Shetland Marine Planning Partnership Newsletter

Supporting clean, healthy, safe and productive seas in Shetland



Welcome to the Autumn/ Winter 2024 issue of the Shetland MPP newsletter!

This newsletter contains information on a range of projects and plans relevant to marine planning which have continued to be developed by, or in association with, the Shetland Marine Planning Partnership, UHI Shetland.

Nationally the Marine Directorate continue to consult on the development of National Marine Plan 2, publishing a position statement in November 2024. They are currently seeking feedback on their Planning Position Statement with the consultation open until 28th Jan 2025.

As a marine region, we hope that our Regional Marine Plan may progress to adoption in 2025.

We hope you enjoy reading about the wider work of the SMPP in this newsletter.

Dr. Rachel Shucksmith

Marine Spatial Planning Manager Shetland UHI



Simon Pallant Coastal Zone Manager Shetland Islands Council



In this issue...

Marine Planning News-

- SMPP attend marine forums
- Royal Garden Party invitation
- UHI Shetland hosts MMO training
- New PhD student at UHI Shetland

Project Updates-

- Moder Dy visits Fair Isle
- Marine Enhancement Plan
- North Atlantic Region Cooperation
- Searching for Shetland's lost Seagrass

Feature Focus- Blue Carbon

- Blue carbon policy brief launched
- Download our new Kelp ID Guide for Shetland
- Photo exhibition showcases blue carbon habitats

Reports and Publications-

- Two chapters published in new Ocean Governance book
- Paper published in special issue

To get in touch please contact the Marine Planning Team at UHI Shetland Email: marineplan.shetland@uhi.ac.uk Phone: 01595 772000 Website: www.shetland.uhi.ac.uk

Marine Planning Partnership News

SMPP attend Royal Garden Party

In July, staff members from the Shetland Marine Planning Partnership were invited to attend the Royal Garden Party. The garden party is an annual event that celebrates individuals and groups making significant contributions to their communities and fields of expertise.

The King and Queen, joined by The Duke and Duchess of Edinburgh, hosted the garden party in the grounds of Holyroodhouse. The invitation was extended in recognition of their contributions to the field of marine spatial planning.

Marine spatial planning plays a crucial role in balancing the ecological, economic, and social needs of marine areas, ensuring the sustainable use of these valuable resources. The UHI Shetland and Shetland Island Council efforts have been pivotal in developing innovative strategies to manage marine spaces, fostering collaboration, and promoting best practices both locally and internationally.

Being selected for invitation is a reflection of the partnerships dedication to advancing marine planning and research, and their impactful work on projects shaping the future of our oceans.

This recognition highlights not only the achievements of the individuals invited but also underscores the broader significance of marine spatial planning in addressing global environmental challenges. The MPP was honoured to have been invited to attend.



Regional and National Marine Planning Forum

The Shetland Marine Planning Partnership attended the Regional and National Marine Planning Forums in Stirling on November 11th and 12th. The Regional Marine Planning Forum included participants from the Orkney and Clyde marine planning partnerships, Local Coastal Partnerships, and representatives from the Marine Directorate planning teams. Discussions focused on the progress of various regional plans, as well as the challenges and opportunities in developing NMP2.

On the second day, the National Marine Planning Forum brought together a broader group of stakeholders to review the current progress of NMP2. The forum included focused sessions on regional priorities and policy ideas following the publication of the National Marine Plan 2 planning position statement on November 5th.

The planning position statement is open for consultation until January 28th. Scan the OR code to find out more.



UHI Shetland welcomes new PhD student

Elinor Spencer has recently commenced her research as a SUPER DTP PhD student under the primary supervision of Rebecca Giesler at the UHI Shetland Scalloway Campus. Her research will address key knowledge gaps in the pathways of secondary spread of marine invasive non-native species in Scottish marine regions, as well as identifying some of the most at-risk sites and routes for invasives transport and settlement. This research will test some of the presently used methods of sampling and surveying to update Scotland's invasives database and will research future scenario impacts such as

climate change, deployment of renewable technologies, and changes in harbour use. The aim is to provide an updated picture on marine invasive species distribution in Scotland and to guide more regular monitoring.

