

#NNF2 Restoring Wild Oysters to Conwy Bay - Project Evaluation Report

2023-2025



Cover image: Rhianna Parry, Engagement and Research Officer, Bangor University

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Acknowledgements

The Restoring Wild Oysters to Conwy Bay Project would like to thank our local working group and technical group members for steering the project development in Conwy Bay. Thank you to the Conwy County Borough Council Harbour team, for completing the oyster reef deployment works. Thank you to Conwy Marina and Deganwy Marina for the continued use of their marinas to host our oyster nurseries. We would like to thank our dedicated volunteers and students who have supported the collection of our oyster monitoring data. We would like to extend our thanks to local schools, and Equality, Diversity and Inclusion (EDI) experts for feeding into our inclusivity strategy. Finally, thank you to the wider teams at Zoological Society of London and Bangor University for supporting the successful outcomes of the project.

Funders

Thank you to the generous funding raised by National Lottery players, provided by the Nature Networks Fund (round two) and awarded as part of the Heritage Fund on behalf of the Welsh Government. The project team would also like to thank Nature Networks Funding (round two) (NNF2) for their flexibility on project timelines which ensured restoration work could be adjusted around oyster biology and ecology to support the delivery of activities outlined under each project objective.



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Executive Summary

*This report outlines the environmental and societal achievements of the Restoring Wild Oysters to Conwy Bay Project, a two-year collaboration between the Zoological Society of London (ZSL) and Bangor University, to restore native oyster (*Ostrea edulis*) populations to Conwy Bay, North Wales.*

With NNF2 funding from April 2023 to August 2025, this project built upon the foundations of the Wild Oysters Project: Conwy Bay, delivered between 2020-2023. Key elements of the project included expanding public engagement and outreach activities, increasing native oyster restoration efforts, and further building our citizen science oyster nursery monitoring. The project successfully delivered a targeted deployment of 45m³/ 20 tonnes of cultch and 2,000 oysters within the restoration site. An impressive 11,280 people and 3,060 students were reached through the project's engagement programme, including co-developed workshops with underserved ethnic minority groups, education fairs, and 'Oyster Safari' site visits.

Key lessons learned, as shared below, include the importance of early planning for marine licence processes, sustained engagement with volunteers and interested

groups for project development locally, and the high costs and logistical challenges of cultch storage and deployment.

This report shares both successes and challenges to inform future native oyster restoration efforts across the UK, ensuring that lessons from Conwy Bay can support the broader recovery of this ecologically and culturally important species.



Photo: Oyster nursery monitoring session with volunteers. © Rhianna Parry

Project Goals

Building on the environmental and social outcomes achieved through previous funding, the #NNF2 Restoring Wild Oysters to Conwy Bay project focused on two key goals:

Goal 1

To improve the condition of native oyster habitat in Conwy Bay, and feed project research and knowledge into national native oyster restoration efforts.

- Conduct surveys to monitor the native oyster restoration trial site.
- Continue biodiversity monitoring to better understand the ecological communities associated with native oyster reefs.
- Consult the local working group to scope and develop the restoration trial and trial the use of different cultch materials (e.g., spat-on-shell, loose shell), contributing to the evolution of the restoration approach.
- Scale up the native oyster restoration trial site, by deploying 10,000 mature native oysters onto the seabed.
- Produce and disseminate a scientific monitoring report summarising restoration activities, findings, and lessons learned — sharing these with the national and European native oyster restoration community.

Goal 2

To support the long-term future of restored oyster beds by engaging a broader range of local people with the cultural and ecological heritage of oysters in Conwy Bay.

- Educate and inspire 3,000 young people from local schools, colleges, and universities to learn about the marine environment and become marine stewards through hands-on visits to marina sites with oyster nurseries.
- Engage 10,000 local residents through outreach events and digital content, increasing awareness of the ecological role of native oysters and fostering a sense of local pride and ownership in Conwy Bay's restoration story.
- Train 60 citizen scientists to participate in monthly monitoring of oyster nurseries, building local skills and long-term involvement.
- Publish a monitoring and evaluation report of the project's education and outreach activities, capturing key learnings—particularly from engagement with STEM audiences and underserved ethnic minority communities.

