

## Invasive American razor clam *Ensis directus* in Belgian waters: a true opportunity for shell-fisheries?

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The invasive American razor clam *Ensis directus*, has established permanent populations in the North Sea since it reached the German Bight in the late 1970s and is widely spread at the Belgian coast since late 1980s. Periodically, huge numbers of dying specimens and shells are washed ashore. Several questions arose with respect to the population structure and the environmental impact of this invasive species in the Belgian part of the North Sea (BPNS). It is shown that *E. directus* has become a prominent component of the benthic community in the southern bight of the North Sea (more or less limited to the 12nM zone) in terms of distribution, abundance and biomass. The most common length class of the Belgian *E. directus* population was around 11–12cm length with a maximum observed length of 16cm over the last years. Stable adult populations were found around Nieuwpoort Bank, Oostende Bank and the northern slope of the Vlakte van de Raan. It is suggested that *E. directus* can provide a valuable food source for seabirds (common scoter) and flatfish (dab, plaice, sole), especially when high recruitment takes place.

The abundance of *E. directus* also triggered the shellfisheries sector's interest in its commercial exploitation. Scientific findings from the BPNS as well as experience gained by the *Ensis* fishery in Dutch waters suggest that at the observed recruitment rates, this species could be well-suited for a targeted fishery within Belgian waters. The impact of such a fishery on the ecosystem is expected to be limited if it is carried out on a small-scale, as done in the Dutch *Ensis* fishery. However, before such exploitation can take place in the BPNS, we advise for more detailed investigations on the balance between the expected benefits for the local fishery sector and the potential impacts on the ecosystem.