

## Project description (cont)

- All deployments will be below mean low water spring, the exact depth will be dependent upon the location chosen within the proposed area (s).
- Deployments will occur between December 2019 and February 2020, as well as in November and December 2020 as a phased approach.
- All lines will be deployed using a small 6m rigid inflatable coded research vessel (RV Calypso) (or an alternative coded vessel hired from local companies).
- After deployment from the boat, divers will be deployed to inspect and tidy up the deployments to ensure they are fixed to the seabed (using biodegradable pegs if required).
- If the site chosen is outside of the mooring area, during the first 12 months after planting, 8 small marker buoys will be placed at the site (around the edge) to aid with site access and maintenance.
- Divers will inspect the deployments periodically and conduct any necessary repairs. After storm events that hit Dale additional inspections will be conducted.
- The method used here builds on the experience developed during trials conducted by Swansea University during 2017 to 2018 and detailed in the following academic article:
  - Unsworth et al. (2019) *Frontiers in Ecology and Evolution*  
<https://www.frontiersin.org/articles/10.3389/fevo.2019.00311/full>

## Expected seagrass growth

As seagrass will be planted at a density of approximately 1 small bag per m<sup>2</sup> over the 2 hectare proposed footprint not all of the area will initially be covered in seagrass. It is expected that within 6 months of planting the bags, the majority of the seed bags will have developed into small seedlings that will mature within the first year. The expected time period of the seedlings to grow into small patches and hence merge into a continuous mature meadow is difficult to determine but based on available scientific literature, this is expected to happen within a 5 year period, although it may take longer. If the planting is successful the seagrass could spread by vegetative reproduction, if this does occur it will take place over time scales of decades rather than years but is unlikely to be widespread. Due to the known interactions between seagrass and boat moorings it is highly unlikely that the seagrass will expand and become successful under the area of the footprints of any individual boat mooring.

## Monitoring

Swansea University, in collaboration with SKY and WWF are committed to the long-term assessment and monitoring of the proposed seagrass to be planted and propose to develop a monitoring plan in collaboration with local and national stakeholders. During the first year, this monitoring will be intensive in order to ensure none of the biodegradable infrastructure of marker buoys are problematic for local marine users.

## Logistics

All marine project works will be conducted off the Swansea University research vessel RV Calypso (small RIB) or a similar sized locally chartered vessel. Equipment will be brought to site using a Swansea University vehicle which will also be used to launch the vessel at either Milford haven or using the Dale boat ramp. Swansea University are in the process of renting a Dale Yacht Club mooring in order to have a locality to moor the vessel for short periods in between activities.