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Background

This document presents the results of the grey seal censuses carried out in the Baltic Sea in 2020, summarized by researchers from Denmark, Estonia, Finland, Germany, Poland, Russia and Sweden.

Action requested

The Meeting is invited to take note of the information.

Baltic grey seal censuses in 2020

Seal researchers from Denmark, Estonia, Finland, Germany, Poland, Russia and Sweden have summarized the results of the grey seal censuses carried out in the Baltic Sea in 2020.

The censuses covered the main distribution area of the grey seal in the Baltic Sea. Censuses were performed during a period from May 25 to June 6 and the counts were used to construct an international summary of the whole sea area.

Censuses are carried out during the time of the year, when grey seals are hauling out on land in maximum numbers due to moult. The seals were counted from photographs taken during aerial censuses or counted from land or boat (Germany).

Synchrony is important for censuses, especially in the core area of the Baltic grey seal. Today, all censuses are conducted repeatedly, where possible. Most areas are counted repeatedly during the census period and the largest results per sea area are summed up to total counted number for the whole Baltic. The maximum result for the Archipelago of Central Sweden is from **27nd of May**. For the Bothnian Sea, the result is from 295th of May in Sweden **and 1th of June in Finland**. Results from **South-Western Finland** from **1th of June** and **Estonia** are from **27th of May**. The result from the Gulf of Finland is from **25th of May in Finland, 29th of May in Estonia and 2th of June in Russia**. **For the Quark 27th May** (Finland) and **29th May** (Sweden). **For the southernmost sites of Sweden and Denmark from 26th of May**. **Grey seals in the Russian side of Gulf of Finland were successfully surveyd in 2020**. The recent census contributed the considerable number grey seals' abundance to named area what was earlier partly unknown.

It should be noted that all seals are not hauling-out at the same time and some animals may have escaped the censuses due to human disturbance.

Census results are presented by sea area. Census results should be understood as a relative index of abundance, which is smaller than the real population size. The essential use of these numbers is to estimate the population trend and use that to serve as guidance for management and conservation of grey seal stocks.

The total number of grey seals counted in 2020 was **40075** individuals. This figure comprises the following values by sea area: the Bothnian Bay and the North Quark **2079**, the Sea of Bothnia **1999**, Finnish Southwestern archipelago including Åland **14757**, Swedish Baltic proper between Gulf of Bothnia and 58°N (along the mainland coast, but without Gotska Sandön) **10534**, Gulf of Finland **2390 (1953 in Russian sea area)**, W Estonia **5284**, (2594 of them in Baltic Proper and 2556 in Gulf of Riga), Swedish Baltic Proper south of 58°N (along the mainland coast, including Gotska Sandön) **1804**, Danish Baltic waters **1088**, Poland **190** and Germany **84**.

Thus, the major part of the grey seal population was concentrated to the Northern part of the Baltic proper during late spring and early summer. It should be noticed that due to active mobility of grey seals outside of the breeding and moulting time, distribution of the grey seal population could be different during other parts of the year.

The total figure of over 40000+ grey seals is above the constant level of the results for last several years. Since 2003, surveys have covered the main haulout distribution and the numbers of counted grey seals have been approximately: 16 000, 17 600, 18 300, 20 700, 22 000, 22 300, 20 400, 23 100, 23 900, 28 300, 29 500, 32 200, 30 300, 30 100, 30 300 in 2017, 38300 in 2019. The counted numbers show an increasing trend over the whole period with a sign of levelling off during last few years. Until an increased result in 2020. In most of the Baltic, weather conditions were favourable for the surveys. It is too early to say from one year if the population is truly increasing again or if the good survey conditions resulted in a larger proportion of animals

seen in the surveys. It still has to be emphasized that the situation during the moulting time does not necessarily reflect the distribution of grey seals at other times of year.

Survey season for 2021 was performed during period of May 25 to June 6.

GREY SEAL NUMBERS IN 2020

	Estonia	Finland	Russia	Denmark	Sweden	Poland	Germany	IN TOTAL
Bothnian Bay and North Quarcken		982			1097			2079
Sea of Bothnia(1)(2)		356			1643			1999
Central Sweden					10,534			10534
SW Finnish archipelago		14,757						14757
Gulf of Finland	134	663	1593					2390
Western Estonia (excl. Gulf of Riga)	2594							2594
Gulf of Riga	2556							2556
Southern Sweden					1804			1804
Denmark				1088				1088
Poland						190		190
Germany							84	84
In total	5284	16758	1593	1088	15078	190	84	40075

1) Sandbäck – Södra Sandbäck in the SE corner of the area, close to SW Finnish archipelago

2) Gräsö-area in Sweden is included into the Sea of Bothnia

* Only seal sanctuaries of the Quarcken