© Hans Hillewaert

# Der Kiebitzregenpfeifer im Nationalpark Niedersächsisches Wattenmeer – Vorkommen und Bedeutung

Gregor Scheiffarth

WATTENMEER
WELTNATURERBE

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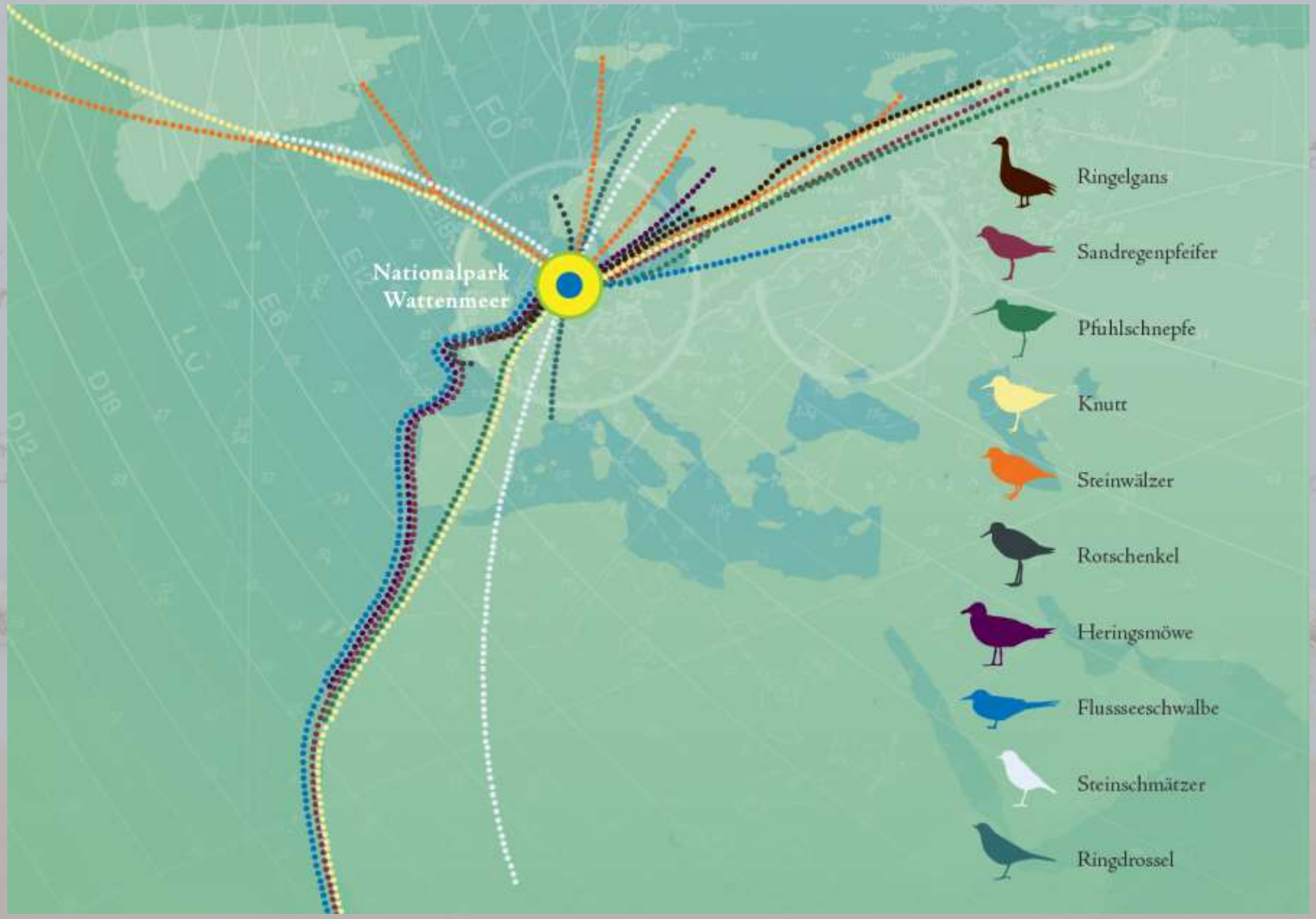
# Warum Kiebitzregenpfeifer?

© Andrea Hoppe

# Der Ostatlantische Zugweg

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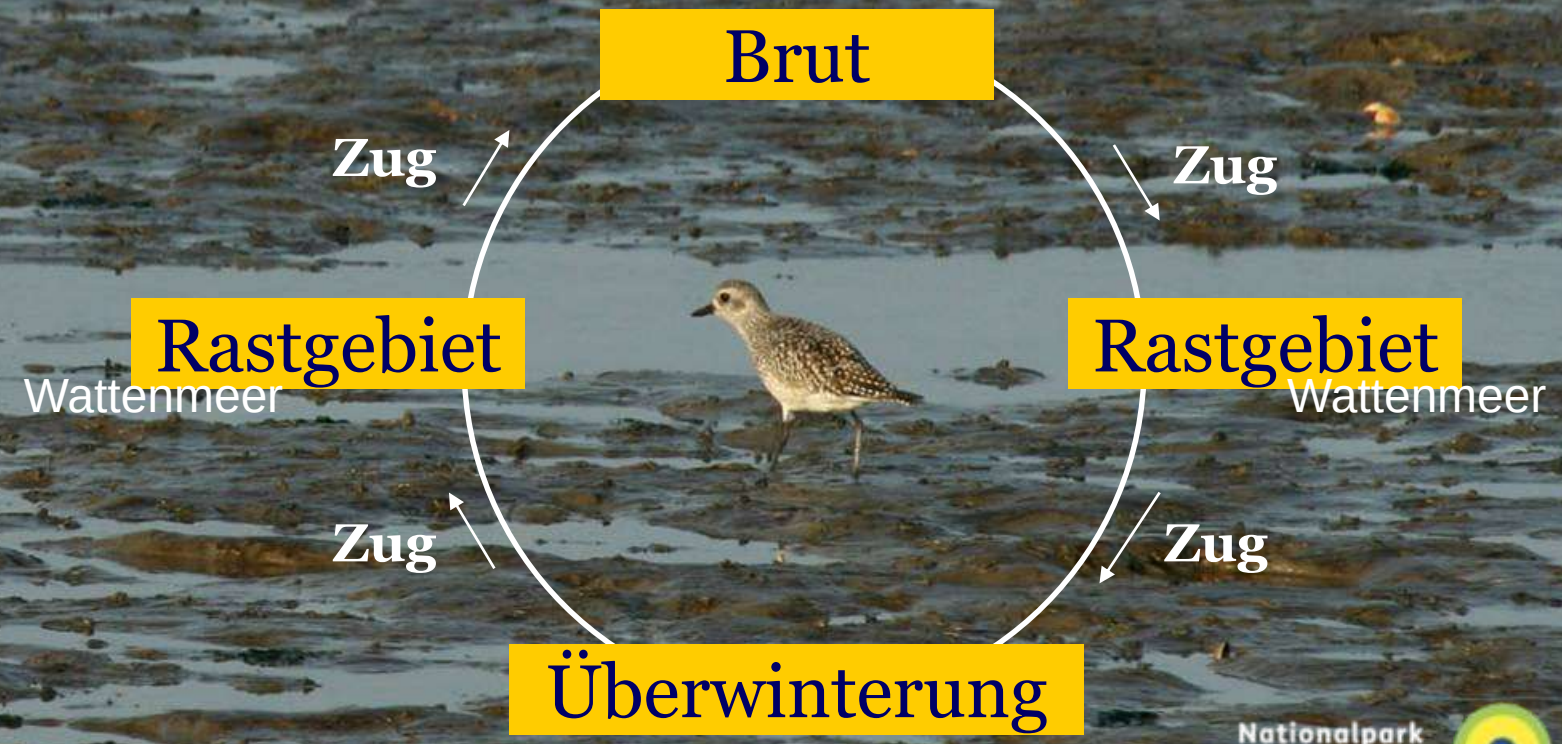
# Jahresrhythmus

Auf dem Rückweg zu den Winterquartieren machen die Vögel erneut Rast im Wattenmeer. Jetzt gilt es, die Energievorräte für den Weiterflug bis ins südliche Afrika aufzufüllen.

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CORAX

Fortsetzung der Mitteilungen der Faunistischen Arbeitsgemeinschaft
für Schleswig-Holstein, Hamburg und Lübeck

Band 12, Heft 4 August 1988

# Das Schleswig-Holsteinische Wattenmeer als Frühjahrs-Aufenthaltsgebiet arktischer Watvogel-Populationen am Beispiel von Kiebitzregenpfeifer (*Pluvialis squatarola*, L. 1758), Knutt (*Calidris canutus*, L. 1758) und Pfuhlschnepfe (*Limosa lapponica*, L. 1758)*

von P. PROKOSCH

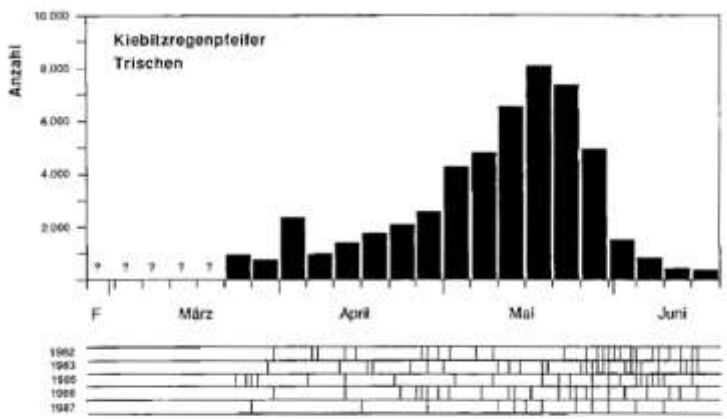



Abb. 19: Frühjahrszahlen von Kiebitzregenpfeifern auf Trischen in den Jahren 1982 / 1983 und 1985 bis 1987 (nach Daten von TODT, briefl.). In den waagerechten Linien unter der Zeitachse sind die Zähltage in den einzelnen Beobachtungsjahren aufgetragen.

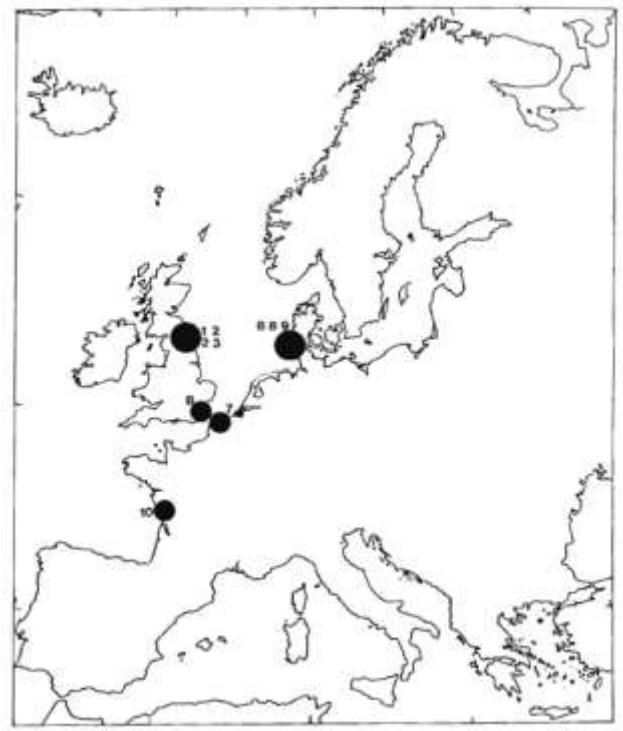


Abb. 24: Wiederfunde und Kontrollen markierter Kiebitzregenpfeifer, die im Mai im Schleswig-Holsteinischen Wattenmeer gefangen wurden. Nebenstehende Ziffern geben Monate an.

