

**BOOMING GULLS IN THE LOW COUNTRIES
DURING THE 20TH CENTURY**
*STERK TOENEMENDE AANTALLEN MEEUWEN IN DE
TWINTIGSTE EEUW IN DE LAGE LANDEN*

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In this final issue of *Sula* a review of the numbers of gulls nesting in The Netherlands and along the Belgian coast during the 20th century will be given. In The Netherlands, eight species of gulls have bred during this century, in Belgium six. In The Netherlands, the total number of gulls increased from a few tens of thousands of breeding pairs early in this century to a maximum of almost 400,000 pairs in the mid 1980s. On the Belgian coast, numbers increased from a few pairs to 9000 pairs in the mid 1980s. Since then, numbers went down to just over 250,000 pairs in The Netherlands and 5000 pairs in Belgium. Throughout the century, the Black-headed Gull *Larus ridibundus* has been the most common species both in The Netherlands and along the Belgian coast. The numerical increase paralleled the explosion of gulls seen elsewhere in the north Atlantic and can be attributed to a combination of protection measures taken during this century and an increase in the availability of food provided by man (fish offal, discards, garbage dumps, land improvement, etc.). In The Netherlands, the recent numerical decline in numbers is attributed to food shortages (Black-headed Gull in Delta area and inland areas, Lesser Black-backed *L. graellsii* and Herring Gull *L. argentatus* in Wadden Sea area, Lesser Black-back only locally) and predation by Red Foxes *Vulpes vulpes* in the dune area of the mainland North Sea coast (all species nesting on this coast). The numerical decline in Belgium is attributed to predation by other gulls. It is expected that recently arrived species will further increase in numbers during the 21st century and that numbers of most other species will stabilise or decrease. For some species, some relief may be expected from plans for a seaward extension of the Port of Rotterdam (Maasvlakte 2) and for an offshore airport off the Dutch coast.

The North Sea dune coast of The Netherlands forms an important breeding area for many species of birds. Of the more than 100 species which regularly nest here, most are terrestrial feeders. Only some tens partly or entirely rely on the marine environment. Gulls form a prominent group among them. They breed in colonies and often feed in groups, and are therefore a conspicuous element of the dunes, tidal flats, beaches and coastal waters of this country.

In this issue of *Sula*, a detailed account of the population development of gulls nesting in The Netherlands during the 20th century will be given. As a bonus, the present situation on the Belgian coast will be presented as well. The results will be presented on both a national and a regional scale. For the purpose

