



Sachverständigenrat  
für Umweltfragen

# Grenzüberschreitende Planung für Nord- und Ostsee

**Dr. Markus Salomon**

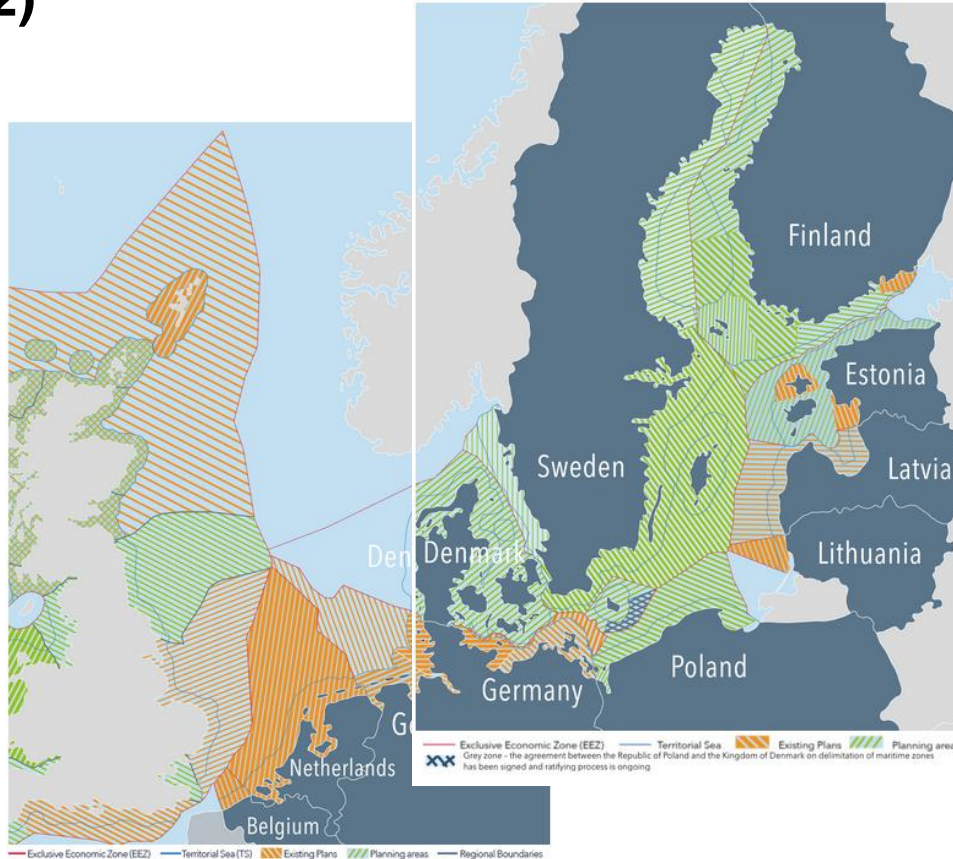
Sachverständigenrat für Umweltfragen

02.06.2022

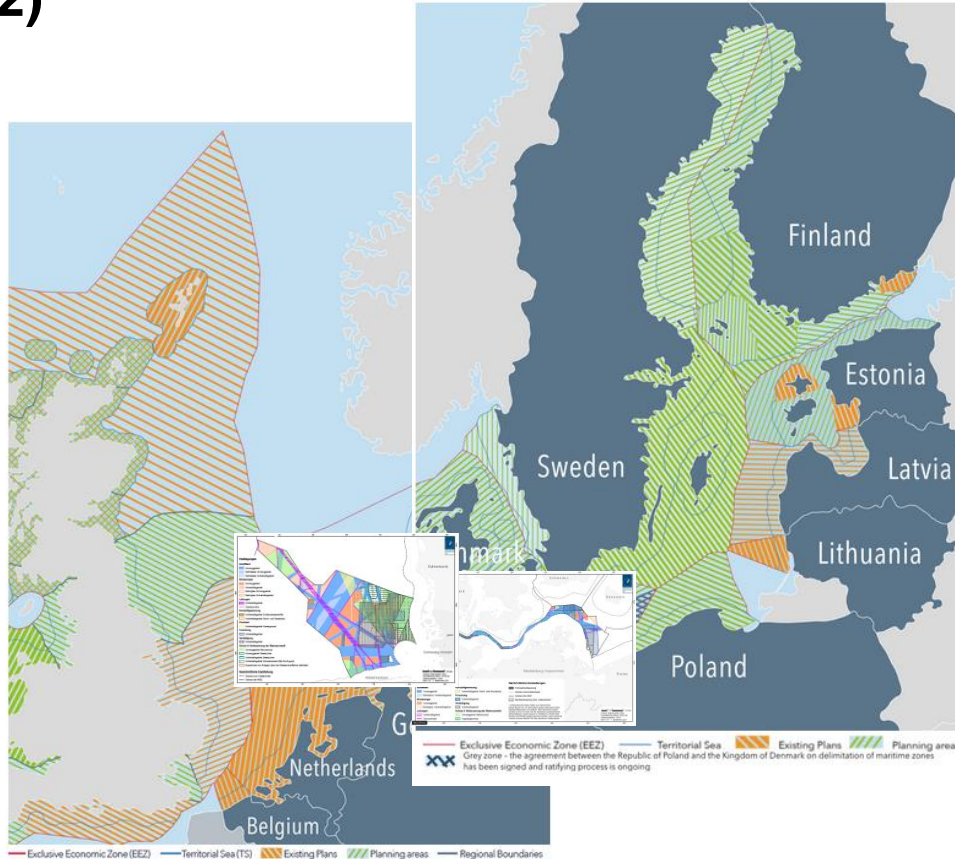
*NABU-Fachgespräch: Eine Strategie für Nord- und Ostsee -  
Natur- und Klimaschutz in der marinen Raumordnung, Berlin*



# Stand Raumordnungsplanung Nord- und Ostsee (22.02.2022)



# Stand Raumordnungsplanung Nord- und Ostsee (22.02.2022)





- 1. Grenzüberschreitende wirtschaftliche Aktivitäten: Schifffahrt, Fischerei, Offshore Wind...**
