Development and status of the breeding population of Little Terns in the Danish Wadden Sea
• Thomas Bregnballe, Dept. of Bioscience, Aarhus University
• Ulf M. Berthelsen, attached to Aarhus University

The Wadden Sea National Park

Knud Olsen
Contents

1. Development of the breeding population
2. Characteristics of the breeding sites
3. The threats
4. Options for protecting against threats
5. Ringing as a tool to improve our understanding of demography and effects of management actions
Our goal

To provide knowledge useful for developing strategies and plans for management and for evaluating effects of management measures.
Overall breeding numbers

Breeding pairs

Overall breeding numbers

Numbers of breeding pairs

- 1977
- 1988
- 1994
- 1997
- 2000
- 2003
- 2006
- 2009
- 2012
- 2015

Breeding numbers range from 0 to 300 pairs.
Current breeding areas for Little Terns
Example - Rømø 2009

- Juvre Sand 0-1 pairs
  3-4 pairs
- Nørreland Strand 0-3 pairs
- Slagtebænken 0-1 pairs
- Havsand 13 pairs
- Sønderstrand 3 pairs
  0-1 pairs
The breeding sites
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding sites - Fanø

Esbjerg Harbour in close vicinity
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Grønningen, Fanø
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Grønningen, Fanø
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Breeding habitats: Søren Jessens Sand, Fanø
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Rømø – endless Little Tern country

(A. Pedersen, Wadmanns Forlag)
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding sites - Rømø
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Nørreland Strand, Rømø
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Sønderstrand, Rømø
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Juvre Forland, Rømø
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Esbjerg Fishery Harbour 1998
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Breeding habitats: Esbjerg Harbour, Container Terminal 1999
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Threats: Storm surge / Flooding
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Threats: Human disturbance
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Threats: Sand storm (in particular when combined with human disturbance)
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Threats: Trampling by cattle (Fanø), ”Near miss”
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Threats: Trampling by cattle (Fanø), ”Near miss”
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Threats: Trampling by sheep (Rømø)
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Threats: Predation by foxes
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

**Threats:** Predation by gulls, crows and birds of prey
Little Tern (Sterna albifrons) breeding population in DK Wadden Sea
Protective measures
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea
Protective measures
Fencing off breeding sites and kindly asking people not to enter the area may help to reduce human disturbance – but it does NOT ”do the trick”.

A lot more is required to ensure the successful protection of our rare and vulnerable beach breeding Little Terns and Kentish Plovers
Little Tern (*Sternula albifrons*) breeding population in DK Wadden Sea

Protective measures: The optimal solution!

Lenster Strand "chicken farm", Schleswig-Holstein (2008)