

Trends in the oil contamination of seabirds in the North Sea.

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In general, the proportion of corpses oiled (%-age oiled) on a beach reflects levels of oil pollution for larger areas offshore. At the same time, extreme phenomena like shortage of food or drowning in fish nets may reduce the %-age locally. The results from monitoring programmes on dead seabirds are especially powerful tools for tracing trends on offshore oil pollution for larger geographical units. During the period 1972-1991, Beached Bird Surveys have been carried out once a year late winter in many areas of western Europe (International Beached Bird Survey, IBBS). In this presentation, the results from the North Sea have been split into three zones, using the %-age oiled out of 37,672 carcasses of auks Alcidae for the coast from Skagen (DK) to south Belgium ('eastern North Sea'), Normandy and the south English coast ('the Channel') and the east coast of England and Scotland ('western North Sea').

The descending trends in %-age oiled of auks are significant in both the western part of the North Sea and in the Channel over the 19 year period ($p < 0.05$, $df 17$). Through the 1970s, more than 75% of the auks in the Channel were oiled, but during the last seven years a steady improvement of the situation has resulted into *ca.* 30%. The improvements along the British North Sea coast is even more evident, where the high mortality due to oil in the 1970s has sunk below 10% in recent years. In the eastern part of the North Sea, oil pollution has remained at a very high level, with the exception of a short period of decrease in the late 1970s (mainly in Denmark). Since 1987, %-ages oiled in auks have been sharply decreasing throughout the North Sea, but the period is too short to document a general trend. It is clear that this decrease also covers parts of the eastern North Sea, in particular Germany, where proportions over the last two years have been <50%. However, the %-ages oiled in Denmark and in the Netherlands remained at a much higher level than in the rest of the North Sea. The differences in the oil contamination of auks between areas in the North Sea may reflect differences in the use and success of oil pollution control measures.

Samenvatting 'Trends in het percentage olielachtoffers in de Noordzee'

Over het algemeen kan het aandeel olielachtoffers van het totaal aantal dode vogels op een strand als een afspiegeling worden beschouwd van de mate van olievernauwing van grote aangrenzende zeegebieden. Resultaten van Internationale Olielachtofferellingen in de winters 1972-1991 zijn opgesplitst in 3 deelgebieden: Oostelijke Noordzee, Het Kanaal en de Britse oostkust. Alleen 4 soorten alkacht-

gen worden besproken. De gedurende de 19 onderzoeksjaren afnemende trends in het aandeel met olie besmeurde alkachtigen zijn significant voor zowel de westelijke Noordzee als voor het Kanaal ($p < 0.05$, $df 17$). Langs de Britse oostkust daalde de oliebesmetting tot onder de 10%. In de oostelijke helft van de Noordzee zijn geen duidelijke veranderingen opgetreden. Sinds 1987 is het aandeel olieslachtoffers onder de alkachtigen sterk afgenomen in de gehele Noordzee, maar deze periode is nog te kort om te zien of het hier om een nieuwe tendens gaat of om een incident. De verschillen in de mate van oliebesmeuring van alkachtigen in de Noordzee kunnen een afspiegeling zijn van het succes van genomen maatregelen ter bestrijding van olievuiling. ■

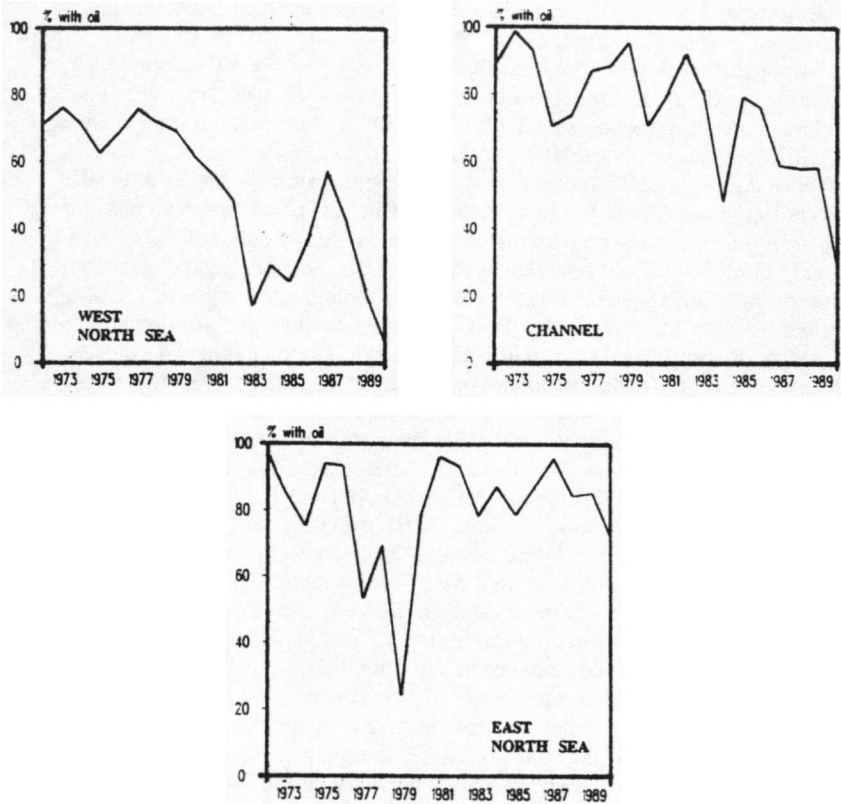


figure 1. Proportion of auk corpses found oiled in the North Sea, International Beached Bird Surveys 1972-1990.