



Mapping of seabird colonies on Spitsbergen in 2008

Harald Steen

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Our initial plan was to continue the mapping of the north-eastern part of Svalbard, from Kapp Platen (80° 30'N, 22° 45'E) on Nordaustlandet along the east coast of Nordaustlandet and into the Hinlopen area. Unfortunately, heavy ice on the east side of Spitsbergen denied us access to these areas such that we, instead, mapped the area south from Bellsund (77°45'N 14°19'E) on the west coast and throughout the Storfjorden area. We did not however count the large colonies on Kovalskifjella (77°03'N 16°23'E) and Stellingfjellet (77°06'N, 17°19'E). The cruise started on 20 June and lasted to 20 July. To accommodate the five crew members and provide transport between the colonies, we used *S/Y Arctica*, a 48 ft and 33 t sailing yacht build for sailing in ice-covered waters. We also used two inflatable boats to reach land and speed up movement between colonies in the vicinity of the yacht. A total of 140,917 birds were counted during the cruise (Table 1).

We were able to cover the whole coastline rather well and left few areas unsurveyed. Ice prevented access to Tusenøyane and the northern part of Storfjorden and fog prevented a full, good count of the Ingerborgfjellet and Midterhuken colonies. These are not included in Table 1 and explain the low Brünnich's guillemot and kittiwake counts for the Bellsund region. These colonies will be counted in another year.

Table 1. Number of individual seabirds (in descending order of abundance) counted in the three different regions covered by the colony mapping cruise on Spitsbergen in summer 2008. Note that little auks and two of the largest bird cliffs in Bellsund (Ingerborgfjellet and Midterhuken) and Storfjorden (Kovalskifjella and Stellingfjellet) were not counted.

Species	Bellsund	Hornsund	Storfjorden	Sum
Kittiwake	1478	26,649	24,412	52,539
Brünnich's guillemot	384	8341	43,203	51,928
Fulmar	646	769	24,182	25,597
Common eider	4134	862	170	5166
Black guillemot	42	60	1798	1900
Barnacle goose	799	533	195	1527
Pink-footed goose	3	6	910	919
Arctic tern	320	91	351	762
Glaucous gull	42	152	124	318
Puffin		69	56	125
Common guillemot			51	51
King eider			44	44
Great skua	7	17	2	26
Great black-backed gull	8	4	1	13
Ivory gull			2	2
Brent goose	0	0	0	0
Sum	7863	37,553	95,501	140,917

Due to extremely variable counting effort and uncertain data quality of earlier counts, it is hard to evaluate if the colonies have changed in size. That being said, our impression is that the colonies are in good shape and looks healthy. The rigorous methods (ensuring repeatability) used within the SEAPOP program will in the future allow data-based evaluations of the population status.

Cover photo:

Seabird mapping in eastern Svalbard summer 2008 (© H. Steen).

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Publication series information

SEAPOP Short Report (SSR) is published by the Norwegian Institute for Nature Research (NINA), the Norwegian Polar Institute (NP) and Tromsø University Museum (TMU) as a web-based newsletter presenting individual progress reports and analyses of projects within the *SEAPOP* programme. The individual SSRs have no ISSN/ISBN coding, but the reports for each year will be collated and published in the registered report series *NINA Report* as a *SEAPOP* annual report.

SEAPOP (SEAbird POPulations) is a long-term monitoring and mapping programme for Norwegian seabirds that was established in 2005 and implemented on the full national scale in Norway, Svalbard and adjacent sea areas in 2008. The programme is financed by the Ministry of the Environment, the Ministry of Petroleum and Energy and the Norwegian Oil Industry Association, and aims to provide and maintain the most important base-line knowledge of seabird distribution, demography and ecology needed for an improved management of these marine environments. More info about *SEAPOP* is found on the programme's web site www.seapop.no, including an up-to-date list of associated publications from which all reports can be freely downloaded as pdf documents.

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