INFORMATION POINT NO. 5: NON-FISHING ENVIRONMENTAL IMPACT

Tenerife receives around **6 million tourists a year**, around 36 million overnight stays a year, **and has a population of almost one million inhabitants**. This large number of users in such a limited space is generating increasing pressure on the sea and coastal areas of the island. Waste management, water purification, the use of space and the protection of fauna become real challenges in an area with such a **varied and fragile biodiversity.**

WASTE. PLASTICS AND MYCOPLASTICS

Pollution of the oceans and coasts by **rubbish**, especially plastics and microplastics, affects the state of the oceans and the lives of all marine animals. A report by the International Union for Conservation of Nature (IUCN) found that 9.5 million tonnes of plastic reach the oceans every year.

The **plastic** in the animals' stomachs has a satiating effect on them, causing them to die of starvation. Plastic additives also contain endocrine disruptors that affect the animals' health and enter our bodies when we eat animals that have consumed plastic.

DISCHARGES AND OUTFALLS

Pollution from untreated or inadequately treated **discharges** has a direct impact on the degradation of all coastal and marine ecosystems. Despite the existence of regulations that prohibit it, in Tenerife there are still numerous illegal and uncontrolled discharges of untreated water into the sea, although in recent years attempts have been made to correct this situation.

EFFECTS ON FAUNA

The marine and coastal fauna of Tenerife are the main victims of the intensive use of the area. The damage is such that there is a great loss of biodiversity, even leading to the extinction of endemic species, an effect that is irreversible.

The main effects on Tenerife's marine and coastal fauna are as follows:

- **Noise pollution**: one of the causes of cetacean strandings.
- **Light pollution**: mainly affects seabirds.
- **Presence of rubbish and plastics**: affects all marine and coastal animals.
- **Marine collisions**: mainly affecting cetaceans and turtles.

- **Overexposure to human presence**: in the case of cetaceans, uncontrolled sightings lead to an increase in stress levels (high levels of cortisol in the blood of pilot whales in the Canary Islands). In the case of birds, it leads to the abandonment of nests, the case of the osprey being emblematic.
- **Lack of food** leading to malnutrition, due to changes in the natural distribution of their prey (due to global warming, overfishing, etc.).
- **Presence of introduced animals**: cats and rats are predators that seriously affect birdlife and lizards, among other species, present on the coasts.

BUILDINGS AND COASTAL ALTERATIONS

The over-occupation of the coastline in the Canary Islands is one of the greatest in Spain and Europe. The great pressure from urban development and tourism has converted most of the coastline into urbanised areas and promenades.

These serious alterations in coastal areas lead to the irreversible disappearance of key habitats such as, for example, **intertidal pools**, which are essential habitats for a wide variety of organisms (seaweed, shrimps, sea urchins, crabs, fish, etc.). They are also resting and feeding areas for many species and marine nurseries (nursery areas for a wide variety of organisms, some of which are of interest to fishermen, such as white sea bream, parrot fish, groupers, octopus, etc., whose first stages of life develop there).

If we do not preserve the pools, these breeding areas will be affected, which will negatively affect the development of their adult stages.

Likewise, the modification of the coastal profile minimises the space available for the development of such fragile plant communities as the coastal halophyte belt, which are as threatened as the thermophilic forest.

DESTRUCTION AND LOSS OF HABITATS

The disappearance of forests in the sea is as serious as the disappearance of forests on land, although it is not as visible to our eyes.

In the Canary Islands, 90% of the surface area of the underwater forests of the species *Gongolaria abies marina* has been lost. These forests play an important

role in the coastal ecosystems of the Canary Islands: they provide food and habitat for hundreds of species of flora and fauna.

Only in the localities of **Punta del Hidalgo (Tenerife)** and in the north of El Hierro are some relatively large underwater forests of this species preserved.

GLOBAL WARMING AND OCEAN ACIDIFICATION

Seas and oceans play a key role in regulating global temperature and combating climate change, given their capacity to absorb CO_2.

Currently, the ocean absorbs about 30% of the CO_2 produced by humans, but this leads to an increase in ocean acidity.