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## Monitoring plastic ingestion by the northern fulmar *Fulmarus glacialis* in the North Sea

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### ABSTRACT

The abundance of plastics in stomachs of northern fulmars from the North Sea is used in the OSPAR Ecological Quality Objective (EcoQO) for marine litter. The preliminary EcoQO defines acceptable ecological quality as the situation where no more than 10% of fulmars exceed a critical level of 0.1 g of plastic in the stomach. During 2003–2007, 95% of 1295 fulmars sampled in the North Sea had plastic in the stomach (on average 35 pieces weighing 0.31 g) and the critical level of 0.1 g of plastic was exceeded by 58% of birds, with regional variations ranging from 48 to 78%. Long term data for the Netherlands since the 1980s show a decrease of industrial, but an increase of user plastics, with shipping and fisheries as the main sources. The EcoQO is now also used as an indicator for Good Environmental Status in the European Marine Strategy Framework Directive.

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