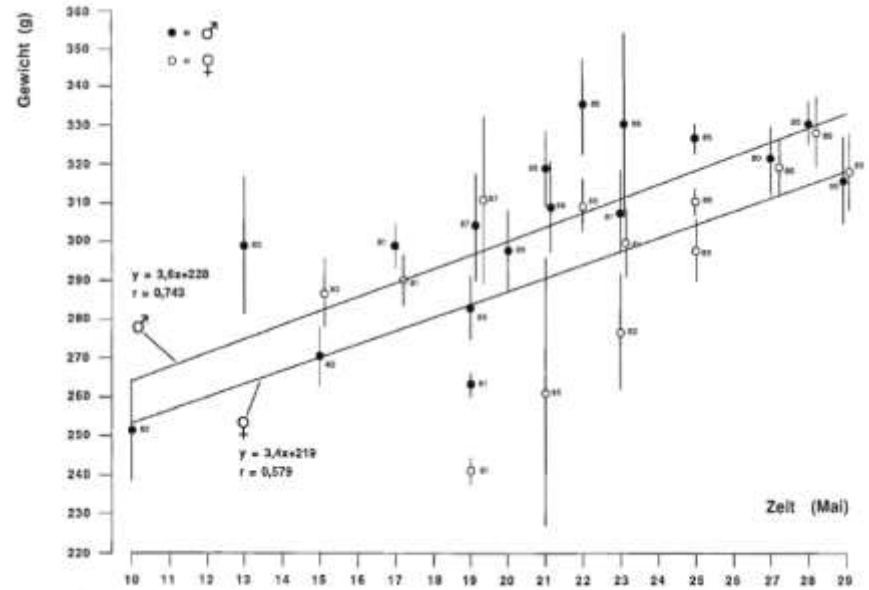
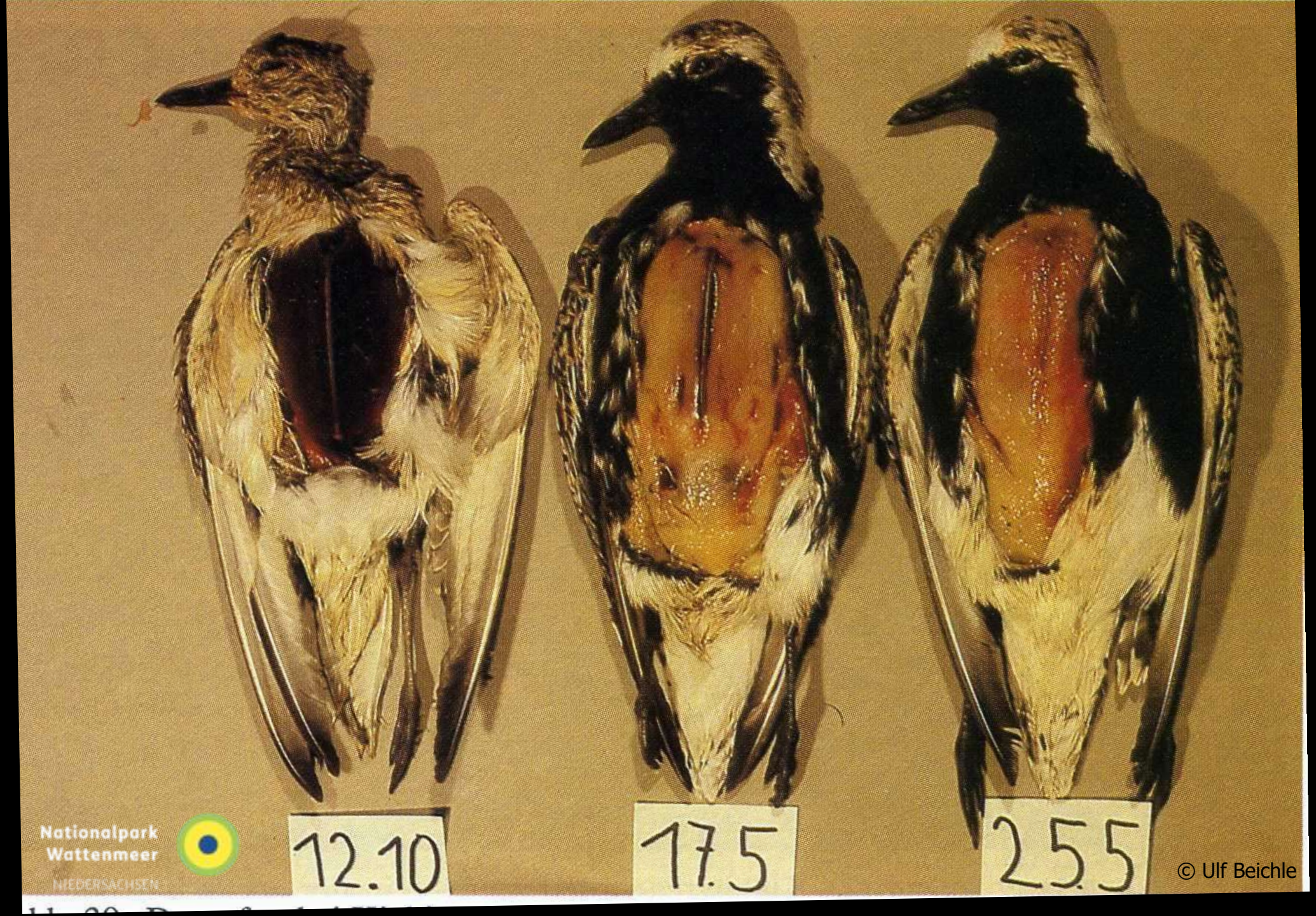
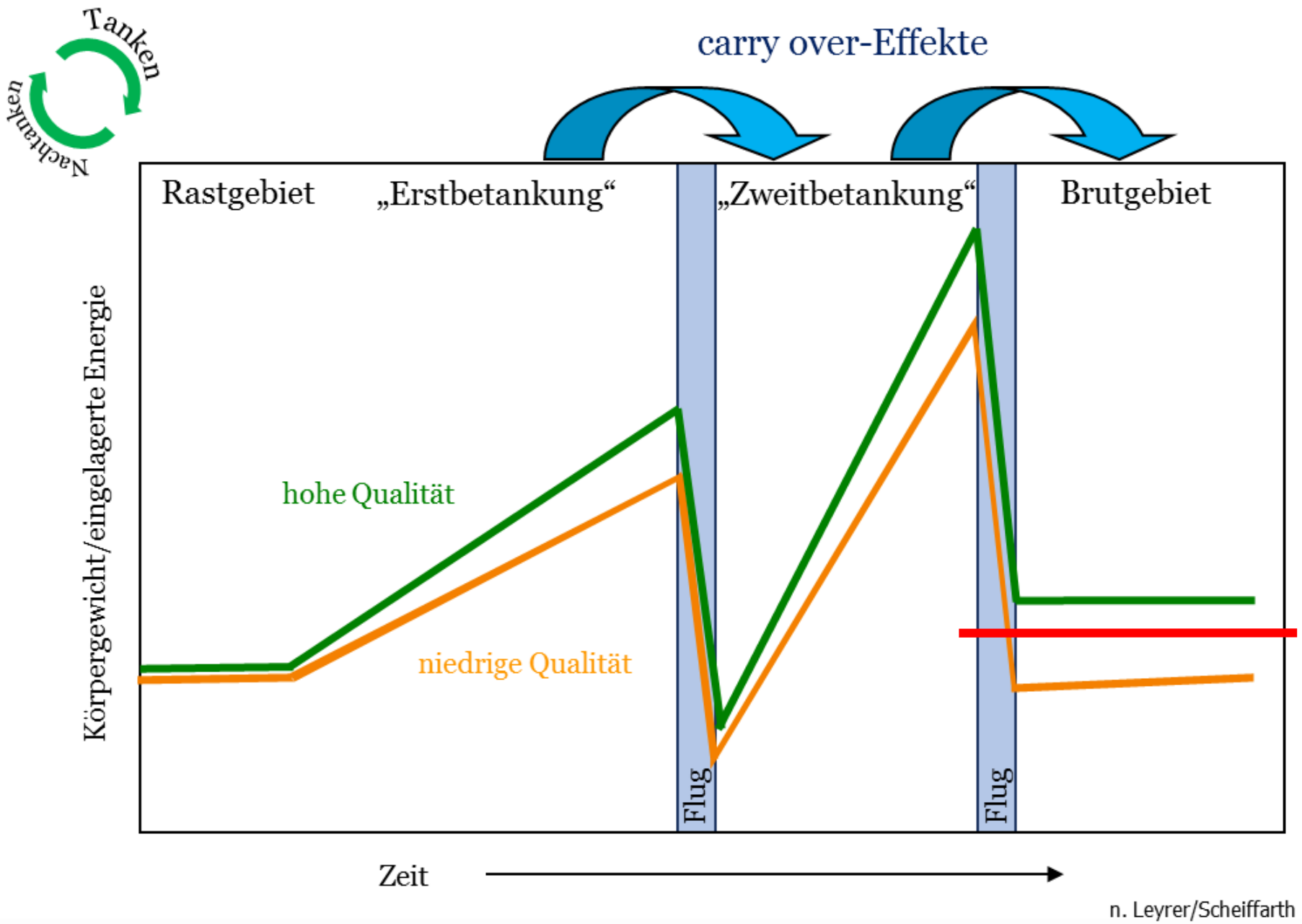



Abb. 28: Gewichte adulter Kiebitzregenpfeifer bei mehreren Stichproben im Mai nach Mittelwerten und Standardfehler (n: s. Tab. 7)




© Ulf Beichle

# carry-over

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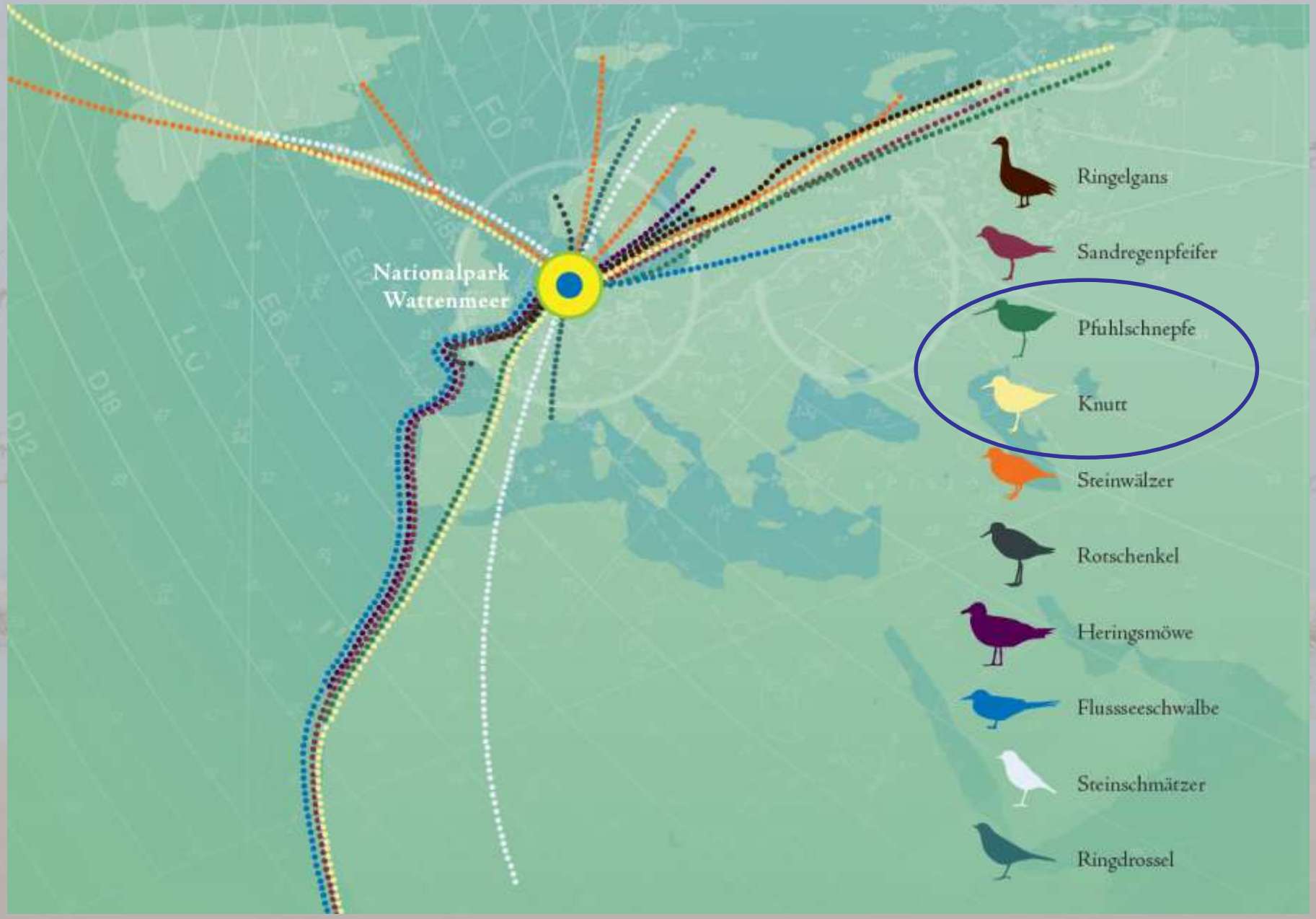
# Der Ostatlantische Zugweg

