

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

18.04. – 28.04.2025

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?!



Geology

Staffa is famous for its basalt columns, formed by volcanic activity around 60 million years ago. The island's geology is similar to that of the Giant's Causeway, with striking hexagonal basalt formations created by slowly cooling lava. These unique structures are a testament to the volcanic processes of the Paleogene period, during the opening of the North Atlantic.



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, we submitted 120 observations of 70 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

10 eager participants joined our **3** Science Boats in Gigha, Tobermory and Loch Scavaig 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

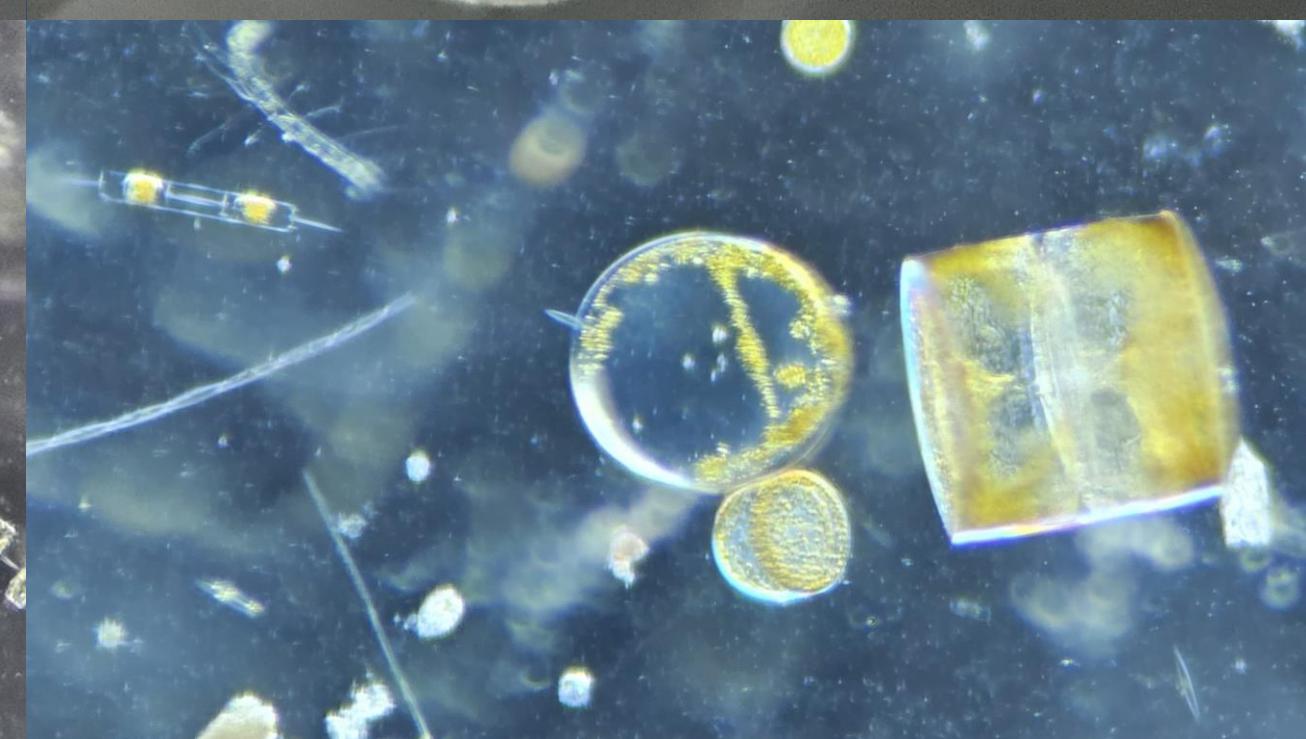
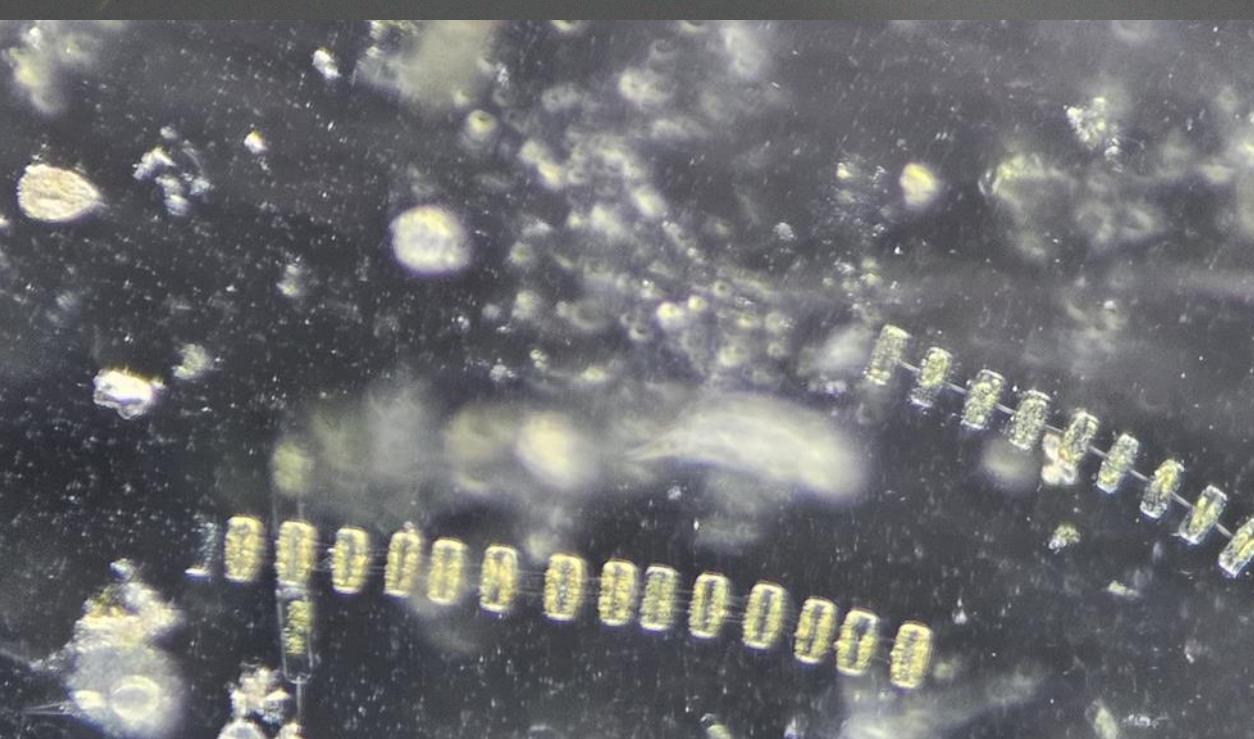
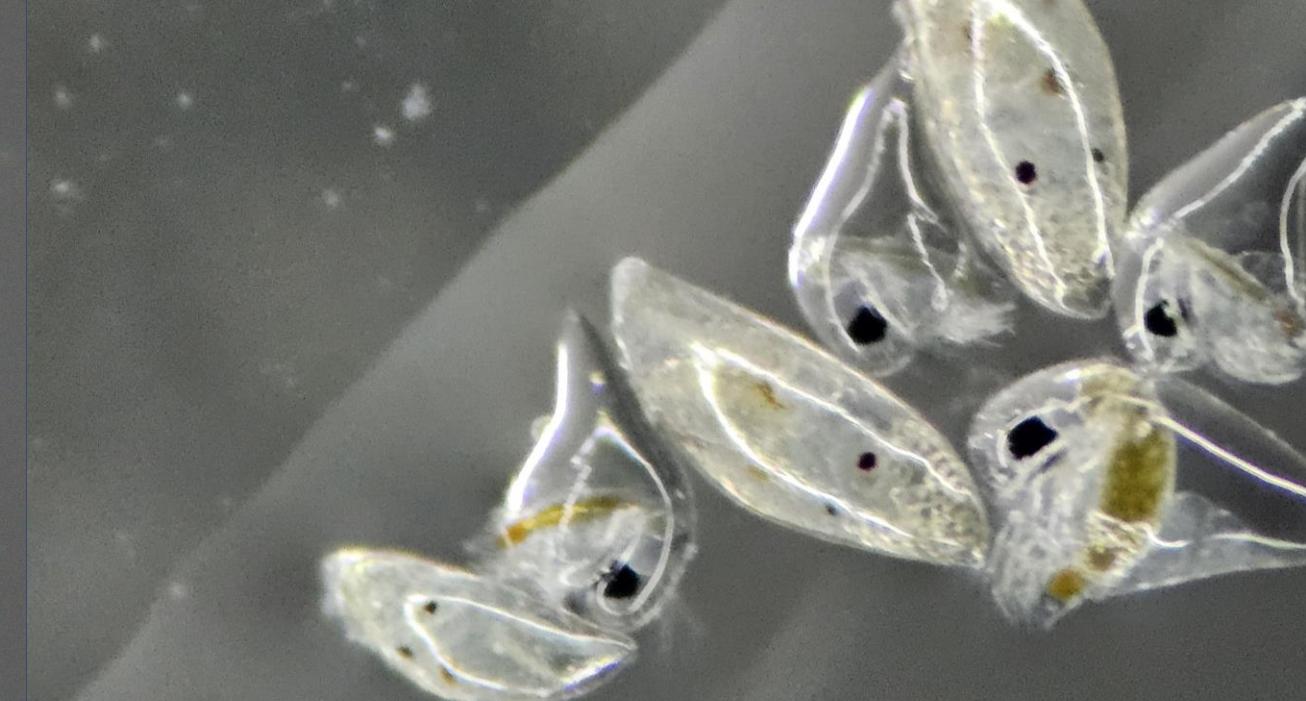


