

Guidelines for counting migrating seabirds

Compiled for Skagen Bird Observatory by Simon S. Christiansen, Hans Christophersen and Knud Pedersen

English version by Mogens Damm and Hanne & Jens Eriksen



Seabird counting at Verdens Ende 3 during a storm and high tide, September 2018. Photo: Knud Pedersen



Counting at Nordstrand, May 2015. Photo: Knud Pedersen

Introduction

These guidelines describe how counting migrating seabirds for Skagen Bird Observatory should be carried out. The guidelines apply especially to the birdwatchers of the Bird Observatory, but also to other volunteers who want to contribute to the counting of migrating seabirds for Skagen Bird Observatory.

An appendix with special guidelines for specific species is added.

Time of the year

In principle the counting of migrating seabirds takes place all year round. Daily counts by the birdwatchers employed by Skagen Bird Observatory are carried out during the standard periods from March 1 to June 15 and July 15 to November 30. Counts outside these periods are named extra periods.

”Havfugletælling” is selected under ”Metode” in DOFbasen when focus is on migration over the sea, which generally is the case during the autumn season. On days when focus is on counting inland migration as well as migration over the sea, ”Trækfugletælling” is selected under ”Metode” in DOFbasen, this often being the case during spring.

Time of the day

The standard time for the daily counting is from sunrise and the next four hours. If considerable migration is still going on after the four hours of standard time, efforts should be made to continue the counting as long as it is found necessary in relation to the intensity of the migration.

In some cases, bad weather (precipitation, fog) may result in cancellation of observations in advance or interruption before the end of the standard time. On these days migration observers must still set up a tour in DOFbasen with weather conditions recorded and with notes stating why the migration counting was not carried out or discontinued. To get the tour included in the extract, though, you need to register 0 Herring Gull.

In case of very weak or no migration at all, counting may be interrupted before the end of standard time and perhaps replaced by counts of birds resting in the area. If so, do not stop until the current hour's count has been completed.

Also, migration counting may be interrupted in case a very rare bird is reported in the nearby area. Every interruption of the standard counting must be indicated in DOFbasen in the tour notes for the day.

What must be counted

In principle all species that have been observed during the migration counting should be recorded, migrating birds as well as resting birds. The counting of certain species may be omitted – see appendix.

How to count

For all migrating birds, species, number and the direction of migration should be noted. Age, sex, and type of plumage must be stated for certain species when observation conditions allow. The competence of the birdwatchers is indeed key to a reliable identification of the species and a reliable determination of age, sex and plumage. A sense of self-criticism is an important quality here.

As for species that occur in large numbers the use of click counters is of great practical help and results in a more accurate coverage of the migration movements as counting is not interrupted by frequent writings in the notebook. Birdwatchers are recommended to divide the most numerous species among themselves.

From the time when the counting begins (at sunrise) you should count for one hour, say from 06.05 a.m. to 07.05 a.m. and then again from 07.05 a.m. to 08.05 a.m. and so on. For each hour of counting the result is entered into DOFbasen for each individual species indicating number, direction of migration, and if possible, age, sex and plumage. All counts are to be carried out as exact and continuous counts of the individual birds. Counting by smaller intervals, extrapolating to a full hour, is not used by Skagen Bird Observatory when counting seabirds.

Resting birds are counted as required, and normally, for the most numerous species, you only register the largest number seen during any hour being counted. Less numerous species are only registered during the hour with the highest number, when you deem these to be the same individuals.

At input into DOFbasen the term "overflyvende" under "Primær adfærd" is not to be used as it does not account for whether the birds were resting or migrating.

Observations of unusual species are announced as quickly as possible via the Zello app – Skagen Birding. Rare birds that other observers inform you about, but that they themselves have not reported on Skagen Birding, must equally be announced on the Zello app. This ensures that everyone will receive the information.

Rare birds should always be registered in DOFbasen with as much detailed information as possible, exact time of observation and further explanation in the comments field. Very rare birds (so-called SU-species) should be reported separately to the Danish Birds Rarities Committee (Sjældenhedsudvalget (SU)).

