

MARINE LITTER MONITORING BY SEABIRDS

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Marine plastic litter is increasingly seen as a serious environmental problem not only affecting birds and mammals directly through entanglement and ingestion, but also as a potential carrier of concentrated chemical pollution which will be released after ingestion by an organism. Chemical concentrates on plastics will also occur at microscopically small particles, thus potentially affecting foodwebs down to filterfeeding organisms. As a consequence, an increasing number of policies aim at reductions in marine litter. Tools to monitor changes in the marine environment are needed. Monitoring marine litter through the abundance of plastics in stomach contents of beached Fulmars (*Fulmarus glacialis*) has been formalized as one of the Ecological Quality Objectives (EcoQO's) for the North Sea area by OSPAR. A provisional target for acceptable environmental quality has been set at the level that less than 10% of beached Fulmars has more than 0.1g of plastic in the stomach. Currently, levels in the North Sea range between 40% to 60% of Fulmars having more than 0.1g of plastic in the stomach. Shipping and fisheries are considered the main sources of plastics in the North Sea area and are thus the first target for new policies. The EcoQO approach may be adopted in the wider OSPAR area (northeast Atlantic), in the European Union through its Marine Strategy Directive, or in other parts of the world requiring pilot studies in different locations, sometimes using other seabird species.