

## **PATHOLOGY OF COMMON EIDERS FROM THE DUTCH WADDEN SEA IN WINTER 1999-2000**

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In December 1999, there was unexplained high mortality of common eiders (*Somateria mollissima*) in the Dutch Wadden Sea. Gross necropsies, supplemented by histologic, virologic, bacteriologic, parasitologic, and toxicologic analyses, were performed on 13 eiders. All birds were severely emaciated and had a multifocal enteritis caused by infection with the acanthocephalan parasite *Profilicollis botulus*. The abundance of this parasite varied from 20 to 1833 (average: 865). The primary cause of death was considered to be starvation or *P. botulus* infection, although the latter was considered less likely. There was no evidence of other diseases, including those caused by viral or bacterial infections, or intoxication as the primary cause of mortality in these eiders. Based on analysis of weather and food resources, we hypothesize that the eider mortality was caused by a combination of factors, including overharvesting by the shellfish industry, a series of mild winters, and decreased shellfish quality. This pathological investigation was hampered by lack of historic data of body weights and *P. botulus* burdens of eiders in this part of their range. To rectify this, we recommend the establishment of a national wildlife health surveillance system. The activities of such a system could include (1) detection of disease or disease-causing agents in wildlife, including eiders; (2) diagnosis, or precise identification, of the diseases; (3) collection and analysis of the information gained from detection and diagnosis; and (4) use of surveillance information in making decisions and policies.

**Zusammenfassung(??)**

**Résumé (??)**

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