

THE IVY Science & Education Report

A photograph of two humpback whales swimming in the ocean. The whale on the left is facing towards the right, and the whale on the right is facing towards the left. Both whales have dark grey skin with white spots and markings. The background is a deep blue ocean.

MS Spitsbergen

28.04. – 08.05.2025

The Scottish Isles
Island Hopping in the Hebrides





Science & Education Program

Our Science and Education Team accompanied you during your expedition to the remote communities and impressive nature of the islands of Scotland's Hebrides.

We had the opportunity to explore our destination's natural beauty, exceptional wildlife, and rich history. We organized lectures and interactive activities onboard and explored our destinations during excursions, nature walks, and from the water.

History & Culture

We had the unique chance to see some remaining of the many different influences which have shaped the Scottish Isles. Celtic, Pict, Christian and Norse culture merge in the language, architecture and the ways of life in the Hebrides, enriching the history of settlement, conquests, clan fights, independence uprisings and the Highland Clearances.

We learnt more about the Saga of Conquest, survival, adaptation, and resilience that the Isles of the Hebrides represent.



Arts & Crafts

The 8,000 years of history and the remoteness of the Hebrides, have triggered an amazing pallet of art which are unique to this region.

Harris Tweed, myths and tales, and the architecture of castles and villages represent the isles in a timeless way.

And how can we forget the amazing single malt whisky and the ice cream?!





NASA Globe Cloud Observer

Together with our Environmental Scientist Jean, you observed the clouds and submitted your findings to NASA GLOBE Observer.

South of the Isle of Skye, we recorded 25–50% low-level cloud coverage, mostly puffy cumulus clouds. Although we've yet to receive NASA's report, these observations help improve climate and weather models. Ours was the only submission from all of Scotland that day, making it especially valuable!

[View our data](#) on the global map

iNaturalist

Throughout our expedition, we documented the flora and fauna of the Scottish Isles and uploaded all our findings to the iNaturalist biodiversity platform.

During our voyage, ten eager observers submitted more than 330 observations of 148 different species. This effort contributes to the creation of a comprehensive understanding of the geographical distribution of species and can aid researchers in their ongoing studies and conservation efforts to protect them.

View our data submitted on our [iNaturalist project](#)





Science Boat

12 eager participants joined our three Science Boats in Gigha, Tobermory and Eigg to study plankton and the hydrography of our destination.

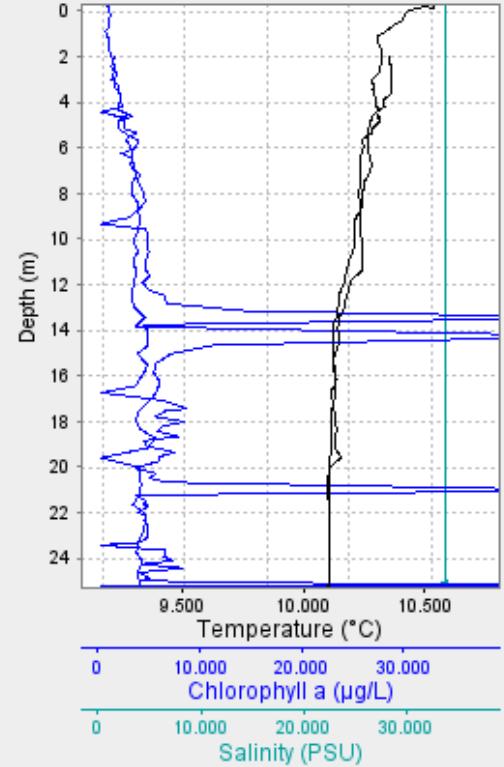
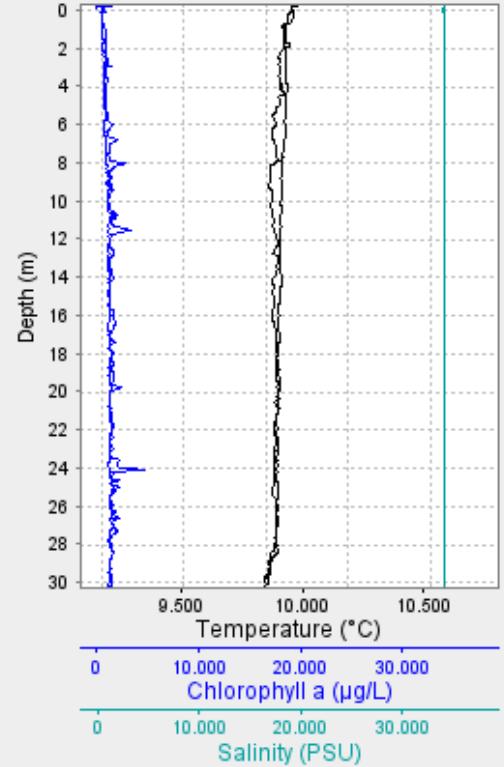
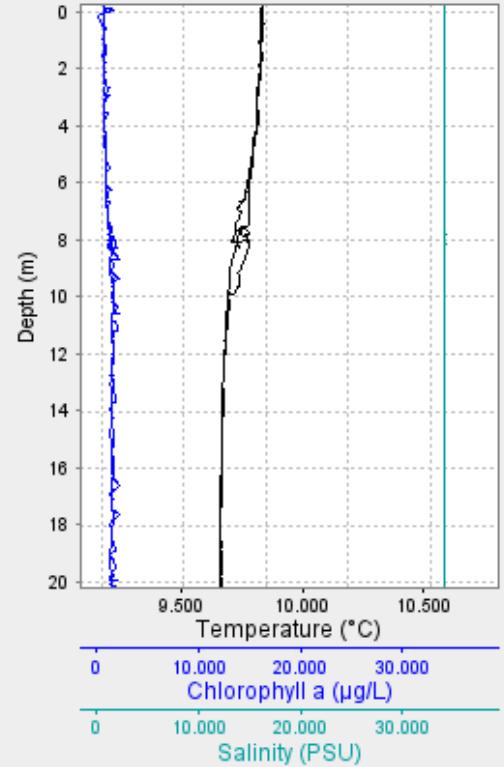
They helped monitor ocean clarity through participation in the Secchi Disk citizen science study, contributing to important research on the distribution of phytoplankton blooms.

