

# MASTS Annual Science Meeting 2025

## *“United in Marine Research & Impact”*

Tuesday 18<sup>th</sup> – Thursday 20<sup>th</sup> November 2025  
Technology & Innovation Centre, University of Strathclyde, Glasgow

## Day 1: Tuesday 18<sup>th</sup> November 2025

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09.00-09.30 Coffee and Registration ☕

09.30-11.00 **Opening of MASTS ASM and Plenary talks** in the Main Auditorium (Auditoria B/C).

09.30-09.40 **MASTS ASM Opening and welcome by Professor David Paterson** (MASTS Executive Director).

09.40-09.45 **An Introduction to the Scientific Committee for Oceanographic Research (SCOR):** Professor Alex Poulton (Heriot-Watt University)

09.45-10.15 **Invited speaker: Professor Maeve Lohan** (University of Southampton). **“Iron and Manganese Cycling in the Atlantifying Barents Sea: Implications for productivity”**

Marine phytoplankton growth influences climate and ecosystems but is dependent on the availability of iron and manganese in the ocean. These nutrients are found at very low concentrations in the ocean and can limit phytoplankton growth. The Barents Sea is one of the most productive regions in the Arctic, but it is warming rapidly due to climate change. Sea ice and glacial melt provide large amounts of iron and manganese to the surface of the Barents Sea and sediment resuspended from the seafloor provides iron and manganese close to the seabed. However, these inputs do not spread very far from their sources, which will change as the Barents Sea warms. In the southwestern Barents Sea, phytoplankton used much of the available iron and manganese, and the supply of iron was very limited, resulting in very low iron concentrations in the surface waters. The combination of low supply and lots of phytoplankton use caused iron to limit further phytoplankton growth. As the Barents Sea continues to warm, rising demand and falling supply of iron and manganese could spread iron limitation, affecting how much phytoplankton growth can occur in the Barents Sea in the future.

10.15-10.40 **Invited speaker: Professor Matt Frost (PML) & Paul Buckley (CEFAS). “The Marine Climate Change Impacts Partnership (MCCIP): What’s to come in the next 5 years (and lessons learned from the previous 20).”**

MCCIP recently celebrated its 20th anniversary at Victoria Quay in Edinburgh (the site of our first formal meeting), reflecting the critical role Scotland has played in shaping the partnership. We will briefly reflect on the MCCIP ‘journey’, including how our evidence and advice ‘offer’ has evolved, and

what changes we expect to implement in the next 5 years. We will discuss some of the key challenges for Scotland’s marine environment, including our role in a current MASTS project to support evidence-based climate change adaptation in Scotland’s marine environment. Opportunities for MASTS members to engage with MCCIP will be highlighted and feedback invited on MCCIPs next phase of delivery.

**10.40-10.50 Invited speaker: Professor Mark Inall** (Chief Scientific Advisor Marine, Scottish Government). **“An update on Scottish Government’s Marine Directorate Areas of Research Interest”**

Earlier this year, the MASTS Community contributed to the development of the Scottish Government’s [Marine and Freshwater Areas of Research Interest](#). These are now published, and Prof Inall will provide an update and detail how to get involved.

**10.50-11.00 Continuing to visualize Climate Change Impacts around Scottish Deep Seas using a StoryMap.** Dr Johanne Vad (University of Edinburgh)

Hear about an interactive and accessible online tool to present and visualize the current and future impacts of climate change on Scottish deep-sea habitats. The StoryMap focusses on deep-sea sediments, sponge grounds, cold-water coral reefs and demersal fishes. It identifies current and future climate change impacts, potential hotspots, critical timepoints and thresholds, and highlights potential changes in species distribution and community structure. The StoryMap also provides an overview of recent research, summarises knowledge gaps across disciplines and integrates open access data sets within an ArcGIS StoryMap framework.

**11.00-11.45 Coffee break, networking and [Poster Session 1](#)** 

Time	On Level 2			On Level 3		
	Screen 1	Screen 2	Screen 3	Screen 4	Screen 5	Screen 6
11.05-11.20	Emmy Cooper-Young			Sharon Brown	Heather McConnell	Anita Flores Lenero
11.25-11.40	Ambre Chapuis	Isabel Quinn	Hayley Swanlund			

- Emmy Louise McLeod Cooper-Young (Heriot-Watt University) - Thriving Not Just Surviving: Understanding the Optimum Environmental Conditions for the Native Oyster (*Ostrea edulis*) to Ensure Long-term Restoration Success
- Ambre Chapuis (University of Edinburgh) - Exploring genetic diversity and hybridisation patterns in mussels in Northern Scotland
- Isabel Quinn (University of St Andrews) - Seasons of change: seasonal variation in the functional and taxonomic composition of *Laminaria hyperborea* epibiont assemblages
- Hayley Swanlund (SAMS) - Quantifying and Valuing Climate, Water Quality, and Habitat Ecosystem Services of Seaweed Aquaculture
- Sharon Brown (University of Stirling / Moredun Research Institute) - Cumulative effect and impact on Gill Health
- Heather McConnell (SAMS) - Bite by Bite: Improving Sea Lice Modelling Through Predation Insights

- Anita Flores Lenero (SAMS) - Using Modified Clay to mitigate Fjord HAB taxa: Laboratory results using species from Chile, Scotland, and Norway.