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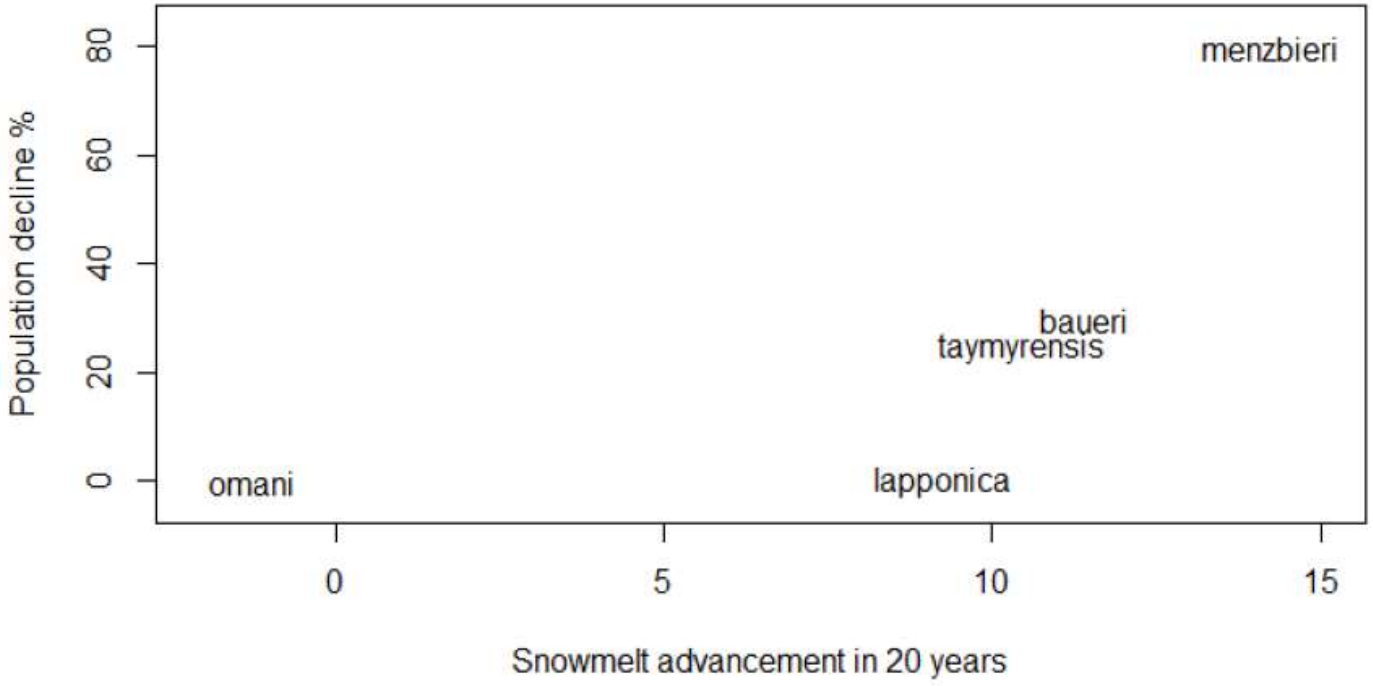
# Überlebensrate im Verhältnis zur Veränderung der Schneeschmelze




Rakhimberdiev 2018

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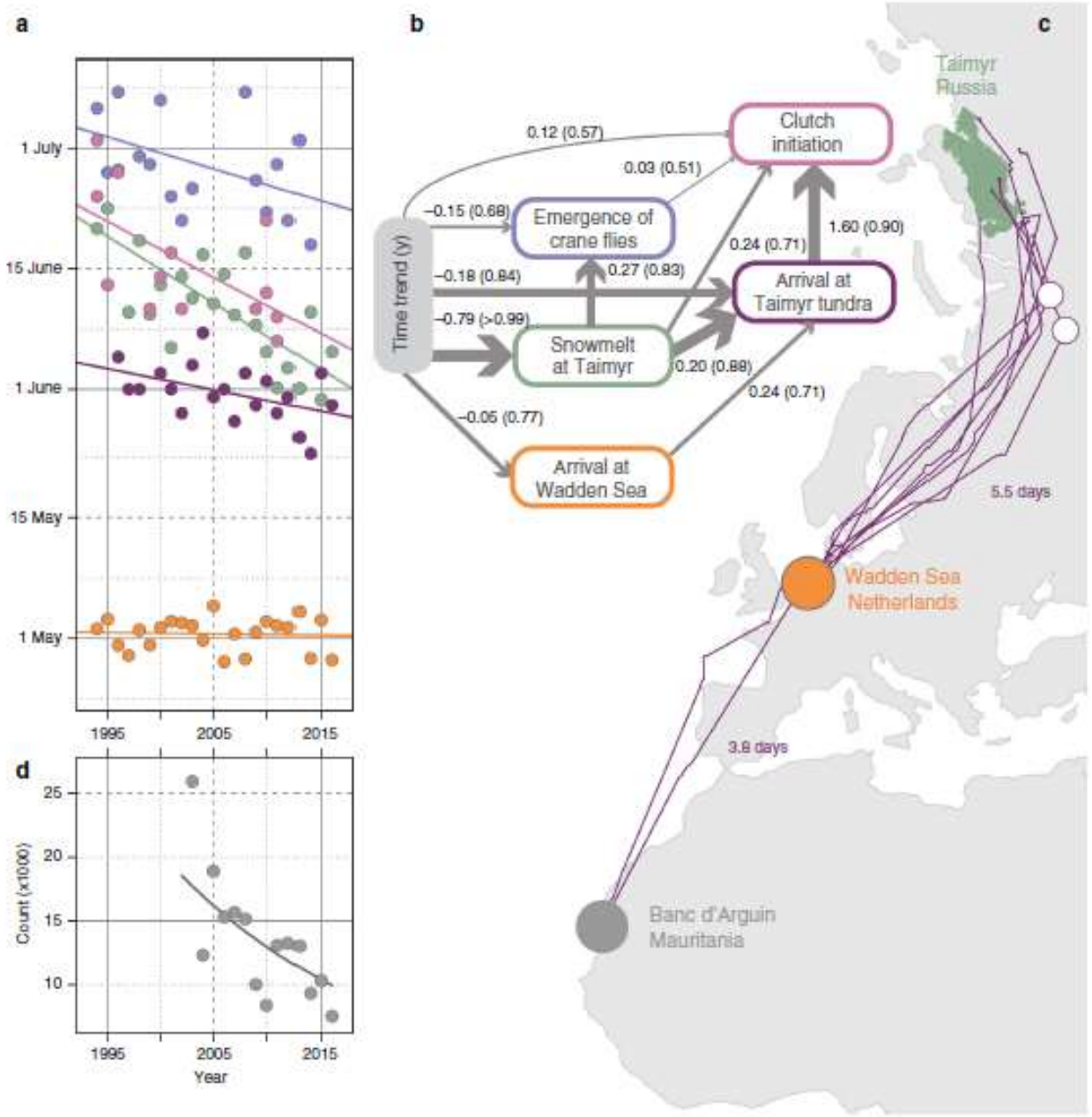
# Timing




Rakhimberdiev et al. 2018, Nature Communications

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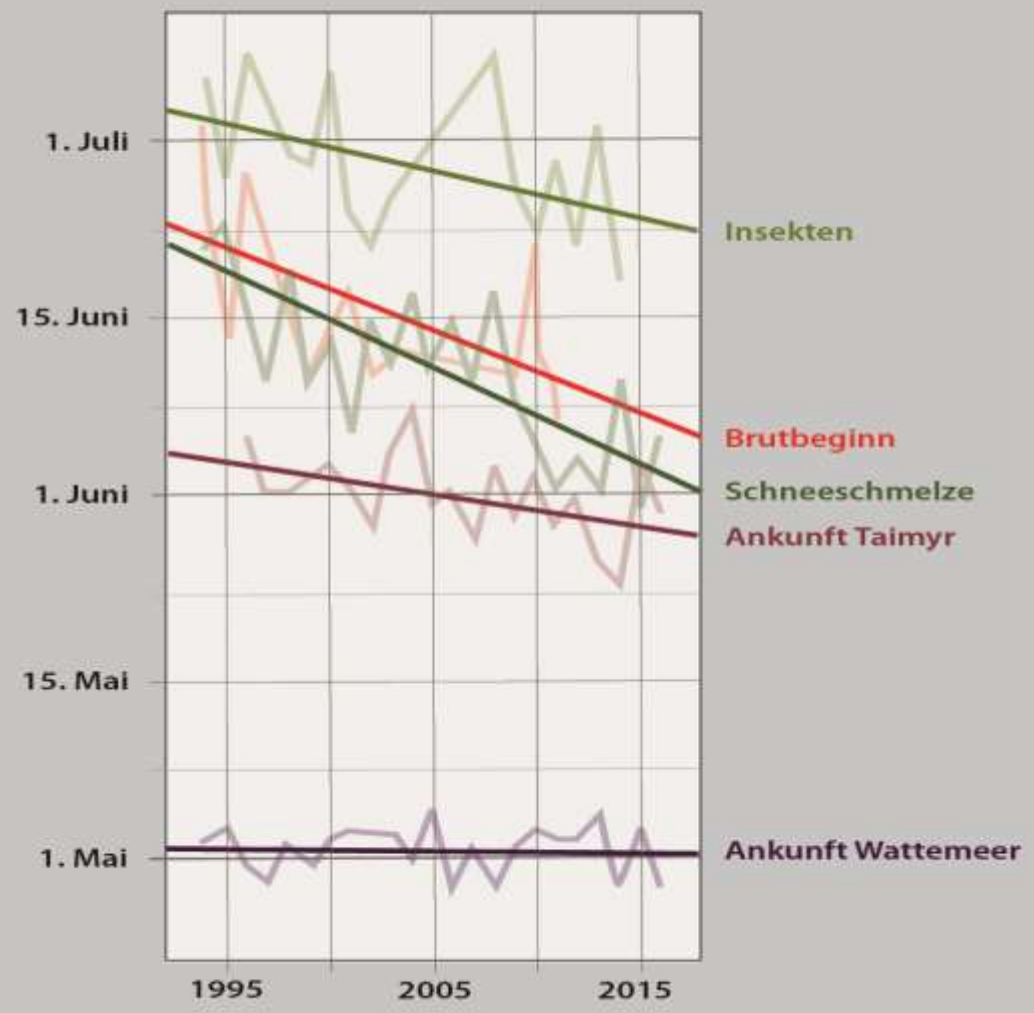
# Timing

## Ankunftszeiten




| | |
|---|---|
| Ankunft Wattenmeer | 0,05 |
| Ankunft Taimyr | 0,22 |
| Schneeschmelze | 0,5 - 0,73 |
| Insekten | 0,38 |
| Brutbeginn | 0,56 |

**Verfrühung Tage pro Jahr**

Quelle: Eldar Rakhimberdiev et al.: Fuelling conditions at staging sites can mitigate Arctic warming effects in a migratory bird; NATURE COMMUNICATIONS | (2018)

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**Fig. 1. Red knots breed during summer in the high Arctic at Taimyr Peninsula and spend the long nonbreeding season at Banc d'Arguin, Mauritania, West Africa.** On their first southward migration to West Africa, many juvenile red knots make a stopover on the Baltic coast of Poland.

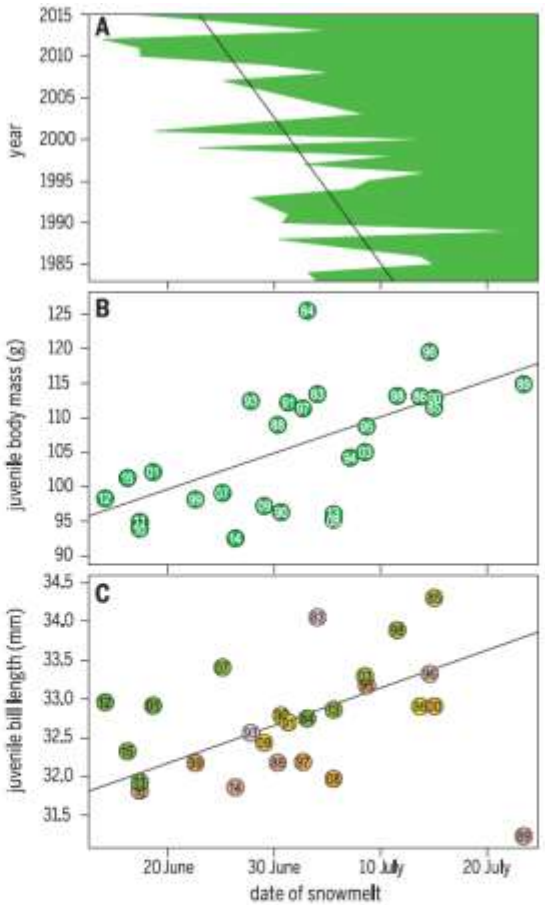
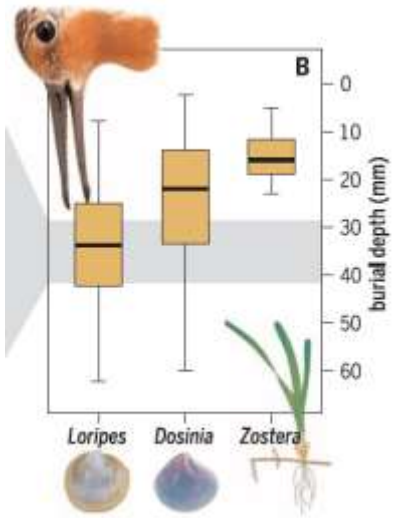
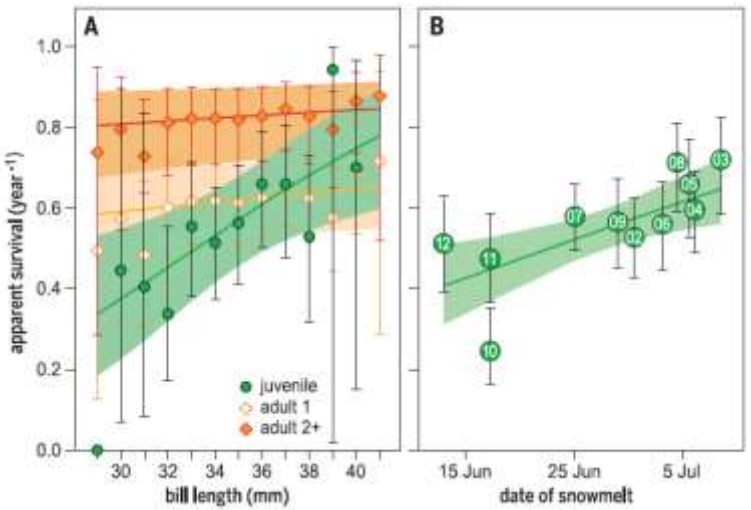



