

**NatureScot**

**SCIENTIFIC ADVISORY COMMITTEE**

**DISCUSSION PAPER**

# CASE Studentships in NatureScot

## Purpose

1. To highlight NatureScot’s current involvement in CASE studentships, demonstrate the value these studentships offer, and seek views on how we can engage with Doctoral Training Partnerships as they emerge from NERC.

## Action

1. The Committee is asked to:
	1. note our current involvement
	2. provide advice on how we can better embed CASE Students within NatureScot, and
	3. make suggestions about how we can get involved with DTPs at an early stage in their development.

## Preparation

1. This paper was written by Alex Mackay. It is sponsored by Des Thompson.

## Background

1. NatureScot has a long history of supporting PhD Studentships. While we have supported a small number of full PhD studentships, in recent years we have focussed on taking on a number of CASE Studentships.
2. CASE studentships provide PhD students with research (and policy) training experience as part of a research collaboration between academic and non-academic partner organisations. These studentships allow us to host a PhD Student for between 3 and 18 months, with students given access to training, facilities and expertise in a real working environment.
3. NatureScot benefits from these studentships by having a capable PhD student taking part in innovative research projects that will provide evidence to help the organisation answer some of the most pressing questions of the day relating to the nature-climate emergency. We also benefit from increased collaboration with the academic sector where important partnerships can be formed.
4. As a CASE Partner we pay around £1,000 per year for four financial years to the lead research organisation which supplements the Research & Training Support Grant (RTSG) for the duration of the studentship and any associated T&S. NatureScot also contributes in-kind support in terms of staff-time, on-boarding requirements, equipment and access to data and information.
5. NatureScot is currently supporting 15 CASE Studentships in 2023/24. The full list can be found in Annex 1. This represents an investment of around £54K from 2021 to 2026. Some feedback from current CASE Studentship supervisors is also included in Annex 2 where they talk about the value of the studentships to their work, the student and NatureScot.
6. NatureScot is keen to broaden the scope of our CASE Studentships to include social, data and innovation science to ensure we are engaging with emerging research techniques. We do, however, recognise there is more work that we need to do internally to ensure that we continue to get value from these studentships and ensure we are maximising the benefits of CASE studentships and DTPs.
7. Prior to the Covid pandemic we worked with students to organise annual ‘in person’ conferences on [Scotland’s ecology, environment and conservation](https://scottishecologyconference.wordpress.com/). The last one planned for Inverness in spring 2020 had to be cancelled due to the pandemic. We propose to resume this series, under the banner of ‘Scotland’s nature’ and propose to hold the event in Inverness in April 2024. This is an excellent opportunity to showcase student work, with advanced undergraduates and postgraduates the main audience. We are aware of some regional events in a similar vein, for example the forthcoming ‘Science Day’ organised by the newly-formed North-East Scotland Ecology Network, to be held at the James Hutton Institute in Aberdeen on Friday 6th October (with a steering group of staff in JHI, Aberdeen University, SRUC, JNCC and BIOSS).

**Studentships - advice**

1. Studentship areas we want to focus on include:
	1. Identifying evidence gaps that we can fill through CASE Studentships.
	2. Encouraging staff from across the organisation to see the value of these studentships to their work, the organisation and their own development and job satisfaction.
	3. Providing more guidance and routes for supervisors to use to embed CASE students into NatureScot and provide them with a valuable experience.
	4. Getting better at sharing the research outputs from CASE studentships and raising the profile of the individuals and their work, possibly using the annual student conference as a major showcase.
	5. Looking at how we can influence the development of DTPs at an early stage to influence the direction and focus of research that will be beneficial for meeting our evidence needs.
2. **The Committee is invited to provide comments on the areas above that we have identified as being important for developing our involvement in CASE studentships.**

