

January

Solving the seaweed biodiversity crisis

In January, SAMS announced it would lead the GlobalSeaweed SUPERSTAR project to help find solutions to the biodiversity crisis in global seaweed stocks.

The project, led by Prof. Elizabeth Cottier-Cook and funded by the UK's Global Centre on Biodiversity for Climate (GCBC), involves some of the world's most prominent seaweed scientists and industry leaders. It works towards a global strategy, or 'Seaweed Breakthrough', to be launched at COP31 in 2026 to urgently protect wild stocks.

Seaweeds are vital for the functioning of the marine ecosystem, supporting an immense biodiversity of marine organisms. There are

more than six million seaweed farmers in 56 countries worldwide who rely on seaweed for their livelihoods. The vast majority of farmers are in Asia, which accounts for more than 95% of global seaweed farming.

Yet, wild seaweed communities are predicted to lose up to 71% of their current distribution by 2100, either through overharvesting or climate-driven impacts, such as pollution, invasive species or pest and disease outbreaks.

"Whales that have their nostrils wider apart are better equipped to smell 'in stereo'."

Dr Conor Ryan

What's that smell?

SAMS honorary research fellow Dr Conor Ryan evidence that suggests baleen whales can sniff out feeding opportunities through their blowholes.

Baleen whales include blue, humpback and right whales and, feed on quantities of zooplankton, such as krill and fish to maintain their bulk. Their ability to accurately locate an abundance of zooplankton in the vast ocean has puzzled scientists, but Dr Ryan may have the answer.

When zooplankton are grazing on microscopic plant-like phytoplankton, a chemical called dimethyl sulfide is released into the sea and then into the air. The scent from this chemical is already known to attract seabirds and to trigger a feeding frenzy. It may also be a signal to baleen whales, which might be able to smell in stereo on account of having two nostrils (unlike dolphins which have a single nostril).



Rain harms coastal sea urchins

The ‘freshening’ of seawater around the UK through heavier rainfall caused by climate change could spell disaster for sea urchins.

Scientists from SAMS, British Antarctic Survey and the University of Cambridge, showed how sea urchins exposed to diluted seawater for long periods show signs of physical deterioration. Their research also found that even slight changes in salinity – or saltiness – trigger changes to urchin behaviour as they try to cope with their new conditions.

Urchins are slow moving bottom feeders, making them especially vulnerable to rapid changes to their habitat. As our climate warms, Britain’s weather is becoming more extreme; **in Scotland precipitation has increased by 20% since the 1960s**. Salinity is one of the critical environmental factors that affect the biology of marine organisms, with increased rainfall and glacial melting reducing the salinity of coastal waters.



February

The ‘virtual marine biologist’

SAMS scientists collaboraed with colleagues from the Greenland Climate Research Centre (GCRC), used robotics and artificial intelligence (AI) to study organisms on deep Greenlandic fjords-walls.

The team conducted 18 subsea video surveys to depths of 120 metres across the length of the fjord Nuup Kangerlua, near to the Greenlandic capital Nuuk and used the footage to create 3D models. A trained AI system, a ‘virtual marine biologist’, was then used to identify and accurately measure the various organisms present.

Their findings will help to create and inform assessments of ecosystem composition and functioning in this hard-to-reach environment, giving an insight into how climate change may be affecting marine life there.



SAMS adopts rainbow mark

Alongside our partners at the University of the Highlands and Islands (UHI), we signed up to The Scottish LGBTI+ Rainbow Mark during LGBT History Month to support inclusive social spaces across the Highlands and Islands, Moray and Perthshire.

The Scottish LGBTI+ Rainbow Mark (The Rainbow Mark) was developed with LGBTI+ people and aims to: increase positive LGBTI+ visibility; provide information and tools to enable better LGBTI+ inclusion; reduce isolation and minority stress for LGBTI+ people; and create more welcoming places in Scotland.

A cut, colour and climate change

UHI hair and beauty students are proving they are a cut above the rest by bringing climate change into their chats with clients, thanks to a collaborative project with students at SAMS.

Under the Scissors, funded by the Scottish Government's Climate Engagement Fund, brought together hair and beauty students from UHI Moray and marine science students from SAMS, a partner of UHI, to help spread the word on our changing environment.

The SAMS students shared their knowledge about climate change, helping to develop cue cards and other materials that prompt conversations in the training salon at UHI Moray.