**Fig. 2. Changes in Arctic climate and red knot body size over the past three decades.** (**A**) Snow at the red knots' breeding ground at Taimyr Peninsula has been melting progressively earlier at an average rate of 0.5 days/year. (**B**) Juvenile red knots, captured during brief stopovers in Poland on their first southward migration from the Arctic, had lower body masses after breeding seasons in which snow had disappeared early (each circle denotes the annual mean, with number inside the circle giving the year). (**C**) They also had shorter bills after breeding seasons in which the Arctic snow melted earlier [circles denote annual means as in (B)], especially in years when breeding-ground NDVI [as a proxy for total primary biomass production (*12*)] was low [NDVI is indicated by the color range of the circles (green, high; pink, low)].




van Gils et al. 2016, Science

# 2020 assessment of the East Atlantic Flyway

Every year millions of waterbirds fly from western and southern Africa to their breeding grounds in Europe and the Arctic, and back. Due to its strategic position along the East Atlantic Flyway, the Wadden Sea is a vital refuge for more than 10 million migratory birds on their journey. The Wadden Sea Flyway Initiative was set up as a collaborative partnership to support the conservation of these birds. Every three years, the initiative, in collaboration with numerous other partners, coordinates a flyway-wide simultaneous bird count which also includes many waterbirds that breed in Africa and migrate along Africa's Atlantic coastline. The aim is to see how our feathered friends are doing and the sites on which they depend. Some key findings of the latest counts are displayed here.

## Efforts

**36** countries

**13,000** counters

**>1,000** sites

## Findings

**30%** of populations decline

**50%** of populations increase

**16%** stable

4% uncertain population developments

**83** populations

**66** species

The numbers of **Northern Pintail** in the flyway have increased since 1985.

Photo: Hans Dekker

The numbers of the *taimyrensis* population of the **Bar-tailed Godwit** are continuously decreasing.

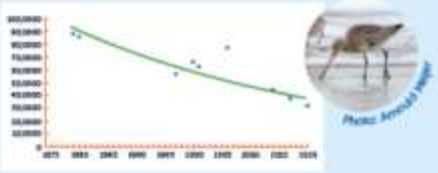


Photo: Arnold Meijer

## Key outcomes

**Climate change**

Negative impacts of climate change are increasingly threatening birds and habitats along the flyway. In Europe, sea level rise is already among the top three pressures.

**Waders decline**

Continued worrying declines in long-distance migratory waders, especially those breeding in the Siberian Arctic.

**Action needed**

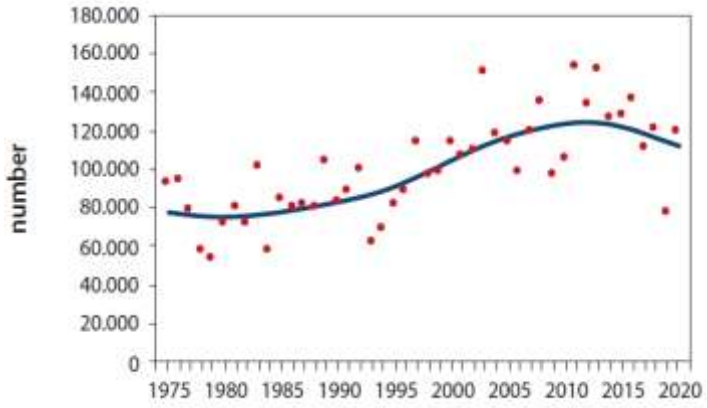
Protecting sites favoured by birds and managing habitats sustainably are important measures to conserve migratory birds.

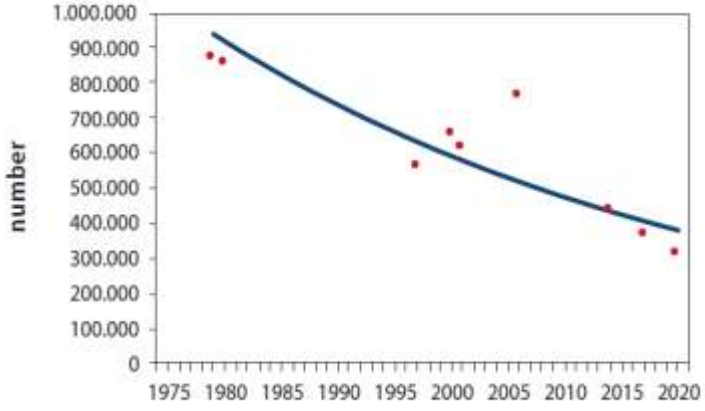

BirdLife International · Sovon · Wetlands International · The Wadden Sea Flyway Initiative

www.waddensea-worldheritage.org/resources/east-atlantic-flyway-assessment-2020

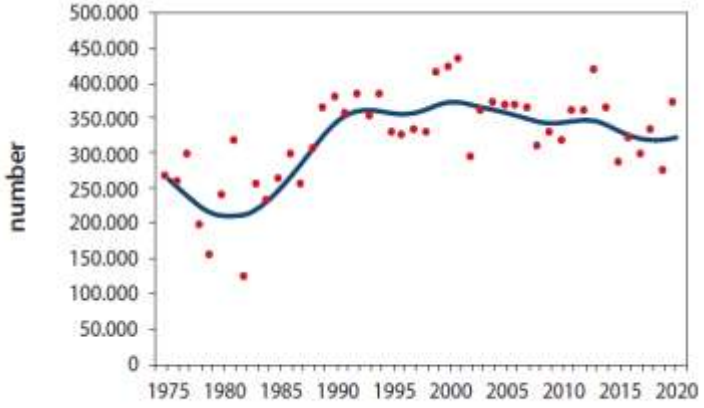
# Trends von Zugwegpopulationen

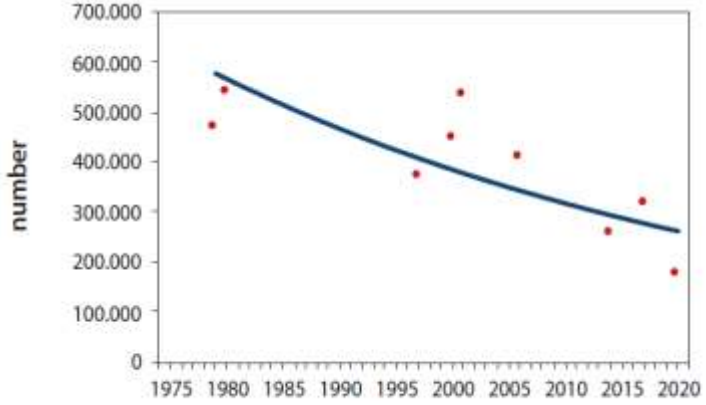
Pfuhlschnepfe




Knutt

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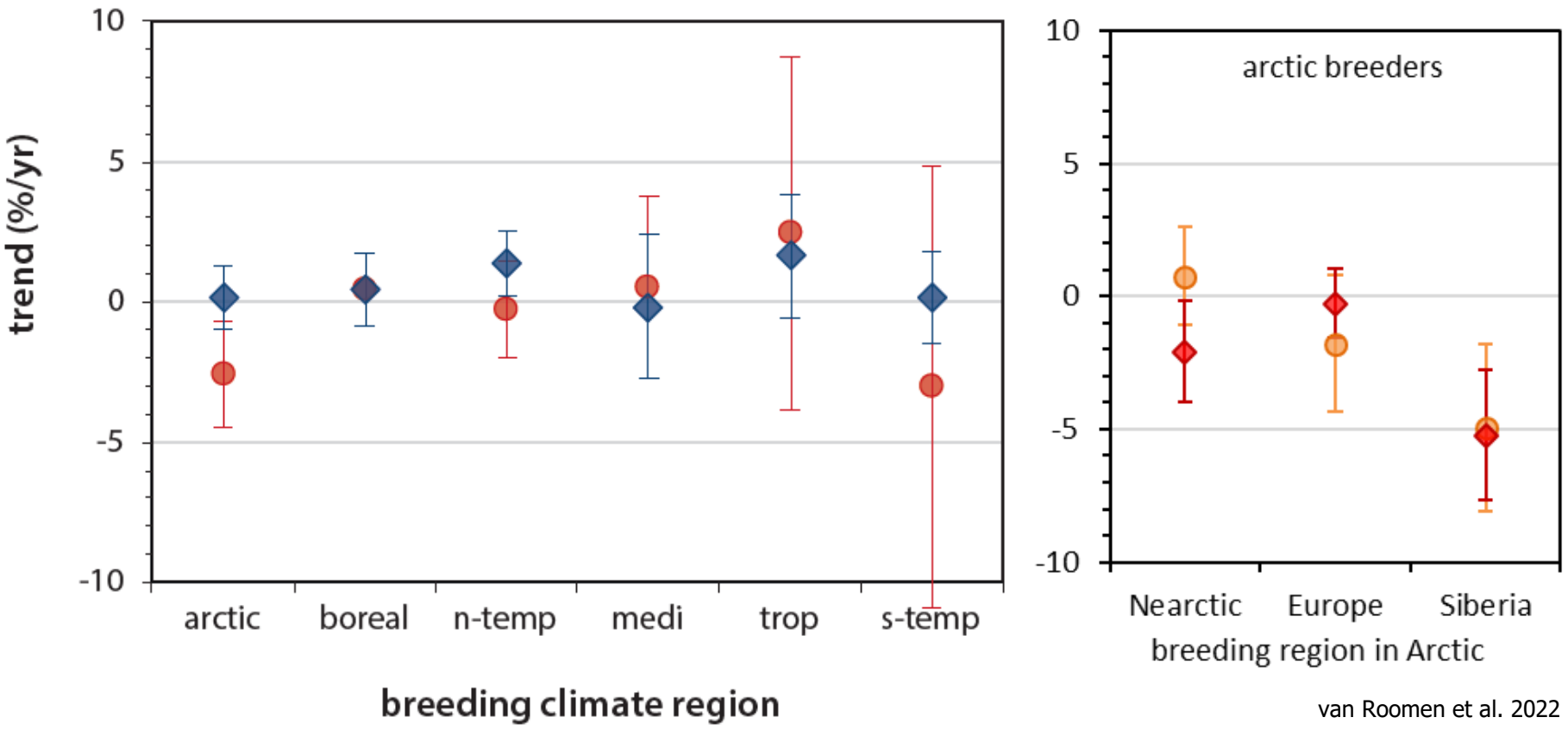
van Roomen et al. 2022

# Zugwegtrends

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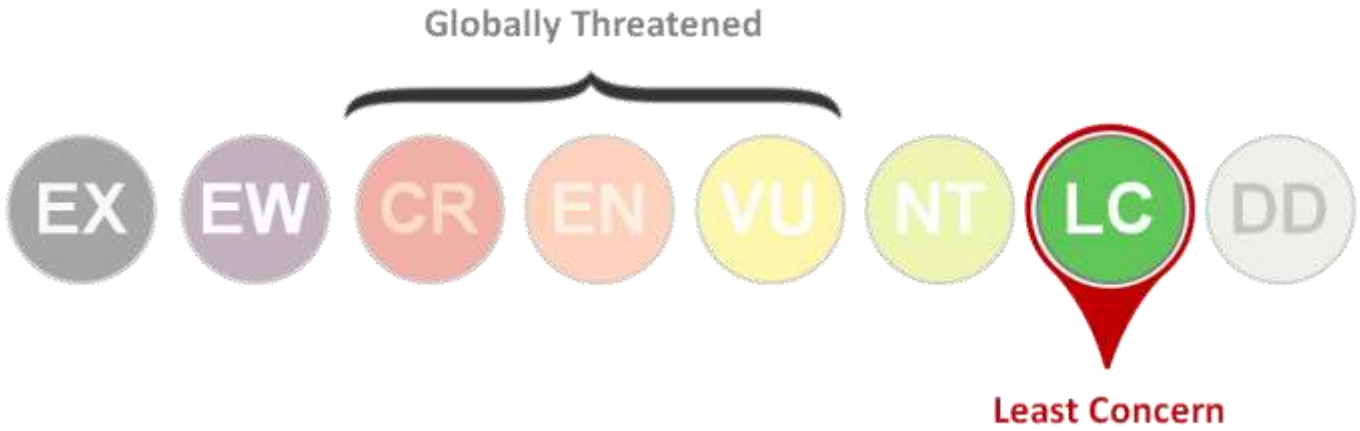