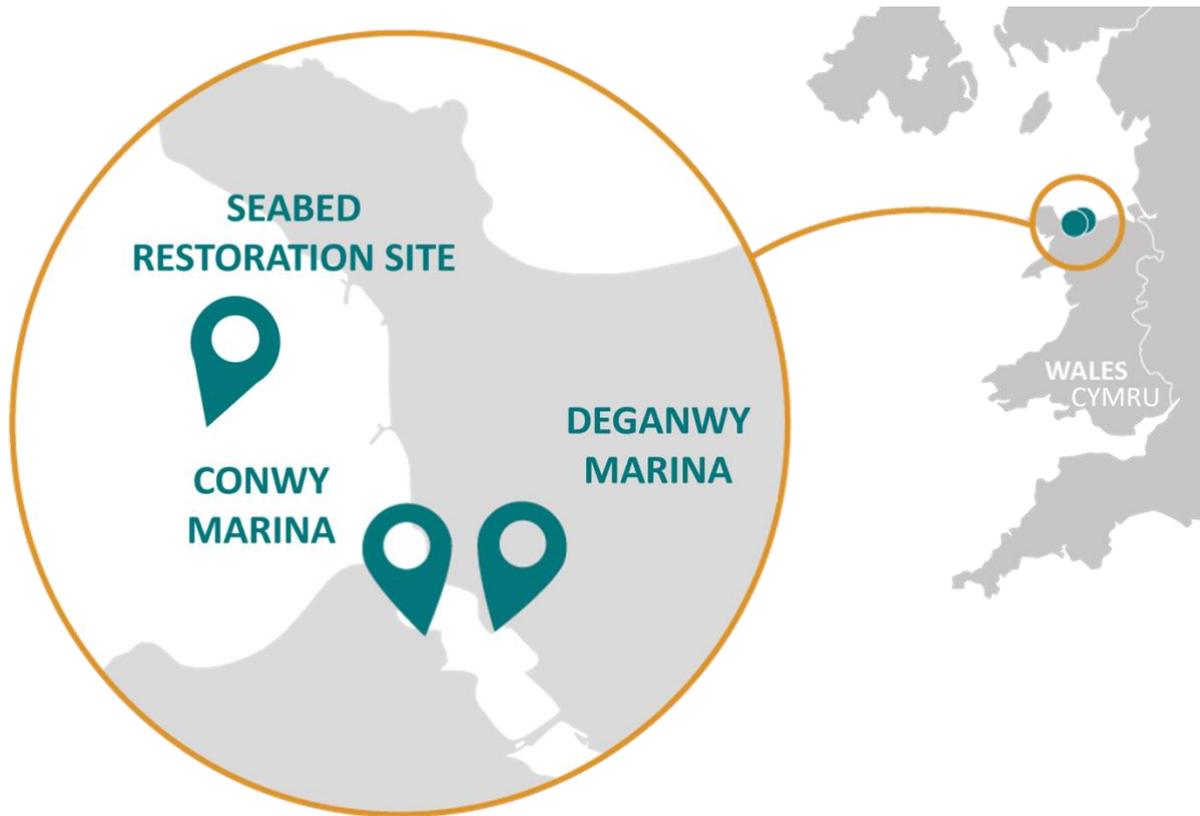


Figure 1: Map of Conwy Bay restoration hub in North Wales indicating the location of Conwy Marina, Deganwy Marina and the seabed restoration site.

The project was made possible thanks to £249,919 of funding from Nature Network Fund (round two) (NNF2), provided by Natural Resources Wales, the Welsh Government and National Lottery Heritage Fund.

The Headlines

Headline results tracked against Key Performance Indicators (KPI)

These headline statistics cover the impact of the Conwy Bay restoration hub between the dates of April 2023 to August 2025.

Category	KPI	Results
Scale up existing oyster reef habitat restoration activities	Deploy 100 tonnes of cultch Release 10,000 mature oysters	Deployment of 20 tonnes of cultch and 2,000 oysters*

Category	KPI	Results
		*The timing and scope of cultch and oyster deployment during the project were influenced by regulatory processes and stakeholder consultation, which were addressed in early 2025 (see below for further details).
Number of students reached with the delivery of educational outreach/learning modules	3,000 students	3,060 students
Training of citizen scientists in native oyster restoration and monitoring	60 volunteers	185 new and 118 returning volunteers - 303 total, contributing 1,460+ hours
Engagement of the general public across the project	10,000 people	11,280 people

Inspired 11,280 people to engage with Oyster restoration in Conwy Bay.

Reached 3,060 students through educational outreach and learning modules.



Photo: Pupils from Ysgol Cynfran taking part in our education programme during the pre-site workshop and Oyster safari.

Volunteers offered over 1,460+ hours restoring and monitoring.

Trained 303 citizen scientists in native oyster restoration and monitoring.



Photo: Wild Oysters: Conwy Bay project team. Image © Lucie Machin

Oyster Nursery Monitoring Results:

Category	Results
Oyster larvae released	~240 million larvae** **approximately 240 million larvae during the spawning seasons in 2023 and 2024. Monitoring for the current spawning season in 2025 is ongoing.
Annual oyster survival rate	83%
Number of litres of water filtered	~112,200,000 litres*** *** Filtering rate is estimated from April 2023 to May 2025 based on filtering rate of 3l/h/oyster from Haure et al., 1998, accounting for oyster mortality and restocking figures.
Unique species recorded within biodiversity sampling	79 different taxa recorded
Individual organisms recorded	10,196
Number of oysters housed in nurseries	2,435

Citizen Science Oyster Nursery Monitoring

The success of Goal 1 involved the retention and recruitment of citizen scientists to conduct monthly surveys of 2,000+ oysters at nurseries established in Conwy and Deganwy Marina.

The first phase of the Wild Oysters Project trained an incredible 185 new volunteers in Conwy Bay. Despite working to a smaller target under the NNF2 funded project, the target of 60 trained citizen scientists was well surpassed. By the close of the project, 185 new volunteers and 118 returning volunteers had contributed over 1,460 hours to the project. Volunteer community building efforts have been effective, and 40% of volunteers are returning volunteers. This demonstrates a retained enthusiasm within local communities to become marine stewards, who, when offered the chance to make new connections and learn new skills, excelled in contributing to restoration efforts.

Volunteer community communications and project updates were achieved online with regular updates shared via Whatsapp, Instagram, Facebook, X, the volunteer email list (287 subscribers to date), and the Bangor University media team. Most posts shared were bilingual, in both English and Welsh, depending on the staff member from ZSL (English medium organisation) or Bangor University (bilingual). A Bangor University translation service was also used to support the translation of materials.

