Algae: Reef Vegetation

Algae are marine plants represented by a wide range of shapes and sizes on the reef. They need light and minerals to live, which they get directly from the water column. They are fixed on dead corals or on sand using a structure called holdfast. Around 400 species are found in French Polynesia.

- Sargasse algae are common in areas of strong current. They have characteristic floats

- The Halimeda algae is a calcareous algae. Its skeleton contributes to the formation of reef sand

- Turbinaria algae are very common on the entire reef. Due to its tough structure, this algae is rarely consumed by fish

- Algal turfs cover dead corals and coral debris

- Padina algae are found mainly on reefs close to the coast

OBSERVE IN THE LAGOON:

- Sargasse floats that explode under the pressure of your fingers

- The green parts of Halimeda, which form strings

- The tough texture of Turbinaria algae

- The discreet but abundant algal turf on dead corals. Many of reef herbivores feed on it

Some large algae common in the lagoon

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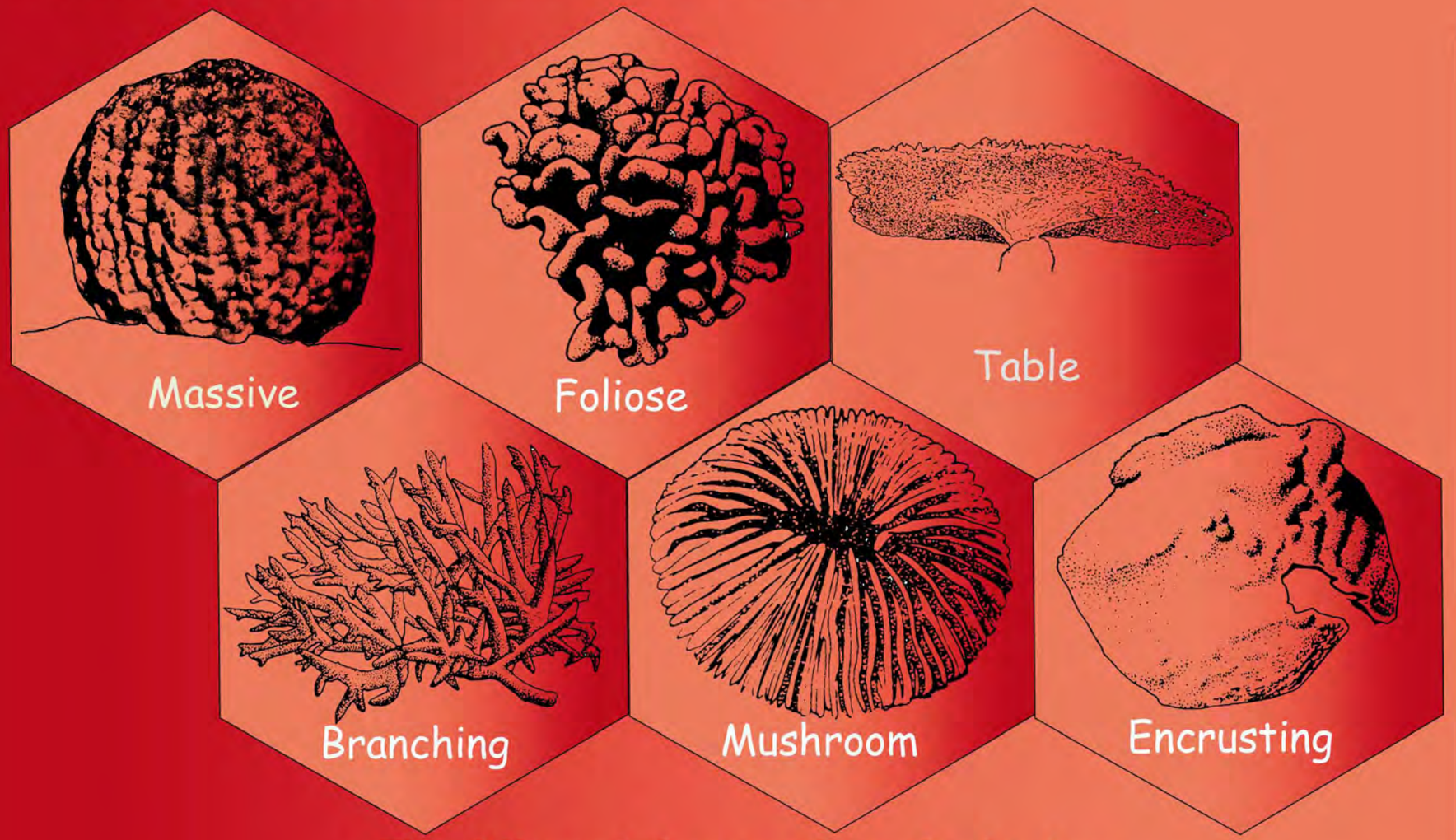
Corals: Reef Builders

Corals are animals containing microscopie algae called zooxanthellae.
The calcium skeleton of a coral accumulates with each generation, building up over the thousands of years the reef has existed.



