

Relevant aspects about the Thermal Dome

Unique oceanographic phenomenon in the American continent

It is the result of the action of the trade winds, the marine currents and the displacement of the Intertropical Convergence Zone.

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.

Blue whales, Humboldt squid, yellowfin tuna, rays, sea turtles and sharks as the Hammer shark, Silky shark and blue shark, are some of the species we can find in the Thermal Dome.

What is its importance?

- ▶ It is an important field for feeding, reproduction and migration for a large number of species.
- ▶ Buffers the effects of climate change due to the enormous amount of carbon fixed in its waters, as a result of the photosynthesis process of microalgae.
- ▶ The species that visit the Dome attract tourism to Central America's coastal areas, revitalizing the economy.
- ▶ Is in the path for important international maritime routes due to its proximity to the Panama Canal.
- ▶ Fishing operations for commercial and sport fishing, it is an area of high concentration of yellowfin tuna that attracts fishing vessels from Asia, Europe and South America.

What are the threats to the Thermal Dome?

Overfishing

Fishing pressure + Lack of knowledge of the status of the captured populations = Area and commercial species highly vulnerable

Maritime traffic

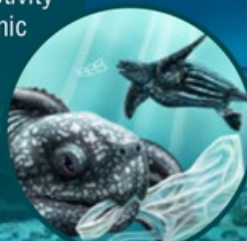
These sea routes traverse the Dome, increasing the probability of collisions with marine species, the Dome is highly vulnerable to damage by international maritime activities.

Climate change

Inside the Dome, this change in oceanographic variables (currents and temperature) could decrease its productivity and therefore its species richness, affecting the economic activities that depend on it.

Plastic Pollution

The trash ingested, including microplastics, can affect the physiology of whales, dolphins, sea turtles, birds, fish, invertebrates and other organisms.



What solutions are available?

To give special protection to the Dome and to protect it from negative impacts caused by international maritime activities, the SARGADOM Project and the MarViva Foundation are working with Central American Countries and the International Maritime Organization to declare in the Dome the first Particularly Sensitive Sea Area (PSSA) in the High Seas.