A volunteer thank you video recapping the years monitoring data was shared to instagram:

www.instagram.com/p/DDh6MJPOh3b/

Volunteer tasks included supporting the monitoring of oyster survival, recording if they are spawning, and tracking the associated biodiversity interacting with the nurseries. Data from oyster nursery monitoring will be fed into a research paper on the biodiversity associated with oyster nurseries. Weekly sampling of oyster larvae during the spawning season has revealed that on average, 1.2 million larvae per oyster were released in Conwy Marina during summer 2024.

This short video captures the key activity delivered:

<https://vimeo.com/1006733806>

In April 2024, the project introduced an additional 600 native oysters to boost the stock in nurseries at Conwy and Deganwy marinas. Volunteers observed ‘clock’ formations/oyster settling on other oysters forming ‘oyster clumps’ within the nurseries in the marinas, which are early stages of reef formation. Volunteers have also recorded over 100 sightings of Critically Endangered European eels living in the nurseries. In response, citizen scientists have begun monitoring their presence and size, and are working to integrate this data into their existing databases.



Image: Autumn oyster festival sand art installation created by volunteers. Image © Soul2Sand

Oyster Nursery Monitoring Results:

Summarising the oyster nursery monitoring data collected, used to assess the associated species communities, oyster mortality and reproduction.

Parameter	Sample size	Method	Frequency
Mobile biodiversity	12 biodiversity nurseries monitored	1mm mesh net around nursery. The contents rinsed into 1mm mesh sieve, into tray for identification.	Monthly, all year

Parameter	Sample size	Method	Frequency
Sessile biodiversity	9 randomly selected oysters per biodiversity nursery	Rinsed, images taken of dorsal and ventral side. BIIGLE used for analysis	Monthly, all year
Mortality	All oysters at all sites	Observational	Monthly
Larval monitoring	40 oysters submerged, at least 20 oysters opened and checked per restoration hub	Oysters submerged in 5% MgCl ₂	Weekly, May to September

Lessons Learned

Communication

Regular social media posts alongside closed Facebook and WhatsApp groups are effective for communicating with volunteers and supports the retention of volunteer engagement.

Time

Oyster nurseries are an effective engagement tool but time and capacity requirements should be revised in any similar projects.

Administration

Online volunteer sign-up mechanisms such as [Volunteersignup.org](https://www.volunteersignup.org) can reduce admin.

Data Collection

During volunteer sessions, volunteers are assigned different tasks, including data recording into hard copy. The project team takes photos of hard copies of data, and uploads them into shared excel sheets.

“Thanks to you all for the fantastic oyster session yesterday. It’s amazing how complex and expansive things are around these creatures. I really do have to find a video of them

using that leg. I'd definitely like to volunteer to be involved in further activities on the Oyster project"

- Carl Harper (Berth Holder and volunteer)

"I joined one of the sessions, and from there I started coming along to the regular monitoring events — and I've really enjoyed it. I definitely want to get involved in more volunteering projects. It really makes you aware of what we have here. It's so full of life. I've been in the UK for four years, and I don't think I've seen as much marine life as I've seen here."

- Giulia Leanza (Volunteer)

"I've always wanted to work in the conservation and environmental sector, so it's great to get some hands-on experience. I didn't know much about oysters before joining this project and I didn't realise how much they've declined in the UK — we've lost so many of our oyster reefs. They're such an important habitat, and it's amazing to help bring some of that biodiversity back into our oceans."

- Abigail Wilkin (Volunteer)

Native Oyster Habitat Restoration

Native oysters are recognised as a keystone species for the ecosystem services and processes provided. They provide an important service, creating habitats for other marine species, improving water quality and clarity, and nutrient recycling.

This project aims to restore native oyster habitat and with it, the biodiverse community of associated organisms and local cultural heritage, contributing to ocean recovery. Under Goal 1 of the project, seabed restoration activities were set:

- Conduct surveys to monitor the native oyster restoration trial site.
- Continue biodiversity monitoring to better understand the ecological communities associated with native oyster reefs.
- Deployment of 100 tonnes of cultch, and the deployment of 10,000 individual oysters.

Prior restoration activities

The previous People's Postcode Lottery funded Wild Oysters project successfully established oyster nurseries suspended from pontoons in Conwy Marina and Deganwy Marina. An oyster nursery is a micro-habitat containing mature oysters which will reproduce and release oyster larvae out into the wider Conwy Estuary. In 2020 the project formed a local working group, comprising of the following local groups: North Wales Wildlife Trusts, Conwy Mussels Company, Conwy Harbour Office, Porth y Felin School, Conwy Council Education Services, Deganwy Marina, Conwy Marina, Bangor University and Natural Resources Wales.

Efforts to restore native oyster habitat began in June 2023 with the deployment of 650 tonnes of locally sourced gravel. A post-deployment survey identified an uneven distribution of gravel, with some peaked areas, which subsequently delayed the deployment of weathered shell 'cultch' and the release of oysters until 2025. Upon the discovery of the peaked areas of gravel, the project informed all relevant regulators and shared the data with the UK Hydrographic Office, Conwy Harbour Master, and Natural Resources Wales and worked with relevant authorities to determine a solution.

Marine Licensing and monitoring

With restoration activities on hold, the project applied for a new marine licence to expedite the levelling of gravel peaks and previously deployed base material, aiming to create conditions favourable for the recruitment of mature native oysters. A marine licence application (MLA) (Band 2) for seabed levelling was submitted in June 2024 with a 4-month timescale for determination. The MLA underwent consultation with relevant bodies, organisations and the public and the team worked with consultancy Environmental Resources Management Ltd (ERM) to provide additional information which was reviewed by the Natural Resources Wales (NRW) Marine Licensing.

