

Location



Introduction

Germany is one of the largest European states which shares marine borders with Denmark to the north, the Netherlands to the west and Poland to the east. Germany has 2,389 km of coastline which includes the North Sea/Wadden Sea in the northwest and the Baltic Sea in the northeast, as well as the East Frisian Islands.

Germany has a temperate climate overall, but the climate varies between north and south. The north, where it has its marine territories, tends to have more precipitation, with cool, cloudy, wet winters and occasionally warm summers.

On the North Sea coast, there are marshlands and salt marshes, and extensive mud flats between the Frisian Islands and the mainland. The North Sea is also subject to large intertidal zones, unlike the Baltic Sea coast which has a smaller tidal zone but contains more cliffs. Both seas have sandy beaches.

Regional Seas and Biogeography

Baltic Sea Region and Baltic Sea LME
North Atlantic Region and North Sea LME

Habitats

→ Salt Marshes

are scattered along the coastline of Germany, with more found on the North Sea side of the coastline.

→ Tidal/Mud Flats

can be found on the North Sea side of Germany which is subject to a North Atlantic tidal system.

→ Dune habitats

can be found across the German coastline, with the highest concentration in the Wadden Sea National Park which is also shared with the Netherlands to the south and Denmark to the north.

→ Lagoons

are a significant feature in the Baltic Sea coastline as part of the National park Vorpommersche Boddenlandschaft (more below) close to the eastern border with Poland.

Biodiversity Hotspots

→ Ramsar sites

Germany has 35 Ramsar sites, and of those there is 1 in the coastal area of the Baltic Sea and 7 in coastal areas of the North Sea side. Below is an overview of some of the key Ramsar sites for marine biodiversity.

Ostseeboddengewässer Westrügen-Hiddensee-Zingst complex of islands, peninsulas, sand-banks, peat swamps, saline pasture and lagoons with shorelines varying from high cliffs to sandy beaches. Among the different habitats there are many waders, a wintering Nordic geese and ducks, amongst others. It is a nationally designated Nature Reserve, Special Protection Area and Natura 2000 site under the Birds and Habitats Directives.

Schleswig-Holstein Wadden Sea comprises 40% of the Wadden Sea and the site is shared with Denmark, and the Netherlands. It contains extensive mudflats, rivers, sandbanks, dunes, saltmarshes, heathland and islands. It supports internationally important breeding numbers of several species of birds and more than two million staging waterbirds. The site is also a UNESCO Biosphere Reserve.

Muehlenberger Loch is a tidal section of the Elbe River. It is home to extensive mudflats exposed at low tide. It hosts several species of waterbirds and is the most important staging area in Northern Europe for Northern Shoveler (*Anas clypeata*).

Wattenmeer, Elbe-Weser-Dreieck, also an UNESCO biosphere Reserve, SPA, National Park and Nature Reserve, has extensive mudflats and salt marshes. It is an important area for numerous species of wintering and staging waterbirds. There is a lot of ecological research carried out and hunting is strictly controlled.

Wattenmeer, Jadebusen & westliche Wesermündung is a large bay area of the Wadden Sea which is an SPA, part of the UNESCO biosphere Reserve, a national park and nature reserve. It consists of extensive sand and mud flats, grading into saltmarsh and dune habitats. Numerous waterbirds winter, stage and breed in the area. It is well studied ecologically and hunting is strictly controlled.

Wattenmeer, Ostfriesisches Wattenmeer & Dollart contains parts of the East Friesian Islands and the Ems River estuary that are an SPA, part of the UNESCO biosphere reserve, national park and nature reserve. The area includes extensive mudflats and saltmarsh and support vast reedbeds. The site is internationally important for breeding, wintering and staging abundant numbers of waterbirds. The site is vulnerable to oil spills from nearby shipping lanes and port facilities.

Hamburgisches Wattenmeer is also an SPA and National Park and consists of sand, mudflats, islands and salt marshes. It is an important site for breeding populations of the grey seal (*Halichoerus grypus*) and harbour seal (*Phoca vitulina*). It is also an important area for staging and wintering waterbirds, especially species of tern.

