

2. What are Invasive Alien Species?

• A major problema in aquatic ecosystems



Invasive alien species (IAS) are animals, plants or other organisms that are introduced to places outside their natural range, adversely affecting native biodiversity, ecosystem services or human well-being.

It is estimated that there are more than 14,300 alien species in Europe, of which around 10-15% are invasive, the percentage varying according to the group of organisms. IAS are found in all type of ecosystems, with inland aquatic systems being highly vulnerable.

In rivers, lagoons and estuaries of the Iberian Peninsula, the presence of IAS is particularly serious since they threaten a very high richness of endemic species that are exclusive. Economic sectors such as sport and professional fishing, aquaculture, agriculture or tourism are affected with diverse damages. In addition, some IAS can become major health problems.

“There are more than 14,300 alien species in Europe, of which around 10-15% are invasive”

Who have we addressed?



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LIFE INVASAQUA has generated documents and information resources, all of which can be downloaded free from the project website.

Coordination:



Associated beneficiaries:



With the support of:



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This briefing note highlights a selection of key elements on the IAS governance, it does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication.

LIFE INVASAQUA

Aquatic Invasive Alien Species of Freshwater and Estuarine Systems: Awareness and Prevention in the Iberian Peninsula.

October 2023 / Policy brief



LIFE17 GIE/ES/000515



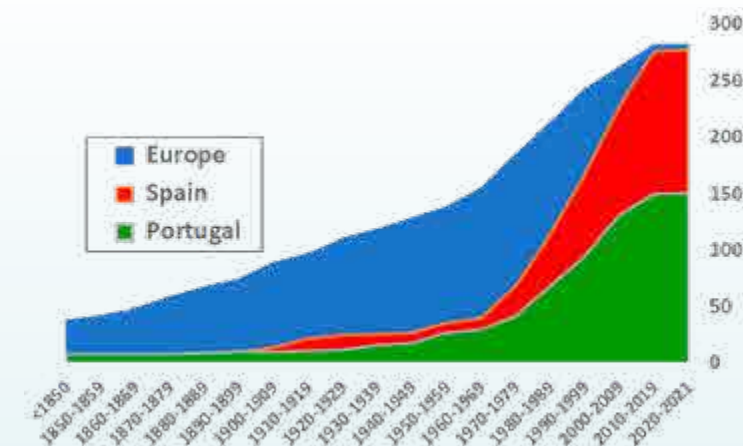
1. INVASIVE ALIEN SPECIES

• A priority for the EU biodiversity policy

Invasive Alien Species (IAS) are a serious threat to nature, the economy and human health in Europe. They are a very significant problem in all EU states and their numbers have increased significantly in recent decades.

Preventing the introduction of IAS and coordinating an effective response requires cooperation between governments, economic sectors and other organisations. To this end, the European Parliament and Council adopted the Regulation (EU) No 1143/2014, aiming to establish common measures among states to prevent the entry and spread of IAS within the EU territory.

Although Spain and Portugal have made progress in implementing policies to reduce the impact of IAS, the involvement of all stakeholders, governments and the private sector must increase to optimise their management. To this end, raising awareness in society is essential and **LIFE INVASAQUA** has generated knowledge transfer and increased social perception of the problem.



Temporal evolution of the introduction of the alien species in continental waters of the Iberian Peninsula

The problem- By the Numbers



More than 37.000 alien species established worldwide.



Of these, more than 3,500 IAS have documented impacts that play a key role in 60% of global plant and animal extinctions.



More than 14.300 are occurred in Europe.



80% of IAS impacts on nature's services to people are negative.



Finally, 85% of documented impacts negatively affect quality of life, for example through effects on human health.



Global cost on IAS damage exceeded \$423 billion in 2019, and it has quadrupled every decade since 1970.

3. Strategic information for the management of IAS in aquatic systems



DID YOU KNOW?

EUROPEAN CATFISH is a voracious predator that easily exceeds 2 m long and reaches 130 kg in weight.

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DID YOU KNOW?

RED SWAMP CRAYFISH generates an annual cost of approximately 1.3 million € in rice farming in Portugal, which in Spain would amount to 4.5 million €.



DID YOU KNOW?

The damage caused by the ZEBRA MUSSEL in the Ebro river basin is estimated at more than 1,600 million €.