Key activities delivered under this process are noted as follows:

- **June 2023** - Cultch (local gravels) deployed. Uneven distribution of gravel identified.
- **June 2024** - Submitted MLA for seabed levelling.
- **September 2024** - MLA put on hold, pending review of additional information submitted in response to the NRW Marine Licensing public consultation.
- **December 2024** - MLA continued to be on hold into the new year until a response was provided to NRW Marine Licensing by the Welsh Government Marine and Fisheries Division.

- **February 2025** - Following formal consultation, it transpired that there were no concerns raised with the area being left to re-level naturally. Subsequently the MLA for seabed levelling was withdrawn.

Amended restoration activities delivered

In the meantime, regular multibeam echosounder seabed surveys were conducted to monitor project footprint, seabed height and the natural redistribution of gravel that was deployed within the restoration area (in West Bwrling licence area). The surveys showed a steady, natural decline of the gravel peaks. Drop-down camera surveys and baited remote underwater video surveys were also conducted annually at the restoration site and control site as part of the project's ongoing monitoring.

Local working group meetings also continued apace with attendees from the Local Harbour Authority, Welsh Fishermen's Association (WFA-CIC), Conwy Fishermen, Zoological Society of London (ZSL); Natural Resources Wales (NRW); Bangor University, North Wales Wildlife Trust (NWWT), Pembrokeshire Marine Special Area of Conservation/ Natur am Byth and interested parties. Attendees were kept updated with survey and licence progress. During this time period, the project hosted two focused technical working group meetings and a meeting with the Welsh Fishermen's Association, whereby a modified plan of the deployment of 20 tonnes of cultch and 2,000 native oysters was formed to deliver project objectives.

In June 2025, the project team successfully completed a targeted deployment of 45m³ (20 tonnes) of cultch and 2,000 native oysters. Using a 5-metre rubble chute, materials were placed within a 32 × 20m area of the restoration site to avoid creating additional cultch peaks on the seabed. This deployment marks the first small- scale research trial to assess the feasibility of oyster restoration in Conwy Bay.

Map illustrating the licence area (yellow box) located in Conwy Bay where seabed restoration took place. Basemap sources: Esri, DigitalGlobe, GeoEye, i-cubed, USDA FSA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community.



Image: © Rhianna Parry



Image: Cultch being deployed onto the seabed using modified 5 meter rubble chute, extended from the side of a vessel. Image: © Rhianna Parry.

Seabed Restoration Monitoring Plan

Summarising the seabed restoration monitoring plan. Data collected to assess the project footprint and reef height, infaunal invertebrates, mobile species, habitat and sessile species, shell cover, oyster density, oyster size and settlement.

Monitoring metric	Method	Frequency
Project footprint and reef height	Multibeam echosounder data	Pre & post deployment, annually
Infaunal invertebrates	Grab samples	Pre & post reef deployment, annually
Mobile species	BRUV survey (3 in reef site, 3 in control site)	Pre & post reef deployment, annually
Habitat & sessile species Shell cover Oyster density	Drop down video & stills (100 stills per reef site and 100 per control site)	Pre & post reef deployment, annually

Monitoring metric	Method	Frequency
Oyster size		
Settlement	Two spat collectors deployed at each restoration hub	Deployment for 6 months per year, between May-November *Method being reassessed

Lessons Learned: Native Oyster Restoration Activities

Marine Licence Consideration

Prioritise the development of MLA, including any potential variations, at the start of project timelines. Apply early to avoid work being pushed back into less-favourable weather windows, and consider how consultations will impact staff capacity. Consider directly speaking with the licensing body before submission to understand if a MLA is necessary to undertake the required work.

Flexibility

Within the MLA application, include greater flexibility regarding reef height and size to accommodate logistical and practical considerations during deployment, providing a useful buffer for on-the-ground adjustments.

Consultations

Agree upon and organise early consultations between government, local stakeholders (such as fishers, aquaculture operators, and other marine users), and relevant representative bodies to build trust and ensure continued project buy-in. Log all evidence of stakeholder consultations and engage with key groups in advance of wider public consultation to enable timely delivery of actions.

Process

Research and understand local objection and consultation procedures, allowing time in the project plan to accommodate any concerns raised by stakeholders. Consider how national legislation on marine habitat restoration can be adhered to while ensuring project targets are met within the specified timeframe.

Stakeholder Engagement

Engagement with fishers should continue throughout the project lifecycle and prioritise on-the-ground interactions in person. Utilise contact networks, and partner with fishers if feasible.

Cost

Cultch storage and deployment is costly, time consuming and challenging, and local logistical availability can be limiting.

For more information on the results of our oyster habitat restoration activities, please see report: **#NNF2 Restoring Wild Oysters to Conwy Bay: Technical Report on Oyster Monitoring and Habitat Restoration.**



Image: Weathered scallop shells, ready to be collected by haulier, in preparation for bagging and deployment. © Rhianna Parry.

Engagement Programme

Oyster monitoring and restoration activities provide an incredible opportunity for local communities to connect with their coastal heritage through education and citizen science.

To meet the ambitious target of 10,000 people engaged over 2 years, the project funded the recruitment of a part-time Engagement and Research Officer, in post from January 2024, to lead the engagement activities and expand reach with a wider audience through the development of a new inclusivity strategy.