Elinor joins UHI Shetland having completed her MSc in Marine Science at Heriot-Watt University, with her thesis investigating coccolithophores as part of the CoccoTrain programme led by Heriot-Watt and the Lyell Centre. Her interests focus on the effects of climate change on ocean ecology and biogeochemistry, especially in rapidly changing systems such as the Arctic and North Atlantic.



To get in touch please contact the Marine Planning Team at UHI Shetland Email: marineplan.shetland@uhi.ac.uk Phone: 01595 772000 Website: www.shetland.uhi.ac.uk

Marine Planning Partnership News

UHI Shetland host MMO training

UHI Shetland recently welcomed specialist trainer Carolyn Barton to conduct Marine Mammal Observer Mitigation training. Funded by ESB, the training brought together 12 participants, including UHI Shetland staff, marine science graduates, and local community members, providing them with key skills for marine mammal monitoring.

The role of a Marine Mammal Observers (MMOs) is to monitor marine mammal activity during offshore development activities, such as geophysical surveys and turbine installation. MMOs help to ensure compliance with environmental regulations designed to mitigate disturbances. MMOs provide realtime observations and data collection, which are crucial for making informed decisions about project operations. MMOs will play a key role during the development of offshore wind projects and this training will help to ensure that this need can be met by the local work force.

This training program has received formal endorsement from the United Nations Decade of Ocean Science for Sustainable Development (2021-2030), highlighting its vital role in promoting ocean sustainability. For more information on the endorsement, please visit <u>UN Ocean</u> <u>Decade website.</u>

By focusing on sustainable practices and protecting marine biodiversity, the MMO training supports Shetland's sustainable marine management goals and aligns with the broader goals of the UN Ocean Decade. This collaboration illustrates UHI Shetland's commitment to ocean stewardship.



Marine Planning Projects

In September, researchers from UHI Shetland's Marine Planning Team headed to Fair Isle aboard the research vessel Moder Dy. The team conducted hydro-acoustic and dropdown video surveys within the Fair Isle Demonstration and Research MPA (DRMPA).

The data will be used by researchers working within the DRMPA to gain a better understanding of the seabed types around Fair Isle. This adds a layer of baseline data which can be used to inform relationships higher up the food chain, for example, understanding where important ecosystems are located that support species targeted as prey by the

Moder Dy visits Fair Isle

seabirds nesting on Fair Isle. This in turn could lead to more effective and targeted marine management and conservation efforts helping to protect biodiversity and support sustainable resource use in the area. The project was supported by players of People's Postcode Lottery through the National Trust for Scotland's Love our Nature project.



To get in touch please contact the Marine Planning Team at UHI Shetland Email: marineplan.shetland@uhi.ac.uk Phone: 01595 772000 Website: www.shetland.uhi.ac.uk

North Atlantic Region Cooperation

Two new projects have recently started within the North Atlantic Region which include the Marine Spatial Planning team at UHI Shetland.

Where Green Meets Blue

UHI Shetland is partnering with Nordregio, a Nordic research institute based in Sweden specialising in research associated with regional development, policy and planning. The aim is to facilitate the sharing of experiences across the North Atlantic Region including examples of best practice in co-location of renewable energy and existing uses, including fisheries and the environment.

Marine Planning Workshop

UHI Shetland is partnering with the University Centre of the Westfjords in Iceland, and Nordregio, in Sweden to host a workshop in Edinburgh on 20/21st January to share knowledge across the North Atlantic Region on the integration of local knowledge and data in marine spatial planning and management. The workshop will explore challenges and opportunities, as well as the potential impact, of the increased use of AI.

