

The Breeding Bird Season in the Wadden Sea in 2002

Joint Monitoring Group of
Breeding Birds in the
Wadden Sea, JMBB
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Introduction

The coordinators of the Joint Monitoring Group of Breeding Birds in the Wadden Sea, JMBB, present in the following an overview of some interesting characteristics of the breeding bird season 2002, despite the fact that the data are not completely available at the moment. This paper is directed towards all interested counters, administrators and others, who would like to know early what is going on in the Wadden Sea breeding bird fauna. This does not replace a thorough analysis of the full amount of data throughout the Wadden Sea representing the whole target species set.

Used abbreviations: NL - The Netherlands, LS - Lower Saxony, HH- Hamburg, SH - Schleswig-Holstein, DK - Denmark, bp - breeding pair.

Weather conditions and breeding success

In general, the breeding bird season in 2002 can be characterized as quite normal concerning weather conditions and the number of flooding events. Therefore, we cannot assume that changes in breeding bird numbers or the breeding success in general were strongly influenced by these factors. But, nevertheless, the breeding season 2002 was again affected by some stronger flooding incidents. A larger part of the low lying salt marshes and beaches was flooded at the end of April, and the water level reached a few times more than 0.5 m above mean high water in the second half of June (about 1m on June 28, 2002).

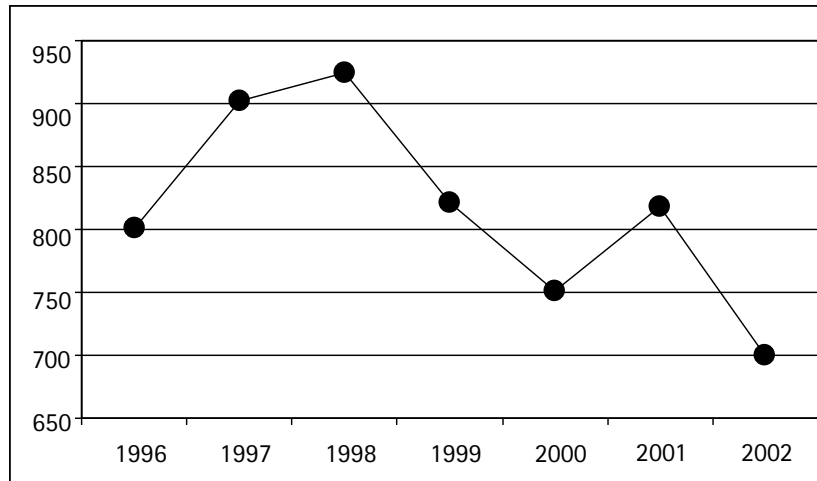
Most of the wader species started breeding early; a good hatching success was recorded, e.g. 50% of the Oystercatcher *Haematopus ostralegus* pairs in the census area Hedwigenkoog (mainland salt marsh SH) were found with hatched chicks (1.25/bp). The fledging period was mostly warmer than normal and a lot of older young of Oystercatcher *Haematopus ostralegus* were al-

ready observed up to the end of June. This was also true especially for the Redshank *Tringa totanus*. In the complete ungrazed mainland salt marsh of Osewoldter Koog/SH more than a third of the pairs counted before was found still warning intensively one week after the flooding of June 28. Possibly, the young survived the short time of high tide in higher vegetation. A very good breeding success for all waders including Kentish Plover *Charadrius alexandrinus* was reported for all inland areas in SH (polders like Beltringharder Koog, Eider estuary). In DK, the breeding success of Kentish Plover on Rømø was poor, probably caused by predation by foxes.

Blackheaded Gull suffered high losses, e.g. 85% in some areas on the Hallig Habel/SH on June 28. Arctic Terns *Sterna paradisaea* on the small Hallig-islands/SH had hardly any breeding success due to flooding the third year in a row. In DK, already on June 13, high sands were flooded by extraordinary high water. Furthermore, sand drift by heavy winds from the east on some beaches and outer sands caused possibly problems at the beginning of June, especially for Little Terns *Sterna albifrons* and Kentish Plovers. In NL, the reproduction of Spoonbill was low due to bad weather and low temperatures.

The small breeding population of Gull-billed Tern *Gelochelidon nilotica* in the German and Danish Wadden Sea area - with the main colony at the mouth of the river Elbe over the last years - is the only one in NW-Europe. These birds are roosting during their post-breeding migration in the northern part of the IJsselmeer (Province of Friesland/NL). On this roosting site, it is possible to identify and count adults and juveniles to estimate the breeding success. Families with juveniles appear in Noord-Holland during the last week of July and in the first week of August, shortly after fledging. In 1988 - 2002, an average of about one young per pair was observed; in 2002 a value of only 0.14 was registered (Vlek 2002).