The different shapes of coral colonies

OBSERVE IN THE LAGOON:

- The different shapes of coral colonies in the landscape

- The difference between dead coral (colorless and covered by algae) and live coral

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Some Curiosities Of Our Reefs

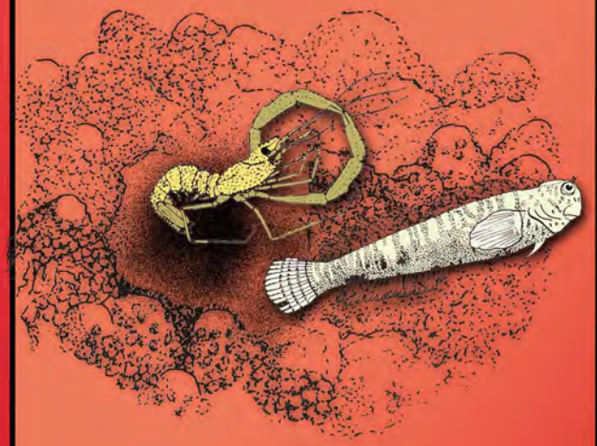
The reef shelters thousands of species. Some of them, by their shape, colors, or behavior, amaze and astonish us more than others. Four of them are presented here. They are relatively easy to find around the buoy.

THE CHRISTMAS TREE WORM

The only parts of christmas tree worms visible outside their coral shelter are their two colorful cone-shaped gills. They allow the worm to both breath and eat

OBSERVE IN THE LAGOON:
- The defensive spine at the shelter entrance
- The withdrawd and return of the gills
- Their colors

THE GOBY AND THE SHRIMP



On sand, some burrows are occupied by two associated roommates: the goby and the shrimp. The goby plays the role of a sentry on the lookout for danger, while the shrimp, which is blind, digs and maintains the habitat

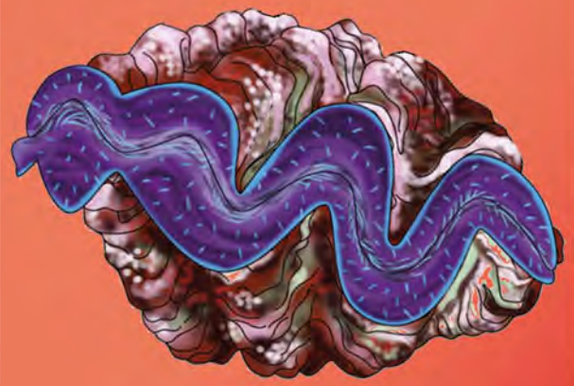
OBSERVE IN THE LAGOON:
- The motionless goby at the burrow exit
- The regular movements of the shrimp carrying sand
- Their common withdrawd when in danger

THE CLEANER WRASSE

The cleaner wrasse swims briskly around other fishes to clean them from their parasites

OBSERVE IN THE LAGOON:
- The swimming of the cleaner wrasse around other fish
- Its feeding behavior

THE GIANT CLAM



The giant clam is a mollusc that needs light to live, and filters sea water to eat and breath

OBSERVE IN THE LAGOON:
- Its colorful mantel
- Its raised position to capture light