POPULATION TREND

Decreasing

NUMBER OF MATURE INDIVIDUALS

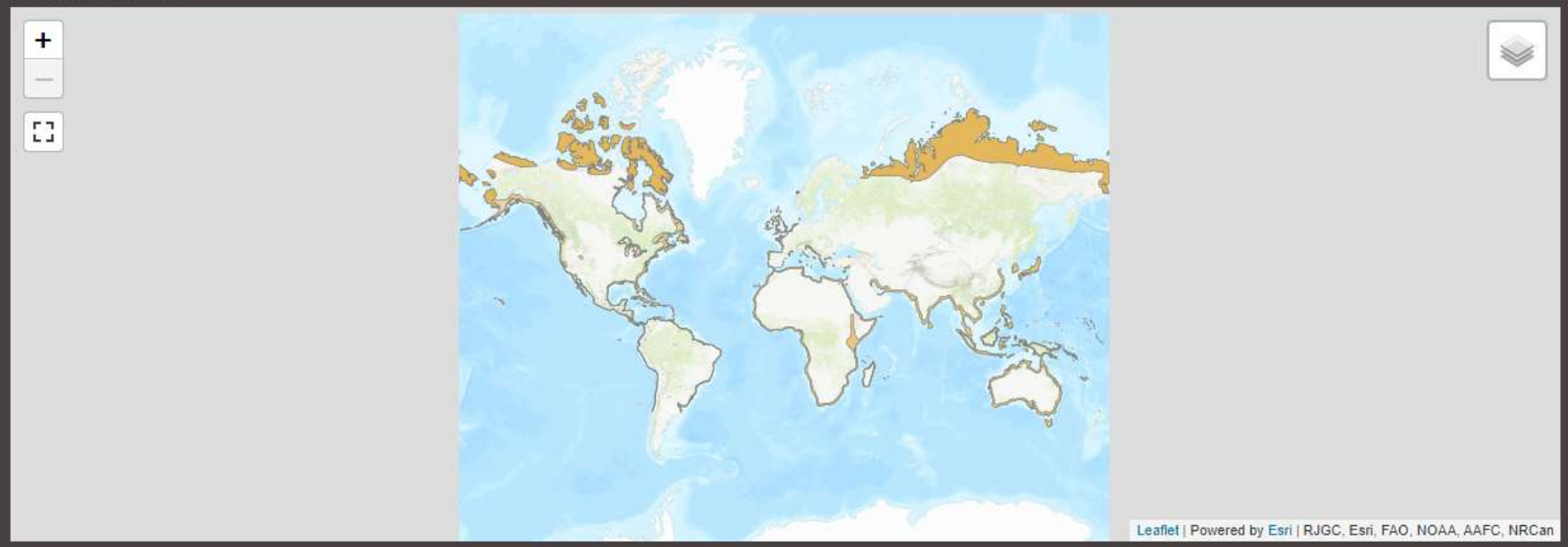
**490,000-630,000**

Population in detail

HABITAT AND ECOLOGY

**Grassland**, Marine Intertidal, Marine Coastal/Supratidal

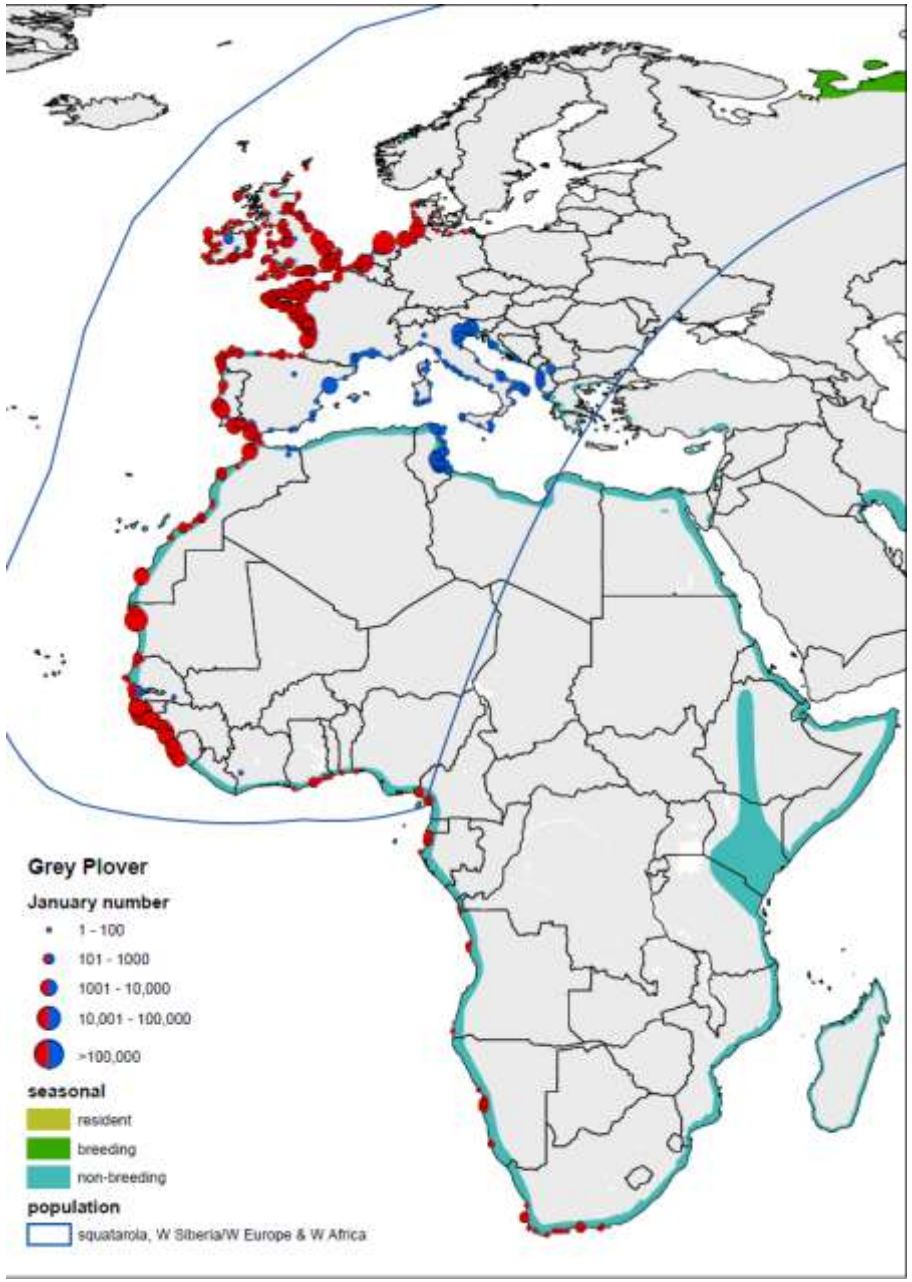
GEOGRAPHIC RANGE




BirdLife International and Handbook of the Birds of the World (2019) 2019. Pluvialis squatarola. The IUCN Red List of Threatened Species. Version 2021-3

5 Populationen

# Kiebitzregen-pfeifer auf dem Ostatlantischen Zugweg

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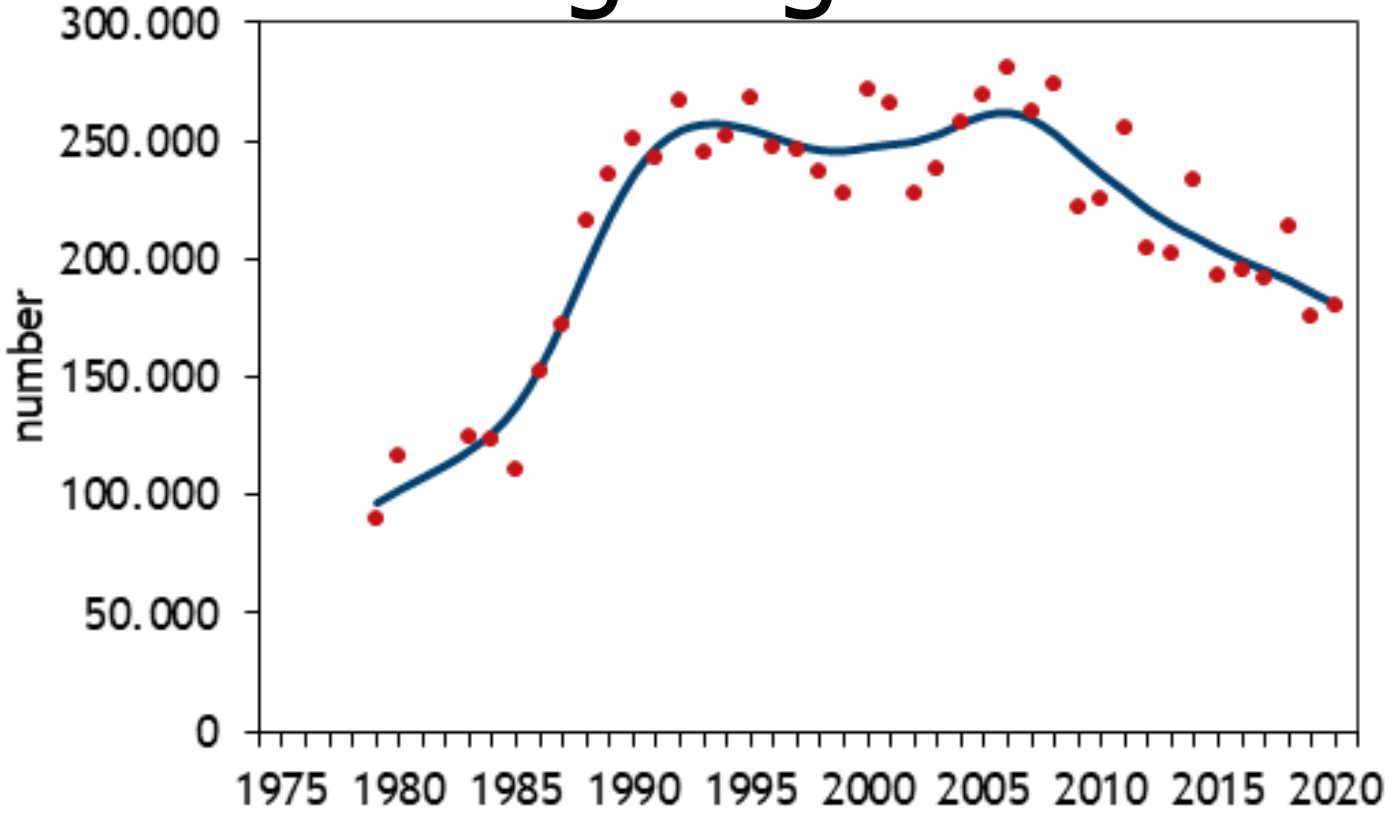
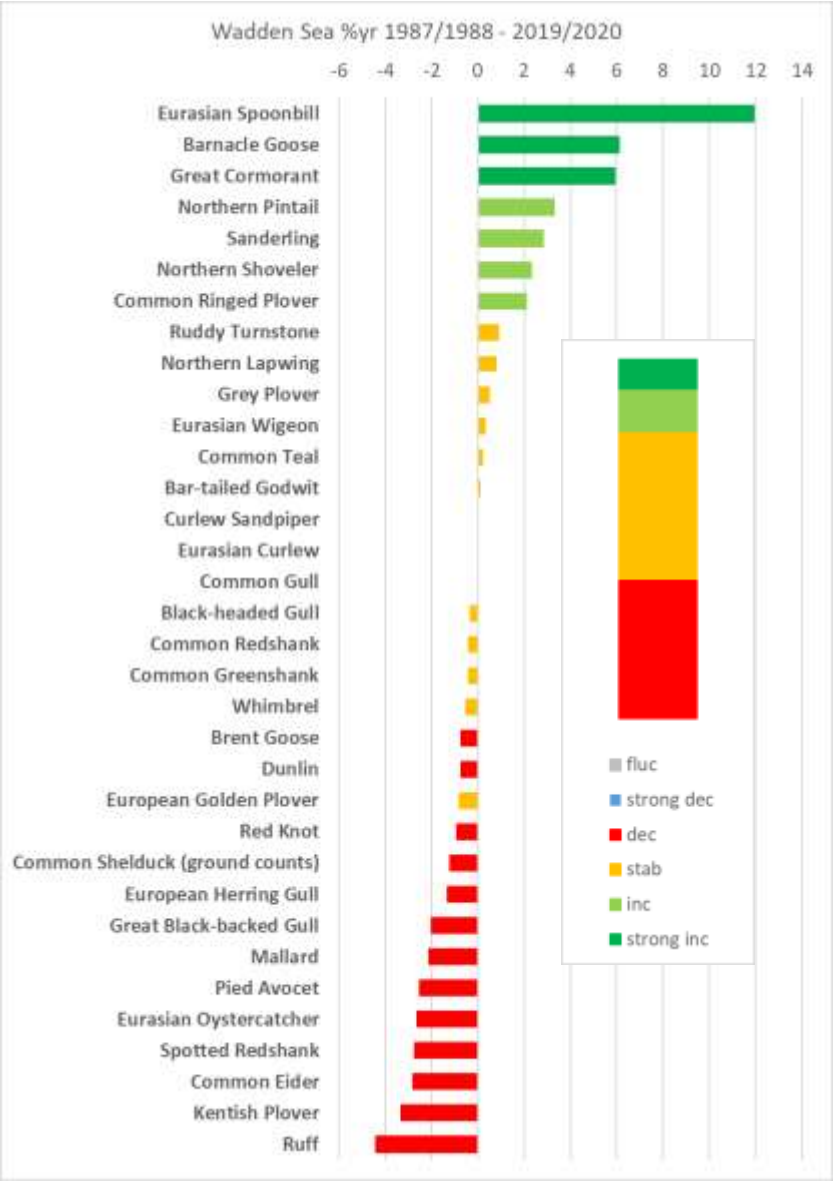
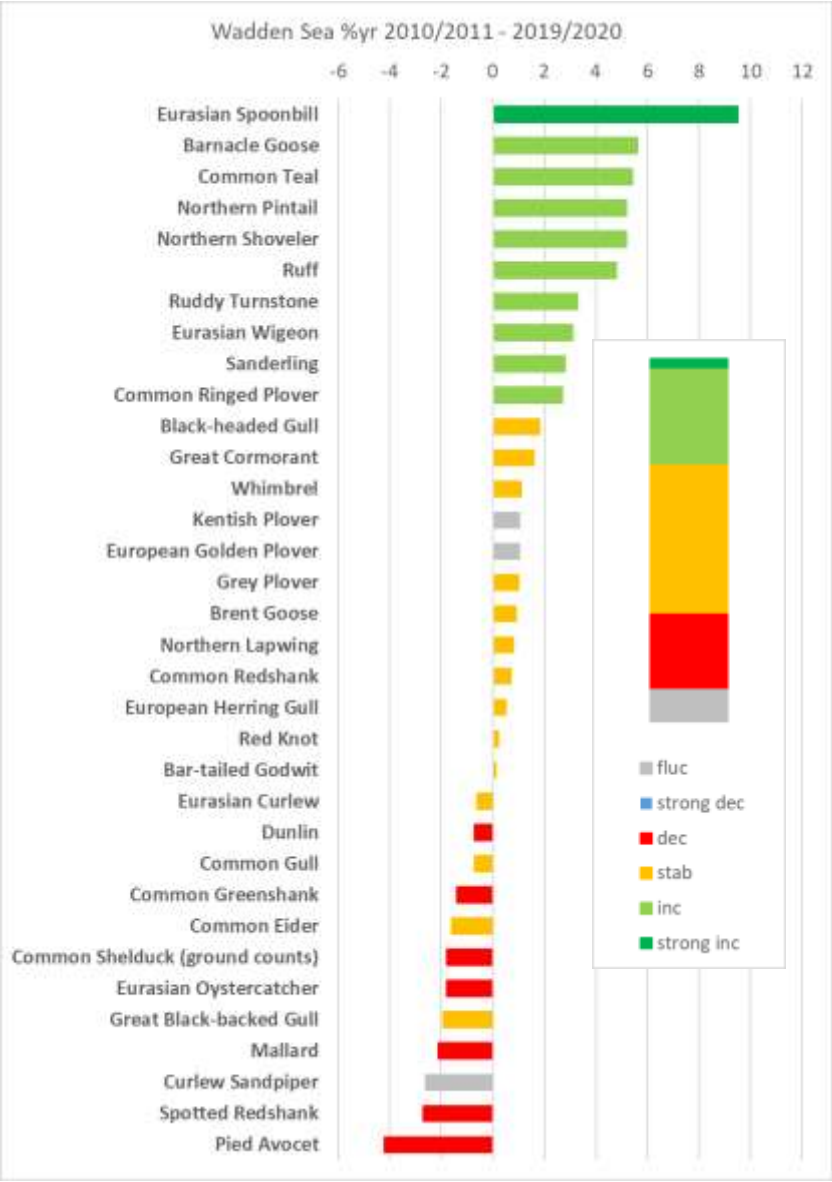
# Ostatlantischer Zugweg




