

Natural Environment Group

9.30am to 12.00pm - 20th November 2024

Paper 3 – Bursary Updates

2024/2025

‘Portunus’ - Exploring and recording the underwater habitats of Langstone and Chichester Harbours.

The aim of the Portunus project is for members of Southsea Sub-Aqua Club to record marine habitats and species seen on dives in Langstone and Chichester harbours and to share data through various reporting mechanisms such as Seasearch, I-Record, Seagrass spotter. Although impacted by boat engine failure for much of the summer, a total of 11 dives have been conducted (9 Langstone and 2 Chichester). Three surveys were conducted at inter-tidal sites on Hayling Island which noted the presence of new areas of sea grass and pacific oyster reefs (invasive species). The Solent Forum grant also provided opportunities for divers to receive training in Seasearch and underwater survey techniques. Five members are working towards their Seasearch qualification and seventeen more have either completed or working towards their Underwater Surveyor certification.

Further dives are expected.

A report will be submitted in the winter to set out the findings and learning points.

When is a wading bird not a wading bird - The case of the European Starling , University of Portsmouth

Wading birds are an essential part of the ecology of The Solent, one of the most important coastal areas in South England. European Starlings are typically land-based birds yet have been observed on Langstone’s intertidal mudflats. The starlings' efficient foraging techniques and invertebrate-based diet could create competition for resources with native wading birds, potentially disrupting species that rely on marine invertebrates found in mudflats during low tide. This behaviour raises questions about whether starlings should be considered part of wading bird counts and how their presence might affect established marine bird populations. Funded by the Solent Forum, this project aims to investigate whether these terrestrial starlings should be included in wading bird counts and evaluate any potential competition with wading birds.

Starling activity on the intertidal mudflats was captured using two Nikon Coolpix P900 cameras set up within the Institute of Marine Science labs overlooking Loch Lake. A 35mm focal length was selected, and each camera's field of view overlapped to cover a marked 2400m² area, enabling an optimal balance between images with enough resolution for bird detection and covering a wide area. The cameras were programmed to take images every 30 seconds, covering one hour before and two hours after low tide. Images were recorded over 93 days, from late July to October 2024, producing a large dataset of 87,449 images. Initial observations have for the first time confirmed the presence of significant numbers of starlings in this intertidal mudflat in addition to traditional wading birds.

The next steps include refining the image set by discarding those with poor visibility due to weather or lighting and developing a standardised annotation method using a grid overlay to systematically record the number and behaviour of birds in each frame. These data will be compared to existing records from Bird Aware and other local datasets to contextualise our findings.

The results could mark a potential shift in how we view bird populations in coastal habitats and lead to new considerations in conservation management practices.

2023/2024

It's the Water Quality Stupid!

Final report being prepared. Further funding from the Environment Agency being discussed.