“We’re trying to normalise climate change in everyday conversation. The weather is often a topic of conversation when people are in the salon, so it’s easy to then talk about these wider issues.”

Dr Kerry McInnes, a Research Fellow at UHI Moray



March

Salmon farming software used in Chile

Computer software built by SAMS Enterprise has been making waves in the salmon farming industry and was showcased at a major aquaculture conference, AquaSur, in Chile.

NewDEPOMOD is a particle-tracking modelling software, designed to predict dispersion of fish farm waste discharges in the marine environment. It was built with support from the Sustainable Aquaculture Innovation Centre, working alongside the salmon farming sector and farm sites regulator the Scottish Environment Protection Agency (SEPA).

It is now prescribed, recommended and used around the world, including in Chile, allowing farmers to calculate the optimal production levels at each farm site, while complying with regulatory standards.



Oban – a home from home

International students on a highly-rated European aquaculture course at SAMS have praised the welcome they received in Oban, where they spent the first six months of their Masters degree.

SAMS, leads the Erasmus Mundus Joint Masters Degree in Aquaculture, Environment and Society-STAR (ACES-STAR), which also involves teaching at the universities of Crete and Nantes.

The course attracts students from all over the world and the current intake of 25 students said they found Oban to be a 'home from home'. With a limited supply of private rental accommodation in the town, some of the students took advantage of the SAMS Host Family Scheme, which involves local families hosting a student.

“Oban, you have a special place in my heart. I spent six wonderful months here. It was my first time abroad, the warm hospitality of the Scottish people made me feel at home and cured my homesickness.”

Subash Yadav Ahir

New Red Sea field course

Marine science students from SAMS swapped the temperate waters of Argyll for the tropical Red Sea as they embarked on the Oban institute's maiden field course in Egypt.

The 15 students, representing all four years of the BSc Marine Science degree, spent 12 days at the Red Roots Sea facility in El Quseir and saw warm-water sealife such as turtles, large moray eels and lionfish during snorkelling and diving expeditions.

The field course introduced underwater survey techniques, and the accompanying SAMS staff gave lectures on tropical marine ecosystems. The group also took part in beach litter and

microplastic surveys. Among the extra-curricular activities were recreational scuba diving and a day trip to visit the ancient temples at Luxor.

Prof. John Howe, BSc programme leader, was among the lecturers on the Tropical Marine Ecosystems field course. He said: "This was a really successful first trip to the Red Sea and the feedback from the students has been fantastic, so we are keen to do this on a regular basis.



Outreach with a distance

Budding marine scientists at an event in Edinburgh's Dynamic Earth became ocean explorers for the day by operating an underwater vehicle 120 miles away in a lab at SAMS.

As part of the North Sea 3D event at the science centre, part of the Edinburgh Science Festival, SAMS staff gave over control of one of their remotely operated vehicles (ROVs), which was sitting in a test tank in SAMS' Scottish Marine Robotics Facility.

Through a remote connection, visitors to the event were able to steer the ROV around the test tank and take on a series of challenges.



Record ocean heatwave

Just as the UK was in the midst of a new marine heatwave, new analysis was published of the unprecedented sea surface temperatures of up to 5 °C higher than normal off northwest Europe in June 2023.

A new study by a consortium of British and Irish institutions, including SAMS, showed the region experienced its longest recorded category II marine heatwave (16 days). This means temperatures around the British Isles reached a 16°C peak in June instead of 13.5°C.

Prof. Mark Inall and Dr Sam Jones co-authored the paper and contributed data from an autonomous underwater glider. The glider was patrolling the north-east Atlantic at the time of the heatwave last June.

Seaweed removes atmospheric carbon

An international team of researchers, including SAMS' Prof. Michael Burrows calculated that the world's seaweed forests transport around 56 million tonnes of carbon to deep ocean sinks.

Historically, seaweed forests have been excluded from the 'blue carbon' toolbox due to uncertainties about their ability to remove carbon in the long-term. This study closes this critical knowledge gap and reveals new opportunities for climate change mitigation in polar and temperate areas, where carbon removal options by coastal ecosystems are currently limited.

The findings, published in Nature Geoscience, showed that the seaweed forests of Australia, the USA, New Zealand, Indonesia and Chile have a particularly high carbon removal capacity.