Avoid double counting

Typically, counting migrating seabirds requires a birdwatcher to systematically scan the sea using a telescope or a pair of binoculars to find the birds. From an observation post, for instance Verdens Ende 3, the sea is typically scanned from left to right (from the Skagerrak towards the Kattegat) and the migrating birds are registered. After a suitable distance has been scanned you start a new scanning from left to right and so on. In this connection you should pay attention to not registering the same birds again when starting a new scan. As an example it is important to make sure that a migrating Great Skua or a flock of Razorbills that have been counted once, should not be counted again during the next scan.

Equipment for counting migrating birds

The following equipment is compulsory when counting migrating birds: a pair of binoculars, telescope on a solid tripod, notebook, click counters (you may need many click counters as often, you must count birds in two different directions of migration), folding chair and warm windproof clothes during the cold season. Furthermore, you need a smartphone with the Zello app with the group Skagen Birding installed. Photo equipment is also recommended for documentation of rare species, for example.



Birdwatcher with suitable optical equipment for counting seabirds, Grenen, August 2017. Photo: Knud Pedersen

Observation posts

Counting of seabirds is best carried out from the following localities:

Grenen – Verdens Ende 3

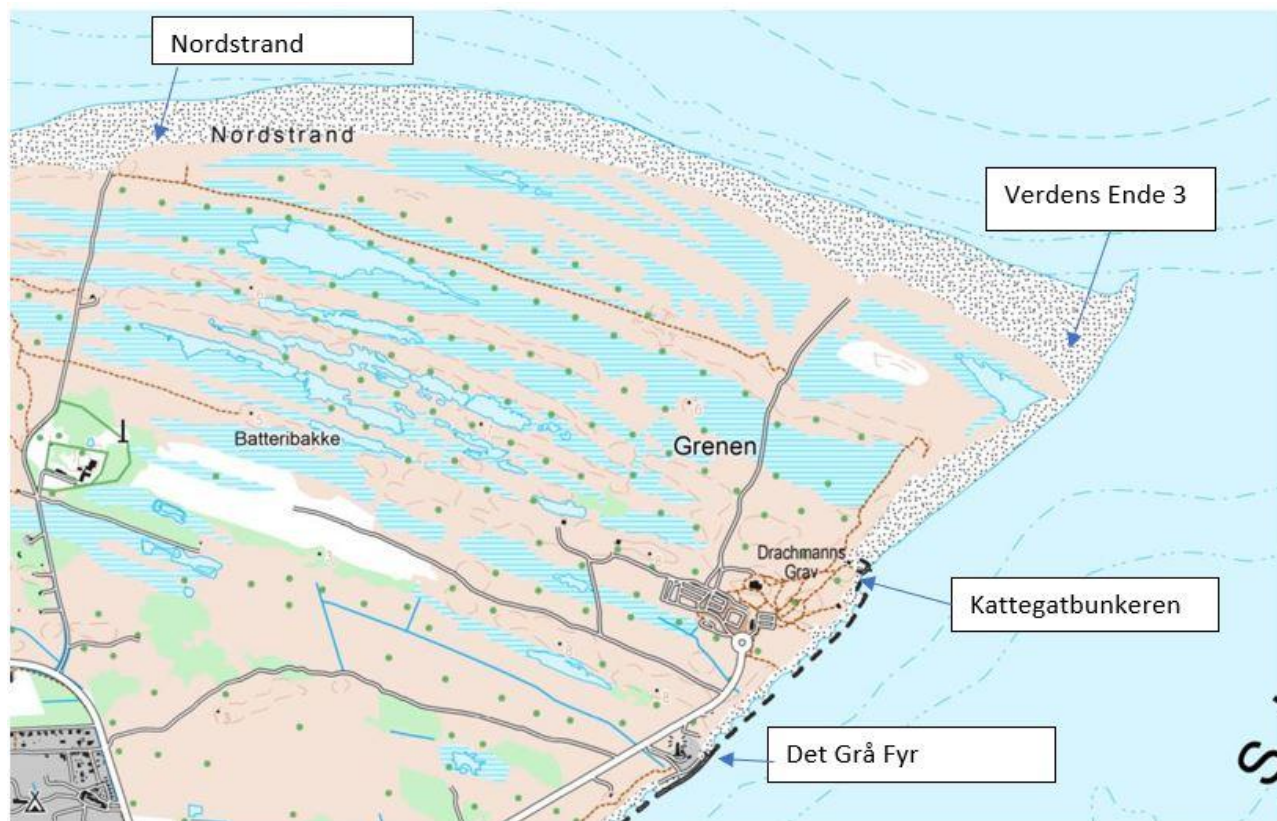
The outermost sand dunes closest to the Kattegat and the Skagerrak. Suitable all year round under most wind conditions. From here you have a good view of both the Kattegat and the Skagerrak. You are close to the sea and the seabirds. Furthermore you can easily monitor the wide foreshore in search of resting waders, gulls and terns. Please note that the landscape of Grenen is rather dynamic and the area of land is growing towards the northeast all the time. New rows of sand dunes emerge and in the course of time it will be necessary to place the observation spot in the new dune rows. So, in the future there will be a Verdens Ende 4 and 5 etc.

