

ESAI Postgraduate Researcher of the Year 2020 – Runner-Up Kate Mahony

A temporal investigation of Europe-wide drivers of cockle *Cerastoderma edule* biology, health and population dynamics.

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Supervisors: Prof. Sarah Culloty and Dr Sharon Lynch

I have always been passionate about the environment and marine life, which led me to completing a BSc in Zoology and an MSc in Marine Biology. My love for research then led me to a PhD in UCC, which I passed in February 2021. This research was part of the international COCKLES Project, which aimed to protect and restore cockles, a shellfish found across Europe that is valuable economically, culturally and ecologically. Due to this importance, my research examined factors that might threaten cockles in the future. Using historic data, histology and growth models, I unravelled the potential for climate change to alter cockle populations. These results led to fascinating outputs which were important to share with stakeholders. These findings were disseminated to the media, scientists, managers and industry and have the potential to protect this vital species into the future.



Kate collecting cockles at Dundalk Bay, an important cockle fishery in Ireland.