

NOTAT



Arter og Naturbeskyttelse
Ref. LAJEN
Den 12. september 2018

Fagligt notat om paraffin og dets virkning på fugle

Departementet har bedt Miljøstyrelsen (MST) om et kort fagligt bidrag til brug for besvarelse af MOF alm. del spørgsmål nr. 957, hvor MST bedes vurdere, om vi har faglig viden, der viser, at fugle bliver syge af paraffin-udledning.

Da MST ikke har kendskab til evt. effekter af paraffin ift. fugle, har MST forespurgt DTU-Veterinærinstituttet.

DTU nævner i deres svar til MST, at paraffin ikke i sig selv påvirker havfugles fjerdagt. Hvilket ifølge DTU giver god mening, idet smeltepunktet for paraffinvoks ligger ved ca. 50-60° C. Det vil sige, at det er en fast masse ved alm havtemperatur, og at det skal blandes med andre petroleum-/råolieprodukter for at påvirke havfuglenes fjerdagt. På åbent hav vil størstedelen af olien fordampe, og det der driver i land er den uopløselige paraffinvoks.

DTU oplyser, at man umiddelbart ikke har kendskab til at indtagelse af paraffin i sig selv gør fugle syge. Det kan dog ikke udelukkes, at paraffin ledsaget af andre følgestoffer kan være skadelige for særligt havfuglene. Udfordringen er derfor, at man ikke kender de ledsagende stoffer, der sandsynligvis er forskellig fra tankskyl til tankskyl, samt betydningen af de ledsagende stoffer, der følger med paraffinen.

MST har endvidere søgt information i rapporten "The Occurrence of Paraffin and Other Petroleum Waxes in the Marine Environment: A Review of the Current Legislative Framework and Shipping Operational Practices", hvor det beskrives, at studier har vist, at forskellige havfugle er døde og strandede som følge af forurening, som blandt andet indeholdt paraffin:

"In some cases, up to 8 tons of paraffin wax were released by a single tank-washing and stranded on a German beach in 1992, while in 1993 a single pollution event was estimated to have killed more than 2,000 birds in the northern part of the Netherlands, although it is not clear if the killing was caused by paraffin wax or palm oil (Dahlmann et al., 1994). During the same year, Scholten (1993) reported that between 10,000 and 20,000 seabirds (mainly guillemots and, to a lesser extent auks and kittiwakes) stranded in the North Sea due to impairment of the bird's feathers protective layer caused by pollution with a refined liquid paraffin, mainly composed of C14–C20 alkanes".

Og senere:

*"Regardless, once at sea or on the shoreline these substances can interact with marine fauna, with most of the studies concerning ingestion by seabirds. Lumps of wax and paraffin-like materials have been reported in the stomach content of northern fulmars (*Fulmarus glacialis*) from the North Sea*

(van Franeker et al., 2011) and from the Labrador Sea (Avery-Gomm et al., 2017), as well as in regurgitates from Black Legged Kittiwakes (*Rissa tridactyla*) and Great Cormorants (*Phalacrocorax carbo*) in Ireland (Acampora et al., 2017). Interestingly, a statistically significant increase in the ingestion of wax by Northern fulmars was found to occur from 1982 to the year 2000 in the North Sea, with paraffin-like substances being also the major category in terms of incidence and weight in ingested litter (28% incidence and mean mass of 0.54 ± 3.53 g and 2.2 ± 6.6 items per bird) (van Franeker and Meijboom, 2002). The authors in this case suggested that changes in the occurrence of a substance in the bird's stomachs would be proportional to a change in its abundance at sea.”