[View our data](#) submitted to the Secchi Disk Project



CTD

We deployed our CTD equipped with a chlorophyll *a* sensor to investigate the physical and biological characteristics of the water column. This instrument allowed us to measure temperature, salinity, and fluorescence, providing insights into phytoplankton distribution. The chlorophyll *a* data gives a snapshot of primary productivity, helping us understand the base of the marine food web.

SCIENTIFIC NAME	GIGHA	TOBERMORY	ISLE OF EIGG
SECCHI DEPTH (M)	5.1	7.4	7.9
SST (°C)	10.2	9.9	9.8
ENVIRONMENT	Open Sound	Sound	Open Sound
PLANKTON COMMUNITY	Diatom bloom	Diatoms, decapod zoea larvae	Copepods, decapod zoea larvae, large centric diatoms, jellyfish
CTD CAST	 <p>Depth (m)</p> <p>Temperature (°C)</p> <p>Chlorophyll a ($\mu\text{g/L}$)</p> <p>Salinity (PSU)</p>	 <p>Depth (m)</p> <p>Temperature (°C)</p> <p>Chlorophyll a ($\mu\text{g/L}$)</p> <p>Salinity (PSU)</p>	 <p>Depth (m)</p> <p>Temperature (°C)</p> <p>Chlorophyll a ($\mu\text{g/L}$)</p> <p>Salinity (PSU)</p>