The engagement programme activities include citizen science volunteer sessions, public outreach and education sessions. All activities sought to raise awareness of project goals, increase ocean literacy, open access to restoration efforts, and harness community participation whilst educating people on the real-life benefits of restoration activities.

At project close we have:

- Reached 3,060 students
- Delivered 32 education sessions
- Engaged a total of 303 citizen scientists, including 185 new and 118 returning volunteers
- Over 1,460 volunteering hours contributed towards the project
- Engaged with 11,280 members of the public
- Delivered 59 activities/events



Photo: Volunteer appreciation event: to 'Celebration: Pizza and Movie Night Bash!' (3rd June 2024)

Public outreach and engagement

Some examples of key events delivered include:

- Bangor Science Festival, Bangor University – 9th March 2024, 1,682 attendees
- Gŵyl Fwyd Caernarfon (Pentre Bwyd Môr), Caernarfon – 11th May 2024, 2,000 attendees
- Dylan's Seafood Discovery Day, Criccieth – 13th July 2024, 1,700 attendees
- Eisteddfod Genedlaethol Cymru, Rhondda Cynon Taf – 8–9th August 2024, 600 attendees
- Oyster Safari (Berth Holder Open Day), Conwy Marina – 29th August 2024, 58 attendees
- Festival of the Sea (Y Môr a Ni), Flint – 22nd March 2025, 292 attendees
- 1,500 Years of Bangor Celebration (Science Zone), Bangor Pier – 1st March 2025, 250 attendees

Community Celebration Events

Two main events strengthened community ties and celebrated involvement:

- Gŵyl Wystrys yr Hydref / Autumn Oyster Fest, Morfa Conwy — A family day with science, art, and music rooted in Welsh coastal heritage, attended by 160 people.
- Volunteer Celebration: Pizza & Movie Night Bash, Bangor — Held during Volunteers Week with a film screening and data presentation, attended by 11 volunteers.

Additional volunteer appreciation events included:

- Christmas Monitoring Session (Dec 2024), attended by 9 volunteers.
- Restoration Site Boat Trip (July 2025), with 12 volunteers deploying 200 oysters to the seabed, adding to the 1,800 already placed.

For more information on our engagement programme, please see report: **#NNF2 Restoring Wild Oysters to Conwy Bay: Celebrating Community Engagement, Education and Culture**



Image: Volunteer appreciation event: Boat trip to the completed seabed restoration site for the deployment of 200 oysters (2nd July 2025)

Formal Education Programme

The formal education programme was developed to enhance ocean literacy and awareness of native oysters and the ecosystem services they provide among Key Stage 2 - Key Stage 3 pupils, and to higher education level. The programme, linked to the National Curriculum for Wales (2022), aimed to inspire the next generation of marine stewards to continue to care for the marine environment. The education programme features a range of free activities and resources, including:

- A range of lesson plans, worksheets, interactive games and workshops
- ‘Oyster Safari’ to see the oysters up close
- Curriculum-linked classroom workshops and assemblies - digital or in person as required
- Hands-on participation in our marine conservation project
- We also offer student internships and research project opportunities