Fig. 1:
Numbers of Oystercatcher
in census areas on
mainland salt marshes in
Schleswig-Holstein.



Cormorant, Bittern, Spoonbill, Egrets, Ducks, Raptors and Owls

A second colony of Cormorants *Phalacrocorax carbo* established itself in SH besides Trischen (12 bp on the island Föhr), but, in LS, the stocks decreased successively on the islands Memmert and Lütje Hörn over the last three years and also no further increase appeared in SH.

Relatively high numbers of Bittern *Botaurus stellaris* were registered on the islands in NL and LS this year (a total of 17 on the West Frisian islands).

The population of Spoonbill *Platalea leucorodia* reached a new all-time record with 1,425 bp in the whole NL, respectively 951 bp in the Wadden Sea area. In LS, a further increase up to 73 bp on six islands was stated and 12 bp with at least 21 hatchlings bred now in SH on two islands. A small colony settled on the mainland each in NL and LS.

Spoonbill *Platalea leucorodia* (Drawing: N. Knudsen)



The settlement of white herons continued. In NL, 3 bp of Little Egret *Egretta garzetta* were detected on the islands and 1 bp of Great White Egret *Casmerodius albus* on the mainland. Little Egrets were also observed in the German part of the Wadden Sea again in summer the 2002.

The Barnacle Goose *Branta leucopsis* established larger stocks in some areas in SH (up to 40

bp in the polders Rickelsbüller and Beltringharder Koog). The number of Eiders *Somateria molissima* (males at the beginning of the breeding season) on the island Langli, DK decreased from 145 resp. 196 bp in 2000/ 2001 to 78 bp in 2002. It is not clear up to now, if there is a general negative trend in large parts of the Wadden Sea in consequence of outbreaks of avian cholera in DK or the mass mortality over the last winters in the Wadden Sea (Desholm et al. 2002). A little increase in breeding pairs was registered regarding the Redbreasted Merganser *Mergus serrator* especially in the western part of the Wadden Sea with 6 bp on the island Griend and a first breeding on Terschelling, NL. In DK, 3 bp were documented.

The numbers of Hen Harrier *Circus cyaneus* and Shorteared Owl *Asio flammeus* are more or less stable resp. fluctuating on a low level on the islands in LS. However, in NL, a further decline of the stocks on Terschelling was noticed (from 39 bp in 1996 – Rasmussen et al. 2000 – to 27 bp in 2002) after the obvious decrease of Hen Harrier in 2001 on Ameland (Südbeck et al. 2002).

Waders

In 12 census areas on the mainland salt marshes in SH, the trend of the Oystercatcher has been negative since 1999, with a slight rebound in 2001. Compared with 1998, there is a decrease of 25% up to 2002 (Fig. 1). In the past, the population increased over the whole 20th century.

499 bp of Avocet *Recurvirostra avosetta* has been the lowest registered number in DK in 2002, since the surveys started in 1996; still in 1999, there were nearly twice as many. An inland-colony of Avocets on the LS-part of the Dollard was disturbed by egg-collectors in 2001 and as a result of this no settlement was registered in 2002.

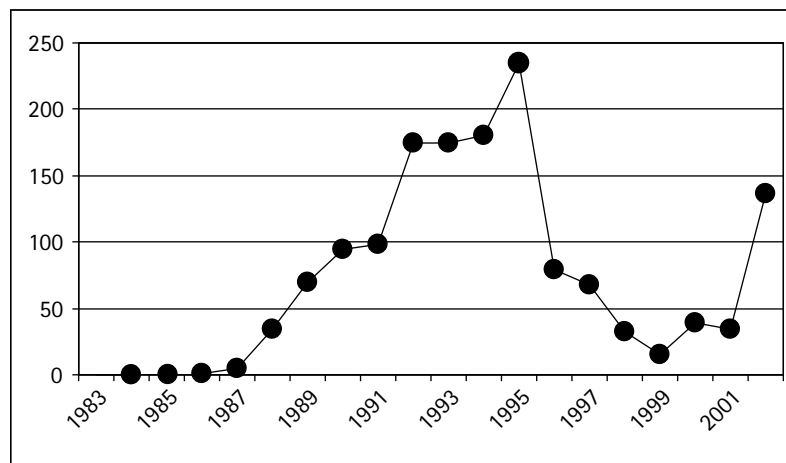


Fig. 2:
Breeding pairs of Kentish
Plover in the
Beltringharder Koog,
Schleswig-Holstein.

Otherwise, in the polder Breebaart/NL, an out-poldered area on the NW side of the Dollard, the Avocet occurred with very high numbers (774 bp).

