

The ZSL Wild Science Podcast: Show Notes

Episode: ZSL #032 Coral reefs: running the gauntlet of climate change

Coral reefs are the most biodiverse marine ecosystems in the world, and more than 500 million people worldwide rely on coral reefs for their livelihoods, food security, and coastal protection. However, coral reefs are impacted by several threats, including rises in sea-surface temperature due to climate change. Join Monni as she navigates these unique underwater ecosystems with the help of five fantastic coral connoisseurs. How can new technologies be used to protect and preserve coral reefs for the future? Why is connectivity important? And which fascinating fact will make your brain (coral) explode?

Guests:

- [Dr Catherine Head](#), Institute of Zoology, ZSL and University of Oxford
- [Dr Jamie Craggs FLS](#), Horniman Museum & Gardens and Natural History Museum, London
- [Dr James Guest](#), Newcastle University
- [Dr Rosa van der Ven](#), Wageningen University
- [Dr Chris Yesson](#), Institute of Zoology, ZSL

Overview

- 01:05 – Monni is joined by the co-host of this episode, Dr Catherine Head, an expert in applied ecology and evolution in marine ecosystems, particularly coral reefs, and how tools like population genetics can help conserve them.
- 05:29 – First up, Monni and Catherine welcome Dr Jamie Craggs, to discuss how captive breeding techniques in aquaria can be used for coral conservation.
- 14:40 – Dr James Guest joins the podcast to talk about his work with ‘Coral Assist’, a project which examines the feasibility of using “assisted gene flow” and selective breeding to assist corals in the face of climate change.
- 24:14 – Dr Rosa van der Ven discusses genetic connectivity of corals between reefs, and explains why connectivity is important for their conservation.
- 30:52 – Monni and Catherine are joined by their final guest, Dr Chris Yesson, cold water coral expert, to discuss how genetic techniques like coral barcoding are used to identify corals in aquaria, and how this can be useful coral conservation.

Resources

- Project Coral: <https://www.horniman.ac.uk/project/project-coral/>
- Coral Assist: <https://www.coralassistlab.org/>
- ZSL Wild Science Podcast #011 Can we still save coral reefs and what if we don't?: <https://www.zsl.org/zsl-wild-science-podcast>
- ZSL's work with coral reefs in the Chagos Archipelago: <https://www.zsl.org/regions/uk-overseas-territories/chagos-archipelago>
- Bertarelli Foundation: <https://www.fondation-bertarelli.org/>