Kattegatbunker

When strong winds blow from directions between north and east and make it impossible to find shelter in the dunes at Verdens Ende 3, the Kattegatbunker with its possibilities for shelter is a good alternative as an observation spot for seabirds. Under these wind conditions, many seabirds will migrate along the Kattegat coast and thus pass close by the Kattegatbunker when heading north.

Nordstrand

When the wind blows from directions between northeast and south, this is the best location in spring. In addition to the migration of raptors and passerines, the spring migration of divers, ducks, skuas, gulls, terns and others is well observed from here. In the autumn from the middle of October to December, equally, Nordstrand is good in wind directions between northeast and south for ducks, auks, divers and others. The birds are often seen passing close to the shore.



Map showing the most important observation posts and Det Grå Fyr (The Grey Lighthouse) with Skagen Bird Observatory.

Appendix

Special conditions apply to the counting of certain seabird species:



Migrating Kittiwakes at Grenen, December 2015. Photo: Knud Pedersen

Ducks

The Common Scoter is one of the most numerous seabirds to be observed all year when counting seabirds. In spring from late March to early May, regular eastbound migration takes place from the wintering areas in the Skagerrak and the North Sea to the breeding grounds towards the northeast. Periodically, during the rest of the year, large concentrations of resting birds are seen on the sea. During periods of strong winds where the birds are likely to drift, resting flocks of Common Scoters may return back to the preferred foraging areas. This type of migration, also referred to as compensatory movement, is greatest during the early hours of the morning. During spring, migrating Common Eiders must be specified by gender and the number of males and females entered separately.

Divers

The Red-throated Diver is by far the most numerous diver all year round comprising 99% of divers identified, followed by Black-throated Diver, Great Northern Diver and White-billed Diver.

The spring migration of Red-throated Divers in March to May can involve 15,000-20,000 birds in the best years. When reporting observations of Black-throated Diver, Great Northern Diver and White-billed Diver, age and plumage should always be specified in DOFbasen. The exact time of observations of Great Northern Diver and White-billed Diver must also be stated.

Gannet

Gannets often appear in great numbers while counting seabirds. Their movements can be described as foraging movement or as compensatory movement.

Foraging movement is seen as movements from resting areas in the Kattegat or Skagerrak to the foraging area near Skagen Rev. Typically, birds resting on the water disperse from the foraging area at Skagen Rev during the day or the night. In the early morning hours the birds migrate back to the foraging area resulting in intensive foraging of birds circulating in the area. Thereafter the birds often sit on the water or scatter again and are not so visible anymore. It is difficult to keep track of the foraging movement and there is a major risk of counting the same birds several times. This calls for experience and a critical sense to be able to evaluate the real number of birds in this movement.

Resting and foraging birds can be counted as the greatest number in each hour of observation or simply, the greatest number seen in one count throughout the whole observation period. The hour with the largest number of resting/foraging birds is the one to be entered into DOFbasen. The hourly number of resting/foraging birds can be specified for each hour under "Noter". Through distribution per hour, the time rhythm in these movements can be obtained.

Compensatory movement after days of strong westerly winds is normally the largest migration to be seen. On the best days several thousand birds, which after drifting into the inner Danish waters, flying back to the Skagerrak and the North Sea. The birds pass by Grenen in small to large flocks – flying both high and low towards the northwest. This type of movement is relatively easy to count in contrast to foraging movement.