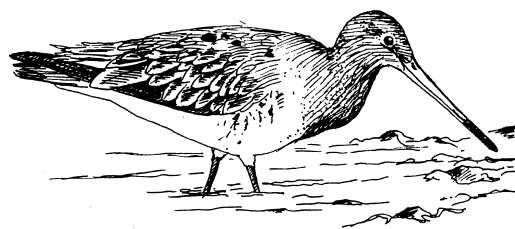
The number of Great Ringed Plover *Charadrius hiaticula* seems furthermore to decrease in large parts of the Wadden Sea. In the census areas in DK, only 28 pairs were recorded. The number has decreased since 1997. In LS, the population on the East Frisian islands dropped from 106 resp. 118 bp in 1998/99 to 81 bp in 2002.

In 2002, in DK, 92 bp of Kentish Plover were counted. After an increase in the 1990s, the population has been more or less stable with around 100 bp since 1999. 84% bred on the island of Rømø in 2002. Caused by "management" of Barnacle Geese *Branta leucopsis* (created by grazing a habitat with very low vegetation at the beginning of the breeding season; Südbeck et al. 2002) the breeding pairs of Kentish Plover slightly increased in the Beltringharder Koog/SH up to 39 resp. 34 bp in 2000/2001. In 2002, the population increased explosively up to 136 (Fig. 2). In the western part of the Wadden Sea (NL + LS), the numbers were again very low resp. more or less stable on a low level.

Probably, one pair of Dunlin *Calidris alpina schinzii* bred again in the LS-part of the Dollard after 2001, the rest-population in SH is probably unchanged with approximately 2 - 3 bp in St. Peter over the last years. In DK, only four of the best localities for Dunlins were recorded in 2002 and 16 bp were found on two of the localities. The numbers must be considered a minimum estimate and the total number of pairs in DK is probably 50-100% higher. The number of 27 bp (2002) has been the lowest recorded since 1998. One breeding pair of Turnstone *Arenaria interpres* was verified in DK again on the island Mandø, where first

breeding had been confirmed in 1994 since the 19th century (Rasmussen et al. 2000).

Within the "meadow-birds" for the Lapwing *Vanellus vanellus*, a decrease of 70% compared to the numbers in 1999/2000 was found in the census areas in DK (158 bp in 2002). Bar-tailed Godwit *Limosa limosa* was recorded with 146 bp on ten localities in DK. After the decreases from the middle of the 1980s to the middle of the 1990s, the number seems to have stabilized now. However, there was a decrease in most of the control areas, but the number had increased in Margrethe Kog from 30 bp in 1996 to 44 in 2002, and in Tøndermarsken from 65 to 90 bp. In LS, the decrease of both species on the mainland as well as on the islands continued.



Bar-tailed Godwit *Limosa limosa* (Drawing: N. Knudsen)

In four regularly controlled areas in DK, five females of Ruff *Philomachus pugnax* indicating breeding attempts were found. This is the highest number since 1998, four more females were seen on three different localities during the breeding season. Despite the increase in 2002, the situation is considered as very critical for this species in the Danish Wadden Sea.

One breeding pair of Black-winged Stilt *Himantopus himantopus* was found in Beltringharder Koog, SH as well as on a North Frisian salt marsh in NL.

Gulls and Terns

The population of Black-headed Gull is still increasing in SH, especially on the Halligen. From 1999 to 2001, there was still a strong increase with 25% up to 35,000 bp, whereas big colonies on the Baltic coast in Germany has shown a steady decrease with 75% since 1983 and also the inland population is decreasing (Bellebaum 2002). In NL, the enormous colony on the island Griend increased further to 33,500 bp. However, in DK, in total only 5,495 bp were breeding in 2002, which has been the lowest number since 1996. There was a reduction in all colonies, also in the largest colony on the island Langli.

The Mediterranean Gull *Larus melanocephalus* reached 79 bp in the Elbe estuary west of Hamburg, that is about doubled compared to 2001. Single pairs were found in different places in all parts of the Wadden Sea now.

The Common Gull *Larus canus* reached 2,422 bp in DK (more than 80% on Langli), the largest number since 1996. On Amrum, the biggest breeding site in SH, a new record with 2,719 bp was found (the same trend near the river Elbe west of Hamburg). The German population on the Baltic coast is declining (Hälterlein et al. 2000).

The same development took place for the Lesser Black-backed Gull *Larus fuscus*. 479 bp were breeding in 2002 in DK, which are nearly twice as many as in 2001. The increase was so high that it would be reasonable to conclude that there must have been immigration from outside. The most important breeding sites are on Langli and Mandø. On Amrum /SH, 11,165 bp were recorded. An analysis of the development in this area by a population model demonstrated also that the strong increases in some years in the past could not be a result of the reproduction in the area but of immigration from abroad (e.g. from NL; Garthe et al. 2000). A few breeding pairs were found on the river Elbe west of Hamburg in 2002.