Plankton Samples

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

In the plankton samples collected from Gigha, Tobermory and Loch Scavaig we found high densities of zooplankton in addition to the photosynthesisers of the plankton world, the phytoplankton.

During our discovery sessions, were able to identify various species of zooplankton, such as this Calenoid Copepod shown in the photograph.



Underwater Drone

We used a Blueye Pioneer underwater drone to explore the underwater world of the British Isles, on the Isle of Eigg.

Through this looking glass into the underwater world, we were able to spot sea stars, and a high diversity of seaweed species.





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 a staggering **25kg** of litter within the 20 minutes, with an additional **7kg** in a subsequent effort. A huge thank you to all those involved!

ORCA

On your voyage, ORCA Ocean Conservationist Becky completed 10.5 hours of cetacean surveys (whales, dolphins and porpoise) with your help out on deck.

Becky recorded, 3 Bottlenose Dolphins, 5 unidentified dolphins, and 27 Common Dolphins, with a grand total of 35 cetaceans sighted during her surveys. Additional species seen outside of surveys included Harbour and Grey Seals and Harbour Porpoise.

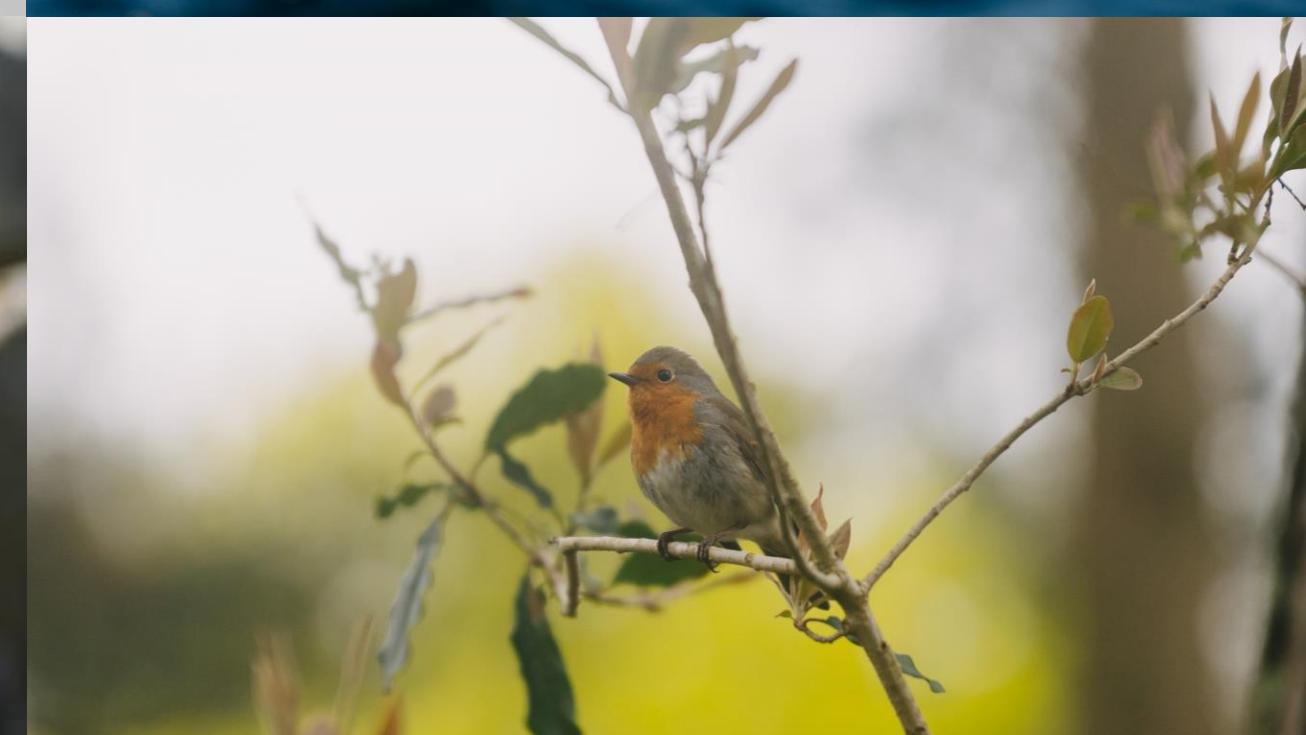
Understanding cetacean distribution is vital for their protection. Surveys such as these support ORCA's work, to help conserve and protect them in Scottish waters and oceans across the globe.