→ **National Parks and ecological reserves**

Wadden Sea and Hallig islands UNESCO Biosphere Reserve is a transboundary system of intertidal sand and mud flats which covers the German Wadden Sea National Parks of Lower Saxony and Schleswig-Holstein, as well as the Dutch and Danish protected areas of the Wadden Sea. The park is home to the harbour porpoise (*Phocoena phocoena*), the grey seal (*Halichoerus grypus*) and harbour seal (*Phoca vitulina*).

Nationalpark Vorpommersche Boddenlandschaft is the largest nature reserve in the Baltic Sea which covers the coast and lagoons of Western Pomerania (also an IBA). The park contains islands, lagoons and peninsulas and is home to thousands of birds, such as long-tailed duck, greylag goose (*Anser anser*) and Eurasian wigeon (*Maraca penelope*).

→ **IBAs**

Greifswalder Bodden is a bay in the northeast of Germany in the Baltic Sea. It comprises of large shoals, intertidal zones and saltmarshes. The bay is an important area for birds such as the long-tailed duck, common pochard, and horned grebe. The site holds more than 20,000 passage waterbirds on a regular basis.

Southern shore of Eckernförder Bucht is a sandy and stony bay in the north of Germany on the Baltic Sea. It regularly holds more than 20,000 wintering waterbirds such as the common eider (*Somateria mollissima*) and the tufted duck (*Aythya fuligula*).

Schlei IBA and national park is in the north of Germany on the Baltic Sea. It is a tidal fjord with saltmarshes and sand dunes which regularly hosts more than 20,000 wintering waterbirds such as the common pochard and tufted duck (*Aythya fuligula*).

Brodter Ufer is a stretch of sandy coastline 8km in length near the entrance to the port of Lubeck. It regularly holds more than 20,000 wintering waterbirds such as the Eurasian coot (*Fulica atra*) and greater scaup (*Aythya marila*).

Eastern part of Kiel Bight is in the north of Germany on the Baltic Sea and supports significant populations of birds, such as the common eider (*Somateria mollissima*) and common scoter (*Melanitta nigra*).

→ **Ecologically or biologically significant marine areas (EBSAs)**

Fehmarn Belt is an important water exchange pathway between the Baltic and Atlantic Sea with several HELCOM marine protected areas. It is important for migratory aquatic species, such as the western population of the harbour porpoise (*Phocoena phocoena*). It is also of high regional importance for migratory and wintering waterfowl.

At risk Wildlife

In this section, some individual wildlife species are mentioned followed by a letter in parentheses. These are species included in the IUCN Red List of Threatened Species within the top three categories of risk - Vulnerable to extinction (VU), Endangered (EN) or Critically Endangered (CR). A more complete list of IUCN listed species is found in Appendix 1.

➔ **At risk birds**

Between the North Sea and the Baltic Sea, and their associated coastlines and varied habitat types, there are numerous seabirds, waders, waterbirds, gulls, ducks and geese, amongst others, that inhabit the different habitat types. Many birds can be found in their thousands or tens of thousands. Many species of gulls, ducks, terns and waders overwinter along the Baltic coast.

Millions of birds stopover in the Wadden Sea as they migrate, and gulls, terns and waders breed in high numbers there.

➔ **At risk reptiles**

Some leatherback turtles, which are critically endangered, migrate to the North Sea in the summer for feeding. Strandings are extremely rare and would be unlikely to become a concern during an oil spill.

➔ **At risk mammals**

The harbour seal (*Phoca vitulina*) and the grey seal (*Halichoerus grypus*) can be found on the German coastline both on the North Sea side and the Baltic Sea side.

The harbour porpoise is one of a few mammals that can be found in German waters, located around Schleswig-Holstein waters and close to the border with Denmark. Although globally it is not threatened, the local population in the Baltic Sea is listed as CR on the HELCOM Red List of Species.