- 2. Grenzüberschreitende ökologische Belange: insb. wandernde Arten (Vögel, Meeressäuger, Fische...)**
- 3. Übergreifender Schutzansatz für Nord- und Ostsee und kumulative Belastungen**

## **1. Grenzüberschreitende wirtschaftliche Aktivitäten: Schifffahrt, Fischerei, Offshore Wind...**

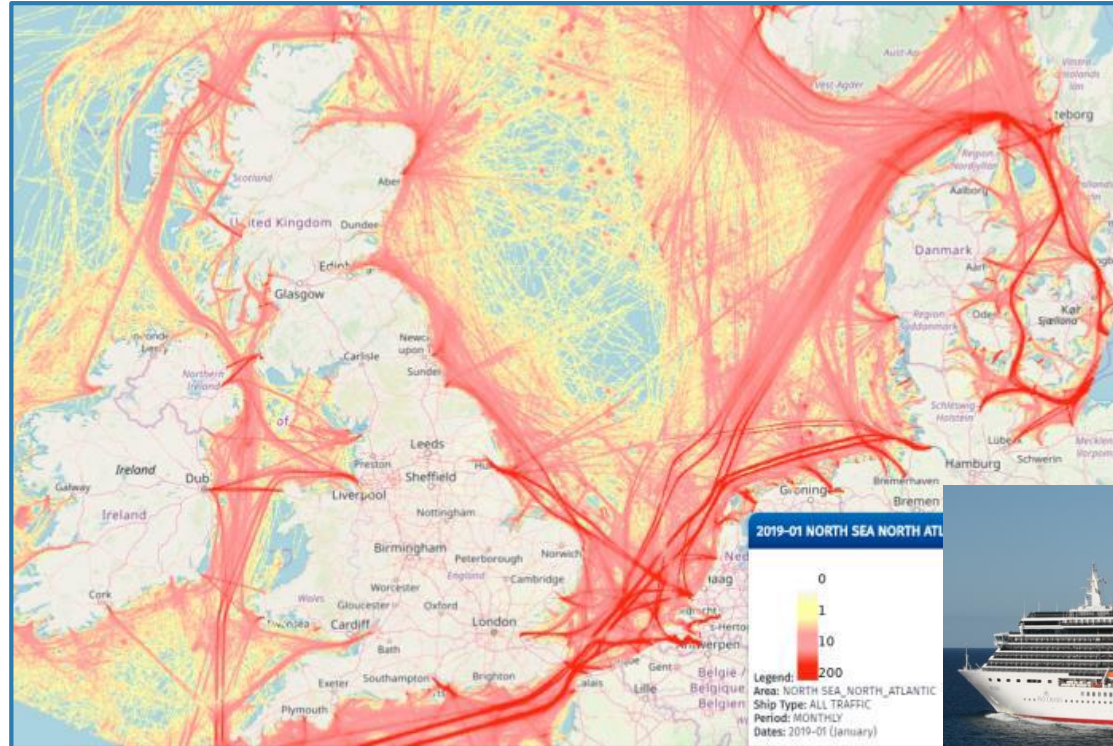
- Schifffahrt: internationale Charakter**
- Fischerei: insb. europäisch reguliert**
- Offshore Wind: Verbindung von Parks  
miteinander**