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**Annex 1**

| **CASE Studentship** | **Activity** | **Timescale** |
| --- | --- | --- |
| Pink salmon invasions in Scotland: origins and impacts | Biodiversity & Geodiversity | 2022/23 to 2025/26 |
| E4DTP CASE - Resilience and acclimation of rainforest lichens | Biodiversity & Geodiversity | 2021/22 to 2024/25 |
| PhD Studentship - Understanding public opinion on conservation | Biodiversity & Geodiversity | 2021/22 to 2024/25 |
| Beavers and climate change mitigation in freshwater systems  | Biodiversity and Geodiversity | 2022/23 to 2025/26 |
| Super-DTP for the PHD “Evaluating the landscape-scale benefits of Sustainable Urban Drainage Systems for freshwater biodiversity | Biodiversity and Geodiversity | 2022/23 to 2025/26 |
| Changes in upland aquatic plants in UK  | Biodiversity and Geodiversity | 2018/19 to 2023/24 |
| Orkney: wader breeding outcomes under differing agricultural land management and invasive mammalian predator control  | Biodiversity and Geodiversity | 2022/23 to 2025/26 |
| PhD Studentship - Populations at the edge: range dynamics and conservation of the Great Crested Newt under globalchange  | Biodiversity and Geodiversity | 2022/23 to 2025/26 |
| PhD studentship - Optimising the long-term control of invasive American mink from catchment to coast: how many mink is too many?  | Biodiversity and Geodiversity | 2022/23 to 2025/26 |
| Future proofing Scotland's remote coastal areas NBS IAPETUS2 PHD CASE  | Sustainable Coasts and Seas | 2021/22 to 2025/26 |
| Contribution to NERC CASE-award PhD studentship - Understanding the multiple roles of culture in valuing ecosystems and their services | Sustainable Coasts and Seas | 2020/21 to 2023/24 |
| Scottish seagrass in a changing ocean; health, role and restoration potential | Marine Ecosystems | 2021/22 to 2024/25 |
| SuMMeR CASE - Exploring geovisualisations as place-based planning tools for collaborative marine and coastal management | Sustainable Coasts and Seas | 2023/24 to 2026/27 |
| SUPER2 - Inclusion of the 'youth voice for nature' in regional marine planning | Sustainable Coasts and Seas | 2023/24 to 2026/27 |
| SUPER32 - The interaction of waves with seaweed farms: wave attenuation and intra-farm hydrodynamics | Sustainable Coasts and Seas | 2023/24 to 2026/27 |

**Annex 2 - CASE Studentship Supervisors’ Comments (we have removed names of supervisors and universities so that we do not identify students)**

**XXX -** “I’m currently working with a CASE student at XXX. She is one year into the project and is already turning up new insights into urban wildlife… She has also helped with analysis for a NatureScot research report and co-authored a paper on … From her point of view, she has benefited from the experience of working alongside established experts, thereby ensuring that her work will be useful for habitat management and planning. From our point of view, she is providing valuable evidence about nature-based solutions that are part of the SBS vision of urban ecosystems”.

**XXX** - “I currently have 2 and a 3rd about to start, in order of how far through they are:

* University of XXX. Incorporating cultural and heritage values of nature in marine management. Currently on placement with us exploring the potential to do exactly that in the MPA process. This is timely given recent stakeholder/coastal community turbulence.
* XXX. 3D geo-visualisations for stakeholder engagement in marine planning scenarios. Early days, nearly 1 year in.
* XXX. Youth voice for nature in marine planning. About to start.

Advantages for the student:

* Better chance of impactful research
* Experience beyond the academic realm, at a time when there are way more people graduating with PhDs than there are post-doc positions or research funding available. The 3-month placement period is particularly good for this.

Advantages for us:

* Low cost way of directing and being involved in research that can push the envelope, and which would often fall outside our ‘core priorities’ (rightly or wrongly)
* Keeps our staff in touch with emerging research, building knowledge, skills and contacts… and building a good reputation for NatureScot with academics.
* Creates a pool of possible future young employees with great skills and a knowledge of what we are all about. From speaking to students that have been with us for stints, we generally are looked upon favourably to other agencies or government departments.

Advantages for academics/institutions:

* Much better chance of getting funded if we are active partners in their applications
* Builds relationships and collaborations with us that reach way beyond these specific projects

**XXX** - “I would echo much of XXX’s comments re benefits for the student, NatureScot and institutions. I suspect we’ve gained more from the enhanced links with the wider academic community than the impact of the science. I have struggled at times to get the students fully embedded within NatureScot, which is in contrast to other approaches such as the Modern Apprentice Scheme and Graduate Placements, both of which result in more applied benefits to our work. I think CASE Studentships should be considered alongside these other mechanisms, but noting the amazing value for money and academic benefits of studentships.”

**XXX** - “I do think that CASE is a great way for NatureScot to be involved in research without it being too much of a financial stretch. It is also helpful to students to have an opportunity to join us during their internship and add to their career development/ employment prospects. I believe that some of our interns have either joined NatureScot on completion of their PhDs or gone on to do good things elsewhere. It also is a means of us adding to our research and knowledge.”