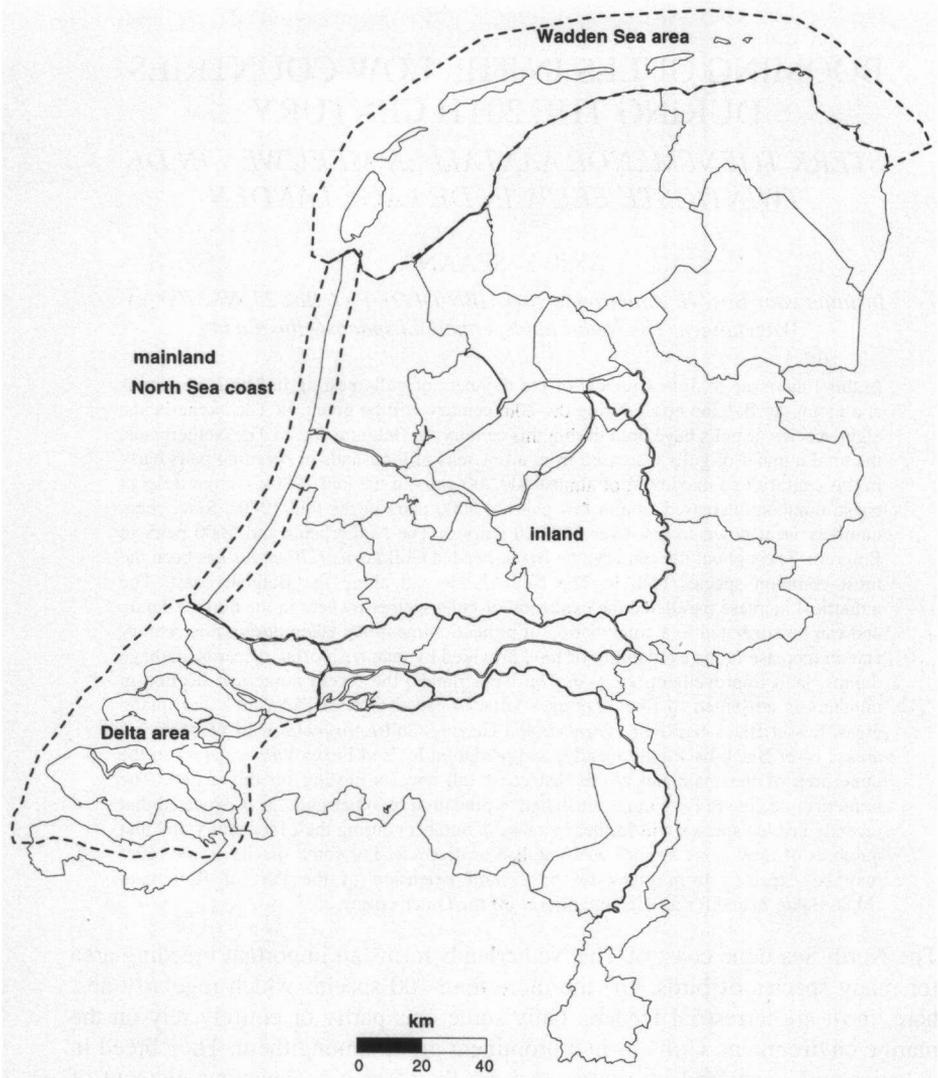


Figure 1. Map of The Netherlands with indication of the four regions into which the country has been divided for describing the regional trend in gull numbers in this issue.

Figuur 1. Kaart van Nederland met indeling van het land in regio's, zoals die in dit themanummer is gebruikt voor de beschrijving van de regionale aantalsontwikkeling van de meeuwen.

of the latter, the Dutch territory is divided into four regions: the Wadden Sea area, the mainland North Sea coast, the Delta area and the interior (Fig. 1). The taxonomy used in this issue follows the recent insights into the species concept in larids (Sangster *et al.* 1999). Numbers presented in this issue may slightly differ from earlier figures published by SOVON Vogelonderzoek Nederland (Co-operating Organizations on Bird-census Work, The Netherlands), the organisation presently responsible for the censuses of colonial nesting birds in The Netherlands, due to additional data recently supplied to SOVON.

Early in the 20th century, gulls were relatively scarce birds in The Netherlands. Since then, the situation has changed markedly. Thus, early in the 20th century, only two species of gulls (Black-headed Gull *Larus ridibundus* and Herring Gull *L. argentatus*) nested here (Albarda 1897; Snouckaert van Schauburg 1908; see also van Dijk 1998 and Spaans 1998b in this issue). At present, eight species do so. In 1908, the Common Gull *L. canus* was the first that could be added to the list, followed by the Lesser Black-backed Gull *L. graellsii* in 1926, the Mediterranean Gull *L. melanocephalus* in 1933-35 (from 1970 regularly breeding), the Little Gull *L. minutus* in 1942 (*e.g.* Teixeira 1979; see also Keijl & Arts 1998, Spaans 1998a, Meininger & Flamant 1998 and Koks 1998, respectively, in this issue), the Yellow-legged Gull *L. michahellis* in 1985 (van Swelm 1998 in this issue) and the Great Black-backed Gull *L. marinus* in 1993 (Vercruijssse & Spaans 1994; see also Koks & Jongenelen 1998 in this issue). The total number of gulls increased from an estimated few tens of thousands of breeding pairs early in this century to a maximum of 370,000 pairs in the mid 1980s (SOVON 1987), after which it fell to just over 250,000 pairs in 1996 (van Dijk *et al.* 1998).

