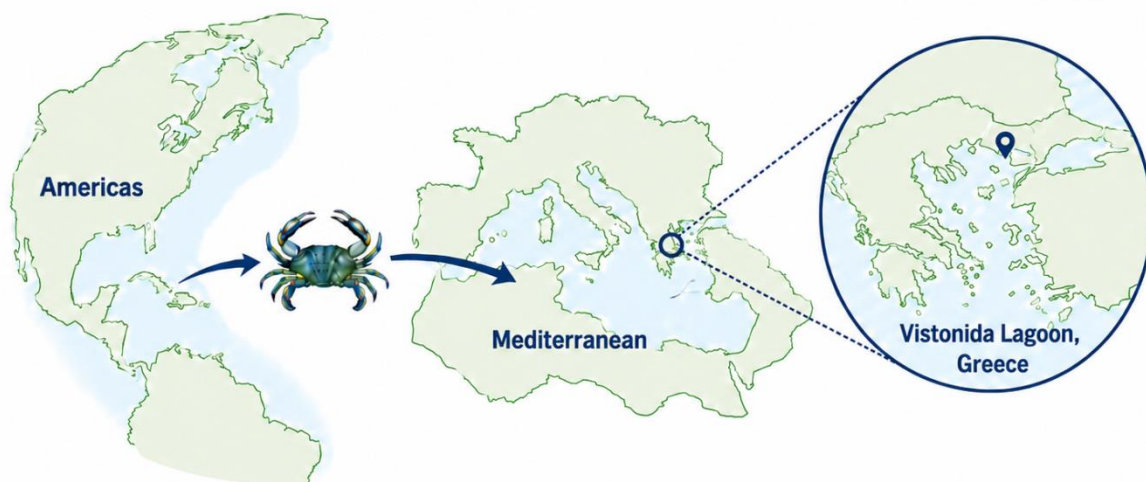


NEWSLETTER No 5

The Blue Crab's Journey: From the Americas to Vistonida Lagoon

The blue crab (*Callinectes sapidus*) is native to the western Atlantic coast, mainly along the coasts of the Americas. Today, however, it is found in many parts of Europe and the Mediterranean. Its arrival was not a natural migration, but is largely linked to human activities, especially maritime transport and the movement of organisms through ships' ballast waters.



The species can establish itself successfully in estuaries, lagoons and brackish coastal ecosystems. It is highly adaptable, mobile and predatory, feeding on molluscs, other crustaceans, small fish and bottom-dwelling organisms. As a result, it can put pressure on native species and affect local food webs.

In Vistonida Lagoon, its presence is particularly important. The lagoon is a sensitive brackish ecosystem, where freshwater and seawater, salinity, temperature and species composition interact continuously. Changes in environmental conditions may favor alien

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and invasive species such as the blue crab. When its populations increase, the effects may extend beyond individual species and influence biodiversity and ecosystem functioning more broadly.



The issue is complex. The blue crab can cause ecological pressure, but in several areas it is also harvested and may provide income for fishers. This creates a difficult management question: can fishing help control its populations without encouraging the acceptance, protection or further spread of an invasive alien species?

For IASON+, the blue crab is a clear example of the complexity of biological invasions. Its management requires scientific monitoring, data on biodiversity impacts and cooperation with local communities. Economic use may be considered only within a clear management framework that prioritises ecosystem protection.

Recent findings from our laboratory suggest that climate-related environmental changes do not appear to reduce blue crab populations in the area. This indicates that the species may continue to persist in high numbers unless effective management actions are implemented. Such persistence raises important concerns for local biodiversity, trophic interactions and the long-term ecological balance of Vistonida Lagoon.

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The journey of the blue crab, from the Americas to Vistonida Lagoon, shows that invasive alien species are not only an environmental issue. They are also social, economic and management challenges. The key priority remains clear: to understand the problem without losing sight of the need to protect biodiversity.