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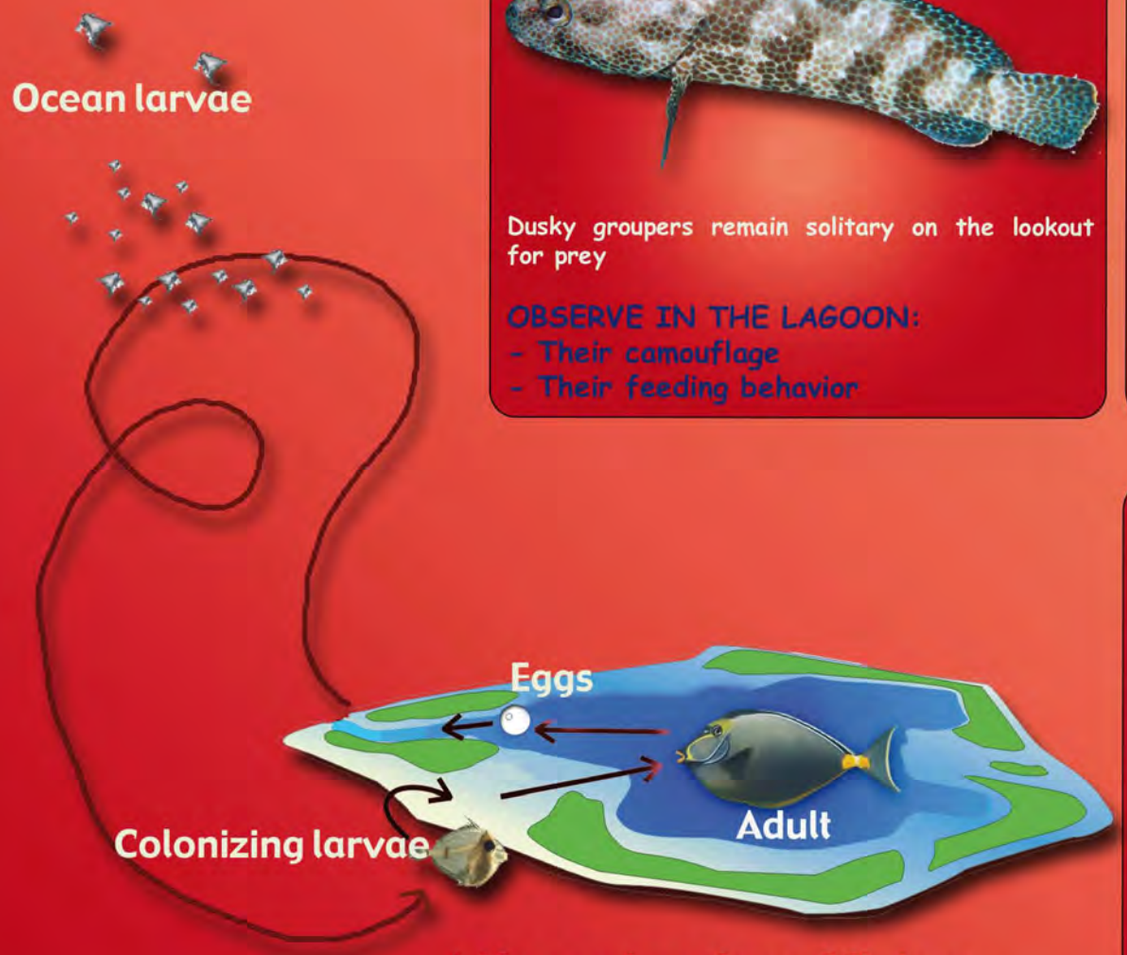
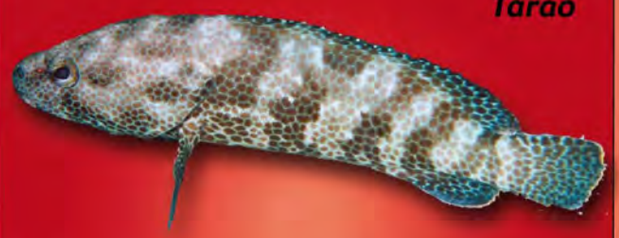
Fish: The Animated Mosaic Of The Reef

Fish do not remain on the reef during their entire lifetime. Fish egs hatch to form larvae, which leave the reef for the open ocean. After a couple of days to a couple of months, they come back to colonize the islands.



Life cycle of reef fishes

Tarao



Dusky groupers remain solitary on the lookout for prey

OBSERVE IN THE LAGOON:
- Their camouflage
- Their feeding behavior

Manini

Surgeonfish owe their name to the sharp scalpels at the base of their caudal fin

OBSERVE IN THE LAGOON:
- Their scalpels (or sharp blade)
- Fish grazing upon algae

Pahoro

Parrotfish consumme the algae at the surface of dead coral with their beak-shaped jaws

OBSERVE IN THE LAGOON:
- Their jaws like parrot beaks
- Fish bite-marks on dead coral

Paraharaha

Omnivorous or coralivorous butterflyfish

OBSERVE IN THE LAGOON:
- They are often found in pairs
- Their intense colors and varied patterns
- Their pointed mouths

Atoti

Damselfish live in schools inside a small territory

OBSERVE IN THE LAGOON:
- Their search for food in the water column
- Their withdrawd into their coral shelter to protect themselves from a predator or danger

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