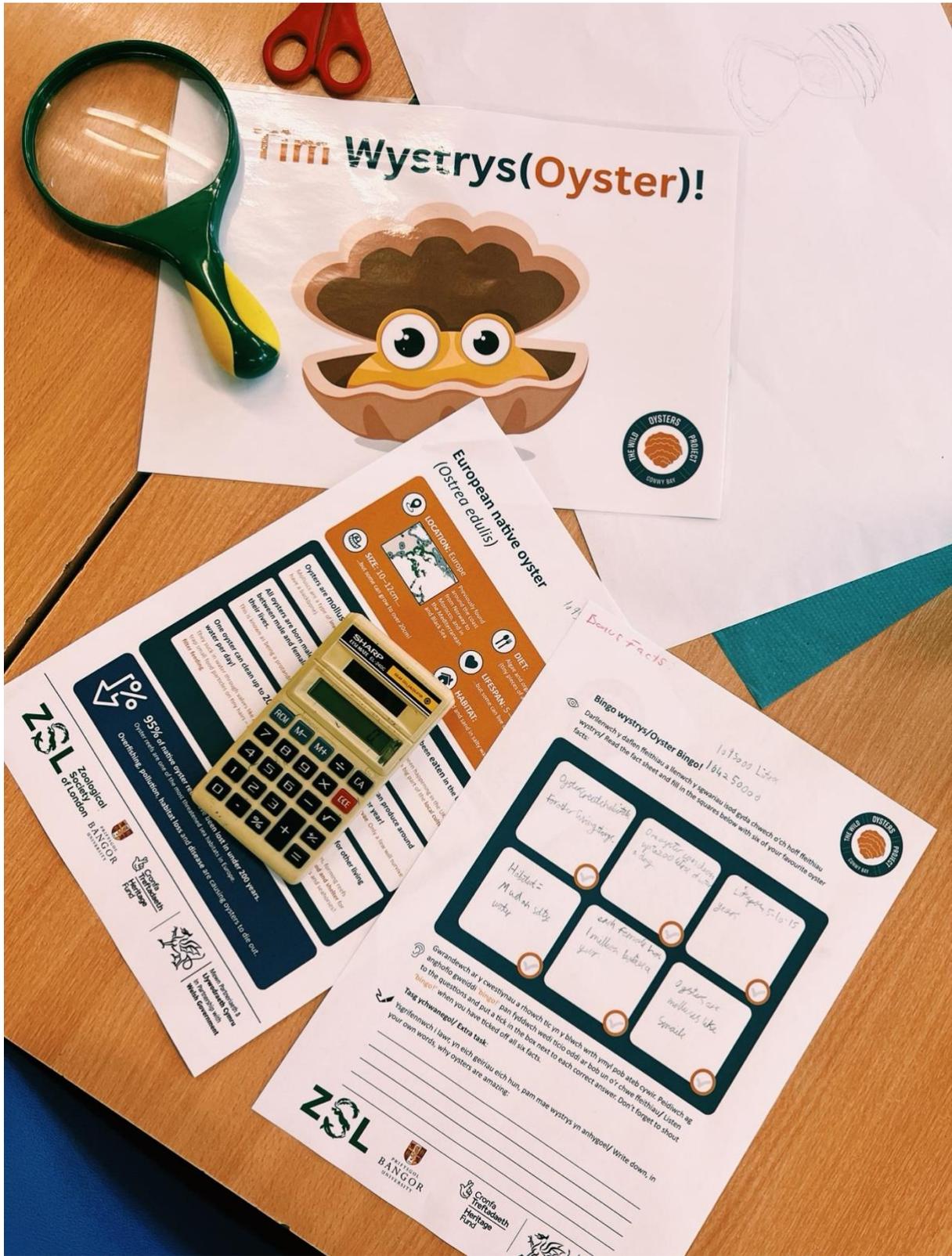


Image: Education resources

As part of this delivery, 32 interactive workshops were held at schools and marina sites, reaching learners across all formal education levels. Of these, 23 were delivered

bilingually or in Welsh, ensuring inclusive access to marine science education in North Wales.

The project team received plenty of positive feedback from schools and students alike on the sessions delivered:

“The children really enjoyed your sessions, and I’m sure they will have gained so much from the STEM day. We really hope you can join us for more events like this in the future.”

- Rhian Richardson – Reaching Wider, KS3, Ysgol Y Moelwyn.

“My daughter thoroughly enjoyed your visit and couldn’t wait to tell me all about it when she came home, thank you for inspiring her! I didn’t know about the work you do so have found it interesting hearing and reading about it.”

– Parent of KS2 student, Ysgol Deganwy.

“Thank you for the workshop you did last Friday! I’ve picked up a lot and have realised where I can take the topic to a higher level!”

- Elen Salisbury – Teacher, KS2, Swyn y Don; pre-site workshop.



Image: Engaging local communities: A selection of outreach events held in early 2024

Developing an Inclusivity Strategy

Developing an Inclusivity Strategy for Women, Girls, and Under-served Ethnic Minority Groups Communities in STEAM (Science, Technology, Engineering, Arts and Mathematics)

A key project objective under Goal 2 was to develop an inclusivity strategy that would shape all outreach and engagement activities.

The ZSL's FAIRER Conservation Framework formed the foundation of the strategy, by embedding inclusivity and reflexivity in the project, creating a space for mutual learning and equitable collaboration.

North Wales is predominantly White (97.5%), which poses challenges in effectively engaging with under-served ethnic groups and ensuring diverse participation. Bridging the gender disparity gap in STEAM was also a key consideration.

Developing this strategy involved collaborating with organisations who have successfully or are currently engaging these groups, such as Project SIARC, The Wildlife Trust, The North Wales River Trust, Reaching Wider, and Chester Zoo's education and engagement team. Understanding learnings from other organisations was critical to developing an approach for Conwy that ensured marine conservation was more accessible.

The project team increased engagement with underserved groups through partnerships with schools, community organisations, and cultural networks, including the Endeavour Society (student society, Bangor University), Pobl i Bobl (refugee group, Anglesey), North Wales Africa Society (NWAS, Bangor), and specialists at Bangor University. The team delivered three targeted outreach events co-developed with these communities, guided by the inclusivity strategy, which focused on understanding their needs and interests in the project, careers, and the marine environment.

CELEBRATE INTERNATIONAL DAY OF WOMEN & GIRLS IN SCIENCE!
ENJOY TALKS FROM & NETWORK
WITH WOMEN SHARING THEIR CAREER JOURNEYS.

ACCELERATE ACTION: INSPIRING CAREERS IN MARINE SCIENCE

**Event open to all*

Date: 11th February 2025
Time: 6:30 PM – 8:30 PM
Venue: Main Arts Lecture Theatre
(MALT), Bangor University

MORE INFO/
TICKETS
HERE

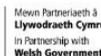


Photo: Example of a social media post used to promote: 'Accelerate Action: Inspiring Careers in Marine Science' event, hosted at Bangor University.

Key Events Included:

- An evening talk at Bangor University on 11 February 2025 for International Day of Women and Girls in Science, featuring women marine scientists and co-designed with educators, students and industry experts.
- Two STEAM workshops with NWS in February and March 2025 to celebrate British Science Week, involving creative activities like building a clay reef sculpture to explore biodiversity.
- A marina site visit with Pobl i Bobl on 25 February 2025, offering hands-on learning about oyster restoration.



Image: Guest speakers from across the marine sector following an evening talk celebrating the UN International Day of Women and Girls in Science

Lessons Learned

Ensure Equitable Access to Learning Opportunities

- Allocate dedicated funding for school travel, especially for rural or low-income areas, to remove access barriers and promote inclusivity across regions.
- Create flexible, curriculum-linked resources tailored to various Key Stages and national education frameworks (e.g., the National Curriculum of Wales), while adapting materials to suit diverse learner needs—across age, background, ability, and context—to enhance engagement and learning outcomes.

