

WHY tuna breed in the Balearic Islands and HOW we know

Atlantic bluefin tuna (*Thunnus thynnus*) visit the Balearics for the same reason as everyone else: **the crystal clear water, the excellent local food and... the absence of predators.**

We're going to tell you about what we've learned from the oceanographic campaign **Tunibal** which we run each summer, to find out more about tuna and their ecosystems.

1 The route

Atlantic bluefin tuna swim from one side of the Atlantic Ocean to the other in search of prey. By tracking individuals, we can discover their migration routes and find out when they enter the Mediterranean to mate.

There are a number of tracking methods: chip, acoustic or satellite. These allow us to follow individual fish over a period of several years.

Experts consulted: Diego Alvarez, Asvin Pérez, Melissa Martín, Patricia Reglero, Pilar Tugores, Rosa Balbín, Mar Santandreu, Rocio Santiago.



Designed and illustrated by Flavia Gargiulo for planettuna.com



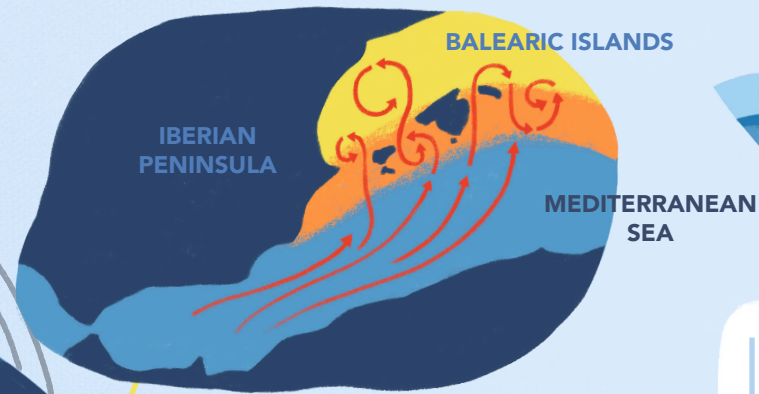
Cofinanciado por la Unión Europea

Co-funding from Proyecto Baleatun (ref: PDR2020/78)

This infographic has been co-funded by the European Union through the European Maritime, Fisheries and Aquaculture Fund (EMFAF) within the national program for the collection, management and use of data for the fishing sector and support for scientific advice with respect to the common fisheries policy.

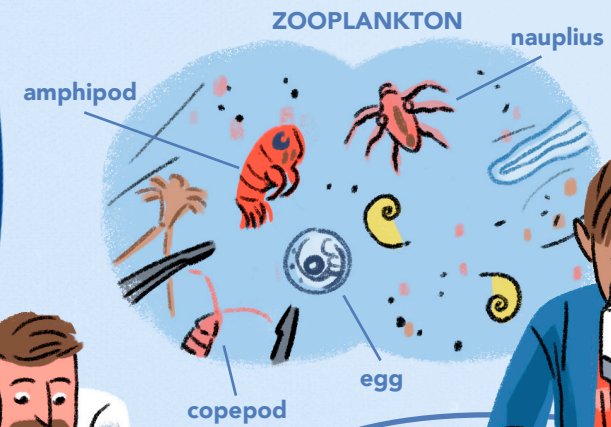
2 The destination

The Balearics are special because water from the Atlantic mixes with water from the Mediterranean, generating currents and eddies that are ideal for hungry, fast-growing larvae.



2.2 The perfect menu

There is sufficient food for the larvae to grow quickly, enabling them to swim faster. As a result, they are better able to escape their predators: other bigger larvae and jellyfish larvae (ephyrae).

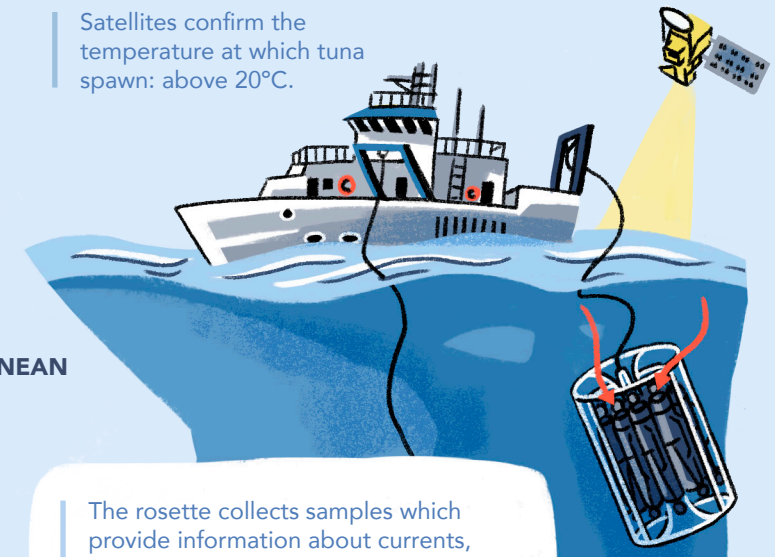


Integration of data and statistical analysis.

2.1 The perfect water

From the end of May until the middle of July.

Satellites confirm the temperature at which tuna spawn: above 20°C.



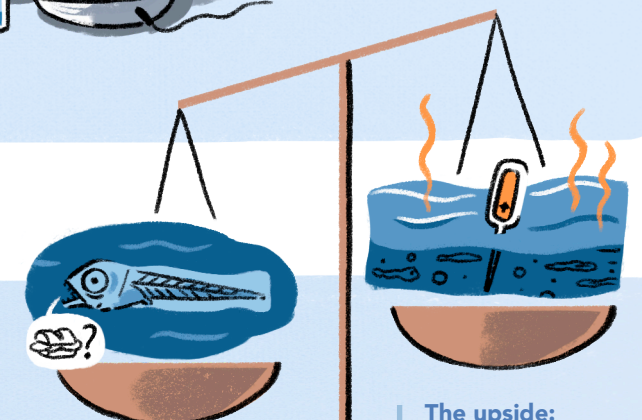
The rosette collects samples which provide information about currents, salinity, oxygen, chlorophyll, nutrients, DNA... to identify the water conditions and variations at the time of spawning.

Fishing nets collect samples of plankton, which include eggs and larvae of tuna and other species, as well as other organisms that they feed on.

The samples are analyzed in the laboratory.

3 A fragile equilibrium

When all the pieces of the puzzle fit together then everything is fine, but sometimes there are factors that affect the tuna's survival and the equilibrium of whole ecosystems.



The downside: a lack of food is a threat to survival.

The upside: heatwaves help larvae to grow more quickly.