



SULA

22(3) - 2009

INHOUDSOPGAVE

Artikelen

97-135

Olieslachtoffers op de Nederlandse kust, 2008/2009

Kees (C.J.) Camphuysen

136-142

Skeletonderdelen van zeevogels (1): Sternum

Edward Soldaat

Recente Publicaties

143-144

OLIESLACHTOFFERS OP DE NEDERLANDSE KUST, 2008/2009

OILED SEABIRDS WASHING ASHORE IN THE NETHERLANDS, 2008/2009

This paper presents the proportion of dead oiled birds washed ashore in The Netherlands of the total number of birds washing ashore as a result of beached bird surveys conducted by volunteers of the Dutch Seabird Group (NZG/NSO). Apart from the survey results for winter 2008/09, a summary is provided of data collected in summer 2008. The results are presented in a context of data collected in nearly 40 earlier seasons (1970-2008).

The oil rate (fraction of oiled corpses of all birds found dead) is considered an indicator of levels of (chronic) oil pollution in the Southern Bight with mineral oil and other lipophilic substances (Camphuysen 1999). These (species-specific) oil rates are calculated on the basis of hundreds of beached bird surveys between November and April, carefully checking all dead birds found. The results of winter 2008/09 are compared with long-term trends calculated over 1975/76-2007/08.

*Along the North Sea coast, over the years, downward trends in oil rates were found in all species and species groups. Most of the recent data fit this pattern. Notable exceptions, however, were rather high oil rates in Common Guillemots *Uria aalge* (the international indicator species for oil pollution in the Oiled-Guillemot-EcoQO) and Razorbills *Alca torda*.*

The higher oil rates in these auks point at illegal oil spills offshore, some distance away from the coast: close enough to provide numerous fresh corpses littering Dutch beaches, but distant enough to prevent the nearshore seabird population to be hit by the oil. In winter 2008/09. Exceptionally high concentrations of foraging seabirds occurred in nearshore waters and none of these seemed significantly affected by the oil.

Oil rates in the Wadden Sea area are rather lower than oil rates on North Sea beaches. The results obtained in 2008/09 did fit that picture, at least for bird numbers enough to provide a reliable sample.

In winter 2008/09, at least regionally in The Netherlands, rather severe winter weather occurred over a period of several weeks. Along the coast, however, the winter was rather mild and extra, weather-induced mortality was not found or remained at low levels.

In January 2009, rather high densities of (dark phase) Northern Fulmars were found and these were part of a wreck that was noted over large parts of the North Sea area. A minority of the wrecked Fulmars was oil-contaminated.

Skeletonderdelen van zeevogels (1):

Sternum

PARTS OF SEABIRD SKELETONS (1): STERNUM

The breastbone of a bird comprises a convex/concave basal plate and a perpendicular keel ventrally. The shape of the breastbone is related to the species' lifestyle. Foraging strategy, aero- and aquadynamics and gravity play important roles. Species with soaring flight and a low wing load generally have a short breastbone with a rather low keel and small pectoral muscles. When the wing load increases, and wingbeats become deeper and flight is combined with wing-propelled diving, breastbones are larger. In diving species, the breastbone is longer to protect the intestines from high water pressure. In wing-propelled divers the keel is considerably larger than in foot-propelled species. Larger species, that have advantage of a low wing load, mostly have pneumatic cavities in the breastbone. The true divers have solid bones to reduce buoyancy. The shape of the breastbone is a compromise between determining factors and shows considerable variation.