NeumaticOUT

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IMPROVING THE KNOWLEDGE ABOUT THE ABANDONMENT OF END-OF-LIFE TIRES (ELTS) ON THE SPANISH COASTLINE

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INTRODUCTION

Marine debris is an **international challenge**, affecting all countries, regardless of where the waste originates. Within macro-debris, the case of End-of-Life Tires (ELTs) stands out.

Tires are one of the **most frequent plastic pollutants** on the planet, which also leads to the generation of micro-waste, as small plastic polymers are released as they wear out.

As a result, it is **very difficult for marine organisms to develop their lives** in them, due to the continuous release of these toxins, which favors the destruction of marine life as well as **hindering or preventing other vital human activities** such as fishing, and other sports and recreational activities such as diving.

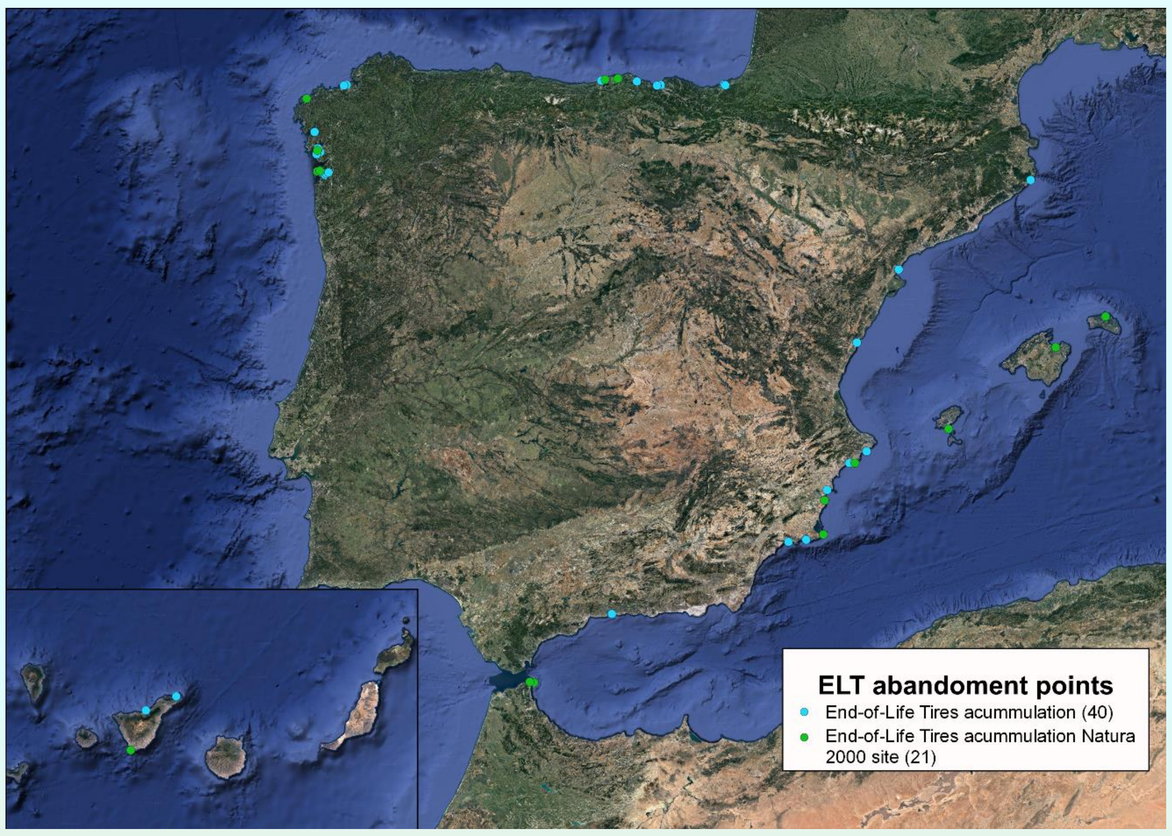
OBJECTIVE

To gain in-depth **knowledge** of the phenomenon of the **abandonment of End-of-Life Tires** on the Spanish coast, as well as to point the areas of greatest accumulation, focusing on those located in Natura 2000 Network areas.

RESEARCH DEVELOPMENT

1

MAPPING AREAS OF HIGH INCIDENCE



2

TREATMENT AND RECOVERY WASTE

By **crushing and reincorporating ELTs** into the manufacturing process of **masonry mortar** as a partial replacement of the natural aggregate.

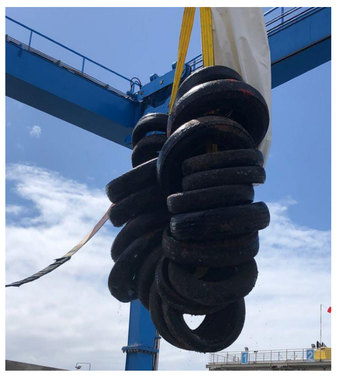
In this way, the raw material is used to extend its useful life, obtaining a lightweight construction material with excellent thermal performance and good water resistance.

3

CITIZEN SCIENCE ACTIONS

Results of the **two waste clean-up days with university volunteers**.

- La Gomera, Canary Islands (Spain):
  - 750 kg ~ 50 ELTs
  - 436 items → plastic material, paper, glass
- Ceuta (Spain):
  - 662 items → plastic and hygienic waste



RESULTS

Our findings will provide:

1) **useful information** to the different **stakeholders involved and affected** by the ELTs about the high incidence areas identified along the Spanish coastline.
2) **better understanding of the causes and consequences** of the phenomenon.

Project developed with the collaboration of the Biodiversity Foundation (Spanish Ministry for Ecological Transition and the Demographic Challenge), through the Pleamar Program, co-financed by the European Maritime and Fisheries Fund (EMFF).

GOBIERNO DE ESPAÑA VICEPRESIDENCIA TERCERA DEL GOBIERNO MINISTERIO PARA LA TRANSICIÓN ECOLÓGICA Y EL RETO DEMOGRÁFICO

Fundación Biodiversidad

PROGRAMA pleamar

Unión Europea Fondo Europeo Marítimo y de Pesca (FEMP)

INTEMARES

Universidad de Alcalá