11.45-13.15 **MASTS General Science Session 1** in the Main Auditorium (Auditoria B/C) and **MASTS General Science Session 2 & SUPER DTP Showcase** in Auditorium A

11.45-13.15 [MASTS General Science Session 1](#) in the Main Auditorium (Auditoria B/C). Chair: Prof Teresa Fernandes. Talks are 12 minutes each (plus 3 minutes for questions).

- Gurjameer Singh Ramday (Heriot-Watt University) - Happy in their Home? Restoration and Survival of the European Flat Oyster (*Ostrea edulis*) in the Dornoch Firth
- Rebecca Giesler (presenting) and Tanya Riley (UHI Shetland) - Community Identification of Challenges and Opportunities for Marine Restoration and Enhancement in the Shetland Islands
- Elizabeth Lacey (Project Seagrass) - Learning from water quality induced seagrass restoration failures in the Firth of Forth
- Cait McCarry (University of Strathclyde) - Toward optical closure in a highly scattering coccolithophore bloom
- Texa Sim (Conservation Detection Dogs Scotland) - Dogs, Detection, and *D. vexillum*: Innovative Management Solutions for an Invasive Threat
- Rachel Shucksmith and Katie Brigden (UHI Shetland) - What drives fishers and citizens as data collectors? Implications for data application and marine management.

11.45-13.15 [MASTS General Science Session 2 & SUPER DTP Showcase](#) in Auditorium A. Chair: Dr Lois Calder. Talks are 8 minutes each (plus 3 mins for questions).

- Jasmine Freeman (University of Strathclyde) - How is climate change driving phenological shifts and trophic asynchrony in a coastal North Sea food web?
- Hannah Towns (SAMS) - Applying a Biotic Ligand Model to the environmental monitoring of deep sea mine tailings placement.
- Fern Fairgrieve (Edinburgh Napier University) - Antibiotic Resistance in Rivers: Comparing Urban and Agricultural Impacts
- Kay Ihle (SAMS) - Light climate and diel vertical migration of *Calanus finmarchicus* in a CDOM-rich Scottish fjord: fine-scale observations and seasonal patterns

- Rhei Ammaturo (University of Strathclyde) - Characterising separate king scallop stocks in Scotland: results from a combined Dynamic Energy Budget and Lagrangian particle tracking approach
- Finn Cowell (UHI) - Changes in the Return Timing of Atlantic Salmon to the River Tweed Between 1840 and 1951
- Maria Iohara Quirino-Amador (UHI) - Patterns and Trends in the Scottish Pelagic Fishing Fleet: A Spatial-temporal Perspective
- James Harris (University of St Andrews) - Catching Up: Shetland as a Case Study for Sandeel Spatiotemporal Abundance Trends.

13.15-14.00 **Lunch** and networking. 🍽️

14.00-16.00 **Special Session on “The Sustainable Management of UK Marine Resources”** in Main Auditorium (Auditoria B/C); a **Special Session on “Multiple Stressors”** in Auditorium A and a **NatureScot Workshop on “Conservation advice to support the upcoming consultation on the management of fishing activities to improve protection for marine wildlife”** in Conference Room 4/5.

14.00-16.00 **Special Session on “The Sustainable Management of UK Marine Resources”** in the Main Auditorium (Auditoria B/C). Chairs: Prof David Paterson & Dr Mark James

Over six years of pioneering research, scientists, policymakers, industries, and communities came together to address the urgent challenges facing our coasts and seas. From climate-smart planning and seagrass restoration to community resilience and inclusive governance, the [SMMR Programme](#) has reshaped how the UK values and manages its marine resources. Come and find out more!

1400-1410 Introduction from the SMMR Champions

1410-1525 Short presentations from the projects:

- Pyramids of Life: Working with Nature – Jon Pitchford
- Marine Spatial Planning Addressing Climate Effects – Ana Queiros
- Restoration of Seagrass for Ocean Wealth – Claire Evans
- Co-benefit Solutions for Resilient Coasts – Laurent Amoudry
- Integrating Diverse Value into Marine Management – Lucy Greenhill
- Resilience of Coastal Communities – Louisa Evans

1525-1600 Panel Discussion

14.00-16.00 [Special Session on Multiple Stressors](#) in Auditorium A. Chairs: Prof Karen Diele and Dr Frances Orton. Talks are 12 minutes with 3 minutes for questions.

