

Large colony of Ivory Gulls *Pagophila eburnea* at Domashny Island, Severnaya Zemlya

Grote kolonie Ivoormeeuwen op Domashny Eiland, Severnaya Zemlya

The archipelago of Severnaya Zemlya is located north of Taymyr, Central Siberia. The three largest islands have a size of more than 9000 km² each. There are many small islands, with a length of less than 10 km, such as the islands in the Sedova group (figure 1). The climate can be defined as maritime high-arctic, with very little precipitation throughout the year. Most of the year, the seas around the archipelago are covered with solid ice, though some polynyas (areas of open water in ice-covered sea) to the north and to the south of the islands occur. Severnaya Zemlya was discovered in 1913 by Vilkistki and first described by the geologist Urvantsev (1935), who worked in the Sedov archipelago from 1930 to 1932. Demme (1934) worked in the

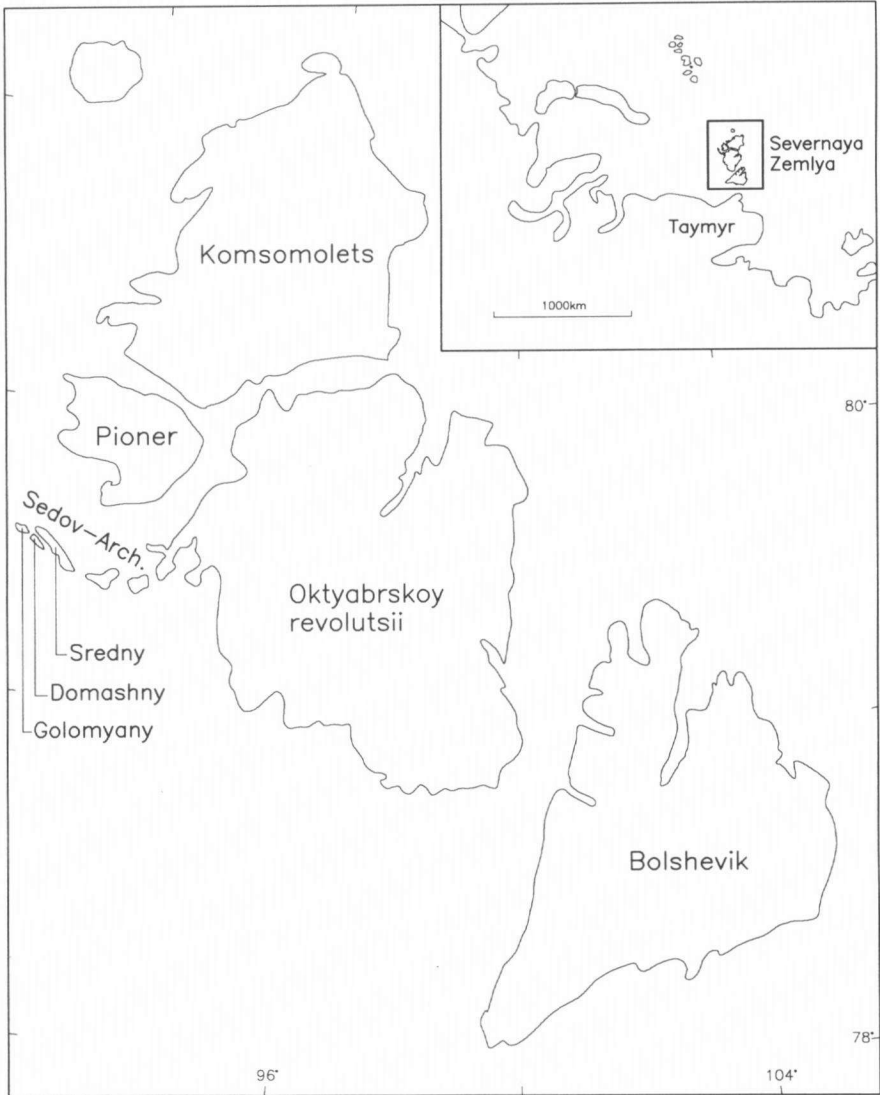


Figure 1. Severnaya Zemlya archipelago with the position of Domashny Island.
Figuur 1. Severnaya Zemlya archipel met de ligging van Domashny Eiland.

