

# HOW CAN REINTRODUCTIONS OF THREATENED SPECIES MITIGATE BIODIVERSITY LOSS?

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## **General data**

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## **Abstract body**

The reintroduction of threatened species is considered a nature-based solution to limit human-induced biodiversity loss and conserve ecosystem services. The European pond turtle (*Emys orbicularis*) is the reptile that has suffered the most dramatic decline in Europe due to wetland collapse since the 18th century. The species has benefited from numerous reintroduction initiatives throughout Europe, but the actual efficiency of all these conservation actions has never been assessed. Based on an exhaustive literature review, interviews of stakeholders engaged in past and present *Emys* reintroduction initiatives, and original field data from our project Emys-R in France, Germany and Latvia ([www.emysr.cnrs.fr](http://www.emysr.cnrs.fr)), we identified a set of most effective settings and protocols for successful reintroduction or restocking of endangered populations of *Emys*. The results show the interdependency of ecological, economic and social levers, providing insights for best practices to ensure survival, dispersal, reproduction, and population growth as indicators of the success of releasing captive-bred *Emys* in the wild. This highlights the relevance of conservation actions focusing on umbrella species such as *Emys*, since they also benefit associated biodiversity, e.g. threatened amphibians. This knowledge will mitigate biodiversity loss through species reintroduction by enabling decision-makers to implement scientific findings in conservation actions.

## **Confirmation and Consent**

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