| population<br>Grey Plover | data | period-L | trend-L | assessment-L | period-S | trend-S | assessment-S | period popsize | popsize-min | popsize-max |
|---|---|---|---|---|---|---|---|---|---|---|
| W Siberia/W Europe & W Africa | w | 1978-2020 | 1,015 | moderate increase | 2011-2020 | 0,973 | moderate decline | 2010-2018 | 200000 | 200000 |

van Roomen et al. 2022

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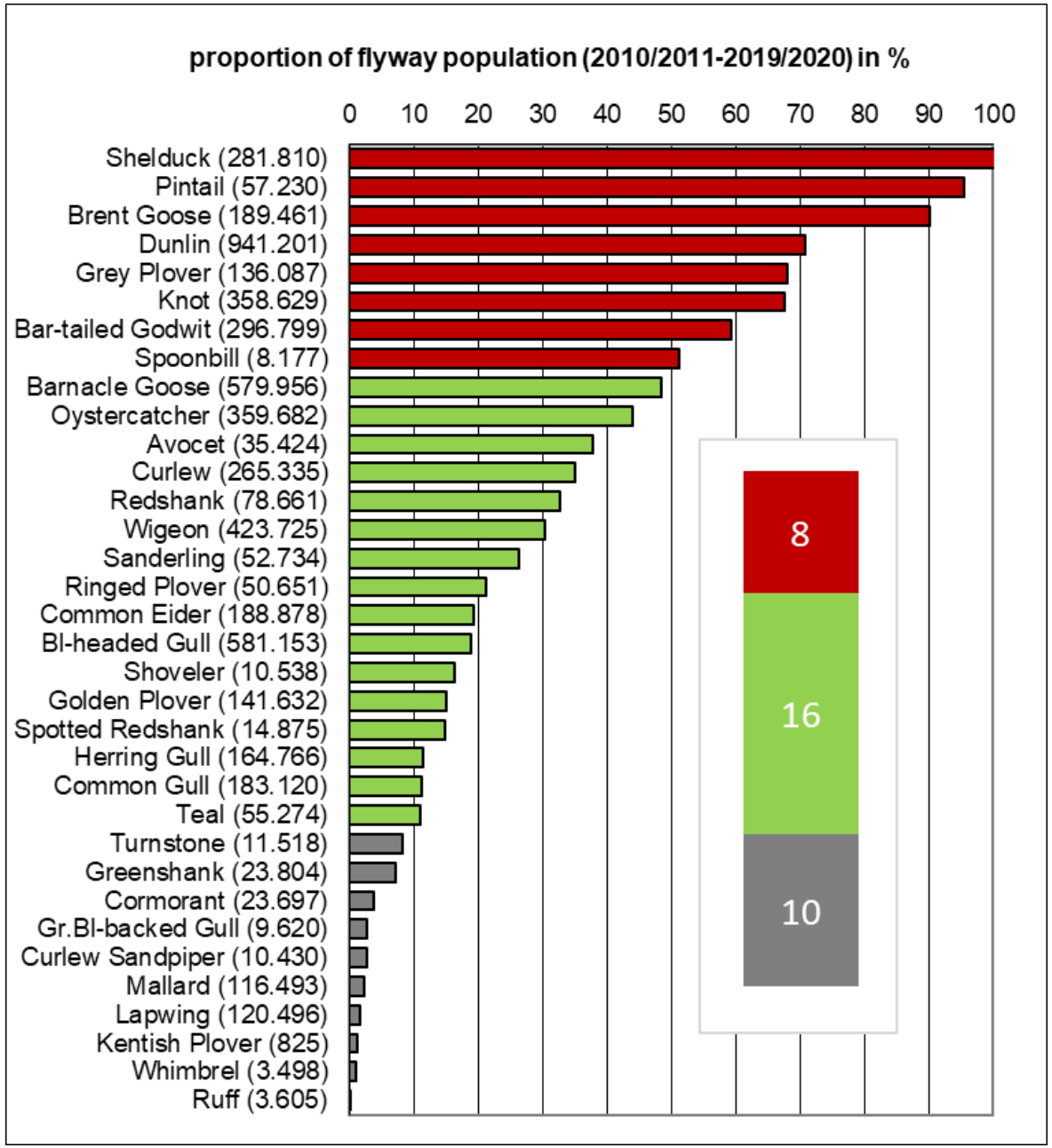


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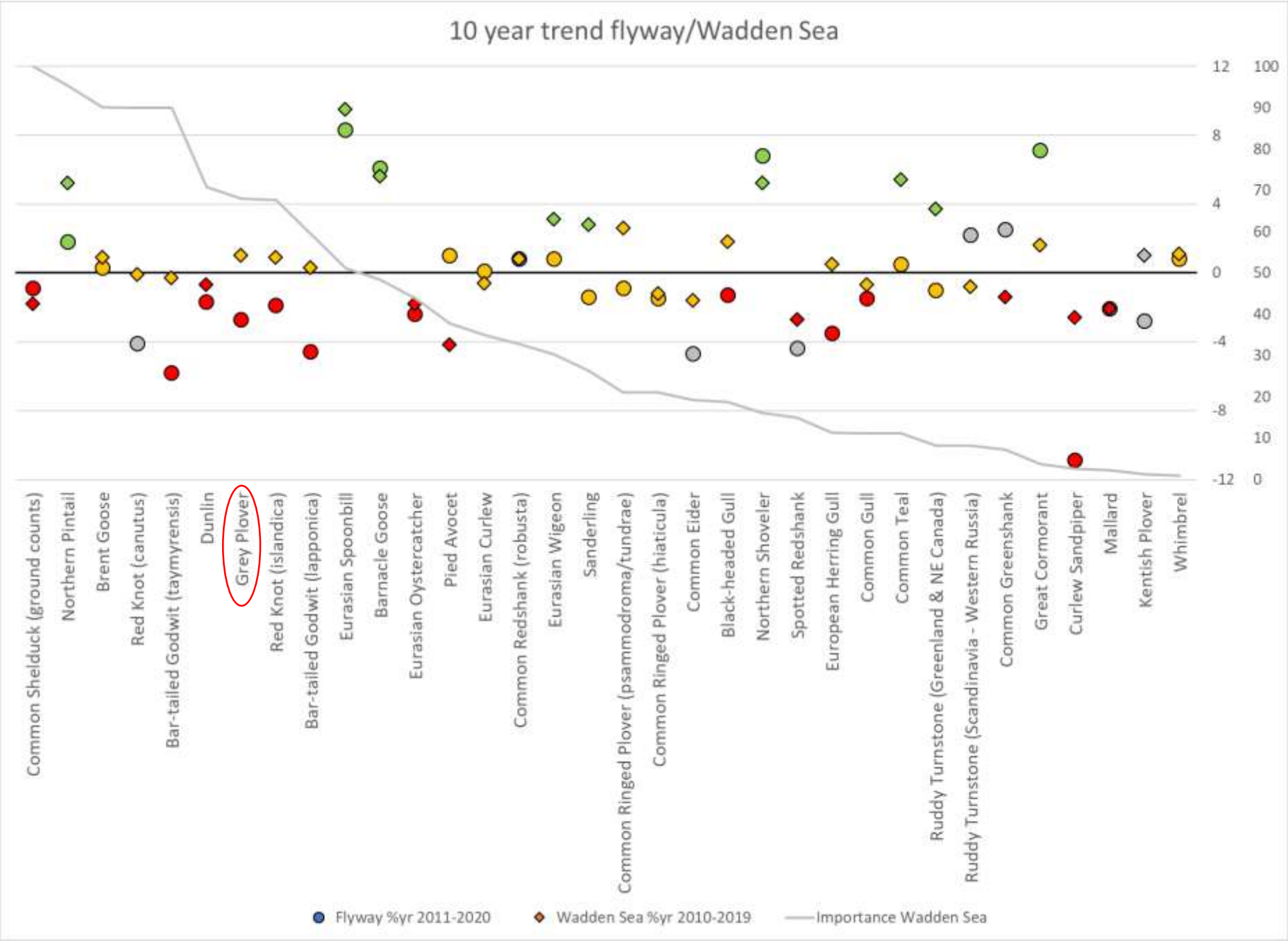