- Simin Gao (University of Edinburgh) - Empirical determination of the interaction landscape for temperature, CO2 and nitrate for a model diatom
- Jude Banks Wilson (Heriot-Watt University) - Behavioural responses of common frog tadpoles to ecologically relevant contaminant mixtures
- Dominique Anderson (Heriot-Watt University) - Chemical Mixtures, Herbicides, and Frog Population Resilience in UK Ponds: Linking Field Chemistry to Recruitment, Survival, and Body Condition
- Hamish Williams (University of Aberdeen) - Phenotypic and gene expression changes of beadlet anemones (*Actinia equina*) under multi-stressor salinity and diesel stress
- Isabella Jackson (Heriot-Watt University) - Commonly Co-Occurring Stressors in Industrialised Estuaries Disrupt Embryonic Development in Blue Mussels
- Tim Regan (University of Edinburgh) - The effects of marine noise on *Mytilus edulis* response to *Vibrio splendidus*
- Jonathan Houghton (Queen’s University Belfast) - Pelagic Predators, Mesopelagic Prey Fields and Conservation Futures

14.00-16.00 **NatureScot Workshop on “Conservation advice to support the upcoming consultation on the management of fishing activities to improve protection for marine wildlife”** in Conference Room 4/5. Chairs: Sarah Cunningham, Sam McFarlane, Laura Steel and Kelly Saunders.

This workshop is to increase awareness and understanding of the upcoming consultation for management measures for fishing activity, including NatureScot’s role and the advice provided. NatureScot hopes to gain a better understanding of the perspectives of the MASTS community of the upcoming consultation, and to increase engagement and involvement during the consultation from the MASTS community. The workshop will also be used to stimulate thinking about research opportunities these proposed measures offer.

16.00-16.45 **Coffee break, networking and [Poster Session 2](#)** 

Time	On Level 2			On Level 3		
	Screen 1	Screen 2	Screen 3	Screen 4	Screen 5	Screen 6
16.05-16.20	Kate Fraser	Elinor Spencer	Niamh Blundell	Doyinsola Mustapha		Arjun Rajendren
16.25-16.40	Dominique Anderson	Yuchen Wang	Lavanya Vythalingam			

- Kate Fraser (SAMS) - Have deep-sea macrofaunal communities in the Rockall Trough, Northeast Atlantic, changed over the past four decades?
- Elinor Spencer (UHI Shetland) - Marine invasive non-native species

- Niamh Blundell (Natural Power Consultants) - Raising the Reef – Innovations in monitoring of marine growth on offshore renewable energy infrastructure allow for better informed Nature Inclusive Design and decommissioning practices
- Dominique Anderson (Heriot-Watt University) - Species-specific patterns of metal accumulation in deep-sea grenadiers *Coryphaenoides armatus* and *C. yaquinae* from the Clarion-Clipperton Zone
- Yuchen Wang (University of Glasgow) - Topographic change of Anthropogenic Mixed Sand and Gravel (MSG-A) beaches: UAV-based assessment of annual change and storm response
- Lavanya Malini Vythalingam (Heriot-Watt University) - Effects of Salinity and Predator Cues on Survival and Morphology of *Rana temporaria* Tadpoles
- Doyinsola Suliat Mustapha (Heriot-Watt University) - Evaluating Pollution Pressure in Freshwater Systems Using Molluscs as Bioindicators
- Arjun Aditiya Krishnan Rajendren (Heriot-Watt University) - Oxidative Stress and Development Disruption *Mytilus edulis* Larvae Exposed to Polypropylene Microplastics and Perfluorooctanoic Acid

16.45-17.30 **MASTS General Science Session 3a** in the Main Auditorium (Auditoria B/C) and **MASTS General Science Session 3b** in Auditorium A.

16.45-17.30 [MASTS General Science Session 3a](#) in the main Auditorium (Auditoria B/C). Chair: Dr Karen Alexander. Talks are 12 minutes each (with 3 minutes for questions).

- Coleen Murty (Scottish Government) - An Update from the Scottish Marine Energy Research (ScotMER) Programme
- Lisa Friberg (SAMS) - Mixing It Up: Biogeochemical Impacts of Floating Offshore Wind
- Myriam Chilvers (Nordregio) - Toward Sustainable Coexistence: Offshore Wind and Fisheries in Nordic Marine Governance – The Green Meets Blue Project


16.45-17.30 [MASTS General Science Session 3b](#) in Auditorium A. Chair: Professor John Baxter. Talks are 12 minutes each (with 3 minutes for questions).

