

NEG Bursary Projects – Update 27/4/22

Previous years' projects

Salt marsh passive regrowth promotion – Lands End, Old Bursledon, AQUASS – [see Appendix A](#)

Tackling the microplastic pollution – testing a new biocomposite material as artificial filtration device, in Chichester Harbour. University of Brighton – [Presentation at NEG Meeting 27/4/22](#)

Projects for 2022/23

NEG voted for 4 projects this year, and the following were successful

The project with the most votes was the Intertidal Seagrass Restoration Project and that will be fully funded. HCC were offered a smaller amount and were happy to accept money for the thermal imager; they can fund the remaining amount.

| | |
|---|--------------|
| Fathom Ecology, Intertidal Seagrass Restoration in the Solent | £2980 |
| HCC Recoding Snipe on coastal site using one thermal imager | £1000 |
| HCC equipment to capture Snipe at Lymington/Keyhaven | £194 |
| TOTAL | £4174 |

Confirmation letters will be sent out tomorrow

Appendix A

UPDATE Salt marsh passive regrowth promotion

AQASS and SAND Geophysics have been undertaking a small scale salt marsh restoration trial through the 2021-2022 period at a site (Lands' End, Old Bursledon) on the River Hamble. The work was funded through a NEG Grant and via funding from the landholder, Mr Mark Keeling. Initial surveys were undertaken in March 2021 to provide a baseline site condition of a chosen creek site at Lands' End (Hackets marsh). A full ecological survey was not undertaken, but a general assessment was carried out using photography and qualitative assessment of marsh conditions, pioneer species presence (noting time of year), cliffing, and channel / erosion development. Importantly as per the NEG proposal, a baseline drone flight was undertaken to provide a spatial / temporal reference from which to compare the subsequent 5 permitted (by Natural England) flight data. The final flight was on 16th March, 2022. To begin the trial study, a series of coir rolls held in place by chestnut stakes were placed in the creek (see plate 1).

Whilst it is acknowledged that a more ambitious structure/ study would potentially have yielded a higher sediment accretion rate, it was expected, and found, that the necessary regulator permissions were time consuming to achieve from the Marine Management Organisation (MMO) and Natural England (NE); Hamble Harbour Authority were, however, rapid in their response. The protracted permissions period was due to MMO necessarily considering if a Marine Licence was required, NE were very helpful and undertook a rapid HRA for the project as the marsh is SPA / Ramsar. Accordingly, we did not wish to be more ambitious in structure design, wanting to avoid more detailed legislation requirement, which may have significantly depleted the research time budget.

The five subsequent drone flights in 2021-2022 (Plate 2) are being analysed using photogrammetry methods to assess sediment change (height / morphology) and if there is evidence of potentially promoted pioneer species (e.g. *Spartina* / *Salicornia*) (Plate 3) where sediment has / may have accreted to a height allowing them to establish. The coir structures are still in place and in good order thus will continue to affect flows and sediment movement in the creek going forward. We will casually monitor this as no more drone flights are permitted. When worked up, results will be disseminated to Solent Forum / NEG, an interim presentation has been given on methods to the Hydrographic Society in November 2021 at the National Oceanographic Centre which was met with interest.

Plate 1.



Plate 2



Plate 3

