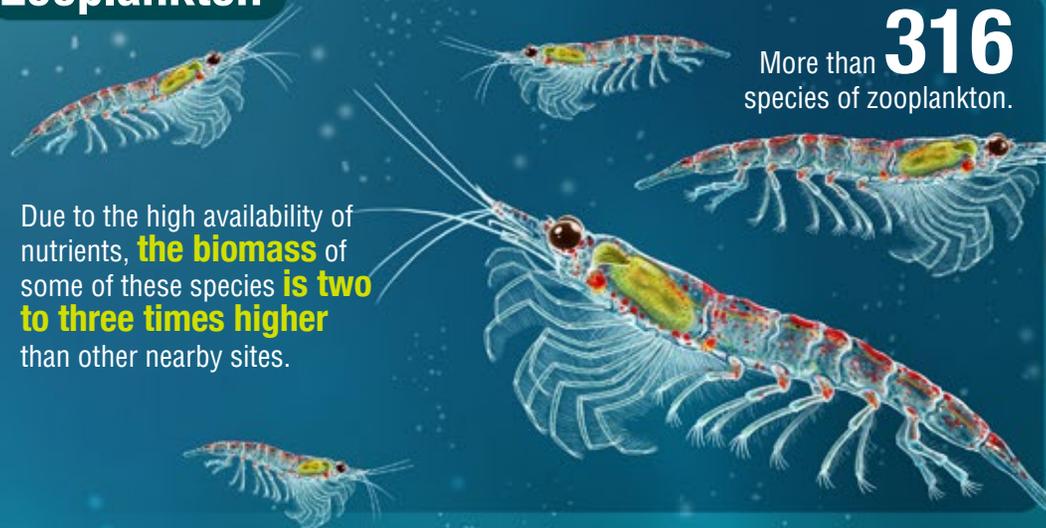


Marine Biodiversity in the Thermal Dome

Due to its oceanographic characteristics and high concentrations of plankton, the Dome **is an ecosystem with a great abundance of species**. Some of them tend to move between the Dome and the coastal areas of Central America, where they are used for activities such as tourism and fishing.

Some of the species that we find in the Thermal Dome are:

Zooplankton



More than **316**
species of zooplankton.

Due to the high availability of nutrients, **the biomass** of some of these species **is two to three times higher** than other nearby sites.

Humboldt squid (*Dosidicus gigas*)

- Is the main species of squid caught in the Eastern Tropical Pacific.
- It congregates on the western edge of the Dome, over 100 m deep.



2 m
Up to 50 kg.



Up to 2 m

Up to 200 kg.

Yellowfin tuna (*Thunnus albacares*)

- Species with **high commercial value**.
- The Thermal Dome and its surrounding areas make up one of the four areas in the Eastern Tropical Pacific with the greatest potential for finding yellowfin tuna.



Giant Manta

5 to 8 m



Up to 1500 kg.

Manta rays

- The most common species in this region are the giant manta ray (*Mobula birostris*), the reef manta ray (*Mobula alfredi*), the Munk's devil ray (*Mobula munkiana*), the spinetail mobula (*Mobula japanica*), the Chilean devil ray (*Mobula tarapacana*), the Bentfin devil ray (*Mobula thurstoni*) and the pelagic stingray (*Pteroplatytrygon violacea*).
- The giant manta population has been listed as vulnerable on the IUCN red list and its main threat is overfishing.

Marine Biodiversity in the Thermal Dome

Sea turtles

The Dome is used as a transit site for sea turtle species that nest in the Central American region, especially the olive ridley turtle (*Lepidochelys olivacea*) and the leatherback (*Dermochelys coriacea*).

Leatherback



Reduction of over **97%** of its population over 3 generations in the Eastern Pacific.

- It is **the oldest** of sea turtles.
- Uses the Dome as a crossing point on its way to feeding and spawning areas, and as a growth area for hatchlings.

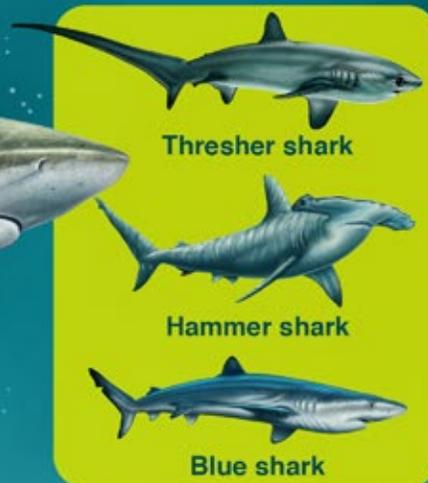


Silky shark

- It is the most captured shark species in the region, probably because it lives 99% of its time in surface waters.
- Between 1994 and 2015, their populations decreased by **32%** due to **overfishing**.

Sharks

Several species of sharks have been recorded in the Dome area, including the common thresher (*Alopias vulpinus*), the blue shark (*Prionace glauca*), the silky shark (*Carcharhinus falciformis*) and the scalloped hammerhead (*Sphyrna lewini*).



Ridley sea turtle

The Dome is an area frequently visited by this species that uses the beaches of the Central American region as a spawning site.

Between 1970 and 2000, their populations shrank between **31%** and **36%**



Billfishes

- Among them are the Indo-Pacific sailfish (*Istiophorus platypterus*), the swordfish (*Xiphias gladius*), the Atlantic blue marlin (*Makaira nigricans*), the black marlin (*Istiompax indica*) and the striped marlin (*Kajikia audax*).
- All these species are of interest for commercial fishing. Sailfish and marlin are particularly attractive for sport fishing.
- Sailfish are usually found on the periphery of the Dome, where they have greater feeding opportunities.



Marine Biodiversity in the Thermal Dome

Cetaceans

At least **30 species of cetaceans** have been identified in the Eastern Tropical Pacific, three of them with a distribution strongly linked to the Thermal Dome:

- the common dolphin (*Delphinus delphis*)
- the striped dolphin (*Stenella coeruleoalba*)
- the blue whale (*Balaenoptera musculus*)



Blue whale

Up to 30 meters



It is the **biggest** animal to ever inhabit the planet.



- It is in **danger of extinction** according to the IUCN Red List.
- The abundance of blue whales in the Dome has been associated with high concentrations of food ("Krill"), which reach levels of up to **312,000 individuals/m³**.
- Important site for **birthing and feeding for this species**.



Striped dolphin and common dolphin

- They are found in high concentrations in the Dome.
- In the case of the striped dolphin, dense pods of up to **500 individuals**, with an average of **100 animals per group**.

