RESTORATION FORTH

‘How To’ Guide: Intertidal Seagrass Mapping

Equipment:

- GPS device
- 50m transect line – this could be a tape measure or length of rope or string etc.
- Recording sheet (link)
- Clipboard, pencil, waterproof protector
- Flags
- First aid kit
- Tide timetable

Before you start your survey:

- Always work in groups of 2 or more when monitoring a seagrass meadow.
- Choose a seagrass meadow that is easy to access and in a safe environment.
- The SeagrassSpotter app can help identify seagrass meadows for your survey.
- Chose dates with spring low tides and have a tide height lower than 0.6m.
- Arrive at the site 2 hours before low tide, to allow you more time on the shore.
- Ensure you have the relevant permissions to access the site and have contacted NatureScot’s regional team to inform them of your plan.
- Wear suitable clothing and footwear.
- Thoroughly clean your footwear to reduce the risk of introducing any harmful species. It is advised that a footbath containing a solution of 1% Virkon Aquatic is made, to clean the soles and sides of footwear before walking on the shore and near the seagrass meadow.

Method:

- Take care walking out to your chosen seagrass meadow site.
- When mapping the area of seagrass, first walk the perimeter to determine the overall shape of the meadow.
- Patches of seagrass may be close to one another. To determine whether patches are joined or separate, a general rule of thumb is if they are beyond a metre in distance from another they are regarded as separate patches.
- Before mapping a section, place flags round the perimeter of the area you are recording to help identify the shape.
- Depending on the area of seagrass you intend to map, you will need to use one of two functions on your GPS device:
  - For large continuous areas with hard boundaries use the tracking function to map the perimeter.
  - For smaller discrete patches use the mark waypoint function to map the perimeter.
- Walk around the perimeter either marking way points every few metres for smaller patches, or enabling tracking for larger sections of a meadow.
- Once you have walked around the area, record the final GPS waypoint or end tracking.
- Write down the GPS waypoint numbers or tracking ID for the patch you have just mapped.
- Record whether the patch is made up of one species of seagrass or if it is a combination of both.
- Record the length and widths of the seagrass areas to help determine their aerial extent.
- Remove any flags and move onto the next patch.
- For individual plants or small clusters that are too small to map, hold the GPS device over the centre and take a single waypoint marker.
- Once completed, ensure all data including meta data (date, location, recorder's name, weather conditions etc.) is captured and recorded.
- Pack up the survey equipment and rinse it off with fresh water before leaving the site.

For more information please follow:

Nature Scot's Community-led Marine Biodiversity Monitoring Handbook. (**Community-led Marine Biodiversity Monitoring Handbook - Chapter 3 - Methods.pdf (nature.scot)**)

For Subtidal monitoring SeaWilding have produced a resources for this type of monitoring: **Seawilding | Native Oyster and Seagrass Restoration, Scotland, United Kingdom**