- Charlie Cooper (Marine Directorate, Scottish Government) - Integrating predator-prey distributions in marine spatial planning
- Edward Lavender (Edinburgh Napier University & Eawag Swiss Federal Institute for Aquatic Science and Technology) - Animal tracking and state space modelling for species conservation
- David Bailey (University of Glasgow) - Scottish wrasse are typical species of reefs – and why this matters for conservation throughout Europe.

17.30-18.30 **Drinks and networking reception** 🍷

Please join us for our drinks and networking reception. An ideal opportunity to catch up with colleagues, chat and get to know each other, foster new connections and

discuss opportunities for collaboration. You will also be able to enjoy access to all our eposter screens.

 The **Energy Transition Forum** is celebrating its one-year anniversary and encourages you to bring your drink up to level 3 to meet the Convenors and network with others who have an interest in Marine Energy and the Energy Transition.

19.00-21.30 **Marine origami and drinks at the Glasgow Art Club** - Please join the Migration and Prey Energyscapes Working Group for an evening of origami at the Glasgow Art Club, 185 Bath St (a 20-minute walk from the TIC in the city centre). Drop in anytime between 7 and 9:30pm. A cash bar will be open, but unfortunately the kitchen will not, so please find supper on your own either before or afterwards. Instructions will be available for diatoms, copepods, sandeels, kittiwakes, and bowhead whales, and paper and help will be provided. You can also view "The Bigger Picture", a group exhibition of work by Wasps Studios artists, featuring marine origami by Neil Banas and recent art-science collaborations by the Waterways Collective ([waterwayscollective.org](http://waterwayscollective.org)). Open to all—guests welcome—but please register interest using [this form](#) so we can estimate numbers.

## Day 2: Wednesday 19<sup>th</sup> November 2025

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08.30-09.00 Registration and tea/coffee 

09.00-11.00 **Special Session on “Coastal Science”** in the Main Auditorium (Auditoria B/C) and **Marine Mammal Special Session** in Auditorium A.

09.00-11.00 [Coastal Science Special Session](#) in the Main Auditorium (Auditoria B/C). Chairs: Prof Stewart Angus & Prof Larissa Naylor. 12-minute talk with 3 minutes for questions.

- Tom Dargie (Boreas Ecology) - Dead dune juniper: the latest response to climate heating at Morrich More
- Rebekah Bajkó (Queen’s University Belfast) - Coastal roots: the history of seagrass in Northern Ireland
- Thomas Baxter (University of St Andrews) - Orkney rocky intertidal change
- Sarah Cryer (Heriot-Watt University) - Blue Carbon systems in tropical areas are a source of CO<sub>2</sub> to the atmosphere

- Anna McGregor (University of Glasgow) - Place-based experiential learning on coastal conservation: co-designing an interdisciplinary course on cultural heritage, language, biodiversity, and geography for final-year undergraduate students
- Davide Vettori (University of Glasgow) - On the interactions between vegetation and cohesive sediments
- Xinyi Zhang (University of Aberdeen) - Wave attenuation by suspended aquaculture canopies
- Stewart Angus (NatureScot) - Saltmarsh and climate change: looking beyond sea level rise

09.00-11.00 [Marine Mammal Special Session](#) in Auditorium A. Chairs: Dr Emily Hague & Dr Carol Sparling. 10-minute talks with 3 minutes for questions.

- Kieran Tierney (SUERC) - Peeling Back Growth Layers in Cetacean Teeth to Reconstruct Life Histories Using Isotopes.
- Faye Moyes (University of St Andrews) - Factors associated with bycatch of marine mammals in United Kingdom static net fisheries
- Tim Awbery (SAMS) - Mobile species move! Why we need to stop treating mobile animals as static species
- Grant Ellis (University of St Andrews) - Evidencing a range expansion: Citizen science and dedicated photo-ID provide baseline abundance and movement data on the East Coast of Scotland bottlenose dolphin population in northeast England.
- Laura Rudd (HiDef Aerial Surveying Limited) - Changing trends in vessel traffic off eastern Scotland and implications for impact assessment on marine mammals
- Ewan Edwards (Xodus) - Evaluating noise abatement systems in offshore wind construction: balancing acoustic benefits and hidden costs
- Ally Russell (ERM Ltd) - Harmonising offshore wind and marine conservation: Lessons from indicator species and international noise regulations.
- Jessica Montabaranom (University of St- Andrews) - Evaluating the risk of collision of seals swimming within metres of operating tidal turbines
- Gianluca Gerich (Ampeak Energy Limited) - Tidal Industry Seal Project: evolving approaches to seal-turbine interactions in Tidal Stream Consenting

11.00-11.45 **Coffee break**, networking and [Poster Session 3](#) 

	<u>On Level 2</u>			<u>On Level 3</u>		
<u>Time</u>	<u>Screen 1</u>	<u>Screen 2</u>	<u>Screen 3</u>	<u>Screen 4</u>	<u>Screen 5</u>	<u>Screen 6</u>