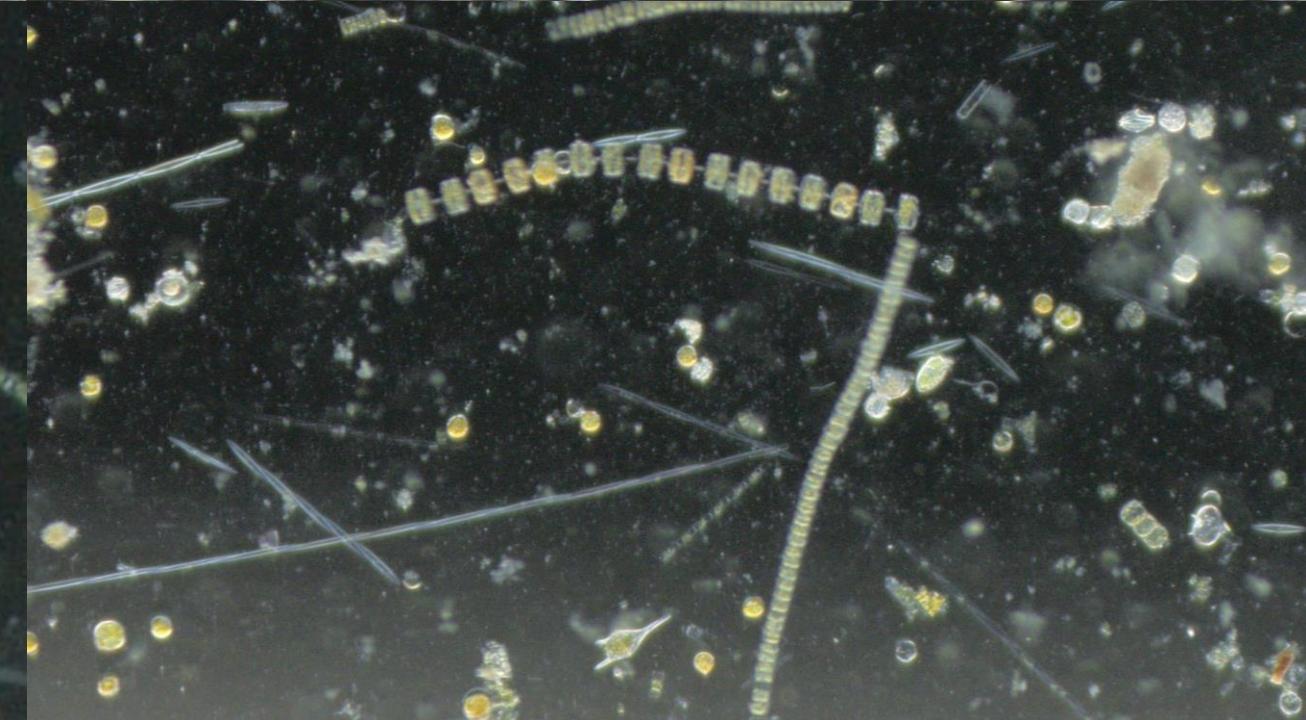


Plankton Samples

We explored the microscopic world of plankton, the tiny organisms that drift in our ocean.

In the plankton samples collected from Gigha, we found higher concentrations of phytoplankton compared to our other science boat locations.

During our discovery session, we also observed various types of zooplankton, such as the Zoaea larvae (a Crustacean larval stage), captured in the picture.





Beach Clean-up

Many of you demonstrated your dedication to protecting nature by taking part in our organised beach clean. This clean was performed in partnership with the “Big Blue Bag” project. This initiative aims to get people out and involved in protecting the marine environment. As part of the project’s Coastal Debris protocol, we recorded how much litter we collected in a 20 minute period.

We removed over **6kg** of litter within the 20 minutes, impressively mostly composed of small plastic items and fishing net and rope. A huge thank you to all involved!

Wildlife List – Birds





Wildlife List – Seabirds



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Fulmarus glacialis</i>	Northern Fulmar	Eissturmvogel	Fulmar boréal
<i>Puffinus puffinus</i>	Manx Shearwater	Atlantiksturmtaucher	Puffin des Anglais
<i>Morus bassanus</i>	Northern Gannet	Basstöpel	Fou de Bassan
<i>Stercorarius parasiticus</i>	Arctic Skua, Parasitic Jaeger	Schmarotzerraubmöwe	Labbe parasite
<i>Stercorarius skua</i>	Great Skua	Große Raubmöwe	Grand Labbe
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	Lachmöwe	Mouette rieuse
<i>Larus canus</i>	Common Gull	Sturmmöwe	Goéland cendré
<i>Larus argentatus</i>	Herring Gull	Silbermöwe	Goéland argenté
<i>Larus fuscus</i>	Lesser Black-backed Gull	Heringsmöwe	Goéland brun
<i>Larus marinus</i>	Great Black-backed Gull	Mantelmöwe	Goéland marin
<i>Sterna hirundo</i>	Common Tern	Flusseeschwalbe	Sterne pierregarin
<i>Thalasseus sandvicensis</i>	Sandwich tern	Brandseeschwalbe	Sterne caugek
<i>Rissa tridactyla</i>	Black-legged Kittiwake	Dreizehenmöwe	Mouette tridactyle
<i>Fratercula arctica</i>	Atlantic Puffin	Papageitaucher	Macareux moine
<i>Cephus grylle</i>	Black Guillemot	Gryllteiste	Guillemot à miroir

