

ALEGRANZA, THE NORTH ATLANTIC LANDFILL

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The Canary Islands are an area particularly vulnerable to plastic pollution, as the ocean currents carries all the waste from the east coast of the United States and Canada, North Africa and Europe, and also from maritime traffic to these coasts. Alegranza is the northernmost island of the Canary Islands, therefore the first to be encountered by the Canary Current, a descending branch of the Gulf Stream that flows in a southwesterly direction. Due to its geographical location, it is a hot spot of marine litter accumulation, since all the debris carried by the current is deposited on its northeast-facing coast. Alegranza is an uninhabited island that belongs to the Chinijo Archipelago, protected by the figure of the Natural Park and has also been recognised as a special protection area for birds (ZEPA). From July to October 2020, six expeditions were led to the island to make a first inventory of marine debris and its possible source and origin. In total, 3,667 objects weighing 321 kg were removed, excluding wooden objects. Of these, 97.7% were plastics, the most abundant being drink bottles (25.4%). Most of the marine litter corresponds to objects of everyday use and plastic fragments of unknown source. However, fishing activity and maritime traffic were a significant source of marine litter (20.2%). While knowing the origin, source and pathway of debris is difficult, legible labels provided valuable information. In Alegranza, 66.7% of the legible bottle labels indicated Asian countries of manufacture, which is evidence that the source is maritime traffic in the region. The lobster trap license labels from the east coast of the United States and Canada were dated from 1999 to 2018, supporting both the exogenous origin and long lifetime in the ocean of these debris.

Key words: marine litter, plastic pollution, maritime traffic, Canary Islands, Canary Current

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