Embed Inclusion, Representation, and Cultural Relevance

- Develop bilingual (Welsh/English) and inclusive resources designed with accessibility in mind (e.g., tactile learning tools, sensory-friendly formats, VR),

addressing the needs of neurodivergent and disabled learners and reflecting cultural diversity.

- Engage educators early in the planning process to identify specific support needs and co-design solutions.
- Incorporate the Welsh language and cultural identity throughout programmes to improve accessibility and strengthen local relevance. Budget for quality translation and culturally sensitive design.

Inspire Future Pathways Through Real-World Relevance

- Connect learning activities to local STEM career pathways—such as aquaculture, marine science, and habitat restoration—to motivate young people, particularly girls and underrepresented groups, to explore ocean-focused careers.
- Integrate arts alongside STEM (STEAM) to enhance creativity, broaden appeal, and support cross-curricular learning.

Collaborate and Learn from Others

- Engage with Equality, Diversity & Inclusion (EDI) specialists and take part in EDI-focused workshops and networks to inform evidence-based, inclusive programme design.
- Strengthen impact through partnerships with existing organisations, events, and community groups—maximising visibility, trust, and reach without duplicating efforts.

Ongoing Community Engagement and Stewardship

- Time public outreach events around key project milestones to build momentum and ensure communities feel informed, involved, and valued.
- Recognise and celebrate volunteer contributions through seasonal wrap-up events and continued opportunities for involvement (e.g., citizen science, monitoring, digital updates).
- Use engaging visuals and personal stories on social media to communicate impact, build emotional connection, and encourage broader public support.

For more information on our engagement activities see report: **#NNF2 Restoring Wild Oysters to Conwy Bay: Celebrating Community Engagement, Education and Culture**



Image: NWAS Society members celebrate British Science Week by building oyster reefs with clay exploring local coastal biodiversity.



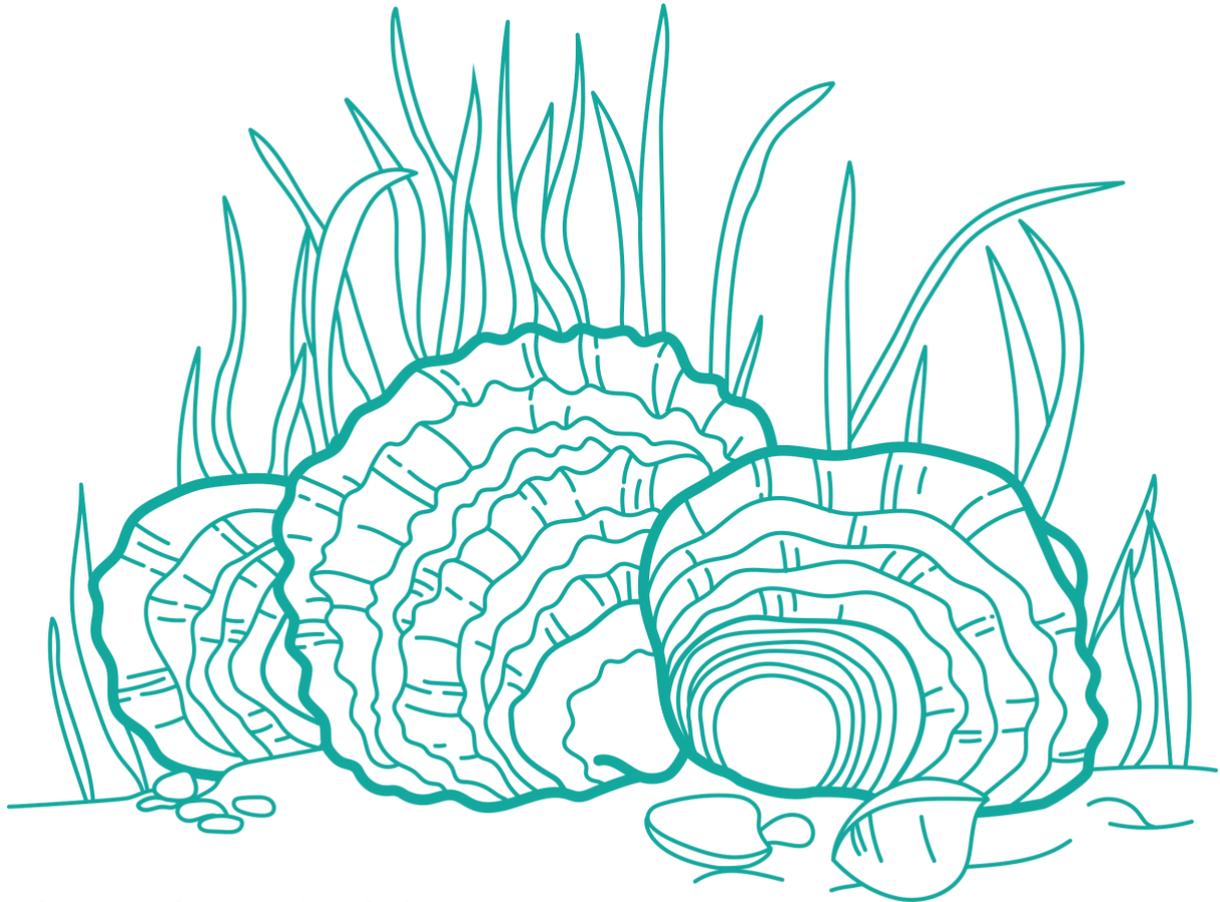
Image: © Rhianna Parry, Engagement and Research Officer, Bangor University

Conclusion

Despite delays caused by previous uneven cultch deployment and subsequent marine licensing challenges, the #NNF2 Restoring Wild Oysters to Conwy Bay Project achieved significant environmental and social outcomes—thanks to the support and flexibility of the Nature Networks Fund (Round 2).