Hydro-electric schemes affect Arctic rivers

PhD student Adam Francis represented SAMS on fieldwork in the Canadian Arctic, exploring how climate change and hydro-electric expansion is affecting the rivers feeding into Hudson Bay. For three weeks and in temperatures down to -40°C, Adam was based Sanikiluaq, on the Belcher Islands, which is on almost exactly the same latitude as SAMS.

The research team worked with the indigenous Inuit people, who have noticed major changes in the environment. Thinner and less predictable sea ice, water circulation and salinity changes and declines in populations of native animals are all impacts of climate change. But there has also been a lesser-known impact from a huge increase in hydro-electric schemes built on many large rivers surrounding Hudson Bay.

These schemes change the timing and the intensity of the flow of freshwater into Hudson Bay with more water being released in winter to meet higher energy demands of cities in the colder times of year. These rivers would naturally have the greatest flow during the spring melt season in May/June but recently these modified catchments now cause water to flow under the winter sea ice in different and largely unknown patterns around Hudson Bay.





A unique MRes

A new and unique Masters by Research (MRes) in Marine Science was launched to take advantage of the multi-disciplinary marine science research at SAMS.

The course offers students the flexibility to study a range of topics, from the deep sea to coastal environments, including oceanography, biotechnology, marine governance and policy, plastic pollution, aquaculture and robotics.

The first intake was in autumn 2024, covering topics such as: nitrogen uptake by ulva; microplastics in the marine environment; and host-pathogen interactions in brown seaweeds.

June

Climate change jet-lag?

Biological rhythms occur widely even in very simple organisms and influence the timing of different phases throughout the organism's life cycle.

Climate change can affect these biological clocks, driving them out of phase, with potentially catastrophic consequences.

Biological clocks have a molecular mechanism and a new study by a team including Dr Kim Last and Dr Jordan Grigor found dramatic changes in gene expression between active and resting stages.



“SAMS research covers a plethora of topics relating to the sea and society and we wanted to offer a research Masters programme that took advantage of the knowledge and facilities here.

Programme leader Dr Bernadette Snow

Maiden Arctic voyage

A team from SAMS was on board the RRS Sir David Attenborough as the UK's polar research vessel made its first science expedition to the Arctic.

The research ship made sail for south-east Greenland to help advance our understanding of the region's rapidly decaying ice sheet and its impacts on ocean and global climate systems.

Led by an interdisciplinary team of 40 scientists and support staff from renowned research institutes worldwide, including SAMS, the KANG-GLAC project embarked on a six-week mission to study Greenland's glaciers and life in coastal waters around the edge of the world's largest island.



RRS Sir David Attenborough in front of A23a iceberg, 1 Dec 2023
(2) (Credit. Theresa Gossman, Matthew Gascoyne, Christopher Grey)

July

Sea ice surprise

A presumption that rapidly melting Arctic sea ice will open up new shipping routes sparked a warning from scientists investigating the fast-changing ice conditions.

Although seasonal sea ice – the ice that thaws in summer and reforms in winter – has been shrinking at a rate of knots because of climate change, this has released thick and centuries-old multi-year ice from further north into shipping channels.

Scientists investigating 15 years of sea ice charts from the Canadian Arctic are now warning shipping companies and sailors that this thicker ice could be more hazardous and more unpredictable, creating so-called 'choke points' in existing shipping routes.

The shipping industry is worth trillions of dollars in annual trade and accounts for the transport of nearly 90% of all goods globally, so the state of the route through the Northwest Passage is of high interest.

The study, published by Dr Alison Cook of SAMS in the journal Communications Earth & Environment, also highlights potential impacts for coastal communities along the routes of the Northwest Passage, as many Canadian Arctic communities rely on maritime traffic for the supply of goods.



Underwater camera on plankton patrol

A hi-tech underwater device that scans water samples for potentially dangerous algae blooms – the first of its type to be deployed in UK waters – has produced tens of millions of images in its first year of operation.