Eurasian otters (*Lutra lutra*) can be found in rivers and coastal areas in Germany.

Past experience with oil spill and potential risks

In October 1998 the freighter PALLAS ran aground in the Schleswig-Holstein Wadden Sea National Park spilling approximately 87m³ of intermediate fuel oil. Around 15,000 seabirds died as a result and a review was carried out of Germany's pollution response arrangements. There have also been a number of small spills in the River Elbe and River Weser.

In 2001 there was a mystery spill off the coast of Schleswig Holstein which impacted over 1000 birds. International Bird Rescue was called in to assist with the wildlife response.

In December 2022, an oil spill from a pipeline near Brunsbüttel port forced the busy Kiel Canal to shut for two weeks. Birds became oiled, but the numbers remained relatively low.

The coastlines of Germany, in the Wadden Sea and the Baltic Sea, are active shipping routes which mean there are risks for oil spill incidents.

International and Regional Treaties and Agreements

➔ **Oil spill and HNS Response**

d CLC Convention 69

CLC Protocol 76

CLC Protocol 92

FUND Protocol 76

FUND Protocol 92

FUND Protocol 2003

d LLMC Convention 76

LLMC Protocol 96

OPRC Convention 90

HNS Convention 96

HNS PROT 2010

OPRC_HNS 2000

BUNKERS CONVENTION 01

→ **Marine Biodiversity Protection**

- Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS)
- Baltic Marine Environment Protection Commission – also known as the Helsinki Commission (HELCOM)
- Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)
- Bonn Agreement for Cooperation in dealing with pollution of the North Sea by oil and other harmful substances

Oil Spill Response and HNS Spill Response

→ **National Contingency Plan?**

Germany has a national oil spill contingency plan in place which includes HNS.

→ **Role of Competent National Authorities**

Spill response is the joint responsibility of the five Federal Coastal States of Bremen, Hamburg, Niedersachsen, Mecklenburg-Vorpommern and Schleswig-Holstein. The Central Command for Maritime Emergencies (CCME or Havariekommando) was established in 2003 to take overall command and coordination in the event of an incident. They are also responsible for maintaining and updating the national response capabilities. In the event of an incident, the CCME is transformed into the Central Incident Staff who ensure that the immediate, targeted and comprehensive response to the effects and consequences of maritime incidents is carried out under a unified and structured command. The CCME draws on the support of the competent authorities, as well as other federal and state institutions.

The Federal Agency for Technical Relief (THW) is an important partner in maritime emergency response which is based on a cooperation agreement between the coastal states and the Federal Government of Germany. On the basis of the agreement, nine oil spill response teams were set up at THW on the coastlines of the North Sea and the Baltic Sea, as well as in Hamburg. Each one has their own equipment for spill response.

Oiled Wildlife Preparedness and Response

→ **Formal guidelines?**

In the event of an incident, onshore oil spill response, including oiled wildlife, is the responsibility of the five coastal states and would be integrated into the overarching command organisation. The different states have plans that are at different stages of development. An overarching framework for oiled wildlife response between the 5 coastal states in the process of being developed which would outline tasks and responsibilities for an incident.

A response plan exists for the Schleswig-Holstein part of the Baltic Sea with guidelines and a manual for implementation. The guidelines describe the competent authorities and identify the regional animal welfare organisation. In Mecklenburg-Vorpommern there is a draft response plan, yet to be agreed.

At the moment, there are no official formal guidelines for oiled wildlife response for the 5 coastal states but they are being developed as part of the framework plan.

→ **Response objectives and strategy**

At the moment, there are no official formal guidelines for the coastal states but they are being developed as part of the framework plan.

→ **Euthanasia or rehabilitation?**

The decision on euthanasia and rehabilitation will be part of the framework plan under development. Currently there is no official position in place. In 2025 there will be a course for State veterinarians organised by ProBird on euthanasia and rehabilitation.