The project successfully delivered a targeted deployment of 20 tonnes of cultch and 2,000 native oysters, forming the basis of an exciting restoration trial. Its expanded community engagement programme exceeded targets, reaching over 11,000 members of the public and more than 3,000 students. This included training 185 new citizen scientists, many of whom continue to support ongoing oyster monitoring efforts.

NNF2 funding enabled the recruitment of a dedicated Engagement Officer at Bangor University, which allowed for the development of a new inclusivity strategy and strengthened collaboration with local schools, NGOs, and underrepresented communities. Strong local ownership, partnerships, and community support enabled the team to adapt quickly and work effectively in response to project challenges.



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Native Oyster Restoration Alliance.

Legacy and Future

Amid ongoing decline and challenges facing native oysters, and wider marine habitat loss across the UK, this project is a means to further action.

A combination of local support with the project, and knowledge obtained under the initial pilot, has helped to feed into legacy activity to be delivered under a new project titled '#NNF3 Connecting Conwy: A plan for seascape scale recovery of coastal habitats in Conwy Bay and the Menai Strait'. This 'phase 3' project aims to research and increase the resilience, connectivity, and health of the protected sites network. Working with existing local coastal partnerships and engaging a wider range of people, the project will seek to better understand the current local presence and distribution of marine habitats, including seagrass, native oysters, saltmarsh and blue mussel, and conduct small-scale trials and surveys to identify further the barriers to recovery.

This will be supported by outreach to communities to deepen understanding of these marine and coastal habitats, and to engage in marine stewardship through existing marine projects and restoration activities in the region. This will set the foundation for a future seascape restoration plan that will increase the diversity, extent, condition and connectivity of marine habitats in Conwy Bay and the Menai Straits.

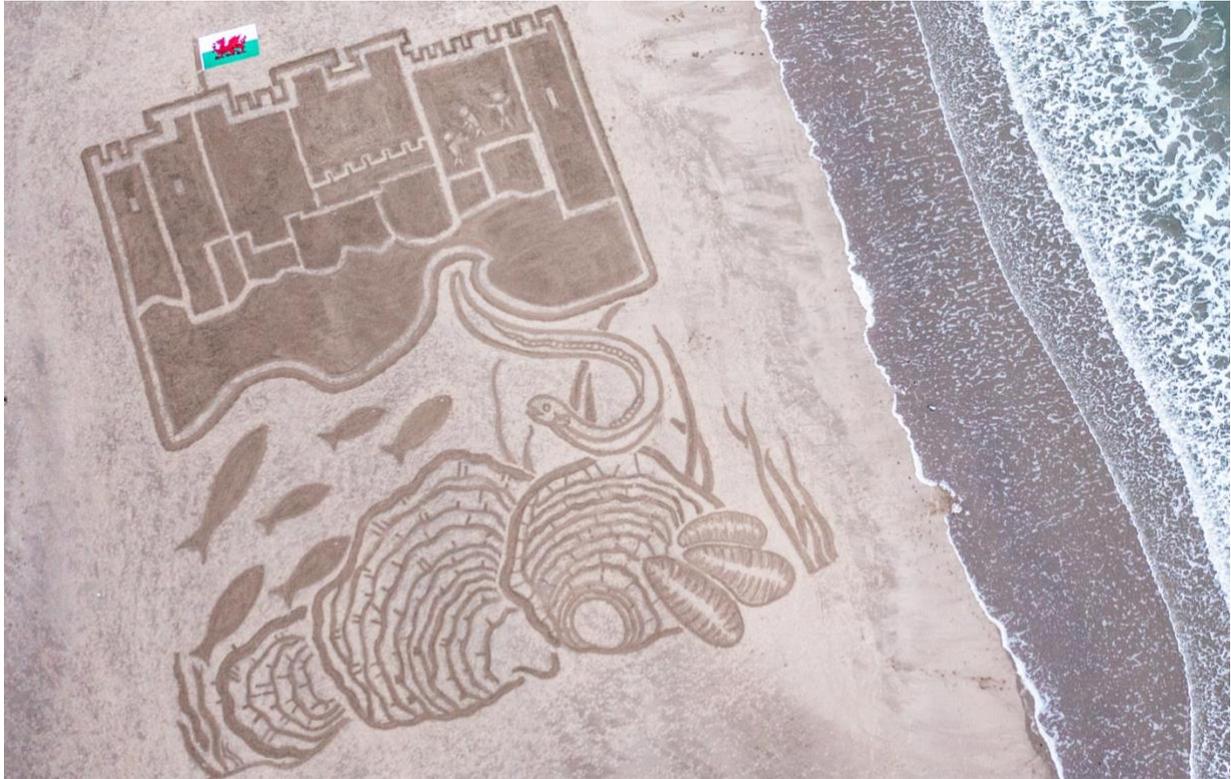


Image: © Soul2Sand, Autumn Oyster Festival, sand art work

Contact

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www.zsl.org/what-we-do/projects/marine-habitat-restoration

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