

# Abstracts

## International Hen Harrier and Short-eared Owl meeting 2019

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J. Bos, T. Schaub, R. Klaassen & M. Kuiper (Eds.)

## Status and trend of the Short-eared Owl in Germany

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During the 20th century there was a strong decline in the distribution and abundance of the Short-eared Owl in Germany. The major driver for this decrease was the conversion of natural and semi-natural open habitats (e.g., bogs, flood plains, wetlands) to intensively used agricultural land. Today, the Short-eared Owl is one of the most threatened bird species in Germany and considered threatened with extinction in the national red data book. In Lower Saxony, the federal state harbouring the largest German population, the owl is listed as a bird species with the highest priority for conservation measures.

The German population is estimated to be 50–180 territories (2005–2009). However, in years without vole outbreaks, owl population size can be assumed to be much smaller. Occurrence of the Short-eared Owl is mainly restricted to the north-west German lowland plain and the adjacent Wadden Sea Islands. Beyond this range, breeding occurs only very irregularly and depends on vole gradations.

The only region where the Short-eared Owl breeds continuously are the German Wadden Sea Islands (NW Germany). At the North Frisian Islands in Schleswig-Holstein and the surrounding coast the species occurs regularly but not constantly. During the last two decades, with the exception of 2003 with 53 territories, the number of breeding Short-eared Owls in this part of Germany ranged between 3 and 16 territories.

The East Frisian Islands within the Lower Saxon Wadden Sea National Park harbour the only constant breeding population in Germany. From 1993 to 2018, the number of territories ranged between 16 and 59 with an average of 36 territories (see Fig. 1). The colonization of the East Frisian Islands by the Short-eared Owl started around 1900 and numbers increased significantly in the 1940s, possibly because of an increase of Common Vole (*Microtus arvalis*) populations due to diking and agricultural use. Despite typical fluctuations, the number of Short-eared Owls breeding on the East Frisian Islands is quite constant compared to the mainland. However, since 2004 a decrease in the size of the breeding population has been observed.

The density peak on the East Frisian Islands was observed in 1972 when 50 pairs were breeding on the 31 km<sup>2</sup> large island of Borkum. Today, the abundance hotspot is situated on the island of Spiekeroog (area: 18.25 km<sup>2</sup>), where 10 to 15 pairs breed every year; the maximum was 22 territories in 2005.

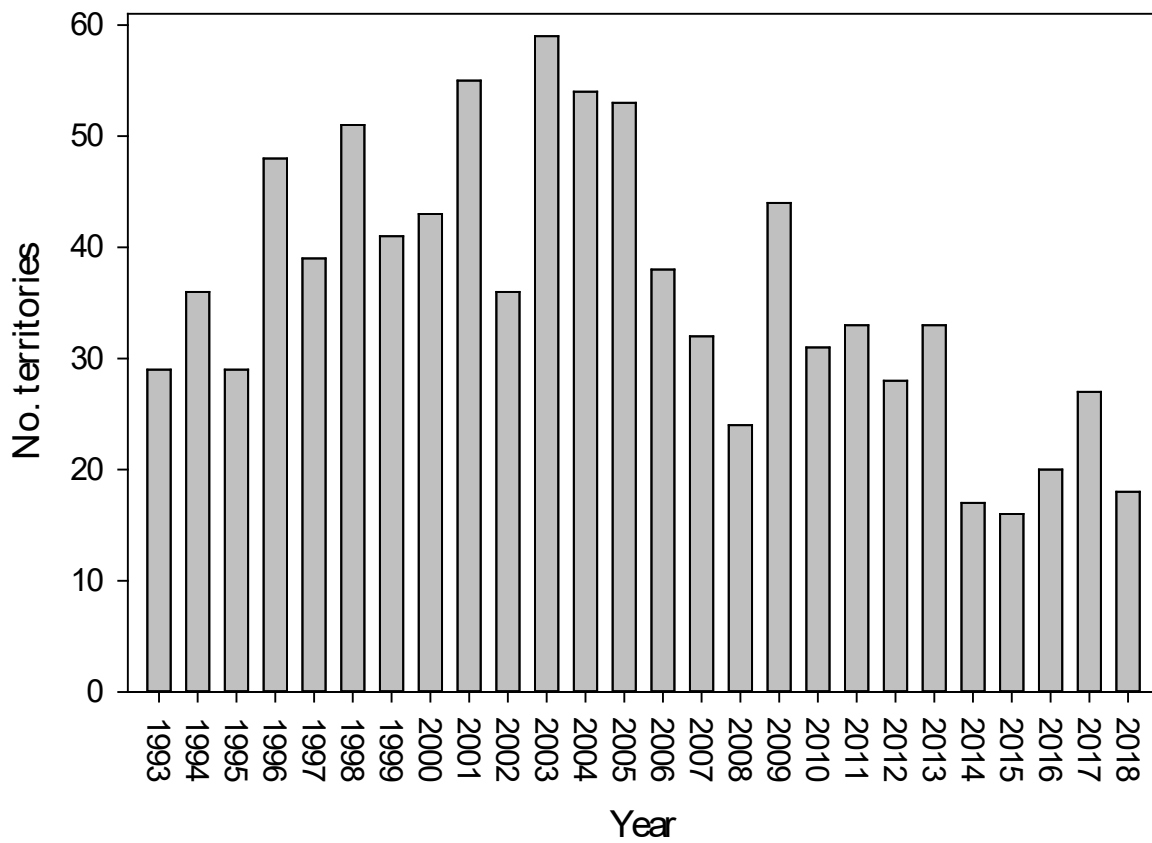


Fig. 1: Population dynamics of the Short-eared Owl on the East-Frisian Islands, the only constant breeding population in Germany. Data source: M. Schulze Dieckhoff, NLWKN 2019.



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