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DE ESPAÑA

MINISTERIO
DE MEDIO AMBIENTE, Y
MEDIO RURAL Y MARINO



CAMPAÑA MEDUSAS



Jellyfish Campaign

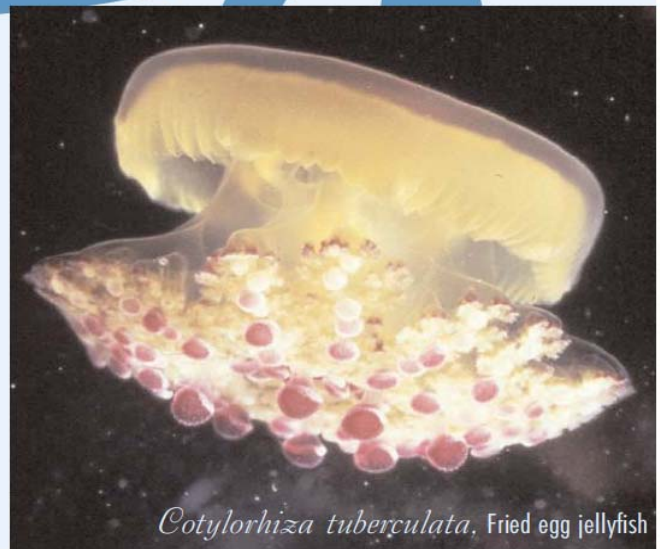
THE CAMPAÑA MEDUSAS

The Campaign for the Study, Detection and Monitoring of Jellyfish Aggregations, promoted by the Coast and Sea Sustainability Directorate of the Ministry of the Environment and Rural and Marine affairs, is focused on the early detection of the aggregations of jellyfish and waste through a operative network of observers throughout the Spanish coast.

Although the jellyfish blooms are a natural phenomenon, sometimes they can be a nuisance for beach users. Thanks to the Campaña Medusas, it is hoped to advance into the knowledge of this animals and their distribution, as well as predict their arrival at the bath areas, in order to improve the state of our beaches.

The Campaña Medusas tackles the spreading of information about biological and ecological characteristics of these organisms, effects of large aggregations on the marine environment, as well as the objectives and results of this campaign, to beach users and another people related to the sea.

The aim of the Campaña Medusas is the vigilance and sighting of the presence of jellyfish, but it is not consider the removal of them. In this regard, according to the Campaign Protocols, the Ministry of the Environment, and Rural and Marine affairs will only act in specific situations.



Cotylorhiza tuberculata, Fried egg jellyfish




TYPES OF JELLYFISH

The most common species of jellyfish in the Spanish coast are:

Scientific and common name	Diameter (cm)	Colouring	Hazard
<i>Cotylorhiza tuberculata</i> , Fried egg Jellyfish	20-35	Yellowish brown	Slight in tentacles
<i>Rhizostoma pulmo</i> , Rhizostome jellyfish	90-100	Bluish white	Medium
<i>Pelagia noctiluca</i> , Luminiscent jellyfish	5-10	Purplish-pink	High
<i>Chrysaora hysoscella</i> , Compass jellyfish	Up to 30	Yellowish white	High
<i>Aurelia aurita</i> , Common jellyfish	10-15	Transparent	Low
<i>Physalia physalis</i> , Portuguese man-of-war	30 *	Purplish	Very High
<i>Velella velella</i> , By-the-wind sailor	1 - 5	Transparent blue	Harmless
<i>Aequorea forskalea</i> , Many-ribbed jellyfish	Up to 30	Transparent	Harmless

* float length/In fact this is not a jellyfish, it is a "Siphonophore"



Pelagia noctiluca, Luminiscent jellyfish



JELLYFISH BLOOMS REASONS

The exactly reasons to explain jellyfish blooms are currently under research, but it is known that these increases are seasonal and a natural phenomenon. Such blooms seem to be increasing in recent years, and suggest the following as the most likely causes: the decline of their natural predators, like turtles or tunas; changes in climatic factors such as rainfall or global temperature (possibly associated with climate change); hydrographic peculiarities of the area, as well as pollution from land-based sources.