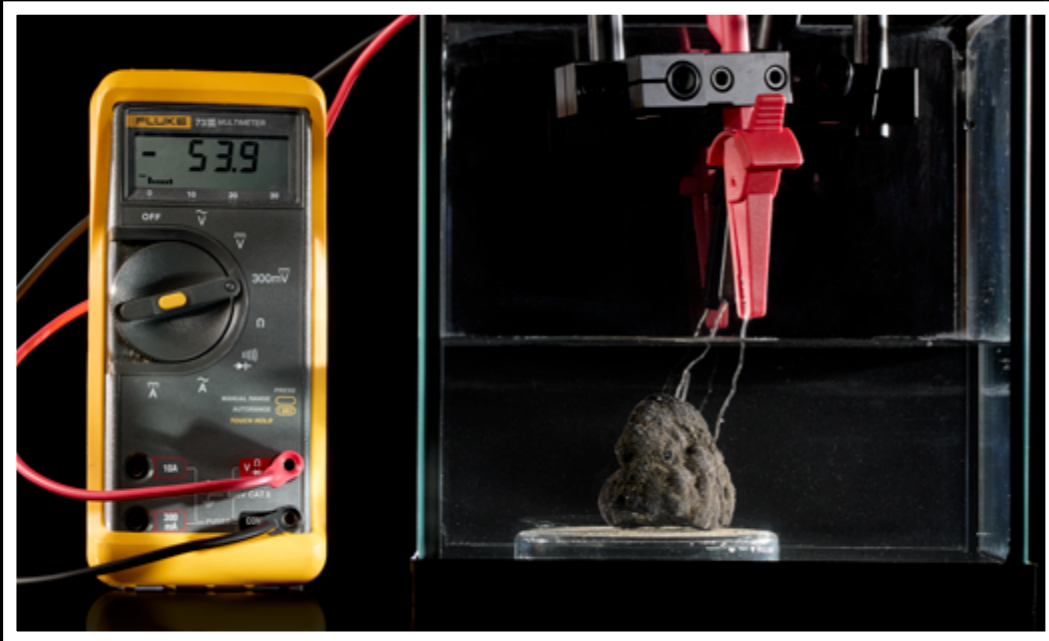
The Imaging FlowCytobot (IFCB) uses a combination of lasers and cameras to detect and photograph microscopic, single-celled phytoplankton in the water, before uploading data for specialist analysis, detection and monitoring.

While phytoplankton are a critical part of the ocean ecosystem, some species can reproduce,

or 'bloom', to toxic levels. Humans eating shellfish that have absorbed these toxic phytoplankton can become ill and blooms can also be fatal to farmed fish. Early warning of such phytoplankton blooms is therefore crucial to the aquaculture industry.

The IFCB was deployed at a Scottish Sea Farms site in Shetland by a research team from UHI partners

SAMS and UHI Shetland, with help from Scottish Sea Farms, which operates the Cole Deep site. It is the first time that an IFCB has been deployed at a working fish farm anywhere in Europe. The research team is using artificial intelligence to train the system to identify different species of phytoplankton at the farm.



The summer of dark oxygen

A discovery in the dark depths of the Pacific Ocean by Prof. Andrew Sweetman is challenging the scientific consensus of how oxygen is produced - and has even called into question how life on Earth began.

Reference: Sweetman et al (2024) Evidence of dark oxygen production at the abyssal seafloor. Nature Geoscience, 17, 737-739



Photosynthetic organisms like plants and algae use energy from sunlight to create the planet's free oxygen. However, new evidence, published in July 2024 in Nature Geoscience, has shown how oxygen is also produced in complete darkness at the seafloor 4,000 metres below the ocean surface, where no light can penetrate.

Prof. Sweetman and his team made the 'dark oxygen' discovery while on ship-based fieldwork in the Clarion-Clipperton Zone to assess the possible impacts of deep-sea mining. This process would extract polymetallic nodules that contain metals such as manganese, nickel and cobalt, which are required to produce lithium-ion batteries for electric vehicles and mobile phones.

In the experiments, Prof Sweetman and colleagues found nodules to be carrying a very high electric charge, which could lead to the splitting of seawater into hydrogen and oxygen in a process called seawater electrolysis.

SAMS Director Prof. Nicholas Owens described the finding as one of the most exciting in ocean science in recent times. The paper attracted significant discussion the world over.

Images credit: Polymetallic Nodule Credit Geiger Laboratories Northwestern University

Green Antarctica

A SAMS scientist who has helped to create the first continent-wide mapping study of plant life across Antarctica has described the work as a ‘game changer’ which will change perceptions of the continent.

The study, published in Nature Geoscience, reveals growth in previously uncharted areas and is set to inform conservation measures across the region. The satellite survey of mosses, lichens and algae across the continent will now form a baseline for monitoring how Antarctica’s vegetation responds to climate change.

Scientists used a European Space Agency satellite to sweep the continent, combined with field measurements taken over several summer seasons, and detected almost 45 square kilometers of vegetation – roughly three times the size of Lake Windermere in the Lake District, UK.