Both projects have been supported by North Atlantic Cooperation Fundinghttps://nora.fo/





Searching for Shetland's lost seagrass

Over the last two years, the marine spatial planning team at UHI Shetland have been working to map the distribution of Shetland's seagrass beds and assess their condition, funded by the Scottish Marine **Environmental Enhancement Fund** (SMEEF). We have been using aerial photos captured by small drones to map the size and status of eelgrass (Zostera marina) beds. The project mapped 11 beds in Whiteness Voe and one in Weisdale Voe, verified by snorkel and paddleboard surveys. However, we have been unable to find evidence of seagrass at several sites where it historically flourished, such as near Papil in Burra and in the Vadills lagoons near Brindister Voe. We are still interested in hearing from anyone

who might have knowledge of other sites who can help us locate remaining seagrass.

Seagrass is an amazing habitat, providing nursery grounds and shelter for important fish species and helping to stabilise sediment and store carbon. The information collected in this project has helped update the baseline of this crucial coastal habitat to better understand how much seagrass habitat has been lost from Shetland. Seagrass across much of the North Atlantic has declined over the last 100 years, limiting the ability of this species to naturally recover. This is driving interest in helping seagrass habitat through active restoration, and we are aiming to explore how this would work in Shetland.



Working towards a Marine Enhancement Plan

The marine planning team are working closely with local people in Shetland to assist with the creation of a Marine Enhancement and Restoration Plan for Shetland.

People in Shetland have a deep connection to the sea which is integral to Shetland's cultural identity. Many people make a living from the sea but it is also important for recreation and social interaction.

Given this deep connection, it is crucial for the community's voice to be heard. UHI Shetland are facilitating this process by collating marine issues and enhancement ideas raised during public drop-in sessions, meetings and surveys.

Ideas raised during the sessions will be prioritised by the local community before being published as a final plan. It is the ambition that the plan will be used by marine developers looking to invest in enhancing the marine environment while also considering the needs and insights of everyone involved.

The project was made possible through funding support from the Marine Fund Scotland.

To get in touch please contact the Marine Planning Team at UHI Shetland Phone: 01595 772000 Email: marineplan.shetland@uhi.ac.uk

Website: www.shetland.uhi.ac.uk

Feature Focus- BLUE CARBON

Blue Carbon policy brief launched

UHI Shetland released its latest policy brief, **"Towards Net Zero: The Role of Marine Habitats"** at the Shetland Climate Festival in June, offering key insights into the critical role of marine ecosystems in combating climate change.

This policy brief details the important contribution of marine ecosystems in achieving global net-zero emissions. In the UK, marine ecosystems are estimated to have the capacity to capture and store around 2% of the UK's emissions. This brief highlights the importance of accurate mapping and modelling of these marine habitats to guide decision-makers and restoration initiatives effectively. It also showcases local management measures which have protected sensitive habitats and supported carbon capture. Accurate blue carbon mapping aids in informed marine management, advancing global climate objectives and coastal environment preservation. The brief outlines actionable steps for policymakers, stakeholders, and conservationists.

The project was supported by funding from the University of the Highlands and Islands Knowledge Exchange Fund for Net Zero.

The policy brief can be found on <u>UHI</u> <u>Shetland's website</u> or by scanning the QR code.





Exhibition showcases Blue Carbon habitats

Earlier this year, the Marine Spatial Planning team, in collaboration with Carbon Neutral Islands, brought Yell's Blue Carbon Habitats into the spotlight.

Two photo exhibitions along with audio recordings gave attendees an insight into the rich variety of blue carbon habitats found in Shetland and Yell. Beautiful underwater images provided by Richard Shucksmith Photography allowed people to dive into the seagrass meadows, kelp forests, and maerl beds that are acting as important blue carbon stores.

An interactive workshop, run by Rebecca Giesler, also provided participants with an introduction to the processes in which coastal and marine ecosystems capture and store carbon. The session also offered practical insights into how individuals can contribute to local mapping efforts, focused on kelp mapping, with a guide also produced to aid in identification of different kelp species (see below).