SCIENTIFIC NAME		ENGLISH	DEUTSCH	FRANÇAIS
<i>Uria aalge</i>	Common Guillemot, Common Murre	Trottellumme	Guillemot marmette	Lomvi
<i>Alca torda</i>	Razorbill	Tordalk	Petit Pingouin	Alke

Wildlife List – Shore birds



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Cygnus olor</i>	Mute Swan	Höckerschwan	Cygne tuberculé
<i>Anser anser</i>	Greylag Goose	Graugans	Oie cendrée
<i>Branta canadensis</i>	Canada Goose	Kanadagans	Bernache du Canada
<i>Tadorna tadorna</i>	Shelduck	Brandgans	Tadorne de Belon
<i>Anas platyrhynchos</i>	Mallard	Stockente	Canard colvert
<i>Somateria mollissima</i>	Common Eider	Eiderente	Eider à duvet
<i>Mergus merganser</i>	Goosander, Common Merganser	Gänsesäger	Grand Harle
<i>Mergus serrator</i>	Red-breasted Merganser	Mittelsäger	Harle huppé
<i>Gavia immer</i>	Great Northern Diver, Common Loon	Eistaucher	Plongeon huard
<i>Tachybaptus ruficollis</i>	Little Grebe	Zwergtaucher	Grèbe castagneux
<i>Phalacrocorax aristotelis</i>	European Shag	Krähenscharbe	Cormoran huppé
<i>Ardea cinerea</i>	Grey Heron	Graureiher	Héron cendré
<i>Crex crex</i>	Corn Crake	Wachtelkönig	Râle des genêts
<i>Haematopus ostralegus</i>	Eurasian Oystercatcher	Austernfischer	Huîtrier pie
<i>Charadrius hiaticula</i>	Common Ringed Plover	Sandregenpfeifer	Pluvier grand-gravelot

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Calidris alba</i>	Sanderling	Sanderling	Bécasseau sanderling
<i>Calidris maritima</i>	Purple Sandpiper	Meerstrandläufer	Bécasseau violet
<i>Arenaria interpres</i>	Ruddy Turnstone	Steinwälzer	Tournepiere à collier
<i>Actitis hypoleucus</i>	Common Sandpiper	Flussuferläufer	Chevalier guignette
<i>Numenius arquata</i>	Eurasian Curlew	Großer Brachvogel	Courlis cendré
<i>Numenius phaeopus</i>	Whimbrel	Regenbrachvogel	Courlis corlieu
<i>Gallinago gallinago</i>	Common Snipe	Bekassine	Bécassine des marais

Wildlife List – Land birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Phasianus colchicus</i>	Ring-necked (Common) Pheasant	Fasan	Faisan de Colchide
<i>Haliaeetus albicilla</i>	White-tailed Eagle	Seeadler	Pygargue à queue blanche
<i>Circus cyaneus</i>	Hen Harrier	Kornweihe	Busard Saint-Martin
<i>Buteo buteo</i>	Common Buzzard	Mäusebussard	Buse variable
<i>Columba livia domestica</i>	Feral Pigeon	Stadttaube	Pigeon domestique
<i>Columba palumbus</i>	Common Wood Pigeon	Ringeltaube	Pigeon ramier
<i>Streptopelia decaocto</i>	Eurasian Collared Dove	Türkentaube	Tourterelle turque
<i>Cuculus canorus</i>	Common Cuckoo	Kuckuck	Coucou gris
<i>Alauda arvensis</i>	Eurasian Skylark	Feldlerche	Alouette des champs
<i>Hirundo rustica</i>	Barn Swallow	Rauchschwalbe	Hirondelle rustique
<i>Delichon urbicum</i>	Western (Common) House-martin	Mehlschwalbe	Hirondelle de fenêtre
<i>Anthus petrosus</i>	Eurasian Rock Pipit	Strandpieper	Pipit maritime
<i>Anthus pratensis</i>	Meadow Pipit	Wiesenpieper	Pipit farlouse
<i>Motacilla alba yarrellii</i>	Pied Wagtail	Trauerbachstelze	Bergeronnette de Yarrell
<i>Prunella modularis</i>	Dunnock	Heckenbraunelle	Accenteur mouchet