Dr Matthew Davey, SAMS principal investigator on polar algae and physiology, who was involved in coordinating the expeditions and science, said: “This is a major breakthrough and a game-changer in our understanding of these Antarctic ecosystems.

The international team, led by the University of Edinburgh with the Norwegian Institute for Nature Research, British Antarctic Survey and SAMS, found that over 80 per cent of the vegetation growth was contained within the Antarctic Peninsula and neighbouring islands. The team estimates this growth makes up only 0.12 percent of Antarctica’s

total ice-free area, highlighting the importance of monitoring key areas of vegetation abundance.

Antarctic vegetation, dominated by mosses and lichens, has adapted to survive the harsh polar conditions and each type plays an important role in carbon and nutrient cycling on a local level, experts say. Until now, their spatial coverage and abundance across the continent remained unknown.



Climate risk assessment of fisheries in Namibia

Eight large-scale fishery sectors provide important food and income sources to people in Namibia. Changes in climate are likely to affect the target species while weather instability may reduce the safety and effectiveness of fishing.



A new study by a consortium including Dr Bernadette Snow calculates the climate risk for different fisheries.

Small-scale, recreational and rock lobster fisheries were identified to have the greatest overall risk while rock lobsters and crabs were the most climate-sensitive species.

The findings were discussed with local fishing communities in five workshops across Namibia to explore options for climate adaptations.



Celebrating ‘exceptional’ students

An ‘exceptional’ undergraduate student who has been involved in five research projects and deputised on an oceanographic cruise to the North Atlantic while in only her second year of study, was named SAMS student of the year.



Nele Thomsen, who graduated along with 44 other students from SAMS this year, has undertaken three summer internships during her BSc Marine Science and has travelled to Svalbard and Tromsø in Norway.

In her second year of study she joined a research ship to gain experience but was unexpectedly promoted to replace a senior chemist who tested positive for Covid-19 the day before the ship sailed. Research undertaken by the German

student, in addition to her undergraduate degree, has contributed to five scientific studies, which are now in the process of being written as academic papers. She is now studying a PhD at SAMS, exploring how copepods are affected by environmental stresses and pollution.

Nele was one of seven award winners at the graduation ceremony, including fellow graduates Janika Sander, who won the Tim Boyd Prize for Oceanography, Jamie

Nathaniel, who was presented with the Overall Achievement Award, and Niamh Docherty, who gained the Academic Excellence Award.

Nicole Allison won the Johanna Fehling Memorial Prize for the best PhD student research paper; Kavya Shibu won the ACES-STAR Dissertation Prize and Adam Francis was awarded the Graham Shimmield Prize for Biogeochemistry.



New university role

SAMS Director Prof Nick Owens will head up research activity at UHI after being appointed to the university’s senior executive team as Vice-Principal for Research and Innovation.

Prof Owens, who has been Director of SAMS since 2015 and will continue in the role, has previously led the British Antarctic Survey and brings considerable experience in managing complex research organisations. He will play a crucial role in shaping the research strategy of UHI, of which SAMS is a partner.

September

Carbon-mapping first

A new series of reports, authored by SAMS scientist Prof. Michael Burrows and published by a coalition of nature charities, means the UK is the first nation to map and estimate the amount of carbon stored in its seabed habitats, including in Marine Protected Areas (MPAs).

The Blue Carbon Mapping Project, completed on behalf of WWF, The Wildlife Trusts and the RSPB, reveals that 244 million tonnes of organic carbon are stored in just the top 10cm of UK seabed habitats, with 98% stored in seabed sediments such as mud and silt.

UK seabed habitats could capture up to 13 million tonnes of organic carbon every year – almost three times the amount sequestered by the UK’s forests – 4.8 million tonnes – although forests cover a much smaller area (32,500 km²).

The Blue Carbon Mapping Project highlights how physical disturbances to the seabed, including from human activity such as bottom trawling, as well as moorings and offshore developments, pose threats to blue carbon stores. Disturbing seabed habitats can release large amounts of carbon into the atmosphere, worsening climate change.