On the Belgian coast, numbers of gulls did not significantly increase before the second half of the century and peaked, just as in The Netherlands, during the mid 1980s, with a total of 9000 breeding pairs (Seys *et al.* 1998 in this issue). Numbers of large gulls did not become significant here until the last 10-15 years, when safe nesting sites became available in the harbour area of Zeebrugge, and gulls in the Dutch Delta area, south-west Netherlands, showed an expansion of their breeding range. The present gull population along the Belgian coast amounts to about 5000 breeding pairs (Seys *et al.* 1998).

The numerical increase in gulls in the Low Countries parallels that elsewhere in the north Atlantic during the 20th century, when many gull species expanded their range and increased their numbers (del Hoyo *et al.* 1996). The revival of gulls was most pronounced in areas with great human activities, because man had a detrimental effect on gull and other seabird populations until the 20th century. Until that time, eggs and chicks of most seabirds were heavily collected for food, while adults of many seabirds were shot for either food or fun (*e.g.* Fisher & Lockley 1954, Furness & Monaghan 1987, Swennen 1991).



Herring Gulls *Larus argentatus*, Horsmeertjes, Texel
Zilvermeeuwen, Horsmeertjes, Texel (C.J. Camphuysen)

At the end of the 19th century, the public opinion slowly changed and resulted in several protective measures in favour of seabirds. For the Dutch bird protection society Vogelbescherming Nederland, founded in 1899, the killing of seabirds, in particular terns for the millinery trade, was one of the main reasons for its foundation. Shortly after the introduction of general bird protection legislation measures in the north Atlantic, seabirds increased in numbers almost everywhere. This held for both food specialists such as terns and generalists such as most gull species. It is therefore generally accepted that the revival of gulls and other seabirds mainly resulted from protection measures against human persecution (*e.g.* Camphuysen & Garthe 1999). But gulls had an additional advantage.

Most gulls are adaptable, opportunistic generalists that may exploit a wide variety of foods ranging from all kinds of natural prey to food that directly

or indirectly becomes available to gulls through human activities. Thus, gulls regularly eat fish offal and discards collected behind fishing boats, offal taken from e.g. refuse dumps and factory disposal sites, waste picked up from sewage farms, sewage outfalls and disposal sites of human faeces, and spoiled grain from cattle, pig and chicken farms. Moreover, gulls regularly feed in pastures and arable farmland (reviews for European gulls in Glutz von Blotzheim & Bauer 1982, Cramp & Simmons 1983).

The quantity of food that man makes available to gulls significantly increased during the present century leading to much better feeding opportunities for gulls than before. It is therefore accepted that most gull populations could increase to much higher levels than otherwise would have been possible. There are several studies presented in this issue that indicate that during food shortages gull populations indeed stabilise or even decrease.

The contributions in this *Sula* issue further demonstrate that in both countries present numbers of gulls are lower than 10 years ago. In The Netherlands, this holds in particular for Black-headed, Common and Herring Gull. The numerical decline was most severe along the mainland North Sea coast, where numbers of Lesser Black-backed Gulls, in contrast to the situation elsewhere, also fell to a very low level since the mid 1980s. The collapse in gull numbers in this area resulted from a persistent and heavy predation of eggs and chicks by Red Foxes *Vulpes vulpes*, which re-appeared here from the late 1960s onwards. The numerical decline of Black-headed and Herring Gull elsewhere in the country has been caused by local food shortages. The decline in Black-headed numbers on the Belgian coast has been attributed to predation by large gulls.

How will the numbers of gulls evolve in the 21st century? On the Belgian coast, the strength of the populations of gulls will be determined largely by the available area of suitable breeding habitat in the near future (Seys *et al.* 1998). In The Netherlands, numbers of gulls of species that started breeding and successfully established colonies during the last 20-30 years will probably further increase for the time being. There are in any way no indications that numbers of Mediterranean Gull, Yellow-legged Gull and Great Black-backed Gull are stabilising, although the situation is less clear for the Yellow-legged Gull than for the two other species. The occurrence of the Little Gull as a breeding bird is rather erratic, the future for this species remains therefore uncertain. Total numbers of Lesser Black-backed Gulls are still increasing, but there are indications that the species may reach its ceiling in the near future (Spaans 1998a). Black-headed, Common and Herring Gull had their highest numbers during the mid 1980s. Since then, numbers went down. If environmental conditions remain the same, a further numerical decline in these species is realistic. For Herring and Lesser Black-backed Gulls, a further