11.05-11.20	Duncan MacDougall		Seyi Adebangbe	Adhip Aditya	Laura Bentley	Reece Mills
11.25-11.40	Moritz Eichert	Beth Langley	Narakorn Srinil	Michael Vail	Charis Hanna	Lucy Robinson

- Duncan MacDougall (University of St Andrews) - Conservation planning for highly mobile species – minke whale residency, movements and population characterisation in the Southern Trench MPA
- Seyi Adebangbe (University of Glasgow) - Adapting to Coastal Futures: Preliminary Insights into Managing Legacy Waste Risks in a Changing UK Climate
- Moritz Eichert (Heriot-Watt University) - From Lab to Field: Quick and Affordable Ways to Improve Selectivity of Fishing Gears
- Beth Langley (University of Glasgow) - Microbial carbon remineralisation in sub-Arctic fjords under future warming
- Narakorn Srinil (Newcastle University) - Nature-Inspired Artificial Mangrove Roots for Coastal Erosion Mitigation
- Adhip Aditya (University of Glasgow) - Projecting Climate Change Scenarios on Marine Ecosystem Models
- Laura Bentley (University of Glasgow) - Evidencing the value of natural capital on youth wellbeing in deprived coastal communities.
- Reece Mills (QUB) - Optimising the sampling efficiency of stereo-BRUVs in turbid waters through horizontal field of view adjustments
- Michael Vail (University of St Andrews) - Waist deep in the big muddy: investigating the interactive effects of microplastics and chemical fertiliser pollution on biogeochemical cycling and ecosystem function in a Scottish estuary
- Charis Hanna (University of St Andrews) - Reducing the Cost of Annotation for the Monitoring of Cliff - Nesting Birds using Self-Supervised Learning
- Lucy Robinson (University of St Andrews) - Carbon-scapes: Understanding carbon connectivity across the land-ocean continuum using a seascape approach

11.45-13.15 **General Science Session 4** in the Main Auditorium (Auditoria B/C) and the **Marine Bioacoustics Special Session** in Auditorium A.

11.45-13.15 [MASTS General Science Session 4](#) in the Main Auditorium (Auditoria B/C). Chair: Dr Alejandro Gallego. Talks are 12 minutes each (and 3 mins for questions).

- Beth Scott (University of Aberdeen) - Linking ocean fronts and biodiversity for evidenced marine spatial planning: Case study of usage of rapid science.
- Sohini Dudhat (University of St Andrews) - Influence of Oceanographic Drivers on Marine Turtle Strandings on Masirah Island, Oman
- María Paz Chidichimo (CONICET, National University of San Martín, Argentina) - Ocean Circulation Variability in the Southwestern Atlantic

- Robyn Tuerena (SAMS) - Hydrothermal Contributions to Dissolved Organic Carbon Cycling Along the Mid-Atlantic Ridge
- Aditya Kapuriya (Heriot-Watt University) - Factors Influencing Calcium Carbonate Dissolution in the Ocean
- Nichole Marsh (Heriot-Watt University) - Testing global drivers of coccolithophore calcification rates using a novel data compilation.

11.45-13.15 [Marine Bioacoustics Special Session](#) in Auditorium A. Chairs: Dr Jamie Macauley & Dr Julie Oswald. A mix of 10 and 5 min talks, together with speed talks advertising an eposter.

- Christina Rose Day-Reader (University of St Andrews) - The Whistle Repertoire of West Coast Scottish Common dolphins (*Delphinus delphis*).
- Charlie Hargrave (University of St Andrews)- Bottlenose dolphins show clear geographic variation in whistles when controlling for repeated, stereotypical signals.
- Julie Oswald (University of St Andrews) - Species-level acoustic monitoring of delphinids along the East Coast of Scotland.
- Ellen White (University of Southampton) - Real-Time Harbour Porpoise Detection Using Synthetic Training Data: A Deployable Edge-Computing approach for Marine Conservation applications.
- Benedict Dell (University of Southampton) – An adaptable machine learning method for identifying the presence of military sonar in long-term passive acoustic data – a case study within a Scottish MPA.
- Vincent Janik (University of St Andrews) - The reaction of bottlenose dolphins to steady-state startle sounds in the wild.
- Paul Thompson (University of Aberdeen) - OSPAR Regional Action plan for underwater noise; a porpoise’s perspective.
- Dinah Hartmann (University of St Andrews) - How to count a click: Harbour porpoise click detection probability depends on behaviour and detection-classification method.
- Nienke van Geel (SAMS) - Monitoring marine mammal occurrence in Scottish shelf waters.

