

Long-term studies make sense: 50 years of beached bird surveys suggest a strong decrease in oil pollution in Belgian marine waters

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After more than 50 years of beached bird surveys along the Flemish coast, a strong and significant decline in the proportion of oiled birds is evident, suggesting a strong decrease in chronic oil pollution in Belgian marine waters.

From 1962 onwards, at least once a year during winter the entire Flemish coastline was searched by volunteers for stranded birds. Of each beach-washed bird the species and possible contamination with oil was noted. The surveys are primarily organized to evaluate the anthropogenic pressures on the marine ecosystem and to gain insight into the diet and mortality factors of seabirds at the Belgian part of the North Sea. The oil-rate (i.e. the proportion of beach-washed birds that were oiled) of Common Guillemot *Uria aalge*, for example, is an indicator for the pollution of the marine environment with oil. One of the ecological indicators used by OSPAR states that a good environmental status is only reached when on average less than 10% of all stranded Common Guillemots is fouled with oil. Within the framework of the Marine Strategy, Belgium strives for an average oil-rate of less than 20% to obtain a good environmental status for its marine waters.

The oil-rate of beach washed birds (all species lumped) showed a strong and significant decline during the past 50 years. During the 1960s more than 60% of the beach-washed birds were fouled with oil, while during the past few years the oil-rate was always lower than 20%. For seabirds that are most sensitive to oil pollution, like the Common Guillemot, the decrease is even stronger. Nowadays 15.2% of all stranded Guillemots are oiled, while during the 1960s that figure amounted to 98.8%. This means that Belgium reaches the objectives stipulated in the Marine Strategy Framework Directive (less than 20% of all stranded Guillemots should be oiled), but does not yet reach the OSPAR EcoQO-criterion (less than 10%).

Also the number of birds found per km beach transect showed a strong, significant decrease over the past 50 years (from approximately 5 birds/km beach in the 1960s to less than 1 bird/km beach at present). This decline is probably fully due to a decrease in the number of oiled birds and not due to a decline in the numbers of birds present at sea.