

Diving seabirds and tidal stream turbines: conflict or co-existence?

a seminar by Dr Natalie Isaksson from ERI, UHI North Highland



Underwater tidal stream turbines harvest the renewable energy from strong tidal currents to generate electricity. Much of this technology is being developed and deployed in the waters around Scotland, including the Pentland Firth. These waters are also home to marine wildlife, including internationally important seabird populations. There is concern that diving seabirds may experience negative interactions with tidal stream turbines, such as colliding with rotating blades or losing foraging habitat.

Tidal stream environments are a challenge when it comes to observing seabird behaviour. So instead, we use information from animal-borne tags (GPS and dive-depth sensors) attached directly to seabirds. Using data from tagged European shags (*Gulosus aristotelis*) and razorbills (*Alca torda*) living in the Pentland Firth we investigated the overlap between areas where they found their food and the tidal turbines. We also looked at the influence of strength of tidal currents, seafloor and water depth on their diving behaviour. This seminar will be a chance to see results from this study and engage with the topic of sustainable use of the seas!

Wednesday 19th October 5.15pm

From the comfort of your own home+ ERI Castle Street, Seminar Room