→ **Impact assessment**

The nature conservation and veterinary assessment of the situation is carried out in the context of the decision on the further procedure with the contaminated wildlife. If action is to be taken, it is likely that members of ProBird would be invited to do the impact assessment of oiled wildlife response.

→ **Notification and early response**

The Maritime Emergency Response Centre (MERC) as National Focal Point and part of the CCME would be informed about a spill or any relevant incident. The MERC would then determine actions to be taken and inform relevant authorities, agencies and other stakeholders.

→ Wildlife responders

ProBird is the primary oiled wildlife response network organisation in Germany. Experts from the ProBird network have been important leading organisation in the development of EUROWA oiled wildlife response courses for responders and authorities.

In Germany, ProBird continually provides training to upskill volunteers and state veterinarians to provide them with oiled wildlife response skills. Some of their experts have also attended oiled wildlife incidents in other countries in Europe.

Tierschutzbund operates a wildlife rehabilitation centre in Schleswig-Holstein and can accommodate approximately 200 oiled birds.

→ Cooperation between stakeholders

Germany is a signatory to the Helsinki Convention (Baltic Sea) and the Bonn Agreement (North Sea). They are also part of the DenGerNeth (Denmark Germany Netherlands) Agreement for response in the Wadden Sea and part of the North Sea, SweDenGer (Sweden Denmark Germany) for response in the southwestern Baltic and a bilateral agreement with Poland for response in the Pomeranian Bight.

There are ongoing discussions with local NGOs about collaboration in the event of an oiled wildlife incident and as part of the framework for oiled wildlife response which is under development.

In 2024, Sea Alarm and ProBird met with the Harvariekommando and the 5 coastal states to run the WildX serious games package at a workshop focusing on creating a framework plan for oiled wildlife response.

→ Permanent facilities

There is some basic oiled wildlife response equipment such as nets, boxes, and pools, amongst other things, in Schleswig-Holstein. Within the ProBird network there are facilities with limited space for oiled wildlife rehabilitation.

As mentioned, Tierschutzbund has some capacity for oiled birds.

→ Current processes

The five coastal states and the Havariekommando are currently working on a framework wildlife plan that would cover all 5 states. Sea Alarm is providing training and technical input on the process. Tactical plans are under discussion with the relevant federal states and responsible parties.

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Appendix 1

→ At risk birds

Common name / Latin name / IUCN Red List Category (CR,EN,VU) / Resident-Migratory (season) / Breeding-Nesting-Pupping (season)

Long-tailed duck / *Clangula hyemalis* / VU / Native winter / non-breeding
Common pochard / *aythya ferina* / VU / Native winter / breeding
Horned grebe / *Podiceps auritus* / VU / Native winter / non-breeding
Aquatic warbler / *Acrocephalus paludicola* / VU / Passage / non-breeding
Grey plover / *Pluvialis squatarola* / VU / native / non-breeding
Velvet scoter / *Melanitta fusca* / VU / Native / non-breeding
Black-legged kittiwake / *Rissa tridactyla* / VU / Native / non-breeding
Atlantic puffin / *Fratercula arctica* / VU / Native / non-breeding
Broad-billed sandpiper / *Calidris falcinellus* / VU / Passage / non-breeding
Curlew sandpiper / *Calidris ferruginea* / VU / Passage / non-breeding

→ At risk reptiles

Common name / Latin name / IUCN Red List Category (CR,EN,VU) / Resident-Migratory (season) / Breeding-Nesting-Pupping (season)

Leatherback turtle / *Dermodochelys coriacea* / CR / Migrate to North Sea, rare in German waters /

→ At risk mammals

Common name / Latin name / IUCN Red List Category (CR,EN,VU) / Resident-Migratory (season) / Breeding-Nesting-Pupping (season)

Harbour porpoise / *Phocoena phocoena* / Baltic subpopulation CR (HELCOM RedList) / Resident /
Ringed seal / *Pusa hispida botnica* / Baltic subpopulation VU (HELCOM RedList) / Occasional resident /