

***Ammothea hilgendorfi*: a New Invasive Species on the Belgian coast**

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Pycnogonids, or sea spiders, constitute a peculiar group of marine arthropods that historically has been considered negligible in marine ecosystems due to their low abundance. However, this perception has been challenged by the recent emergence of *Ammothea hilgendorfi* in Europe. Originating from the North Pacific Ocean (*i.e.*, Japan and the USA), it has settled in many countries since the late '70s, including Italy, France, the Netherlands and Belgium.

This comprehensive study consisted of a 24-month monitoring of *A. hilgendorfi* in the wave breakers of Knokke, Belgium. The findings revealed unprecedented population densities, characterized by a rapid life cycle and a year-round reproductive activity. In contrast, native pycnogonids seemed to have almost totally disappeared.

Only punctual observations of *A. hilgendorfi* have been made in other countries. Hence, this research signifies a milestone, providing the first evidence that it can develop important and self-sustainable populations in its non-native range. This prompts the classification of the species as invasive. Among the 1,400 extent pycnogonids, *A. hilgendorfi* is thus the first ever to be called an invasive species. Considering the general oversight of pycnogonids by zoologists, further investigations are imperative to assess the intrinsic and extrinsic factors that facilitated its invasion in Europe, as well as its potential ecological impact on the Belgian coast.

Keywords

Pycnogonid; Invasive; Population Monitoring; Belgian Coast