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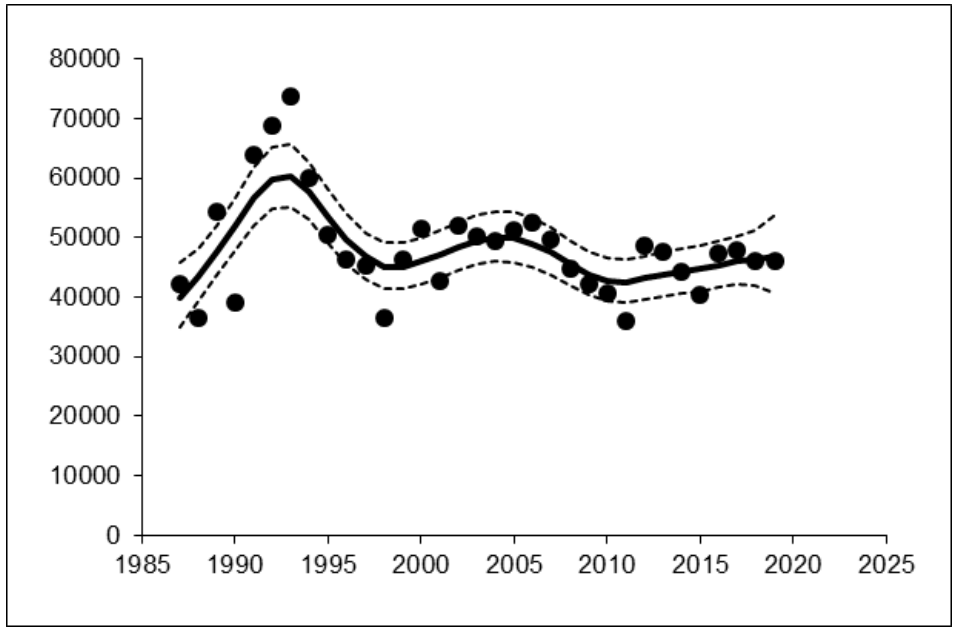
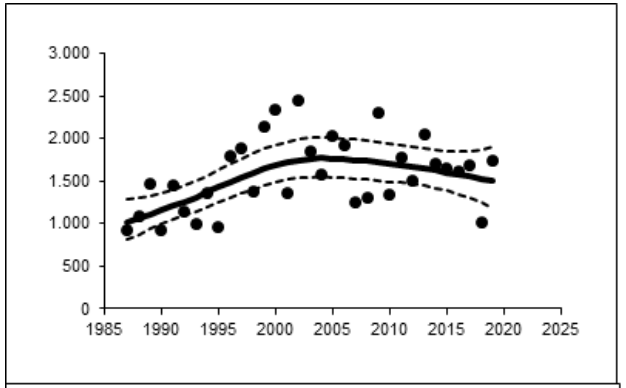
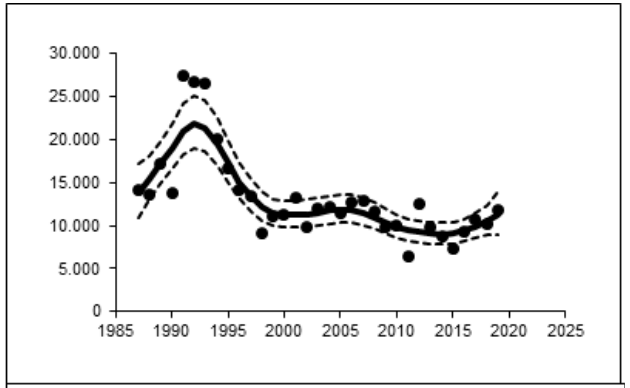
# Wattenmeer

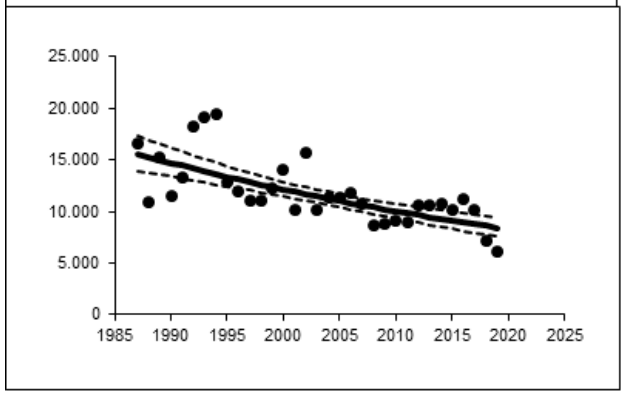



Dänemark

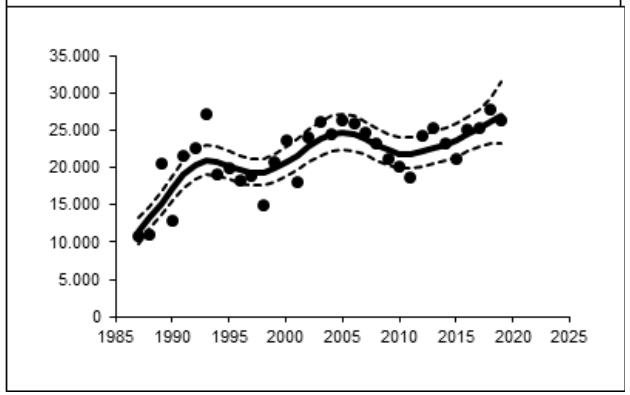



Schleswig-Holstein




Niedersachsen




Niederlande

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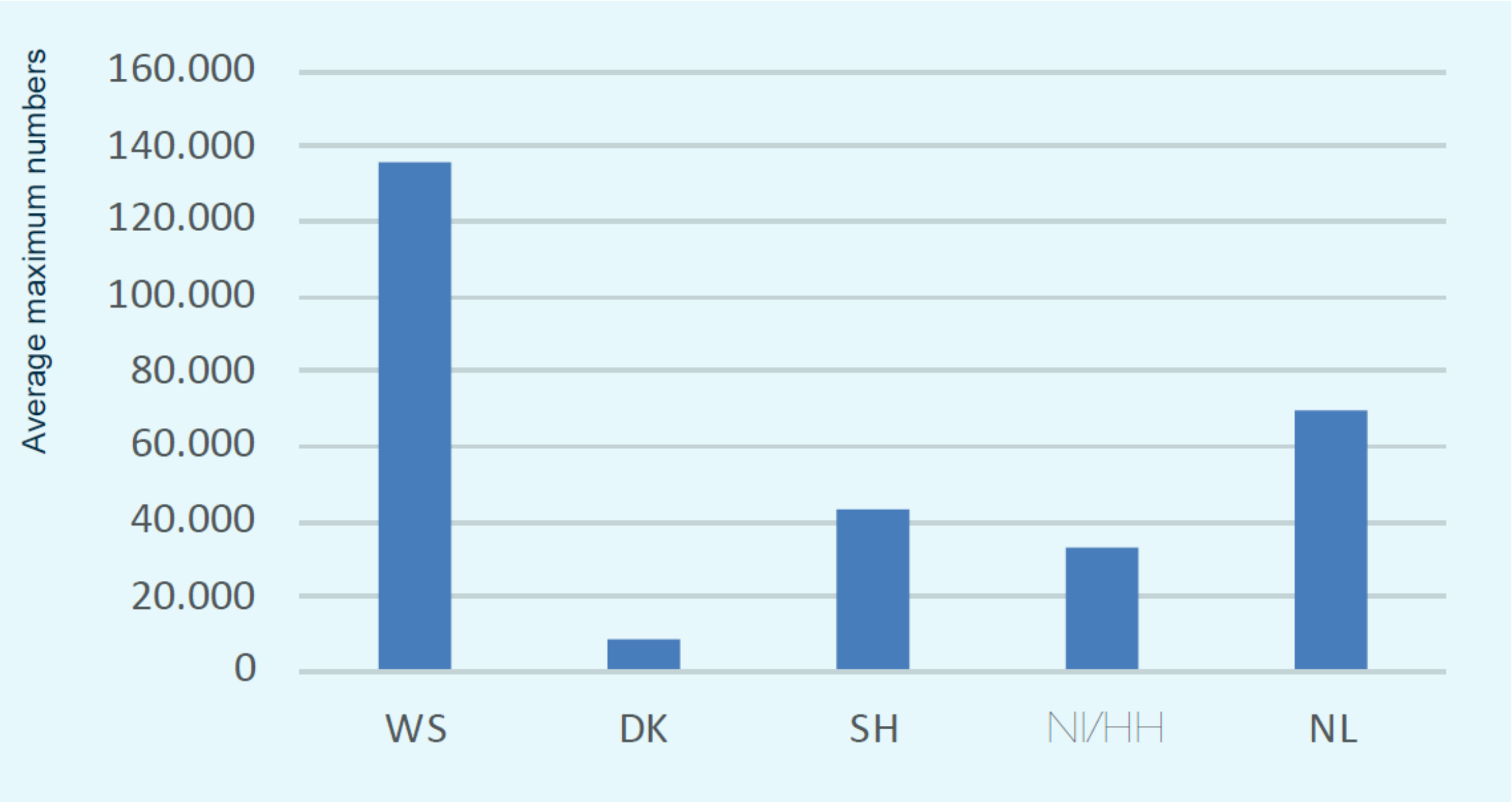


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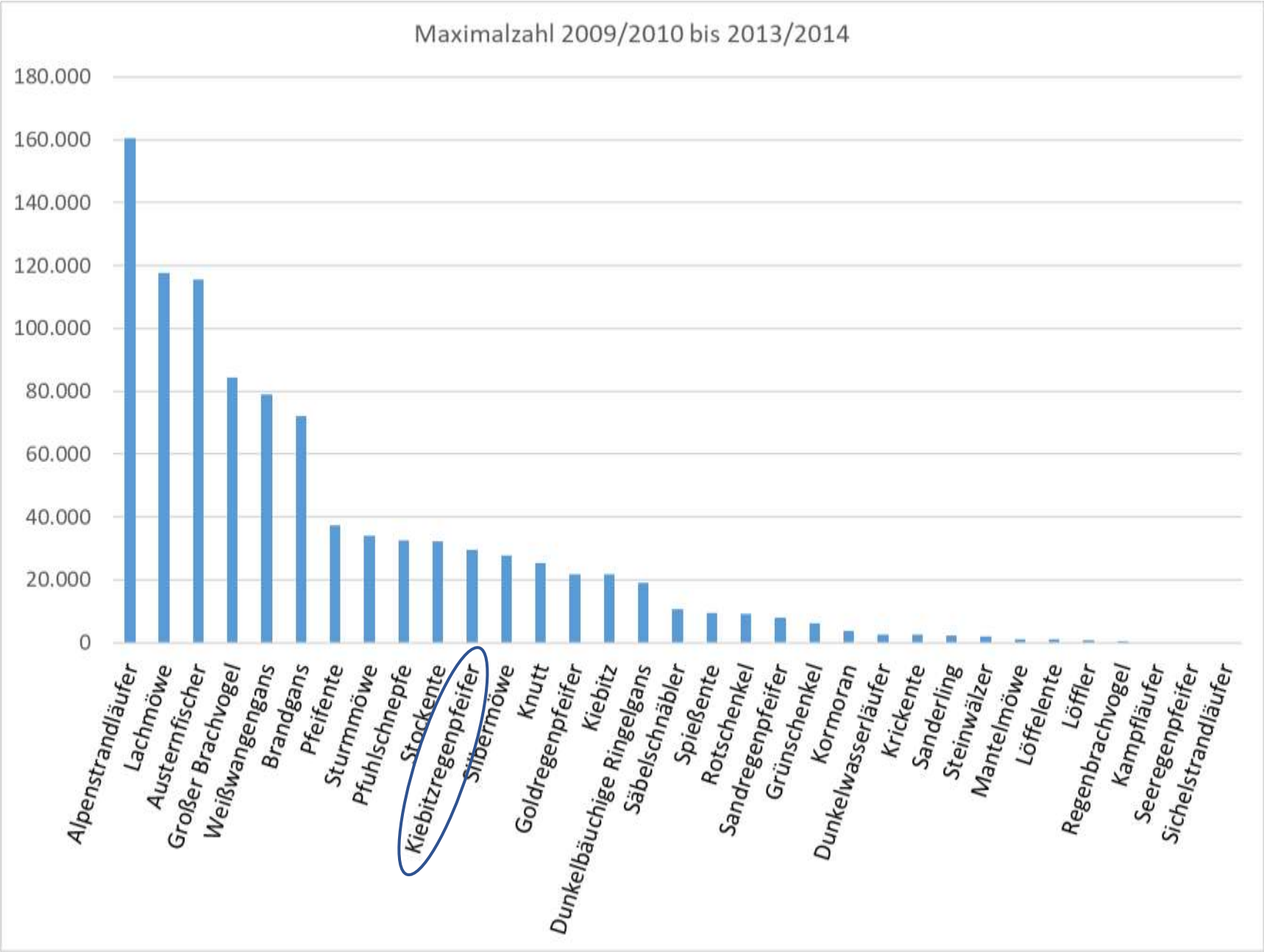