same area from 1932 to 1934. From 1936 until 1954 there was a meteorological station on Domashny and from 1934 until today there is one on Golomyany. These stations also carried out some ornithological programmes (Uspenski 1969). The ornithofauna is relatively poor, with only 16 breeding species, among which 11 species of seabirds (own observations 1992, 1993). On 7 August 1992, JdK flew across Sredny and Golomyany by helicopter during a survey organised by the Institute of Nature Protection and Nature Reserves in Moscow. On 14 and 15 July 1993, we made landings at Sredny and Domashny, during a voyage organised by the Plancius Foundation (Amsterdam). From 22-24 July 1993, AV worked on Domashny.

In the 1930s, the Sedov archipelago had some large colonies of Ivory Gulls *Pagophila eburnea*, all of them on flat ground. In 1931, two colonies, one of which with *ca.* 100 nests, were found on Golomyany (Ushakov 1951). In July 1932 this colony held several thousands of birds and nests with eggs and chicks (Urvantsev 1935). In 1939, *ca.* 300 eggs were collected in this colony (Kharitonovitch 1940). On nearby Sredny, 25 nests were found in 1932 (Demme 1934). On Domashny, nesting was reported in 1933 (when dogs of the polar station consumed all eggs), in 1948, 1949 and in 1951 (data in Arctic and Antarctic Institute, St. Petersburg).

On 7 August 1992, when we flew over Sredny and Golomyany, which both have large military bases, we did not see breeding Ivory Gulls, nor did we see any when we surveyed Sredny on 14 July 1993. On 15 July 1993, however, we found a colony of about 700 nesting pairs on the southeastern tip of Domashny, with one- and two-egg clutches. About 30% of the pairs had young. On 22 July, *ca.* 70% of the pairs had young and the mortality among young birds of about one week old was estimated at 25%. At a distance of *ca.* 2 km from this colony, four more colonies (that had been in use in previous years) were found. Colonies of Ivory Gulls of less than 100 pairs each, mostly on cliff faces and totalling less than 1000 pairs were found all over the Severnaya Zemlya archipelago (own observations 1992, 1993). The colonies described by Urvantsev (1935) on Golomyany and those found by us on Domashny, are the largest colonies ever reported in the Russian arctic and probably in the world. Presumably, the human impact on Golomyany and Sredny, with heavy air and ground traffic, made the nesting Ivory Gulls disappear from these islands and establish a large colony on Domashny, which had no inhabited base after 1954. Apparently, the populations of Ivory Gull colonies on flat land easily move from one site to another (Volkov & Pridatko 1993).

Samenvatting Op 15 juli 1993 werd aan de zuidoostelijk zijde van Domashny Eiland, Severnaya Zemlya (Noordland) een kolonie van ongeveer 700 broedparen Ivoormeeuwen *Pagophila eburnea* aangetroffen. De kolonie was gevestigd op de vlakke toendra en de nesten bevatten één- en tweelegsels. In ongeveer 30% van de nesten bevonden zich kuikens. Op 22 juli had 70% van de paren een nest met jongen en de mortaliteit onder kuikens van ongeveer een week oud was ongeveer 25%. Op een afstand van ongeveer 2 km van deze kolonie bevonden zich vier verlaten kolonies. In de rest van de archipel werden minder dan 1000 broedparen van Ivoormeeuwen aangetroffen, in verspreide kleine kolonies en meestal op kliffen. Het artikel geeft een overzicht van eerdere meldingen van grote kolonies Ivoormeeuwen in deze archipel. Geconcludeerd wordt, dat de kolonie beschreven door Urvantsev (1935) voor Golomyany ('enkele duizenden vogels met nesten met eieren en jongen' in juli 1932) en de nu gevonden kolonie op Domashny, de grootste kolonies Ivoormeeuwen zijn in het Russische arctische gebied, en waarschijnlijk in de hele wereld, die ooit zijn gerapporteerd.

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