colonisation of the interior may, however, possibly lead to higher national numbers than at present, because reproductive success in undisturbed inland colonies is high. However, urban nesting large gulls are often in conflict with the public. As a result, control measures are regularly taken against these gulls. Plans for a seaward extension of the industrial area of the Port of Rotterdam (Maasvlakte 2) and for an offshore airport off the Dutch coast may therefore perhaps give more relief to the two species. So, it may be expected that gull numbers will not stabilise soon. In the 21st century, censuses of nesting gulls in the Low Countries, coupled with ongoing studies on population dynamics, dispersal and food and feeding habits, will therefore as needed as in the past. Who should be very sorry for this conclusion?

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SAMENVATTING

In dit nummer van Sula wordt een overzicht gegeven van de ontwikkeling van de broedvogelstand van meeuwen in Nederland en langs de kust van België in de loop van de twintigste eeuw. In beide landen is de meeuwenstand explosief toegenomen. In de loop van de eeuw hebben verscheidene soorten zich in beide landen voor het eerst of opnieuw gevestigd. In het begin van de eeuw broedden in Nederland alleen Kokmeeuw Larus ridibundus en Zilvermeeuw L. argentatus. Langs de Belgische kust vestigde zich pas in de tweede helft van de eeuw meeuwen als vaste broedvogel. In Nederland broeden thans acht soorten meeuwen; in België zijn deze eeuw zes meeuwensoorten als broedvogel vastgesteld. In Nederland nam de totale meeuwenstand toe van hooguit enkele tienduizenden paren aan het begin van deze eeuw tot bijna 400.000 paren in het midden van de jaren tachtig. Ook langs de Belgische kust piekte in die periode de meeuwenstand (9000 paren). Sindsdien is in beide landen de stand teruggelopen (Nederland: Kokmeeuw, Stormmeeuw L. canus en Zilvermeeuw; kust België: Kokmeeuw). De explosieve toename van de meeuwen in de Lage Landen in de loop van deze eeuw staat niet op zichzelf, maar is in het gehele Noord-Atlantische gebied vastgesteld. Als belangrijkste factoren voor de aantalstoename worden genoemd de beschermende maatregelen die in het begin van de eeuw voor meeuwen zijn genomen (wettelijke bescherming, stichten van reservaten), gekoppeld aan een toename van de hoeveelheid voedsel en de voedselmogelijkheden die de meeuwen dankzij de mens ter beschikking staan (landverbetering, eutrofiëring oppervlaktewater, vuilstortplaatsen, visafval op zee, etc.). In België zal de verdere ontwikkeling vooral worden bepaald door de beschikbare oppervlakte broedbiotoop langs de kust. Verwacht wordt dat in Nederland Zwartkopmeeuw L. melanocephalus, Geelpootmeeuw L. michahellis en Grote Mantelmeeuw L. marinus in de komende eeuw verder in aantal zullen toenemen, de Dwergmeeuw L. minutus

erratisch in voorkomen zal blijven, het aantal Kleine Mantelmeeuwen L. graellsii op vrij korte termijn zal stabiliseren en de afname bij de andere soorten zich nog zal voortzetten. Voor Kleine Mantelmeeuw en Zilvermeeuw is er misschien hoop voor enig herstel als plannen om de Maasvlakte verder zeewaarts uit te breiden (Maasvlakte 2) en een vliegveld in zee aan te leggen, worden geëffectueerd. In ieder geval lijkt het er niet op dat van de meeste soorten de aantallen spoedig zullen zijn gestabiliseerd. Monitoring van de broedvogelaantallen, vergezeld van voortgezet onderzoek naar reproductiesucces, voedselkeuze en uitwisseling tussen kolonies, blijft dus ook in de eenentwintigste eeuw noodzakelijk. Maar wie zal daar rouwig om zijn?

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Mediterranean Gulls *Larus melanocephalus*, Delfzijl 1996
Zwartkopmeeuwen, Delfzijl 1996 (H. Hut)