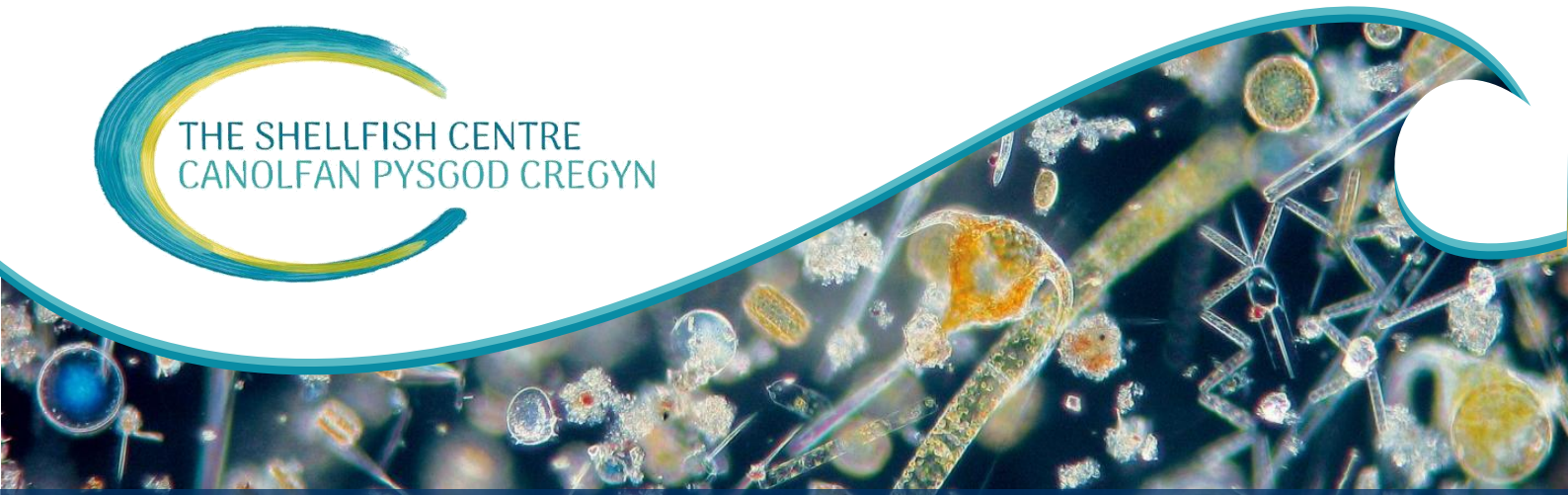
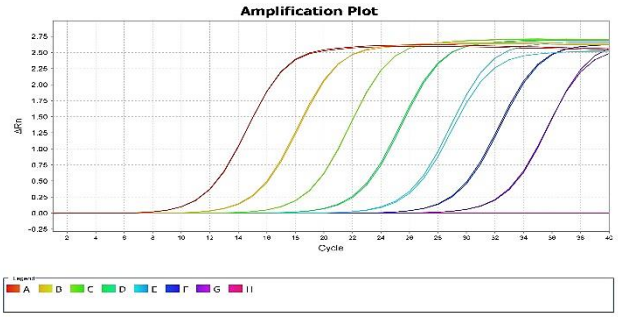
THE SHELLFISH CENTRE
CANOLFAN PYSGOD CREGYN



SC-04: Molecular identification tools for marine bivalve larvae

Shellfish production in the Menai Straits and North Wales is limited by availability of juvenile bivalves for relaying onto culture areas and knowledge on the location of standing stocks. In order to predict or determine the most suitable locations for the collection of adults and seed it is essential to study the parameters surrounding juvenile settlement and survival, necessitating the discrimination between planktonic larvae of many morphologically-similar bivalve species. Molecular tools present a powerful detection and quantification tool for studying environmental samples, which can shed new light on temporal and spatial patterns of spawning and larval transport.



Impact

We will develop and apply species-specific molecular assays to detect commercially-important bivalve larvae in mixed environmental samples. Data will form part of a joint programme to measure and potentially predict larval abundance and spatfall in Welsh waters, with the aim to improve resilience of shellfish culture and management and reduce natural uncertainty, allowing for greater investor confidence and growth stimulation in the shellfish sector. The methodology also has the potential to aid in aquaculture site selection and projections for optimal times when equipment deployment or installation can take place to maximise settlement potential.

Project Officer

Jenna Alexander is the lead researcher for SC-04

Project Partner

Deepdock Ltd

PRIFYSGOL BANGOR UNIVERSITY

The Shellfish Centre is a research and innovation initiative supporting development of the shellfish sector in Wales. The Centre will collaborate with businesses to deliver science to support growth. The main focus of the project is shellfish aquaculture and the related supply chain, with scope also for research to support new/ underexploited shellfisheries and aquaculture of non-shellfish species that are compatible with shellfish production

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