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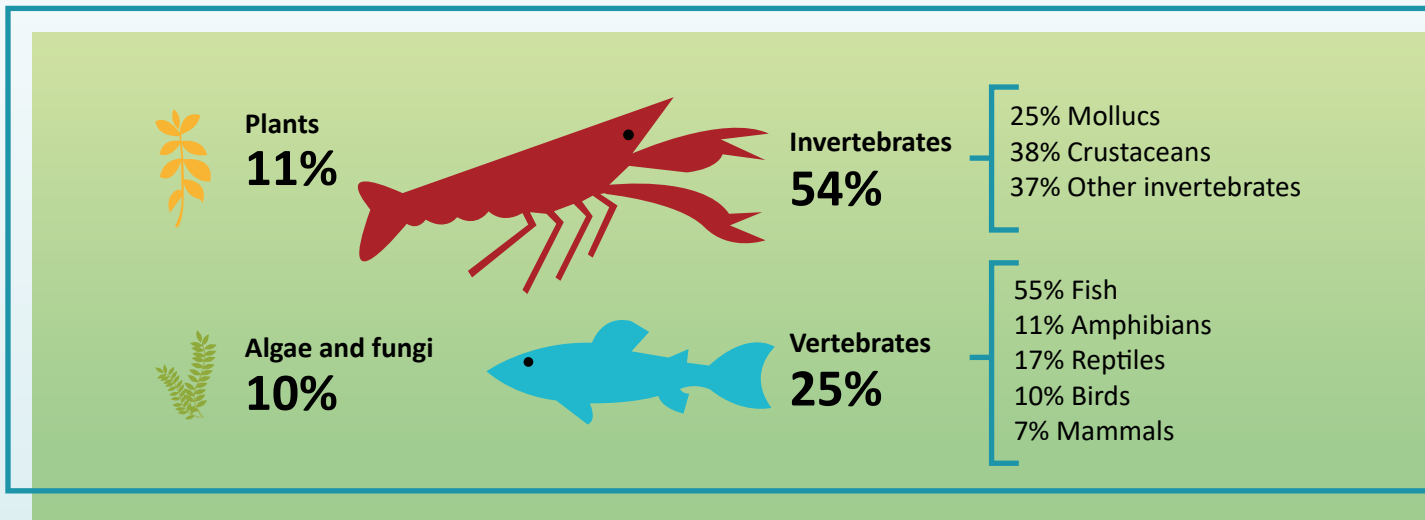
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DID YOU KNOW?

In the Guadiana river, more than 900,000 tonnes of WATER HYACINTH have been removed in the last 15 years, with a cost of more than 50 million €.

LIFE **INVASAQUA** has generated documents and instruments to support the IAS Regulation providing a factual basis for examining its application. This information is key to coordinated transnational efforts between Spain and Portugal. In turn, they assist IAS policies by providing a scientific basis for updating legislation, supporting restrictions on specific activities (e.g. species trade), or identifying key IAS for monitoring, rapid response and mitigation actions.



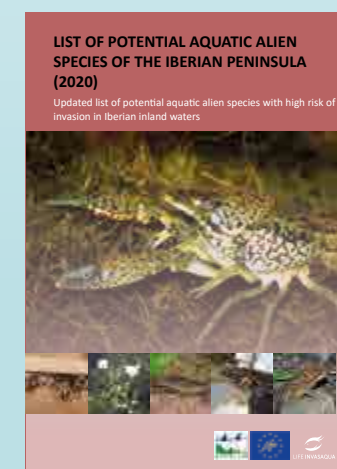
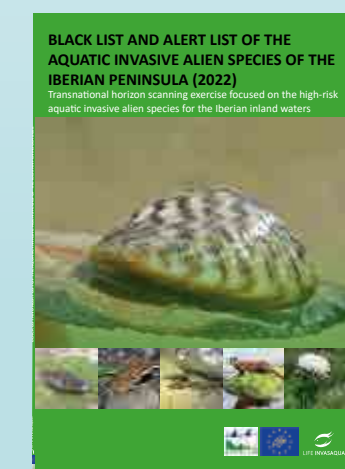
Aquatic alien species present in the Iberian Peninsula. Representation by taxonomic groups.