Aequorea forskalea, Many-ribbed jellyfish



RECOMMENDATIONS TO BATHERS

- Be careful when you are facing with a proliferation avoid to get into the water, even on the shore, because there may be fragments of tentacles with the same stinging effects as jellyfish. In case of doubt, ask the surveillance patrol at the beach.
- Do not touch jellyfish, even if it seems to be dead or their fragments: their stinging power persists up to 24 hours in dry conditions.
- If you see jellyfish in the water and no communication has been given, notified to the closest monitoring beach post.
- Breaking wave area is a hazardous zone in case of jellyfish proliferation, as many of its fragments, with stinging action, may concentrate there.
- To minimize the risk of stinging, you can use sunscreen lotion or protect yourself with light clothes.



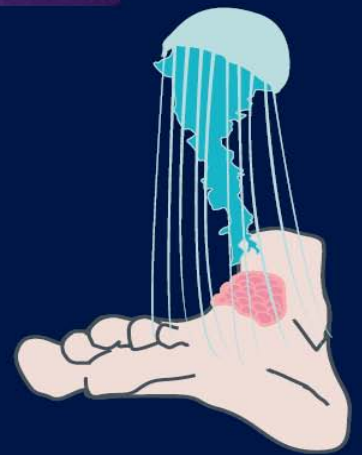
Rhizostoma pulmo, Rhizostome jellyfish



Chrysaora hysoscella, Compass jellyfish

IF A JELLYFISH STINGS YOU...

- DO NOT SCRATCH or rub the affected area, not even with a towel or sand.
- Wash the area with seawater, NEVER with freshwater.
- DO NOT APPLY ammonia, urine or vinegar.
- Remove remains or tentacles with the help of some pincers, if you do it with your hands, protect yourself properly.
- To relieve pain apply cold for about 15 minutes, WITHOUT RUBBING. If using ice, avoid direct contact with skin.
- Children, the elderly or allergic people may need special attention when affected.
- If any symptoms are shown, such as nausea, vomiting, dizziness, muscle cramps, headache and general discomfort, you should go to the nearest hospital, and, if possible, give a report on the type of jellyfish that caused the sting.
- Disinfect the wound with iodized alcohol 2 or 3 times a day for 48 to 72 hours.



WHAT IS A JELLYFISH?

Jellyfish are animals, most of them marine within the Phylum of Cnidarians. They possess some specialized cells (cnidocytes) distributed throughout their body, especially in its tentacles, sometimes in an amount up to 1,000,000 per cm². The stinging cnidocytes are provided with a very long filament inside, sometimes with spines, which is activated when changes of temperature and/or pressure occur, injecting toxins from the capsule, and producing stings when skin contact happens. This mechanism is used by jellyfish for its defence and capturing prey (mostly small planktonic animals).

Jellyfish are of gelatinous consistency, have a bell-shaped body, with several cavities. The top and most visible part is called umbrella which, on its edge, presents long tentacles, and under the umbrella, the oral arms around the mouth are found. Tentacles and oral arms help in the capture of their preys moving them towards the mouth.

Jellyfish live suspended in the water column, being part of the plankton. Even they have a slight ability to move, they are generally unable to overcome ocean currents and consequently are dragged by them and often reach the coast.

A period of some species life's cycle occurs fixed to the substrate, as a polyp form, which can generate jellyfish, generally during the period from May to August. In other species of jellyfish there is no polyp stage, and its whole life develops being part of the plankton.

Thus, these organisms are part of the marine ecosystem and play a key role in maintaining a good environmental status of marine ecosystem.

HOW TO PARTICIPATE IN THE CAMPAÑA MEDUSAS

If you sail frequently, and you think you are able to inform about the presence of jellyfish or marine litter, you can participate as observer for the *Campaña Medusas*. At the internet address www.marm.es (Costas section) you can find detailed information on the way to participate. You can also use the free phone number 900 102 326.