# 1. Beispiel Schifffahrt

## Schiffsintensität in der Nordsee und angrenzenden Gewässern



Quelle: EMSA 2019; <https://www.emsa.europa.eu/>

## Schiffssicherheit wurde u.a. nach dem Pallas-Unfall (1998)

verbessert:

- Notschleppkonzept
- Havariekommando

...

Aber mit dem Ausbau  
der Windenergie  
steigt auch das  
**Kollisionsrisiko...**

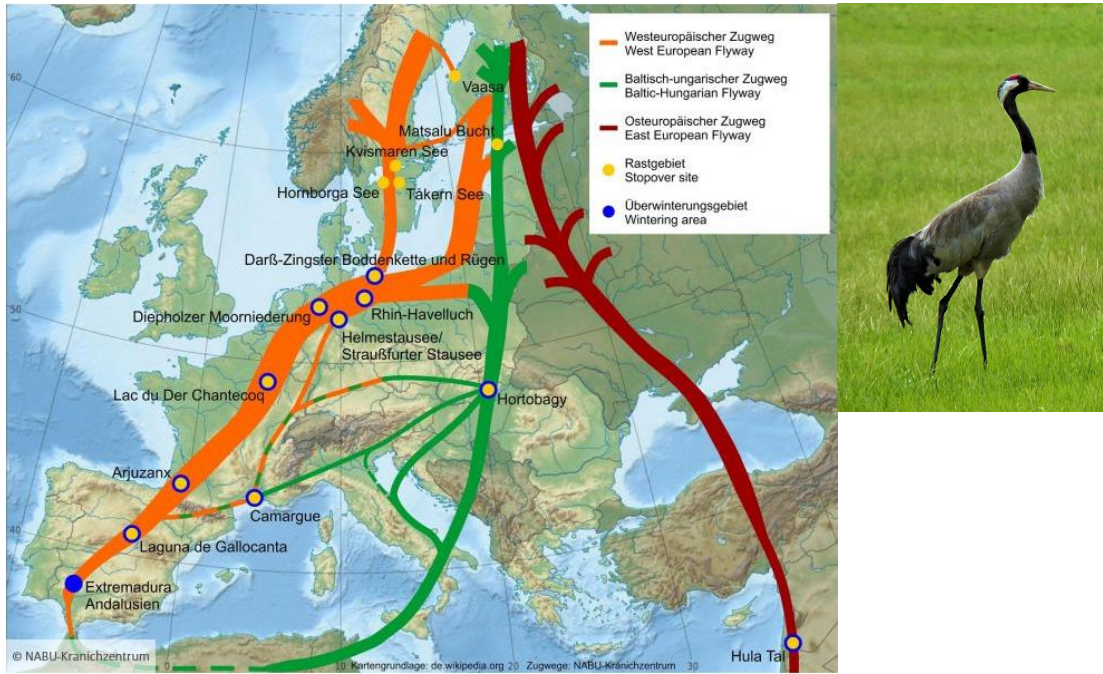
Standorte der Verkehrszentralen sowie  
Sturmpositionen der Mehrzweckschiffe und Notschlepper





