

# The Northern Fulmar litter bin and ecological monitor

The Northern Fulmar, a relative of the albatrosses, is a common bird of the North Sea. It is a true seabird which forages far offshore on fish, squid or other types of animal prey.

Rubbish enters the North Sea from ships, fisheries, offshore industry, recreation, rivers and sewage systems. The waste, especially plastic, causes serious economic and ecological damage. Animals like fishes, birds, seals and whales become entangled in synthetic materials or ingest the waste. Ingestion causes a reduced body condition and increased load of toxic chemicals.

Also the Northern Fulmar mistakes litter for food. In the North Sea, plastics occur in 95% of fulmar stomachs, with an average number of 34 pieces and combined mass of 0.36 gram per bird (*data 2006-2010; n=785*). The Fulmar is nothing less than a flying litter bin.

The North Sea governments have decided that the ecological quality of the marine environment has to improve. The Fulmar has been chosen as a monitoring species for marine litter.

A target has been set in which the percentage of Fulmars with more than 0.1 gram plastic in the stomach is reduced to less than 10%. Currently, 63% of Fulmars (55% to 87% depending on region) exceed the 0.1 gram level without significant change over the past 10 years.

To change this, raising awareness remains very important. Dedicated effort could focus on shipping and fisheries because in the North Sea they represent important sources of debris.



**Northern Fulmar**  
*Fulmarus glacialis*



Stomach content of a Fulmar beached in the Netherlands with industrial plastic granules at the lower left and fragments of consumer wastes at the right. The top left item is not plastic but a clay pellet as used in horticulture.

Ruler units are centimeters.

**Percentage of Northern Fulmars with more than 0.1 gram plastic in the stomach North Sea regions – 2006-2010**

