

# 3 September 2024

### NATIONAL TRUST FOR SCOTLAND MARKS 70 YEARS OF CARING FOR FAIR ISLE

- Fair Isle was acquired by the National Trust for Scotland from renowned ornithologist, George Waterston on 3 September 1954
- Anniversary coincides with research activity carried out in partnership between the Trust, Fair Isle Marine Research Organisation (FIMRO) and UHI Shetland to measure health of marine environment around Fair Isle
- Research supports the Fair Isle Demonstration and Research Marine Protected Area (DR MPA), the first ever community led project of its kind in the country
- New equipment and technology used during research made possible thanks to funding raised by players of People's Postcode Lottery

The National Trust for Scotland is celebrating the 70<sup>th</sup> anniversary of Fair Isle coming under its care after the conservation charity acquired the island from renowned ornithologist, George Waterston on 3 September 1954.

The celebration coincides with the expansion of research activity being carried out to better understand Fair Isle's natural heritage by observing and measuring the health of its marine environment. Researchers were able to build upon previous years' research by deploying new equipment and technology, made possible thanks to funding raised by players of People's Postcode Lottery.

This funding supported research carried out throughout the summer by researchers from UHI Shetland in collaboration with the Trust and Fair Isle Marine Research Organisation (FIMRO). The research supports the Fair Isle Demonstration and Research Marine Protected Area (DR MPA), the first ever community led project of its kind in the country.

This fieldwork involved the tagging of European shag seabirds as part of the fine-scale foraging mapping project. The Trust's seabird officers and ecologists were able to fit GPS tags to 10 shags with support from the Fair Isle Bird Observatory (FIBO) team. Data from these tags provides important information about where the birds are going to feed and how deep their dives are, and this combined with data from the other research, will provide a holistic view of the health of Fair Isle's marine environment.

The equipment and technology used to increase the scope of the research included a newly designed piece of kit deployed for the first time in the inshore fish survey which took place at the end of July. A drifting baited remote underwater video (BRUV) lander, designed by UHI Shetland, recorded pelagic fish species (species that occur in the midwater column).

Additionally, the researchers also used a benthic BRUV lander, designed by the Orkney Skate Trust, to capture an overhead (dorsal) view of mobile fish that assisted

researchers when documenting the different species prevalent on the seabed. This new design is particularly useful in identifying flapper skate individuals by their dorsal spots. A new survey trawl net allowed the research team to be more ambitious when negotiating the challenging tides and seabed topography around the island that enabled researchers to cover a larger survey area.

FIMRO have also been able to deploy their first FPOD - a piece of passive acoustic monitoring equipment used to detect the echolocations of cetaceans. This supports cetacean monitoring around Fair Isle to providing information on their abundance and distribution.

Fair Isle Research Officer, Katie Cubbon, who is co-ordinating the research projects for the National Trust for Scotland and FIMRO, hosted by NatureScot said: "This is the third consecutive inshore fish survey to take place around Fair Isle. The team were able to repeat and expand on previous years' trawl survey coverage largely thanks to the new survey trawl net equipment and good weather. The benthic (seabed) habitat and species distribution modelling project survey is due to take place later this month.

"Initial observations of the catch highlighted a large abundance of adult haddock in combination with a variety of other fish species. The researchers were also able to successfully deploy several baited camera landers that allowed them to monitor species through video footage recorded from the seabed. A new approach adopted this year saw the use of drifting pelagic camera landers thanks to the ingenuity of our research partners at UHI Shetland. Similar to previous years' survey findings, the footage was dominated by flapper skate suggesting Fair Isle may be an area of importance for this species.

"Following further analysis of the data recorded across the different habitats we will bring together findings from the shag, inshore fish and benthic surveys to help develop the next steps in the project. UHI Shetland aiming to trial the use of AI in the benthic modelling, and this combined with the other findings will certainly benefit the wider study of seabirds by providing information on important habitats and prey species. In the long term, we hope to continue to build on this baseline data that will help us establish more definite conclusions when considering any potential marine management measures in the future."

Dr Shaun Fraser, Senior Fisheries Scientist from UHI Shetland, who led the team conducting the Fair Isle Inshore Fish Survey, said: "It was a pleasure to work in Fair Isle and undertake another successful survey of the fish species around the isle this summer. By repeating the survey each year, we are increasingly able to analyse the data for important patterns and trends. Although the analysis of this year's data is ongoing, we already have seen evidence, including some spectacular underwater video footage, that Fair Isle may be an important habitat for some elasmobranch species (sharks, skates and ray) in particular. We are continuing to address key knowledge gaps relating to the Fair Isle ecosystem by expanding our survey methods and coverage, and we hope that there will be further support in the future so that we can build on the success so far."

Fiona Mitchell, FIMRO Trustee, said: "FIMRO are delighted to see the players of People's Postcode Lottery supporting the National Trust for Scotland to facilitate existing and exciting new Fair Isle DR MPA research. In developing new research FIMRO are focused on how the Fair Isle community, through citizen science, can contribute to the DR MPA".

