**Delivering Effective Marine Protected Areas – Backing the Blue Belt through Governance Structures**

**Supervisory Team**
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**This is a joint NERC & ESRC CASE PhD project**
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Scientific background

Environmental sustainability is an important current issue. Marine conservation is key to sustaining our natural and environmental resources. The conservation of marine species such as porpoises and flame shells, or marine features such as seagrass and chalk reefs, often takes place through Marine Protected Areas (MPAs, Lown et al 2018). Some MPAs perform quite well in preserving and sustaining resources, but others perform much worse. Why is that?

Evaluations of MPAs highlight the lack of clear governance structures as contributing to low compliance and effective conservation outcomes (Buglass et al. 2018, Campbell et al. 2012). Many MPAs are supported through voluntary or commercial groups working with statutory regulators, but without formal institutional structures. Others are regulated by rigorous institutions. This studentship will assess MPA governance structures to determine how and whether they condition MPA conservation performance.

Research methodology

Decades of research have explored how best to manage and preserve collective resources, and solutions range from incentives to penalties, and from single providers to group coordination (e.g. Ostrom 2015). The student will undertake quantitative and qualitative analysis of academic literature, registered documents, online text and structured interviews to explore variations in MPA governance. The project will evaluate approaches to engage stakeholders, fund preservation, and effectively manage the maintenance or recovery of protected species and designated features.

Training

Along with outstanding NERC training as part of the ARIES and SeNSS DTP programs, this student will receive truly interdisciplinary training in marine social sciences, marine and environmental policy, policy analysis, discourse analysis, and computerised text mining (CTM) and machine learning. Training will include interview methods, and the student will be able to meet policy makers and practitioners in regional, national, and international fieldwork locations. The successful candidate may undertake an internship at a UK government or NGO organisation to gain experience of delivering the UK Blue Belt programme (https://www.gov.uk/government/publications/the-blue-belt-programme).

Person specification

We seek candidates with Bachelor's degree and interest in or across relevant Social, Natural, and Computer Sciences, including: Marine or Conservation Biology, Public or Environmental Policy, International Development, Political Science, Economics, Data Sciences. If you have a passion for research in the natural world and effective conservation policy, this project could be for you!

References

Gawande, K, **Reinhardt**, GY., Silva, CL., Bearfield, D., (2013). Comparing Discrete Distributions: Survey Validation and Survey Experiments. *Political Analysis*. 21 (01), 70-85

Lown, AE, Hepburn, LJ, Heywood, JL, **Cameron**, TC - Density and seasonally dependent associations of biodiversity with the European flat oyster (*Ostrea edulis*): evidence for marine planning. (In Press)

Caveen, AJ., **Sweeting**, C. *et al.*, (2014). Diverging strategies to planning an ecologically coherent network of MPAs in the North Sea: the roles of advocacy, evidence and pragmatism in the face of uncertainty, *Advances in Marine Biology* 69: 325-370

**Reinhardt**, GY. (2017). Imagining Worse than Reality: Comparing Beliefs and Intentions between Disaster Evacuees and Survey Respondents. *Journal of Risk Research,* 20(2): 169-194. DOI: 10.1080/13669877.2015.1017827

Ostrom, E. (2015). *Governing the commons: The Evolution of Institutions for Collective Action.* Cambridge university press.

## Key Information

- This project has been shortlisted for funding jointly by the ARIES NERC Doctoral Training Partnership (www.aries-dtp.ac.uk) and the SeNSS ESRC Doctoral Training Partnership (www.senss-dtp.ac.uk). This studentship will be led by the ARIES DTP, but the successful candidate will have additional access to training across the SENSS DTP consortium.
- Successful candidates who meet UKRI's eligibility criteria will be awarded a NERC/ERSC studentship - in 2018/19 the stipend is £14,777.
- Undertaking a PhD with ARIES will involve attendance at training events.
- ARIES is committed to equality & diversity, and inclusion of students of any and all backgrounds. All ARIES Universities have Athena Swan Bronze status as a minimum.
- Applicants from quantitative disciplines who may have limited environmental science experience may be considered for an additional 3-month stipend to take appropriate advanced-level courses.
- Usually only UK and EU nationals who have been resident in the UK for 3 years are eligible for a stipend. The closing date for applications is 23:59 on 8th January 2019.

## How to Apply

Please apply by sending a CV (including contact details of two academic referees) and a cover letter explaining your motivation and suitability for the PhD to Emma Revill ariesapp@essex.ac.uk by 8th Jan 2019. If you have any questions please feel free to contact any member of the supervisory team.

Marine Management Organisation