

The ZSL Wild Science Podcast: Show Notes

Episode: ZSL #034 Marine habitat restoration in the UK: tales of oysters, saltmarsh, kelp, and seagrass

Coastal marine habitats are essential to the health of our marine ecosystem, and hold both environmental and social importance. They provide valuable ecosystem services, but for decades they have been impacted by harmful human activities. In her final episode as host, Monni Böhm will be joined by co-host Celine Gamble and an expert panel to explore the need for active restoration to conserve four incredible marine habitats: native oyster beds, saltmarshes, kelp forests and seagrass. How can we scale up these restoration efforts? What makes some species in these habitats ecological superheroes? And what on earth is a scubadiving spider? Please note: this episode was recorded in 2020.

Guests:

- Celine Gamble, Zoological Society of London
- > <u>Dr Joanne Preston</u>, University of Portsmouth
- Angus Garbutt, UK Centre for Ecology & Hydrology
- <u>Dr Ian Hendy</u>, The Blue Marine Foundation
- <u>Dr Richard Unsworth</u>, Swansea University and Project Seagrass

Overview

- **01:06** Dr Monni Böhm introduces the co-host of this episode, Celine Gamble, to discuss why marine habitat restoration is needed, and introduce the Native Oyster Network.
- **05:29** Monni and Celine are joined by Dr Joanne Preston who will discuss the forgotten ecosystem of oyster beds, and how to restore native oyster reefs in the UK.
- 14:51 Angus Garbutt describes the diversity of saltmarshes of the UK, provides unique insight into their ecological and cultural importance, and the methods used to restore them
- **28:12** Monni and Celine introduce Dr Ian Hendy who explains what can be done to 'Help our Kelp' and why conserving it is crucial for marine biodiversity in the UK.
- **39:16** Dr Richard Unsworth joins the hosts to talk about the importance of seagrasses, and the lessons learned from the UK's first major seagrass restoration project .

Resources

- 25 Year environment plan: https://www.gov.uk/government/publications/25-year-environment-plan
- ➤ UN decade on Ecosystem Restoration: https://www.decadeonrestoration.org/
- ➤ Native Oyster Network: https://nativeoysternetwork.org/



- Native Oyster Network Habitat Restoration Handbook (November 2020): https://nativeoysternetwork.org/wp-content/uploads/sites/27/2020/11/ZSL00150%20Oyster%20Handbook WEB.pdf
- > ZSL Native oyster restoration: https://www.zsl.org/conservation/regions/uk-europe/thames-conservation/native-oyster-restoration
- Twitter: <u>@NativeOysterNet</u>; #OysterLove
- ➤ UKCEH Restoration of coastal habitats: https://www.ceh.ac.uk/our-science/projects/restoration
- The Saltmarsh App: https://www.saltmarshapp.com/
- ➤ Blue Marine Foundation Sussex Kelp Project: https://www.bluemarinefoundation.com/projects/sussex-kelp/
- Lyme Bay Reserve: https://www.lymebayreserve.co.uk/science/
- Research on Kelp and Oyster restoration in Australia: kelp and oyster restoration in Australia? https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.13719
- Project Seagrass (Seagrass Ocean Rescue): https://www.projectseagrass.org/
- Chesapeake Bay Seagrass Restoration:
 https://www.vims.edu/research/units/programs/sav1/restoration/index.php
- > 750,000 seeds planted in Wales in UK's Biggest Seagrass Restoration Scheme: https://www.swansea.ac.uk/press-office/news-events/news/2020/03/750000-seeds-planted-in-wales-inuks-biggest-seagrassrestoration-scheme-.php