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Erythacus rubecula</i>	European Robin	Rotkehlchen	Rougegorge familier
<i>Oenanthe oenanthe</i>	Northern Wheatear	Steinschmätzer	Traquet motteux
<i>Saxicola rubicola</i>	European Stonechat	Schwarzkehlchen	Tarier pâtre
<i>Turdus merula</i>	Eurasian (Common) Blackbird	Amsel	Merle noir
<i>Turdus philomelos</i>	Song Thrush	Singdrossel	Grive musicienne
<i>Sylvia borin</i>	Garden Warbler	Gartengrasmücke	Fauvette des jardins
<i>Turdoides reinwardtii</i>	Eurasian Blackcap	Weißaugen-Schwatzhäherling	Cratérope à tête noire
<i>Sylvia communis</i>	Common Whitethroat	Dorngrasmücke	Fauvette grisette
<i>Acrocephalus schoenobaenus</i>	Sedge Warbler	Schilfrohrsänger	Phragmite des joncs
<i>Locustella naevia</i>	Grasshopper Warbler	Feldschwirl	Locustelle tachetée
<i>Phylloscopus collybita</i>	Common Chiffchaff	Zilpzalp	Pouillot véloce
<i>Phylloscopus trochilus</i>	Willow Warbler	Fitis	Pouillot fitis
<i>Regulus regulus</i>	Goldcrest	Wintergoldhähnchen	Roitelet huppé
<i>Troglodytes troglodytes</i>	Eurasian Wren	Zaunkönig	Troglodyte mignon
<i>Muscicapa striata</i>	Spotted Flycatcher	Grauschnäpper	Gobemouche gris
<i>Parus major</i>	Great Tit	Kohlmeise	Mésange charbonnière
<i>Periparus ater</i>	Coal Tit	Tannenmeise	Mésange noire
<i>Cyanistes caeruleus</i>	Eurasian Blue Tit	Blaumeise	Mésange bleue

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Certhia familiaris</i>	Eurasian Treecreeper	Waldbaumläufer	Grimpereau des bois
<i>Coloeus monedula</i>	Western (Eurasian) Jackdaw	Dohle	Choucas des tours
<i>Corvus corax</i>	Northern (Common) Raven	Kolkrabe	Grand Corbeau
<i>Corvus cornix</i>	Hooded Crow	Nebelkrähe	Corneille mantelée
<i>Corvus corone</i>	Carrion Crow	Rabenkrähe	Corneille noire
<i>Corvus frugilegus</i>	Rook	Saatkrähe	Corbeau freux
<i>Sturnus vulgaris</i>	European Starling	Gemeiner Star	Étourneau sansonnet
<i>Passer domesticus</i>	House Sparrow	Haussperling	Moineau domestique
<i>Fringilla coelebs</i>	Common Chaffinch	Buchfink	Pinson des arbres
<i>Linaria cannabina</i>	Eurasian Linnet	Bluthänfling	Linotte mélodieuse
<i>Carduelis carduelis</i>	European Goldfinch	Stieglitz	Chardonneret élégant
<i>Chloris chloris</i>	European Greenfinch	Grünfink	Verdier d'Europe
<i>Spinus spinus</i>	Eurasian Siskin	Erlenzeisig	Tarin des aulnes





eBird

During our Wildlife Watches and landings, the science team conducted detailed bird surveys, recording observations for the citizen science platform eBird. We recorded 64 different species of birds in 21 checklists.

This initiative helps contribute valuable data to global bird conservation efforts, enhancing our understanding of seabird populations and their habitats.

[View our data on our e-Bird trip report](#)

Wildlife List – Marine Mammals





Wildlife List – Marine Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Balaenoptera acutorostrata</i>	Common Minke Whale	Zwergwal	Petit rorqual
<i>Orcinus orca</i>	Orca, Killer Whale	Orka, Schwertwal	Orque
<i>Grampus griseus</i>	Risso's Dolphin	Rundkopfdelfin	Dauphin de Risso
<i>Tursiops truncatus</i>	Common Bottlenose Dolphin	Grosser Tümmler	Grand dauphin
<i>Delphinus delphis</i>	Common Dolphin	Gemeiner Delfin	Dauphin commun
<i>Phocoena phocoena</i>	Harbour Porpoise	Schweinswal	Marsouin commun
<i>Halichoerus grypus</i>	Grey Seal	Kegelrobbe	Phoque gris
<i>Phoca vitulina</i>	Harbour Seal, Common Seal	Seehund	Phoque commun

Wildlife List – Other Fauna



Wildlife List – Other Fauna



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Oryctolagus cuniculus</i>	European Rabbit	Wildkaninchen	Lapin de garenne
<i>Cervus elaphus</i>	Red Deer	Rothirsch	Cerf élaphe

IX

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