



Biodiversity Interdisciplinary Research Community Hub (BIRCH)



University of
St Andrews

FOUNDED
1413

SDG Focus

- ☒ Goal 13 - Climate action

What did you do?

The Biodiversity Interdisciplinary Research Community Hub (BIRCH) fosters innovative, interdisciplinary research on biodiversity through student internships and collaborative projects. Launched in 2023, BIRCH connects undergraduate students with project leads across University Schools to explore biodiversity loss and support ecosystem recovery. It encourages hands-on learning and the development of practical solutions to the biodiversity crisis.

BIRCH has initiated over a dozen projects that engage the public and educational institutions, offering freely accessible resources to deepen understanding of biodiversity. These include school monitoring initiatives and studies involving University staff, examining how exposure to biodiversity influences conservation attitudes.

Current projects include the Ocean Ambassador Programme and the development of an app supporting small-scale fisheries. BIRCH's work contributes to a sustainable, biodiverse future through research, education, and community engagement.



Image: Birds perched in tree. Blue background

What were the benefits and outcomes?

1. Local schools, communities, and partners all benefited from the work undertaken. One project was featured on the BBC:
<https://www.bbc.co.uk/programmes/p0k515ry>
2. Student interns acknowledged the program supported independent learning and developed a strong understanding of the benefits of interdisciplinary learning. "It was truly an invaluable experience for me," said Natasha Currie, BIRCH intern 2024.
3. Projects have already led to some great outputs. For example, the Ocean Ambassadors Logbook is available for kids to pick up NOW at the Scottish Oceans Institute on East Sands Beach. Kids can follow the guided exploration of the seashore and learn about the marine environment.

What barriers or challenges did you encounter in embedding sustainability into your learning and teaching practice and how did you overcome them?

1. 'Sustainability' is such a broad term that it can have limited meaning and use unless it is defined in a specific, relevant way to the context you're using it. So at the start of my Honours module, I define what I mean by sustainability, in relation to sustainable/responsible environmental management. Challenging students on their use of 'sustainability' in class and assignments is one way to overcome barriers to its effective use. I also invite 'professionals' involved in environmental management to

join my classes to share what their perspective on sustainability means in their context.

2. 'Sustainable' practice, defined in terms of carbon emissions, is a challenge when it comes to third year field trips for Geography and SD, one of which is to the south of France, one to Oban, and one to Malta. We aim to discuss with students the emissions related to their trip, and explain why certain locations have been chosen (cost and attractiveness being key factors in decision making, over environmental impact).

What are your conclusions and recommendations for others?

- Talk to students about how you, and they, define 'sustainability' in relation to the specific context you are learning/teaching about ... and keep discussing this, and pointing out misuse within/outwith the University
- Calculate, as far as possible, the different impacts of operations relating to learning and teaching, ideally with your students, and then discuss the decisions that have been made (and why) with reference to the various impacts and opportunities

Web link to further information

<https://birch.wp.st-andrews.ac.uk/>