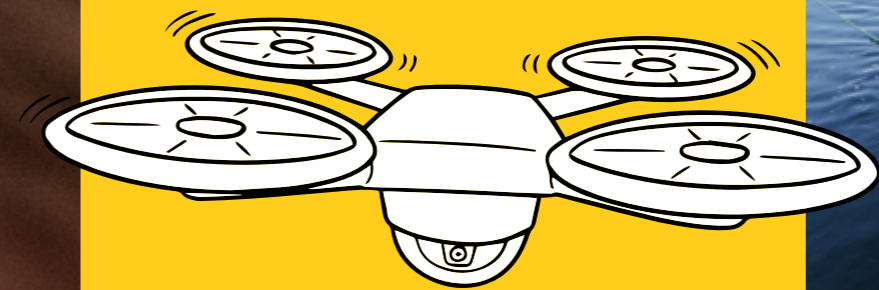
October

Seeking out natural products

The Culture Collection of Algae and Protozoa (CCAP) at SAMS will be part of a new £4.5m research project to develop the use of natural products in the agriculture, pharmaceutical and manufacturing industries.

The collection is part of the Natural Products BioHUB (NP BioHUB) project, led by Swansea University, which gained funding from UKRI's £25m Accelerating the Green Economy programme.

The NP BioHUB aims to lead innovation in natural products use in the agricultural, pharmaceutical, and manufacturing industries to become healthier, greener, and more sustainable.



High hopes for airborne research

SAMS contributed to a landmark report which outlines the future development of uncrewed aerial systems (UAS) in support of low-carbon environmental science research in the UK.

The report, commissioned by the Natural Environment Research Council (NERC), was compiled by UK environmental science centres to review the UAS landscape in support of low-carbon environmental science research.

UAS enable research that is currently beyond the reach of traditional aircraft and other methods - playing a crucial role in supporting cutting-edge science, while contributing to reduced carbon emissions.

Recommendations on how best to invest in and support environmental science research using these technologies are published in the report: Net Zero Aerial Capability (NZArC) Scoping Report: A Review of the Role of Uncrewed Aerial Systems in the Decarbonisation Strategy of NERC Aerial Activities.

Dr Phil Anderson, who heads up SAMS' Scientific Robotics Academy, and SAMS UAS pilot Richard Dale were authors on the report.



Preparing Europe's seaweed industry for climate warming

As the seaweed farming industry in Europe expands, scientists have warned that seaweeds currently thriving in the cooler coastal waters of the north Atlantic could begin to vanish over the next 50 years.

Climate change is expected to bring higher ocean temperatures, increased storms and unpredictable salinity fluctuations because of increased rainfall. Temperature has a major influence on seaweed growth and seaweed farms can be susceptible to storm damage.

However, a paper by SAMS seaweed scientist Dr Reina Veenhof in *Frontiers in Marine Science* says that sufficient investment in seaweed farming research and development could help safeguard the industry for decades to come.

The paper also explored measures to better prepare the seaweed for a change in conditions and looked at the use of priming at the early gametophyte stage of seaweed cultivation.

November

Hunting 'ghost fishing' gear

SAMS scientists used sonar and remotely operated vehicles to find examples of 'ghost fishing' and other lost creel gear in Scottish seas, as they attempt to reduce the risk of marine mammal entanglement.

Ghost fishing refers to lost fishing gear like creels that can collect on the seabed and continue to fish without ever being collected. Rope associated with the gear can also become an entanglement hazard. In Scottish waters approximately six humpback whales and 30 minke whales become entangled in active creel fleets each year, but the numbers that succumb to lost creel gear remains unclear.

The SAMS team used a boat to tow a side-scan sonar system, known as a towfish, to locate objects they believed to be creels. They then deployed a remotely-operated vehicle (ROV) to observe the objects in detail.

The success of the trial paves the way for better monitoring of this marine litter problem, potentially including increased use of underwater robotic vehicles in known hotspots to reunite fishermen with their gear.

A good ambassador

Dr Alasdair O'Dell received a letter of thanks from His Majesty's Ambassador to Chile for his invaluable contribution the country's blue carbon research.

Dr O'Dell was keynote speaker at the seminar 'Advances in Blue Carbon in Chile and Scotland, organised by the British Embassy Santiago, together with Chile's Corporate Leaders Group for Climate Action.

His contribution will directly inform Chile's blue carbon agenda.



Sea lice solutions

SAMS scientists Drs Helena Reinardy and Kim Last, convened a workshop on sea lice that brought together researchers, industry, regulators and policy makers has sought to offer solutions to the growing problem of farm infestation.

