



Abstract

# Lessons Learned from the Elimination of Plant IAS in Natura 2000 River Corridors of the Iberian Atlantic Region (Galicia, NW Spain) †

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**Abstract:** LIFE FLUVIAL project (LIFE16 NAT/ES/000771) is a transnational project between Spain and Portugal, whose overall objective is the improvement in the conservation of Atlantic Natura 2000 river corridors and associated wetlands, mainly targeting the 91E0\* priority habitat. IAS have become one of the main threats to these ecosystems, as they affect the composition and structure of riverine habitats, as well as the decrease in their area. In this conference, we present the results and learned lessons of IAS elimination in several river basins (Miño, Mandeo, Mero, Barcés) of Galicia (NW Spain) by LIFE FLUVIAL, including herb (*Cortaderia selloana*, *Crococsmia x crocosmiiflora*, *Delairea odorata*), scrub (*Tamarix gallica*), and tree (*Eucalyptus* spp., *Acacia dealbata*, *Robinia pseudoacacia*, *Populus x canadensis*, *Salix viminalis*) alien species. An integral strategy has been developed, as they have been removed from the upper and middle basin, as well as from estuaries, so LIFE FLUVIAL has a highly demonstrative character as it can be applied on a larger scale to similar situations, or elsewhere in similar circumstances. The project has refused to use herbicides because of the high fragility of the aquatic environment, nor are they a 100% effective method. Removing plant IAS through manual or light mechanical means has revealed the best practices to improve the conservation status of priority habitat 91E0\* and river corridors, carrying out active and continuous management, because many of them have a high resprouting potential. Following this methodology, plant IAS can be completely eliminated, or at least controlled, as they are confined in very specific places from where they cannot disperse. In some cases, the eliminated plants (both herbaceous and woody plants) reached large sizes, which has been a major challenge when it comes to eliminating, handling and removing them. When this happened, the plant material was stacked and dried in an isolated place from which it cannot spread, to finally be removed for treatment by an authorized waste manager. In this regard, the herbaceous IAS have been valued as raw material in the economic system, undergoing treatment to obtain agricultural fertilizers; thus, the project has also contributed to the circular economy.

**Keywords:** IAS; fluvial corridors; priority habitats; manual treatments; Natura 2000



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