Speed talks of 1 Minute advertising an e-poster:

- Jamie Macaulay (University of St Andrews) - Using passive acoustic monitoring to record wild porpoise behaviour around actively fishing gill nets
- Chloe Malinka (SMRU Consulting) - Near Real-time Passive Acoustic Mitigation Monitoring: Listening for Dolphins in a Scottish SAC throughout a dredging campaign.

- Natalie Sinclair (NatureScot) - Humpback Whale Songs as Markers of Migration in the North Atlantic.

13.15-14.00 **Lunch** and networking opportunities 🍽️

14.00-16.00 A **Special Session on Technological Innovation in Environmental Monitoring** in Auditorium A; and a **Special Session on “Bottom Trawling: Beyond the Headlines – Science, Sustainability, and Solutions”** in the Main Auditorium (Auditoria B/C).

14.00-16.00 [Special Session on Technological Innovation in Environmental Monitoring](#) in Auditorium A. Chairs: Dr Tom Wilding and Dr Ciprian Zavoianu. Talks are 10 minutes each (plus 3 mins for questions).

- Chairs welcome and short introduction to the AI Forum
- Niall Burnside (SAMS) - Innovating Coastal Management: Monitoring Hand Gathering with UAVs and AI
- Tom Morgan (SAMS) - Reliable seafloor mapping through AUV data fusion and uncertainty estimates
- Vicki Balfour (University of St Andrews) - Deck to Data: Integrating AI and Laser Scanning for Crustacean Stock Assessments.
- Michelle Elliott & James Robbins (Natural Power) - Using environmental DNA to assess fish and invertebrate communities around offshore windfarms
- Rebecca Nagel (HiDef Aerial Surveying Ltd) - Seabird flight height distributions at operational windfarms
- Douglas Gillespie (University of St-Andrews) - The use of high frequency imaging sonar in wildlife monitoring
- Claire Stainfield (SRUC) - Drone surveying for fine-scale seal monitoring
- Gary Groves (SAMS) - The plankton monitoring revolution: combining automated *in-situ* imaging devices and computer vision to better understand phytoplankton communities

14.00-16.00 **Special Session on “Bottom Trawling: Beyond the Headlines – Science, Sustainability, and Solutions”** in the Main Auditorium (Auditoria B/C). Chair: Prof Paul Fernandes.

Join the Fisheries Science Forum for a set of short talks and interactive audience discussion around sustainable fisheries, bottom trawling, the science-policy interface, evidence over emotion and more! Speakers include Michel Kaiser (Heriot-Watt University), Maria Sciberras (Heriot-Watt University), Katie

Gillham (NatureScot), Sarah Coulthard (Newcastle University), Rob Kynoch (Marine Directorate), Jane MacPherson (Marine Directorate), Calum Duncan (MCS), and Elena Balestri (SFF).

16.00-16.45 **Coffee break, networking and [Poster Session 4](#)** 

Time	On Level 2			On Level 3		
	Screen 1	Screen 2	Screen 3	Screen 4	Screen 5	Screen 6
16.05-16.20	Jamie Macaulay	Natalie Sinclair	Emily Hague	Flora Kent	Katherine Simpson	Dominique Anderson
16.25-16.40	Kat Majewska	Lyndsay Cruickshank	Shaun Fraser	Hoa Nguyen		

- Jamie Macaulay (University of St Andrews) - Using passive acoustic monitoring to record wild porpoise behaviour around actively fishing gill nets
- Natalie Sinclair (NatureScot) - Humpback Whale Songs as Markers of Migration in the North Atlantic.
- Emily Hague (UHI Shetland) - BLUE CONNECT: Collecting marine mammal data within the Shetland and Fair Isle Important Marine Mammal Area
- Kat Majewska and Chloe Malinka (SMRU Consulting) - Near Real-time Passive Acoustic Mitigation Monitoring: Listening for Dolphins in a Scottish SAC throughout a dredging campaign.
- Lyndsay Cruickshank (Scottish Government) – Navigating the intricacies and complexities of a new National Marine Plan for Scotland
- Shaun Fraser (UHI Shetland) - Identification of inshore nursery areas for commercially important fish species around the Shetland Islands
- Flora Kent (Marine Directorate, Scottish Government) - Ecosystem Consequences of Changes to Habitats and implications for a Net Gain Energy approach
- Katherine Simpson (University of Glasgow) - Principles for Responsible Investment in Coastal and Marine Natural Capital
- Dominique Anderson (Heriot-Watt University) - Deep-Sea Ecotoxicology in the Age of Mining: Challenges, Knowledge Gaps, and Future Directions
- Hoa Nguyen (Helmholtz-Zentrum Hereon) - Investigating causes of increasing algal blooms along Vietnam’s coast over the past decade
- Sam Smith (QUB) - Electrosensory Lab for Adaptive Species Management in the Ocean (ELASMO): developing electromagnetic deterrents to reduce elasmobranch bycatch

16.45-17.30 **[MASTS General Science Session 5](#)** in the Main Auditorium (Auditoria B/C). Chair: Dr Mark James. Talks are 12 minutes each (and 3 mins for questions).

