the species that are fished which form large schools. They are attracted by light, which is why fishermen use what is called “light boat”, an auxiliary boat that illuminates the centre of the school, causing it to tighten together, to be able to encircle it and capture it with the nets.





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