The photographs are still available to view on the online exhibition at <u>bluecarbonyell.com</u>



Shetland Kelp ID Guide

UHI Shetland, with support from Carbon Neutral Islands, have created a new ID guide specifically for Shetland's kelp. These large seaweeds form underwater forests important for protecting coastal areas from flooding, are a refuge for many marine species and play a role in capturing carbon.

Perfect for kelp mapping volunteers and marine enthusiasts, this guide helps you identify the diverse kelp species around Shetland's coasts.

Scan the QR code or visit shetlandcommunitywildlife.org to download your copy.





To get in touch please contact the Marine Planning Team at UHI Shetland Email: marineplan.shetland@uhi.ac.uk Phone: 01595 772000 Website: www.shetland.uhi.ac.uk

Latest Publications

Two chapters published in new Ocean Governance book

Rachel Shucksmith, Inne Withouck and Beth Mouat from UHI Shetland, recently published two chapters within the book Governing Oceans edited by Catherine Jones.

The first, entitled "Barriers and opportunities for improved governance of fisheries within the context of marine spatial planning" delves into the challenges faced by

decision-makers in managing an ever increasingly busy marine environment. Managing conflicts between marine users, for example, how to make trade-offs between wider societal aims and values such as decarbonising energy creation via offshore renewable energy, with the impacts on existing users such as fisheries and navigation, as well as onshore communities can be a challenge for decision-makers and are sometimes termed 'wicked problems'. These challenges are difficult to legislate or regulate, however, recognition of wicked problems can allow the focus to shift towards solutions. Within the chapter, Rachel and Inne take a closer look at how fisheries are currently included within marine spatial planning processes globally, and pose the question of how can MSP and fisheries be integrated to improve ocean governance.

The second, entitled, "A value tree approach to integrating policy and legislation into spatial decision support tools for siting offshore renewables" describes how a value tree approach can help decisionmakers test future planning policies. Currently, to aid decision making, multi-criteria mapping can be used which combines a set of spatial data layers representing multiple objectives into one overall suitability map. Linking the policy and legislation requirements directly with the included layers of an existing tool gave an indication of how 'mappable'

planning policies and legislation that are currently in place are, and it was found that the policies could be interpreted in different ways. Inne, Beth and Rachel advise using the value tree approach to help ensure planning policies are specific enough to be implemented with spatial decision support.

For more information scan the QR code or visit



www.elgaronline.com

Or contact Rachel Shucksmith on marineplan.shetland@uhi.ac.uk

Paper published in special issue

Tanya Riley, Rachel Shucksmith and Beth Mouat from UHI Shetland recently published their latest paper, "Real World Data for Real World Problems: Importance of Appropriate Spatial Resolution Modelling to Inform Decision Makers in Marine Management" featured in a special issue on Good Modelling Practice.

The study emphasises the critical need for selecting appropriate spatial resolutions in environmental modelling. It also illustrates the potential consequences of neglecting this aspect and its potential impact on marine management.

For the full article go to <u>https://doi.</u> org/10.1016/j.ecolmodel.2024.110864 or scan the QR code.

For more information contact Tanya Riley on <u>marineplan.shetland@</u> <u>uhi.ac.uk</u>



Further Information

This newsletter has been produced by Shetland UHI on behalf of the Shetland Marine Planning Partnership.

The development of the Shetland Islands Regional Marine Plan is supported by funding from Shetland Islands Council and Marine Scotland. If you would like to subscribe to this quarterly newsletter please contact us via email:

marineplan.shetland@uhi.ac.uk

The Shetland Islands Regional Marine Plan and more information on marine planning in Shetland can be found on the Marine Spatial Planning pages of the Shetland UHI website <u>here.</u>

Contact the Marine Spatial Planning Team on:

01595 772000

marineplan.shetland@uhi.ac.uk

For more information on SIC marine and coastal planning visit their website <u>here</u> or contact them on:

01595 744293

marine.planning@shetland.gov.uk





U'HI SHETLAND



To get in touch please contact the Marine Planning Team at UHI Shetland Email: marineplan.shetland@uhi.ac.uk Phone: 01595 772000 Website: www.shetland.uhi.ac.uk