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*Abstract*

# Elimination and Control of Flora Exotic Species on Natural Habitats in Natura 2000 Islands of the Atlantic Ocean †

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**Abstract:** Islands in the Atlantic Ocean (spread across the Atlantic and Macaronesian biogeographical regions) have been identified as one of the most biodiverse areas in the EU. Thanks to the combination of climatic conditions alongside their edaphic and coastal dynamics, these regions harbor a very high diversity of habitats and species, included in Directives 92/43/EEC and 2009/147/EC, many of which are considered for priority conservation. These island ecosystems generally present shared environmental problems, so they are extremely threatened and consequently present complex biodiversity mosaics that hold joint patterns of fragmentation and vulnerability, nowadays aggravated by global change. To solve this, the LIFE INSULAR project (LIFE20 NAT/ES/001007) is a transnational project between Spain and Ireland which implements a transnational strategy for the integrated restoration of insular habitats in Atlantic Ocean Natura 2000 islands spread across the Atlantic and Macaronesian biogeographical regions, promoting their favourable conservation status and increasing their resilience as the main measure of adaptation to current global changes. In these territories, the main threats and conservation problems that have been identified in the 2013–2018 EU Biogeographical Assessments under Article 17 of the Habitats Directive are the existence of senescent forest plantations (made by fast-growth exotic species with a high invasive potential that are encroaching the surroundings), and the presence of Invasive Alien Species (IAS) of flora. These threats cause an unfavourable conservation status for the natural insular habitats that are targeted by the project, triggering the reduction of their occupied area, as well as severely affecting their structure and functionality. Therefore, during the 2021–2026 period, LIFE INSULAR will carry out the elimination of old forest plantations that negatively affect the natural habitats in the islands and will erase the plant IAS. It will be necessary to carry out active and continuous management because many of the present invasive species have a high resprouting potential. In every case, manual methods will be employed to avoid the use of herbicides because of the high fragility of the insular environment, and these are not 100% effective methods. These operations will enable the subsequent restoration of the targeted habitats by planting and sowing their characteristic plant species.

**Keywords:** IAS; senescent forest plantations; insular habitats; manual treatments; Natura 2000

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