

PROBLEMS WITH AGE-DETERMINATION OF SEABIRDS DUE TO HEATING OF THE CORPSES.

The use of the bursa Fabricii as an indication of age in seabirds on dissection was discussed by Van Franeker (1983) and Hope Jones et al.(1982). The bursa is a sack-like organ, opening into the dorsal side of the cloaca and is more and more used as a character indicating immaturity. The bursa

regresses completely in older birds. It is argued that also size (length and breadth) of this organ could be useful when estimating actual age.

During May 1985 some 47 Guillemots *Uria aalge* were collected on the coast of Noord-Holland. All birds were covered with a layer of heavy oil, about 2 cm thick and, due to the sun and high temperatures at the time, were quite warm when collected. In fact they had absorbed heat for some days. Autopsy led to some confusing results, as compared to similar data on winter birds. A majority of the birds still had a bursa and could thus be determined as being immature. The size of the bursae however, was in general about 1.5x the biggest bursae ever found in winter collections. Similar problems were found when looking at the guts. Although apparently healthy (pinkish and well filled with food remains), the guts were swollen as to 2-3x normal diameter. The swollen appearance of internal organs is likely to be an artefact linked to the heating of the corpses. These birds looked as if also size of testes and oviducts were affected. Such organs are usually accurately measured and even a small heating effect, or artificial increase in size, could seriously affect the data collected. Future researchers should be aware of the problem. In the Guillemots discussed here, temperatures were extraordinary and the effect was therefore easily recognized. In less extreme conditions, effects may be less conspicuous. Evidently, results of dissections, especially measurements of internal organs, must be handled with care.

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Bij 47 in mei 1985 op het strand verzamelde dode Zeekoeten werd tijdens inwendig onderzoek buitensporige zwelling van organen vastgesteld. Dit leidde tot problemen bij de leeftijdsbepalingen aan de hand van de bursa Fabricii. Ook de darmen en geslachtsorganen bleken buitenproportioneel opgezet. Deze zwelling is hoogstwaarschijnlijk het gevolg van verhitting van de kadavers (in de periode voorafgaande aan het verzamelen was het warm en zonnig weer) en was in dit geval gemakkelijk als artefact herkenbaar. Toekomstige onderzoekers worden gewezen op het probleem en aangeraden wordt maten van organen altijd met het nodige voorbehoud te gebruiken.

van Franeker, J.A. 1983. Inwendig onderzoek aan Zeevogels. Nieuwsbrief NSO 4:144-167.

Hope Jones, P., Blake, B.F., Anker-Nilssen, T. & Røstad, O.W. 1982. The Examination of Birds Killed in Oilspills and Other Incidents - A Manual of Suggested Procedure. Nature Conservancy Council, Aberdeen.

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