Updated inventories for the Iberian Peninsula

LIFE INVASAQUA has coordinated, with **more than 60 experts**, the updating of inventories on present and potential alien species. A total of **326 alien species introduced in Iberian inland waters** and **272 potentially invasive species** with a future risk of invasion have been identified.

Black list and alert list

A total of 129 IAS present were prioritised in the **black list** or list of concern generated by LIFE INVASAQUA, **24 IAS showed a very high priority for management**. On the other hand, the **alert list** included 89 IAS with a significant risk of invasion in the Iberian Peninsula, **11 potential IAS with the highest scores are considered very high priority** which should lead to increased surveillance mechanisms for their possible introduction.



BLACK LIST AND ALERT LIST OF AQUATIC INVASIVE EXOTIC SPECIES OF THE IBERIAN PENINSULA. Transnational horizon scanning exercise focused on high-risk aquatic invasive exotic species for Iberian inland water.

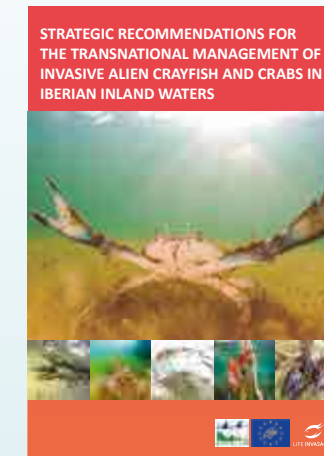
LIST OF POTENTIALLY INVASIVE EXOTIC SPECIES OF THE IBERIAN PENINSULA (2020). Updated list of exotic species with a high risk of potential invasion of Iberian continental waters.

Strategic recommendations for the management

LIFE **INVASAQUA** developed a participatory process with experts to elaborate **Strategic Recommendations for the transnational management** of invasive alien fish, crayfish and crabs in inland waters of Spain and Portugal. These promote coordinated management between the states and were designed as a strategic guidance tool for IAS governance.



Strategic recommendations for transnational management of invasive exotic fish in iberian inland waters.



Strategic recommendations for the transnational management of invasive exotic crayfish in iberian inland waters.

Platforms for information transfer

LIFE **INVASAQUA** has generated the **Invasives Alien Species web** (<https://eei.sibic.org/>) which includes more than 20,000 geo-referenced records on the monitoring of approximately 200 IAS. In addition, the **IBERMIS** platform (<https://ibermis.org/>) has been developed to increase citizen collaboration.



IBERMIS (<https://ibermis.org/>)



Invasive Alien Species web (<https://eei.sibic.org/>)

LIFE **INVASAQUA** has supported the European Commission's approach to centralising information by linking all platforms to the European Alien Species Information Network (EASIN) and promoting the use of the **App - Invasive Alien Species Europe**.



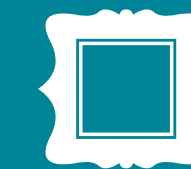
4. A project to improve governance, communication and raise awareness of IAS in Spain and Portugal

LIFE **INVASAQUA** has developed environmental governance instruments aimed at improving the transnational management framework by supporting the implementation of the EU Regulation on aquatic IAS in Spain and Portugal. The project has improved early detection and rapid response to IAS through information and training campaigns targeting key groups. Finally, communication and awareness-raising activities aimed at the general public have also been developed.

Project Impact - By the Numbers



More than **229,000** people attended all activities.



More than **100,000** visitors to the museum exhibition **Beware! Exhibition on aquatic invasive plants.**



585 events and activities (transfer and training days, dissemination and communication events, etc.).



More than **445** institutions or other organisations participating in events and actions.



More than **11,000** followers on social networks and more than **120,000** project-website users.



More than **600** news and publications on the EEI.



More than **20** scientific-technical documents for transfer to managers and other stakeholders.

Lessons learnt

LIFE **INVASAQUA** has proven to be a good source of information on IAS, supporting enforcement and facilitating synergies between managers, key stakeholders and the general public. Some key aspects:

- Expert groups have been key to updating information and developing documents that provide a useful and replicable scientific-technical basis.
- The involvement of other key sectors proves to be an enriching approach to ensure the quality and usefulness of information and training resources.
- Public information, education and awareness-raising are key to making society aware of the IAS problems and acquiring the necessary tools to make informed decisions and take responsible action.