In total 4,545 bp of Herring Gull *Larus argentatus* were breeding in DK, which was an increase of more than 500 pairs compared to 2001. On Amrum, SH the number was reduced to 1,462 bp. In the 1990s, the numbers shifted between 2,500 and 3,000. Large parts of the dune valleys are now occupied by Lesser Black-backed Gulls and the Herring Gull settled only in the outside margins on the slopes. Single pairs bred - protected against ground predators - on the top of thatched roofs on Sylt the last years.

In the course of the southwest-ward expansion the Great Black-backed Gull *Larus marinus*

bred with 6 bp on the Terschelling and the first time on Griend in NL.

The main colony of Gullbilled Tern *Gelochelidon nilotica* was found with 41 bp again in the salt marsh Neufeld, SH in the mouth of the river Elbe. In DK, only a single bird was seen a couple of times during the breeding season, no breeding pairs were observed for the first time.

Very high numbers, in some cases all-time highs, were detected of Sandwich Terns *Sterna sandvicensis* on the uninhabited islands Hallig Norderoog/SH (5,250 bp), in LS on Minsener Oog, (3,068 bp) and Memmert (477 bp) and Griend/NL (10,966 bp). Lower numbers than normal compared to last years were found on Langli/DK and Trischen, SH. Wangerooge, Juist/LS and Scharhörn/HH were completely abandoned.

There were 63 bp of Common Tern *Sterna hirundo* in DK in 2002, which has been the lowest number since 1996. The number of Arctic Tern in total has been rather stable between 1,000 and 1,200 bp in DK since 1996 (2002: 1,062). The largest colony of Common Tern in SH in the mainland-salt marsh Neufeld in the mouth of the river Elbe holds with 1,368 bp a very high stock. On Griend/NL, a large decrease of both species was reported. Probably the number of Arctic Tern was very low all over the Dutch area.

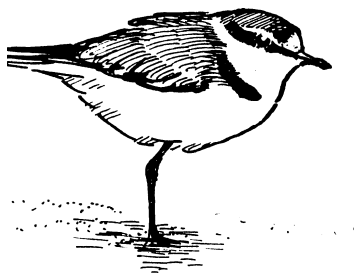
The population of Little Tern seems to be rather stable with little fluctuations in all parts of the Wadden Sea over the last years. But on a smaller scale, consistently a shifting from one area to another is to be noted in periods of about 10 years or even shorter periods. At the moment, e.g., the newest colonies on Hallig Hooge/SH and Wangerooge, LS are definitely increasing, whereas older ones with high stocks in the 1990s like Morsum-Odde on Sylt, SH and Juist/LS are decreasing.

Songbirds

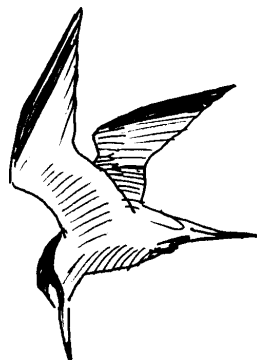
Especially the dune areas on the Wadden Sea islands are important breeding grounds for the Wheatear *Oenanthe oenanthe*. 112 bp were found on Norderney/LS in 2002, on other islands clearly lower numbers and partly dramatic collapses were noticed. On Sylt/SH high densities up to 15 bp/km² were found but the species decreased over the last years. The German inland populations have been decreasing for a longer time (Kieckbusch 2002, Pfeifer 2003). So this species should find more attention in the future.

Conclusion

The Spoonbill has also established itself as breeding species in the northern Wadden Sea/SH over the last years, the Egrets are extending from the south. The Barnacle Goose is established in all parts of the Wadden Sea coming from the north, with larger stocks in SH. Recently not only "meadow-birds" and "beach-birds" but also some coastal waders with increasing populations over long decades, especially the Oystercatcher, begin to show a clear decrease in wider parts of the Wadden Sea. The Avocet-colonies showed small and a large-scale shifting between different areas depending on disturbance and predation. Within the "beach-birds", the Little Tern and Kentish Plover are probably stabilized on a low level and shifting between different more or less suitable areas at the moment. However, the Great Ringed Plover has decrease uninterrupted and dramatically for a few years now. The Gull populations, except for the Herring Gull, are still more or less heavily increasing in most areas. Also the Sandwich Tern seems to be in a good status of conservation. The population of Arctic Tern is still to be seen as stable; for the Common Tern, the situation is not really clear at the moment. Regarding all Gulls and Terns a trend to concentrate more and more in big colonies and – with the exception of the northern river bank of the Elbe mouth – to shift to the islands is visible.



Kentish Plover *Charadrius alexandrinus*
(Drawing: N. Knudsen)



Little Tern *Sterna albifrons*
(Drawing: N. Knudsen)

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