The workshop, 'Innovations in Sea Lice Monitoring', was part of the annual Marine Alliance for Science and Technology Scotland (MASTS) Science Conference in Glasgow.

The sea louse, *Lepeophtheirus salmonis*, is one of the major challenges facing sustainable Atlantic salmon farming in Scotland, but there is currently limited knowledge on the life cycle and distribution of this organism.

Meanwhile, SAMS has been trialling new methods of detecting sea lice larvae in the water column. The team has been expanding its expertise in sea lice research, from microscopic analysis to field capturing techniques.

Protecting world heritage

SAMS helped UNESCO's Environmental DNA (eDNA) Expeditions to take an inventory of marine biodiversity at 21 of UNESCO's 51 World Heritage marine sites, in an effort to protect the world's most vulnerable species and habitats.

The 51 world heritage sites host over one third of the world's vulnerable and endangered marine species, a fifth of the world's blue carbon, and at least 15% of the global surface area of coral reefs. Yet most of the sites are threatened by climate change.

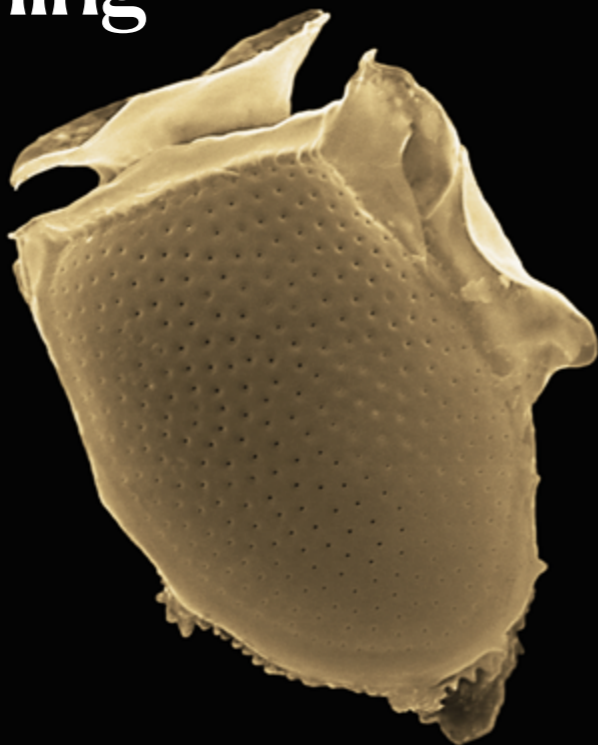
Prof Mike Burrows assisted with the climate change susceptibility work, supporting 250 volunteers – aged six and upwards, from 19 countries – who identified over 4,000 species. Their data suggest that warming oceans risk pushing many species outside of their known thermal ranges, raising key questions about how to protect them.

An early warning

Harmful algal blooms (HABs) are a major threat to marine ecosystems, aquaculture industries, and human health, but predicting these blooms is difficult due to the many environmental and biological factors that influence their behaviour.

A SAMS study tested new 'ensemble' to improve predictions of algal blooms and their toxins in Scotland.

The results showed that ensemble models consistently outperformed individual models, making forecasts more accurate. Better forecasting allows industry to act earlier, improving food safety.



December

A growing collection

The Culture Collection of Algae and Protozoa (CCAP) is one of the world's most biodiverse collections, looking after microalgae, protozoa, algal pathogens and also species of macroalgae (seaweed).

In 2024, it celebrated 20 years at SAMS, a relatively short, but extremely significant time in its 100-year history.

More than 3,000 strains are currently stored and cultured by a team of scientists in the purpose-built laboratory, supported by UK Research and Innovation's Natural Environment Research Council (NERC-UKRI).

CCAP has recently added to its analytical and genomic research capabilities, helping to explore further the potential uses of algae. Algae are already used in nutraceuticals, pharmaceuticals, beauty products, food and other industries.

The collection was founded by Professor Ernst Georg Pringsheim at the Botanical Institute of the Charles University of Prague in the 1920s. In response to the Nazi invasion of Prague, Pringsheim and his cultures moved to England where the collection was expanded and eventually taken over by E A George for Cambridge University in 1947, coming to its current home in 2004 when SAMS' Sir John Murray Building opened.

Since then, 1,303 strains have been added to the collection. In the same period, the team has also despatched more than 13,000 orders to more than 100 countries, as far afield as the Azores, Gambia and Fiji.

Visit www.ccap.ac.uk to find out more...