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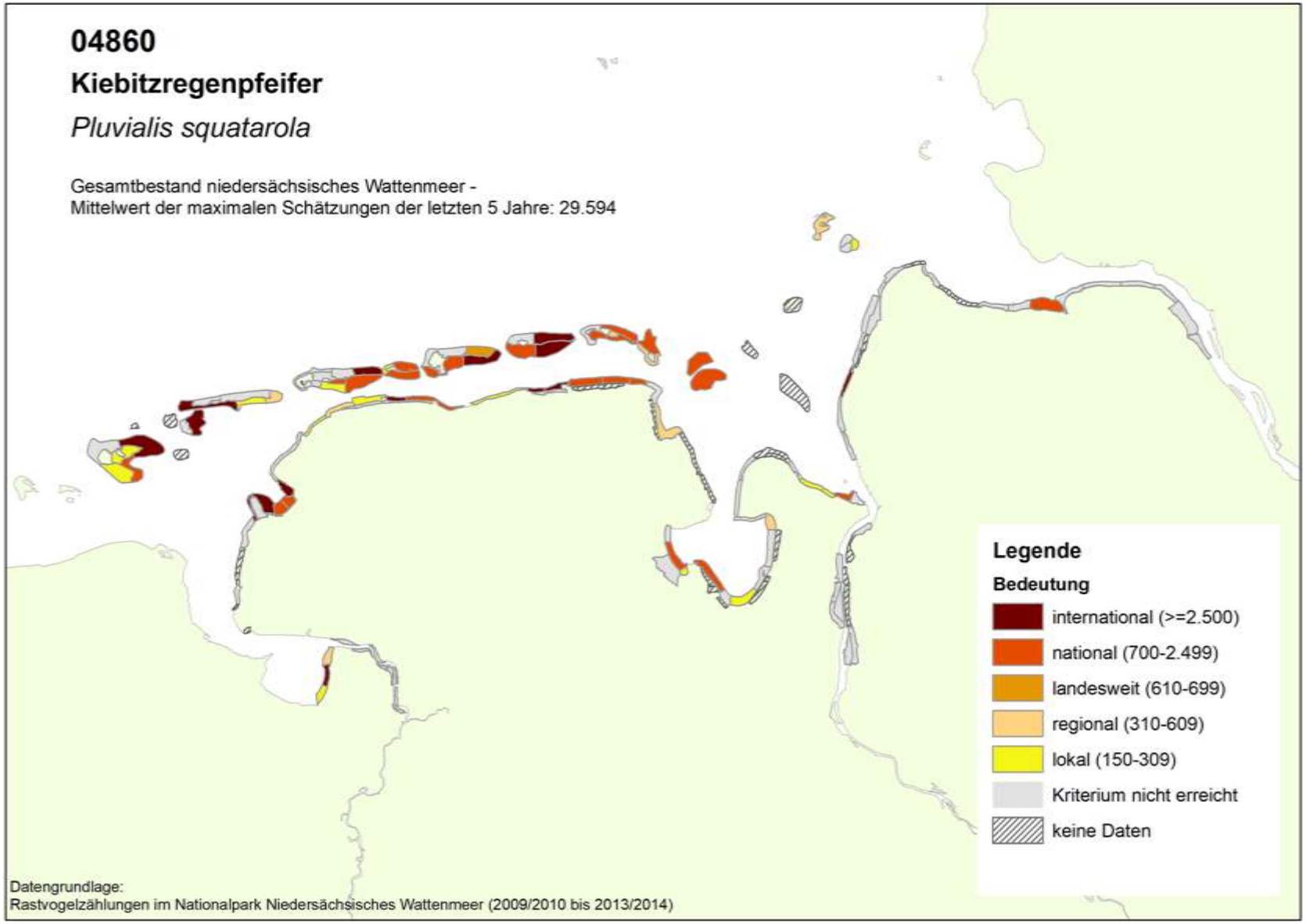


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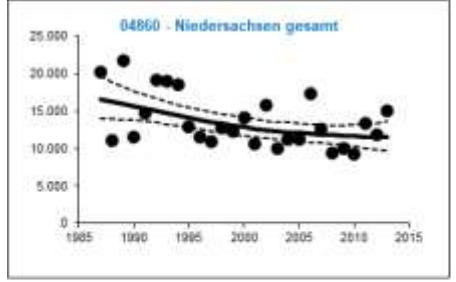
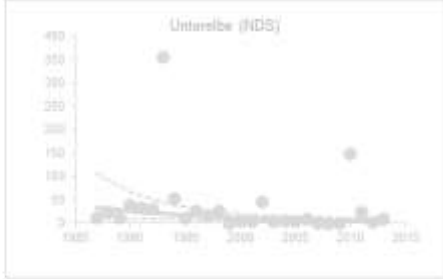
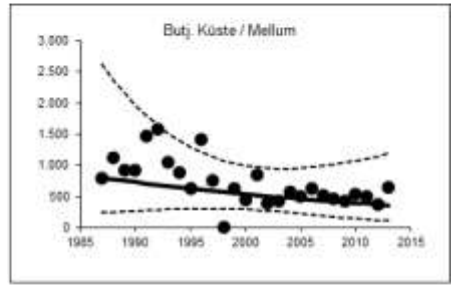


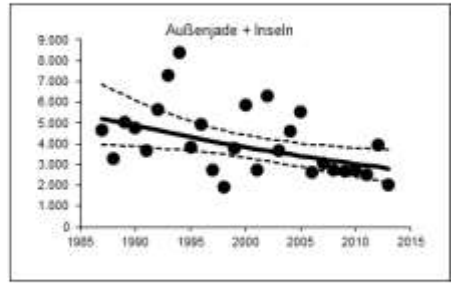


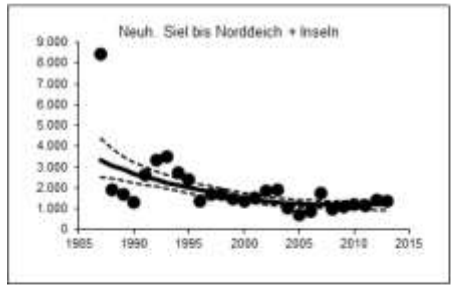






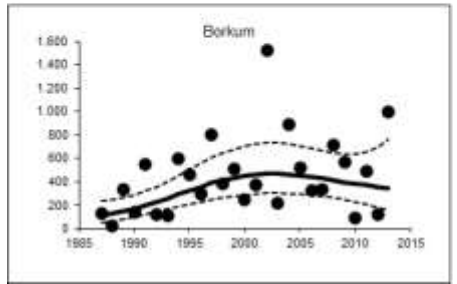




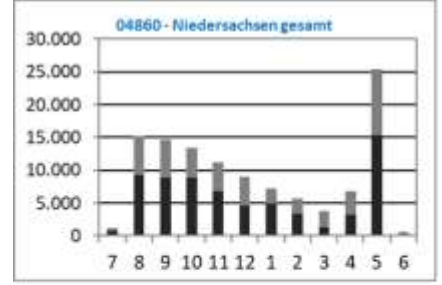


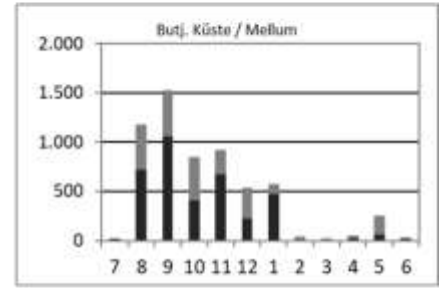


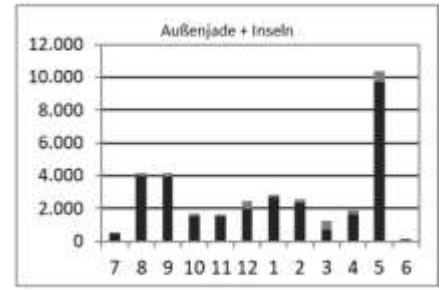


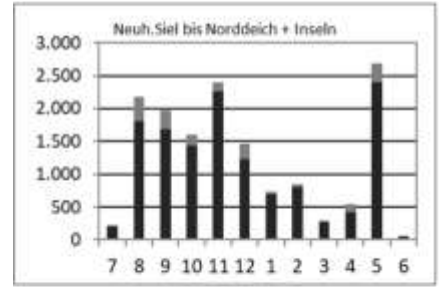


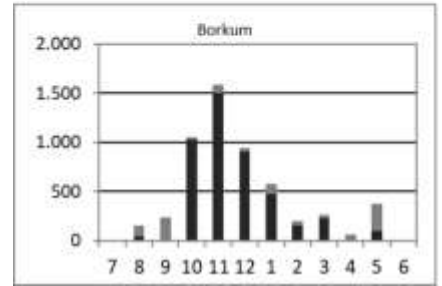




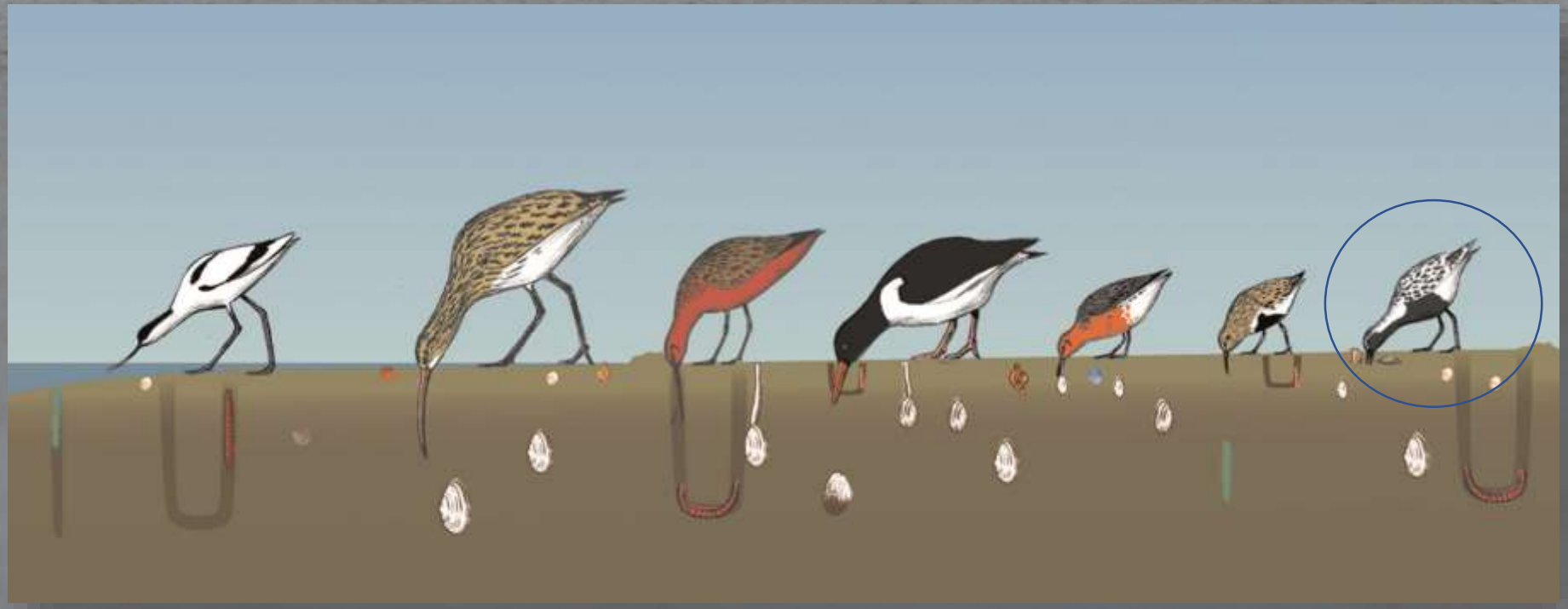




Nationalpark Wattenmeer
NIEDERSACHSEN

# Nahrung im Wattboden

## Welche Nahrung fressen die Vögel?



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Gibt es einen Einfluss des Klimawandels auf die Nahrungs- und Rastplatzökologie des Kiebitzregenpfeifers?

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# Warum Kiebitzregenpfeifer?

- Der Kiebitzregenpfeiferbestand auf dem Ostatlantischen Zugweg nimmt seit 10 Jahren ab.
- Der Rastbestand im gesamten Wattenmeer hat sich seit 1995 nicht mehr verändert.
- Es gab Verschiebungen im Rastbestand, im zentralen Bereich des Wattenmeeres nahmen die Rastbestände ab.
- Das Welterbegebiet hat eine globale Verantwortung für den Fortbestand der Zugvogelbestände auf dem Ostatlantischen Zugweg.
- Der Zusammenhang zwischen beschleunigtem Klimawandel, Veränderungen im Nahrungsangebot und Bestandsveränderungen ist für den Kiebitzregenpfeifer unbekannt.