Katie continued: "The valuable contribution by players of People's Postcode Lottery to support these research projects will help us to gain a better understanding of these marine environments and help to ensure their longevity and sustainability for the future. This research contributes to the wider conservation work carried out by the National Trust for Scotland to care for, protect and share Scotland's rich natural heritage for everyone."

Players of People's Postcode Lottery have supported the conservation charity's Love Our Nature project since 2022, which benefited from £900k last year. Further funding awarded through Postcode Earth Trust this year has supported the conservation research at Fair Isle and across a variety of different habitats, including coastal and marine areas, peatlands, wetlands, woodland, and the eight National Nature Reserves cared for by the Trust.

Head of Charities at <u>People's Postcode Lottery</u>, Laura Chow, said: "It's great that our players are supporting the Trust's vital nature conservation work at Fair Isle in this way. It's exciting to see new technology being used to help protect Fair Isle's marine environment and the island communities that rely on it."

Players of People's Postcode Lottery have now raised over £3.4m since 2014 to support the National Trust for Scotland.

The Love Our Nature project supports the National Trust for Scotland's vision to care for, protect and share Scotland's nature, beauty and heritage for everyone, as outlined in its 10-year strategy, launched in 2022. For more information on the National Trust for Scotland, visit <a href="https://www.nts.org.uk">www.nts.org.uk</a>.

### **ENDS**

#### **Editor's Notes:**

Images: https://www.flickr.com/gp/133918740@N04/qrX0E0dTGa

### About Fair Isle Demonstration and Research Marine Protected Area (DR MPA)

\*Fair Isle is a small island (768 hectares) within the Shetland Isles. It is roughly equidistant between Shetland and Orkney and around 40km from any neighbouring land. It hosts a small population of circa 50 persons, which has remained stable since 1954, when ownership of the island passed to the National Trust for Scotland.

Decades of declining natural resources – primarily seabird and inshore fish populations – prompted initial concern from the local community in the late 1980s, who felt a continuing sense of powerlessness in implementing their own decisions around how to

maintain their local marine resource. Of particular concern to islanders was the steep decline in their (traditionally abundant) visiting seabirds. Seventeen species breed on Fair Isle and, in the 1980s and 1990s, around 250,000 birds would be present in summer. By 2010, this had declined to a little over 100,000. This was, and remains, of high concern to islanders due to the high footfall in tourism that the presence of this wildlife encourages. Without the attraction of rich and diverse wildlife, the economy of the island is highly threatened.

The Fair Isle DR MPA was designated in November 2016 under the Marine (Scotland) Act 2010 and is the only current DR MPA in Scotland. The site is a third-party proposal, which was submitted by the community group the Fair Isle Marine Environment and Tourism Initiative (FIMETI) in 2011, having been developed by FIMETI and the Fair Isle community, alongside a range of partners. The Fair Isle DR MPA was, in many ways, the culmination of many years of effort from FIMETI to establish some means of recourse or local intervention into the management of the island's adjacent marine resources. In 2018, FIMETI dissolved and a new community organisation, the Fair Isle Marine Research Organisation (FIMRO), was formed in Fair Isle. FIMRO are responsible for overseeing community conservation activity and managing elements of the Fair Isle DR MPA Project Officer's role.

DR MPAs have the potential to be a powerful vehicle for community-led marine protection in Scotland. They are a relatively untested form of marine management, and thus there is a vast, as yet untapped, potential in their application and impact. Understanding the process of, and the lessons learned from, Scotland's only DR MPA is therefore of vital importance.

\*Fauna and Flora International, 2021. A Case Study of Demonstration & Research Marine Protected Area development in Scotland. FFI, Edinburgh, UK. p.13.

## **About the National Trust for Scotland**

Established in 1931, the National Trust for Scotland is Scotland's largest conservation charity and cares for, shares and speaks up for Scotland's magnificent heritage.

Over the last 90 years the Trust has pioneered public access to and shared ownership of some of the most magnificent buildings, collections and landscapes in Scotland. It cares for more than 100 sites, from ancient houses to battlefields, castles, mills, gardens, coastlines, islands, mountain ranges and the plants and animals which depend upon them.

In March 2022 the National Trust for Scotland launched *Nature, Beauty & Heritage for Everyone*, its ten-year strategy which sets out the ambitions of the charity over the coming decade. From speaking up for Scotland's heritage which doesn't have a voice, to improving the lives and wellbeing of people across the country, and responding to the climate and biodiversity crisis, the Trust will build on its work in recent years to grow its impact and conserve and restore more of Scotland's heritage, as it moves towards its centenary in 2031.

Scotland's largest membership organisation, the National Trust for Scotland relies on the support of its members and donors to carry out its important work. For more information on the National Trust for Scotland visit <a href="www.nts.org.uk">www.nts.org.uk</a>. The National Trust for Scotland is a charity registered in Scotland, Charity Number SC 007410.