- Charlotte Miskin-Hymas (MEDIN) - Bridging Data Gaps: Improving Access to Marine Socio-Economic Information
- Leigh Storey (NERC UKRI) – Marine Science in 2040: A Science Requirements Framework for the UK’s Future Marine Research Infrastructure (FMRI)

- Robert Pye (Marine Directorate, Scottish Government) - The Scottish Blue Carbon Action Plan

17.30-17.45 **Conference Closing Remarks & Prize Giving** (Prof David Paterson and Dr Richard Wakefield) 🏆 ASM prizes are kindly sponsored by [IMarEST](#).

20.00 **Evening Ceilidh** – we hope you can join us for a few drinks and some ceilidh dancing. This is a ticketed event, and tickets can be bought as part of the registration. The venue is [Sloans](#), 108 Argyle St, Glasgow G2 8BG.

## Posters

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All e-posters will be available to view from any screen at any time during the ASM. Simply navigate to the menu and choose which e-poster you would like to view. Most e-poster authors will be present at their posters during a designated coffee break (names and linked abstracts above).

Poster screens will be spread across Level 2 and 3. Look out for relevant signage at the event.

## Exhibitors

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MASTS is delighted to host the following exhibitors:


- **ACTNOW**: A Horizon Europe Project funded by the European Commission, a state-of-the-art work programme that provides regulators and decision-makers the knowledge and fit-for-purpose tools they need to combat biodiversity loss in coastal and marine habitats threatened by climate change interacting with other local and regional drivers. <https://www.actnow-project.eu/>
- **Environmental Standards Scotland**: Environmental Standards Scotland (ESS) is an independent public body, set up to ensure environmental laws and standards are adhered to in Scotland. ESS carries out its function by monitoring and investigating public bodies' compliance with environmental law, the effectiveness of the law and how it is implemented and applied in Scotland. ESS is independent of the Scottish Government and accountable to the Scottish Parliament. ESS' mission is to ensure that Scotland's environmental laws and standards are complied with, and their effectiveness improved, to achieve Scotland's ambitious targets for the environment, nature, and climate change. @EnvStanScot and <https://environmentalstandards.scot/>
- **Marine Environmental and Data Information Network** (MEDIN) - The Marine Environmental and Data Information Network (MEDIN) is the hub for UK marine data. MEDIN promotes good data management practices by providing the MEDIN discovery metadata standard, marine data guidelines, tools and an online portal. MEDIN's aim is to make UK marine data Findable, Accessible, Interoperable and Re-usable (FAIR). [www.medin.org.uk](http://www.medin.org.uk) and X: @MEDIN\_marine