Normally, age groups based on types of plumage should not be indicated when counting Gannets. However, this does not apply to 1cy-birds in the autumn, partly because 1cy-birds are relatively few in numbers (<1%) and partly because we want to register the phenology of these birds (numbers, arrival and departure).



Flock of Gannets feeding at Grenen, October 2012. Photo: Knud Pedersen

Fulmar

Considerable numbers of Fulmars can be seen in the autumn, mostly in connection with strong winds and gales from westerly directions. In spring, in particular, quite a few birds are seen following fishing vessels from the Skagerrak into the Kattegat.

Attention is called to the fact that Fulmars driven by the wind often migrate back into the Skagerrak and the North Sea before sunrise. If these are to be counted observations must start half an hour before sunrise. Dark forms of Fulmar are seen on and off – especially in winter. It is important that these birds are noted individually in DOFbasen.

Skuas (Jaegers)

With regard to Arctic Skua, Pomarine Skua and Long-tailed Skua it is standard procedure to specify age and plumage, if observation conditions allow. For 3cy+ birds of Arctic Skua and Pomarine Skua it should be stated whether they are dark or light form. Light and dark types of juvenile plumage can be determined and should be stated. Great Skuas can be identified as juveniles or older birds if observation conditions are favorable.

Gulls

It is not standard requirement that all gulls that rest or migrate past the observation post are counted. Kittiwake is a focus species and migrating and resting Kittiwakes must always be counted. If possible, age based on plumage must be stated (1cy, 2cy and 2cy+). If there is major regular migration or you see numerous resting Black-headed Gulls and Common Gulls these must be counted and entered into DOFbasen.

Species that are rare or scarce (Glaucous Gull, Iceland Gull, Caspian Gull, Mediterranean Gull, Little Gull and others) – resting or migrating – are recorded in the usual manner, and the age of these birds must always be stated.

Many Great Black-backs, Lesser Black-backs, Herring Gulls and Kittiwakes that are resting on the beach are colour-marked. If possible, the codes should be read, and the results passed on to the Bird Ringing Centre at <http://www.ringmerking.no/cr/> or <http://www.fuglering.dk/>

Terns

All terns are counted as either resting or migrating. During spring migration, movements are often seen of Common Terns in particular. Confusion between Common Terns and Arctic Terns is significant in spring when the wing markings that distinguish the two species are less conspicuous. If you are unsure of the identification, observations are entered as H/F tern (either Common or Arctic Tern.)

After the breeding season large flocks of foraging and resting Common Terns and Sandwich Terns gather on Grenen in July-August. It is important to count the resting birds, preferably with a distinction of juvenile and adult birds. Many terns are ringed and some also fitted with colour rings. If possible, take the reading and report to <http://www.fuglering.dk/>

Auks

Razorbills and Guillemots often occur in considerable numbers from October until February in the waters around Skagen and often leave their marks on the seabird counts at this time of the year. Significant migration movements of Razorbills from the breeding grounds on the British Isles to the wintering areas in the Kattegat are seen each year in the period from mid-October to mid-November. The return migration back to the breeding grounds in February to March fluctuates from year to year, but major days of migration do occur at regular intervals.

Guillemots also migrate in considerable numbers to spend winter in the Skagerrak and the Kattegat in October or November, but generally they peak a little later than Razorbills. Similarly the return migration seen in February to March may vary. Compensatory movement of wintering birds in the Skagerrak and the Kattegat is frequently seen during the winter months.

Identification of Razorbills and Guillemots from quite a distance during their fast flight over the sea can be a challenge to all seabird observers. It requires great experience with these species and a good telescope to identify them correctly. If you are not certain, the birds should be registered as Guillemot/Razorbill in DOFbasen.

If you see Guillemots in breeding plumage during the period from late October until January, they should be entered separately in DOFbasen. Razorbills only appear in their breeding plumage from February.

Black Guillemots occur at regular intervals, but throughout the year there are just a few. It is often possible to determine the age of Black Guillemots in the field using their wing patterns and in that case their age should be stated in DOFbasen.



Razorbills passing Grenen, October 2015. Photo: Knud Pedersen