[Visit ORCA's website](#) to find out more about their work.



Wildlife List – Birds





Wildlife List – Seabirds



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Fulmarus glacialis</i>	Northern Fulmar	Eissturm Vogel	Fulmar boréal
<i>Puffinus puffinus</i>	Manx Shearwater	Atlantiksturmtaucher	Puffin des Anglais
<i>Morus bassanus</i>	Northern Gannet	Basstölpel	Fou de Bassan
<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
<i>Uria aalge</i>	Common Guillemot (Common Murre)	Trottellumme	Guillemot marmette

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Alca torda</i>	Razorbill	Tordalk	Petit Pingouin



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>Anser brachyrhynchus</i>	Pink-footed Goose	Kurzschnabelgans	Oie à bec court
<i>Anas platyrhynchos</i>	Mallard	Stockente	Canard colvert
<i>Somateria mollissima</i>	Common Eider	Eiderente	Eider à duvet
<i>Mergus serrator</i>	Red-breasted Merganser	Mittelsäger	Harle huppé
<i>Gavia immer</i>	Great Northern Diver (Common Loon)	Eistaucher	Plongeon huard
<i>Gavia stellata</i>	Red-throated diver (Red-throated Loon)	Sterntaucher	Plongeon catmarin
<i>Tachybaptus ruficollis</i>	Little Grebe	Zwerftaucher	Grèbe castagneux
<i>Phalacrocorax carbo</i>	Great Cormorant	Kormoran	Grand Cormoran
<i>Phalacrocorax aristotelis</i>	European Shag	Krähenscharbe	Cormoran huppé
<i>Ardea cinerea</i>	Grey Heron	Graureiher	Héron cendré
<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>Vanellus vanellus</i>	Northern Lapwing	Kiebitz	Vanneau huppé
<i>Actitis hypoleucos</i>	Common Sandpiper	Flussuferläufer	Chevalier guignette
<i>Tringa nebularia</i>	Common Greenshank	Grünschenkel	Chevalier aboyeur
<i>Numenius arquata</i>	Eurasian Curlew	Großer Brachvogel	Courlis cendré

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>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>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
<i>Erythacus rubecula</i>	European Robin	Rotkehlchen	Rougegorge familier
<i>Oenanthe oenanthe</i>	Northern Wheatear	Steinschmätzer	Traquet motteux

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Saxicola rubicola</i>	European Stonechat	Schwarzkehlchen	Tarier pâtre
<i>Turdus iliacus</i>	Redwing	Rotdrossel	Grive mauvis
<i>Turdus merula</i>	Eurasian (Common) Blackbird	Amsel	Merle noir
<i>Turdus philomelos</i>	Song Thrush	Singdrossel	Grive musicienne
<i>Turdus viscivorus</i>	Mistle Thrush	Misteldrossel	Grive draine
<i>Turdoides reinwardtii</i>	Eurasian Blackcap	Weißaugen-Schwatzhäherling	Cratérope à tête noire
<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>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
<i>Coloeus monedula</i>	Western (Eurasian) Jackdaw	Dohle	Choucas des tours
<i>Corvus corax</i>	Northern (Common) Raven	Kolkrahe	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

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Sturnus vulgaris</i>	European Starling	Gemeiner Star	Étourneau sansonnet
<i>Emberiza schoeniclus</i>	Common Reed Bunting	Rohrammer	Bruant des roseaux
<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>Pyrrhula pyrrhula</i>	Bullfinch	Gimpel	Bouvreuil pivoine
<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, our ornithologist Miguel conducted detailed seabird surveys, recording observations for the citizen science platform eBird. We recorded 24 different species of birds in 8 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>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
	Unidentified dolphin	Nicht identifizierter Delfin	Non identifié Dauphin
<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>Sciurus vulgaris</i>	Eurasian Red Squirrel	Eurasisches Eichhörnchen	Écureuil roux
<i>Oryctolagus cuniculus</i>	European Rabbit	Wildkaninchen	Lapin de Garenne
<i>Vipera berus</i>	Common European Adder	Kreuzotter	Vipère péliade
<i>Anguis fragilis</i>	Common Slow Worm	Westliche Blindschleiche	Orvet Fragile

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