- **NatureScot:** We provide advice to Scottish Government on marine protected areas (MPAs) and advice to support the effective management of our wider seas. Our recent advice to support management measures for fishing activity can be found on our webpage. This advice is focussed on a variety of fishing activities in MPAs and features sensitive to bottom contacting towed fishing gear. Ministers announced that a public consultation on protection measures is planned for the end of 2025. Please come and see us to learn more and get involved. Twitter: @NatureScot; <https://www.nature.scot/> and <https://www.nature.scot/professional-advice/land-and-sea-management/marine-and-coastal-work>
- **NEIF Stable Isotope Ecology Lab, SUERC:** The National Environmental Isotope Facility (NEIF) provides state-of-the-art isotope and organic geochemistry analysis. With expertise in stable isotopes, NEIF enables ecological research providing supported analysis and guidance to help develop research projects, ensuring high-quality, impactful science. Successful applications are awarded analyses as a “grant-in-kind” from NERC. Alongside analytical services, NEIF delivers customised online training for these techniques through the GAEA platform, from introductory to advanced levels, equipping researchers with essential isotope skills. Access is free and covers each technique from the fundamentals of the approach to sample collection and data publication to align with community best practise. <https://www.isotopesuk.org/index.html> <https://www.stableisotopelab.com/> <https://www.gla.ac.uk/research/az/suerc/> <https://www.gaea.ac.uk/about-gaea/>
- **Nortek:** Nortek Group is a global leader in underwater acoustic doppler instrumentation. Founded in Norway, Nortek provides advanced ADCPs, DVLs, velocimeters, and navigation solutions for oceanographic and subsea navigation applications. With a global presence, Nortek combines innovation and technical expertise to deliver precise, reliable ocean measurements worldwide. [www.nortekgroup.com](http://www.nortekgroup.com)
- **Numerical & Experimental Hydrodynamic Modelling Forum StoryMap** – contact [Rory O’Hara Murray](#) for more information. The MASTS NEHM Forum is developing an accessible online overview of modelling of Scottish coastal waters. This StoryMap presents an accessible insight into the life cycle of a coastal ocean model to non-modellers, explaining the merits of different models, their development, and how outputs can be used for a wide variety of marine science applications. The StoryMap will also be useful to more experienced ocean modellers, or those looking to start modelling, by providing pointers to up-to-date information and resources as well as an overview of Scottish and MASTS modelling capability (including computation and physical/experimental modelling and case studies). Emphasis is placed on presenting the material in an accessible, easy to understand graphical/visual format, using maps where possible.
- **Scientific Robotics Academy at the Scottish Association for Marine Science (SAMS).** The Scientific Robotics Academy offers CPD-recognised training courses to early career researchers, engineers and industry professionals. Guided by SAMS experts, participants receive practical and theoretical training; empowering their use of aerial, sea-surface and underwater technology for immediate real-world environmental applications. X: @SAMSoceannews <https://www.sams.ac.uk/robotics/academy/> and <https://linkedin.ac.uk/company/sra-at-sams>
- **Shetland Oil Terminal Environmental Advisory Group (SOTEAG):** For five decades SOTEAG has continued to look after the interests of the environment around Shetland’s Sullom Voe Terminal and Port. It is recognised globally as a pioneering, world-class model of integrated coastal management based on its independent scientific monitoring and expert advice. [www.soteag.org.uk](http://www.soteag.org.uk) and X: @SOTEAG!
- **Subsea Commercial Services Ltd** - Founded in 2011, SCS has a proven track record of helping clients achieve their operational objectives. Supplying and supporting Ocean Sciences, Offshore Energy and Aquaculture, we offer a range of harsh environment underwater technology solutions deployed in inspection, survey, biodiversity and environmental monitoring, and marine asset location tracking, command and recovery. SCS has the technology to meet the challenges and opportunities you face. [www.subcomservices.com](http://www.subcomservices.com)
- **Tamara Darbar - Enhancing the effectiveness of Marine Protected Areas in Scotland:** I am a PhD researcher at the University of St Andrews. My interdisciplinary research focuses on the effectiveness of marine protected areas (MPAs) in Scotland using (1) explanatory case studies to explore management practices and key lessons and (2) a Delphi study to identify and evaluate key performance indicators. <https://mace.wp.st-andrews.ac.uk/research-projects-and-collaborations/enhancing-effectiveness-and-equitability-of-marine-protected-areas-in-scotland/>
- **Tecprime Technology** (A subsidiary of Aquatec): Tecprime Technology Ltd was recently launched as a subsidiary of Aquatec to provide concentrated sales, marketing and support for our famous subsea particle monitoring instrumentation which includes the AQUAscat Suspended Sediment Profiler and wide range turbidity loggers. And now the LISST-ABS & AOBSS single frequency instruments recently bought from Sequoia. <https://tecprime.world/> and [https://x.com/tecprime\\_world](https://x.com/tecprime_world)

# Day 3: Thursday 20<sup>th</sup> November 2025

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This third day of the MASTS ASM is for associated meetings, seminars, training sessions and workshops.

 **Thursday breaks are: 10.30-11.30 for morning coffee, lunch is at 12.00-13.30 and afternoon coffee break is 15.00-15.45.**

## One-day workshops

- 0900-1530 in Conference Room 3 - **Grant Proposal Writing Retreat for Early Career Researchers**. Organised by Dr Dominique Anderson.
- 0900-1630 in Conference Room 1 - **MEDIN Marine Data Management**. Organised by Rosanna Wright, Charlotte Miskin-Hymas and Alice Rysiecki
- 0930-1600 in Exec Room B - **One Day Introduction to Open-Source GIS (QGIS)**. Organised by Prof Rob Briers.
- 1000-1600 in Conference Room 4/5 - **Migration and prey energyscapes in changing oceans: Advancing observations, models, and synthesis**. Organised by Dr Neil Banas.

## Morning workshops

- 0900-1200 in Conference Room 2 - **High-throughput integrative ecological sampling at the Culzean floating wind platform – designing data pipeline for the scientific community**. Organised by Prof David Lusseau
- 0930-1200 in Conference Room 6/7 – **Inaugural Meeting of the MASTS Marine Mammals Forum**. Organised by Dr Emily Hague & Dr Carol Sparling.
- 0930-1330 in Conference Room 8 - **Emotional Intelligence for Leadership**. Organised by Dr Lois Calder & Dr Ali Budjanovcann
- 0900-1200 in Exec room A - **Bottom trawling in MPAs**. Organised by Prof Paul Fernandes.

## Afternoon workshops

- 1330-1630 in Conference Room 6/7 - **Why, where and when? Learning the value of airborne drone surveys in nearshore marine environments**. Organised by Dr Calum Hoad.