

## What you can do!

Everybody can effectively contribute to the protection of our habitats by:

- 👍 Calling other people's attention to the consequences of eutrophication. The oceans and beaches will thank you.
- 👍 Buying products from regional, organic agriculture.
- 👍 Eating less meat and choosing meat produced on well-managed pastures, which have a lower impact on the environment.
- 👍 Using public transport and your bike instead of the car!
- 👍 Reading up on the topic and taking action: [www.ccb.se](http://www.ccb.se)

## What we do

BUND and CCB campaign for a change in agrarian policy and practice towards increased organic farming as well as more environmentally-friendly traffic planning and management. We inform, give tips and suggest solutions – for the sustainable protection of land and sea!



pipe fish and seahorse

## Support us here

[www.bund.net/spenden](http://www.bund.net/spenden)



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**Bund für Umwelt und Naturschutz Deutschland e.V. (BUND)**

Friends of the Earth Germany  
Am Köllnischen Park 1 • 10179 Berlin  
Telefon 0 30 / 27 58 64 - 0 • Fax 27 58 64 - 40  
[bund@bund.net](mailto:bund@bund.net) • [www.bund.net](http://www.bund.net)

### Coalition Clean Baltic (CCB)

Östra Ågatan 53 • 753 22 Uppsala • Sweden  
Tel: +46-18-71 11 70 • [secretariat@ccb.se](mailto:secretariat@ccb.se)  
[www.ccb.se](http://www.ccb.se)

### Contact:

#### BUND-Meeresschutzbüro

Bund für Umwelt und Naturschutz Deutschland e.V.  
Friends of the Earth Germany  
Am Dobben 44 • 28203 Bremen • Tel: 04 21 / 790 02 32  
[nadja.ziebarth@bund.net](mailto:nadja.ziebarth@bund.net) • [www.bund.net/meer](http://www.bund.net/meer)

**Editor:** Nadja Ziebarth, BUND-Meeresschutzbüro

**Text:** Bettina Taylor, BUND-Meeresschutzbüro

**Layout:** Grafik-Atelier Wunder

**Photographs:** Cover: Nadja Ziebarth, Dietmar Reimer, Rainer Borcherding;  
photos snorkeler and seagrass bed: Dietmar Reimer

**Illustrations:** Diego Ruiz Jarrin

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# A clear vision for our oceans



## Our vision: maintain biodiversity

For diverse and flourishing North and Baltic Seas, it is absolutely essential to reduce the amount of nutrients that reach the rivers and coastal waters. This will help restore the natural equilibrium between the nutrient sources and their uptake by plants.



## Our mission: create a clear vision

The North and Baltic Seas only have a chance to thrive if we combine our efforts. Politics, agriculture and industry must agree on the reduction of nutrient input into the oceans by initiating:

- An agrarian reform (no promotion of industrial livestock farming, etc.)
- The reduction in the use of organic and mineral fertilisers through nutrient balanced fertilisation practices
- The expansion of organic agriculture
- A ban of open cage fish aquaculture
- The reduction of emissions from land and maritime traffic
- Efficient nutrient removal from sewage on land and at sea



## A treasure under the sea

A glance under the surface of the North and Baltic Seas reveals breath-taking beauty and an exciting wildlife.

Nearshore, **seagrass beds** ① form unique habitats with specially-adapted wildlife, including highly endangered **seahorses** ② in the North Sea and their Baltic relatives, the **pipe fish** ③.

Further offshore lie species-rich **reefs** ④, sandbanks and extensive **mussel beds** ⑤, which support numerous seabird species. Harbour porpoises and seals also search for prey in this diverse habitat.

## Murky perspectives for the North and Baltic Seas

Getting the chance to see the beauty of this underwater world is becoming increasingly difficult. The Baltic waters are especially turbid during the summer months. The reason

is eutrophication caused primarily by over-fertilisation from agricultural run-off, which has been a problem for decades.

**Lack of light:** Over-fertilisation with nutrients results in excessive growth of small algae, decreasing water clarity. Consequently, larger plant species such as seagrass die off because they do not get enough light. The disappearance of seagrass beds and **underwater kelp forests** ⑥ represents a loss of habitats that provided shelter, food and nursery grounds for many marine animals. These changes are part of the reason why the seahorse has nearly disappeared from the North Sea.

**Mountains of foam and dead zones:** Mountains of **seafoam** ⑦ on North Sea beaches are a sign that blooms of mono-cellular algae have been frothed in the breaking waves. In the Baltic, this is less frequent, and the dead algae sink to the bottom after the bloom where they are decomposed by bacteria. This decomposition process depletes the oxygen on the sea floor, creating **Dead Zones** ⑧.

These now cover ca. 60,000 km<sup>2</sup> or 15% of the Baltic Sea floor.

**Jellyfish and toxic algae:** Fast-growing species, such as **planktonic algae** ⑨ and **jelly fish** ⑩, can quickly proliferate under these conditions to become a plague in the North and Baltic Seas. Some algal species are toxic for marine animals and can also be dangerous for humans.

## Where does over-fertilisation come from?

**Industrial agriculture:** The main cause of eutrophication is excessive **fertilisation** ⑪ with mineral and organic fertilisers. The latter mainly stems from industrial livestock farming. The excess nutrients on the fields are transported through the atmosphere and water run-off, which ends up in our oceans.

**Sewage:** Human excreta in urban and rural areas, as well as sewage from passenger ships and leisure crafts, if not properly collected and treated, generate as much nutrient pollution as farmed animals.

**Industry:** The industry puts further pressure on the oceans through emissions and wastewater. Open-cage aquaculture systems enhance nutrient inputs through excess feed and faeces.

**Transport on land and at sea:** Traffic on land and at sea burns fuels, which releases massive amounts of nitrogen into the atmosphere and, ultimately, into the oceans.

