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ZOUTMAN

Supports









Oyster reef restoration in the Belgian North Sea

Belgian North Sea



65 oyster batch(es)

Before 1850, European flat oyster (Ostrea edulis) reefs were a dominant structural and ecological feature of the North Sea. Due to human impact and the spread of a persistent oyster parasite, these reefs have now nearly disappeared. Yet oyster reefs remain vital ecosystems. Often referred to as "ecosystem engineers", they provide habitats that support a wide array of marine life. The government, industry and science join forces to tackle the challenges of restoring oyster reefs, a complex operation that requires both innovation and interdisciplinary expertise. The logistical complexity, coupled with the sensitivity of oysters to disturbance—during seeding of hard reef substrates with oyster larvae, as well as their subsequent transport and installation at sea- requires in-depth knowledge across multiple fields of expertise. The BELREEFS project, commissioned by the Belgian Federal Public Service (FPS) Health, Food Chain Safety and Environment as part of the action T4.8 of the LIFE Belgium for Biodiversity programme (101069526), exemplifies this collaborative spirit. It brings together Jan De Nul Group, the Institute of Natural Sciences, Shells & Valves, and Mantis Consulting, with guidance from the Native Oyster Restoration Alliance (NORA) and additional support from Go Ocean. BELREEFS consists of three phases: identifying suitable sites in existing gravel beds for kick-starting new oyster reefs, deploying substrates seeded with oyster larvae, and guiding the development of self-sustaining reefs that attract and support other marine species—thereby enhancing biodiversity. These reefs provide essential shelter, feeding and breeding grounds for a wide variety of marine flora and fauna. To maximize reef survival and reproduction, BELREEFS identified locations with the most suitable seabed and environmental conditions, as well as natural protection from damage. Detailed seabed mapping, led by the Institute of Natural Sciences, informed decisions regarding the reef deployment location. Furthermore, the project builds on key innovations—such as developing reef installation methods and refining 'remote setting' techniques, whereby oyster larvae produced elsewhere settle on reef substrates in laboratory conditions before being deployed at sea. Once deployed, the new oyster reefs will be closely monitored for several years to assess their development and ecological impact. "The European flat oyster has always been an important core species in our North Sea, but it has today nearly disappeared. The active restoration of these oyster populations is therefore a priority for us. The fact that we can collaborate on this scale with scientists and industry is truly unique". - FPS Public Health, Marine Environment Department Timing: Summer 2025 - 1st installation of oyster reef substrates Summer 2026 - 2nd installation of oyster reef substrates, including the Go Ocean patch