## 2. Grenzübergreifende ökologische Belange: insb. wandernde Arten (Vögel, Meeressäuger, Fische...)

### Flugroute des Kranichs (Quelle: Nabu-Kranichzentrum)



### Small Cetacean in a Human High-Use Area: Trends in Harbor Porpoise Abundance in the North Sea Over Two Decades

Dominik A. Nachtshelm<sup>1</sup>, Sacha Viquera<sup>2</sup>, Nadya C. Ramirez-Martinez<sup>1,3</sup>, Bianca Unger<sup>1</sup>, Ursula Siebert<sup>1</sup> and Anita Gilles<sup>1\*</sup>

<sup>1</sup>Institute for Terrestrial and Aquatic Wildlife Research (IAWW), University of Veterinary Medicine Hannover Foundation, 30559, Germany; <sup>2</sup>Center of Natural History (CNH), University of Hamburg, Hamburg, Germany; <sup>3</sup>Fundación Macaulay, Colombia, Medellín, Colombia

#### OPEN ACCESS

##### Edited by:

Jenamy Kizuka, Florida International University, United States

##### Reviewed by:

Philip Hammond, University of St Andrews, United Kingdom  
François Hédin, Duts University, United States

##### \*Correspondence:

Anita Gilles  
angilles@iho.hannover.de

##### Specialty section:

This article was submitted to Marine Megafauna, a section of the journal Frontiers in Marine Science

Received: 15 September 2020

Accepted: 01 December 2020

Published: 07 January 2021

##### Citation:

Nachtshelm DA, Viquera S, Ramirez-Martinez NC, Unger B, Siebert U and Gilles A (2021) Small Cetacean in a Human High-Use Area: Trends in Harbor Porpoise Abundance in the North Sea Over Two Decades. *Front. Mar. Sci.* 7:606609. doi: 10.3389/fmars.2020.606609

The North Sea is one of the most heavily used shelf regions worldwide with a diversity of human impacts, including shipping, pollution, fisheries, and offshore constructions. These stressors on the environment can have consequences for marine organisms, such as our study species, the harbor porpoise (*Phocoena phocoena*), which is regarded as a sentinel species and hence has a high conservation priority in the European Union (EU). As EU member states are obliged to monitor the population status, the present study aims to estimate trends in absolute harbor porpoise abundance in the German North Sea based on almost two decades of aerial surveys (2002–2019) using line-transect methodology. Furthermore, we were interested in trends in three Natura2000 Special Areas of Conservation (SACs), which include the harbor porpoise as designated feature. Trends were estimated for each SAC and two seasons (spring and summer) as well as the complete area of the German North Sea. For the trend analysis we applied a Bayesian framework to a series of replicated visual surveys, allowing to propagate the error structure of the original abundance estimates to the final trend estimate and designed to deal with spatio-temporal heterogeneity and other sources of uncertainty. In general, harbor porpoise abundance decreased in northern areas and increased in the south, such as in the SAC Borkum Reef Ground. A particularly strong decline with a high probability (94.9%) was detected in the core area and main reproduction site in summer, the SAC Sylt Outer Reef (–3.79% per year). The overall trend for the German North Sea revealed a decrease in harbor porpoise abundance over the whole study period (–1.79% per year) with high probability (95.1%). The assessment of these trends in abundance based on systematic monitoring should now form the basis for adaptive management, especially in the SAC Sylt Outer Reef, where the underlying causes and drivers for the large decline remain unknown and deserve further investigation, also in a regional North Sea wide context.

**Keywords:** harbor porpoise, North Sea, monitoring, Bayesian trend analysis, marine mammal conservation, biodiversity indicators, marine protected areas



### 3. Übergreifender Schutz / Kumulative Belastungen



Schweinswal (*Phocoena phocoena*)




- 1. Internationaler Austausch/Abstimmung wichtig.  
Dafür bestehen eine Reihe von Prinzipien: klare Ziele,  
Transparenz, Einbeziehung von Stakeholdern, Monitoring...**
- 2. Erforderlich, um wirtschaftliche und ökologische Belange in  
Einklang miteinander zu bringen**
- 3. Dringend erforderlich für einen übergreifenden Ansatz zum  
Schutz von Nord- und Ostsee**





Sachverständigenrat  
für Umweltfragen

**Vielen Dank!**

[www.umweltrat.de](http://www.umweltrat.de)  
[info@umweltrat.de](mailto:info@umweltrat.de)  
 [@umweltrat](https://twitter.com/umweltrat)

