

# Eisbericht Nr. 95 Amtsblatt des BSH

Ja	hrgang 95	Nr. 95	Monday, 11.04.2022	1	1
----	-----------	--------	--------------------	---	---

## Übersicht

In den Schären der Bottenwiek liegt im Norden 40–85 cm dickes Festeis und im Süden 30–55 cm dickes Festeis. Entlang des Festeises im Norden und Nordosten liegt eine 5–25 sm breite Rinne mit sehr lockerem Eis oder offenem Wasser. Auf See treibt 20–70 cm dickes, sehr dichtes, aufgeschobenes und aufgepresstes Eis bis zu den Holmöarna. In Norra Kvarken liegt in den Schären bis zu 50 cm dickes Festeis. Auf See kommt im Norden sehr dichtes und lockeres, 20–60 cm dickes Eis und im Süden offenes Wasser vor. Entlang der Küsten und in den Schären der Bottensee liegt Festeis und im Süden auch morsches Eis; im Schärenmeer und der Ålandsee morsches Eis. Im Finnischen Meerbusen liegt entlang der Nordküste und im Osten bis 45 cm dickes Festeis. Östlich und nördlich von Seskar treibt auf See 15–30 cm dickes Eis und entlang der Südküste bis St. Petersburg sehr lockeres Eis. Im Rigaischen Meerbusen kommt in der Pärnubucht ein schmaler Streifen morsches Festeis vor. In der nördlichen Ostsee und dem Vänern kommt im geschützten Buchten noch vereinzelt morsches Eis vor.

## Overview

In the archipelagos of the Bay of Bothnia, there is 40–85 cm thick fast ice in the north and 30–55 cm thick fast ice in the south. Outside the fast ice in the north and northeast, there is a 5–25 NM wide lead with very open ice or open water. At sea, there is mostly 20–70 cm thick, very close, ridged and rafted ice to Holmöarna. In Norra Kvarken, there is up to 50 cm thick fast ice in the archipelagos. At sea, there is very close or open, 20–60 cm thick ice in the north and open water in the south. Along the coasts and archipelagos of the Sea of Bothnia, there is fast ice and in the south also rotten ice; in the Archipelago Sea and Åland Sea, there is rotten ice. In the Gulf of Finland, there is up to 45 cm thick fast ice along the northern and eastern coast. At sea east and north of Seskar, there is mostly very close 15–30 cm thick ice and along the southern coast to St. Petersburg, there is very open ice. In the Gulf of Riga, a narrow belt of rotten fast ice is present in Pärnu Bay. In the northern Baltic and Lake Vänern, thin rotten ice is still present in some sheltered bays.

## **Bay of Bothnia**

In and outside the northeastern archipelagos, there is 55–85 cm thick fast ice and consolidated ice, reaching out to Kemi-2, Oulu-2 and Johan. In the northwestern archipelagos the fast ice and consolidated ice is 40–70 cm thick. Further out in the north, there is an up to 25 NM wide lead with open water or very open ice and new ice. The lead con-

tinues about 5–10 NM wide along the eastern fast ice edge to Norra Kvarken. With mostly open water and some thicker floes at places. At sea, there is mostly 20–60 cm thick, very close, ridged and rafted ice. Around 64°50'N 22°30'E, there is an area with 50-70 cm thick and ridged very close ice. The ice field is difficult to force in places. In the south-

## Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH) www.bsh.de/eis www.bsh.de/ice

© BSH - Alle Rechte vorbehalten Nachdruck, auch auszugsweise, verboten

## Eisauskünfte / Ice Information

Telefon: +49 (0) 381 4563 -780 Telefax: +49 (0) 381 4563 -949

E-Mail: ice@bsh.de

© BSH - All rights reserved Reproduction in whole or in part prohibited ern Bay of Bothnia, there is 30–50 cm thick fast ice along the Swedish coast and along the eastern coast, there is 30–55 cm thick fast ice or consolidated ice. At sea, there is 20–60 cm thick, very close ice partly ridged and rafted but also cracks

and leads occur. In the southeastern part, there is mostly open ice.

Some new ice formation is possible the coming day and the ice will drift slightly to the east/northeast.

#### **Norra Kvarken**

In the archipelagoes off Vaasa, there is 30–60 cm thick fast ice to about Storhästen. Along the Swedish coast, there is 20–50 cm thick fast ice in the archipelagos. At sea, there is very close, 20–60 cm thick ice north of Holmöarna and open ice east of Holmöarna. Further south is open water with

stripes and patches at places and along the eastern coast. South or Nordvalen it is mostly ice free in the west.

No larger changes are expected the coming day with a weak easterly ice drift.

## Sea of Bothnia

On Ångermanälven, there is 20–50 cm thick very close ice in the upper part and mostly open water in the lower part. In sheltered bays along the western coast, there is 10–35 cm thick fast ice and rotten ice in the south. Along the eastern coast,

there is 20–45 cm fast ice in the inner archipelagos and rotten fast ice in the south. Further out, there is open water in places.

Some ice melt is expected the coming day but else no larger changes.

## Archipelago and Aland Sea

Rotten ice, up to 30 cm thick, is present in the inner archipelagos and sheltered bays of both coasts. At the eastern coast, there is mostly open water on the fairways and in the outer archipela-

Continued ice melt is expected the coming days.

### **Gulf of Finland**

From St. Petersburg up to the dike, there is 25–35 cm thick fast ice but very open drift ice is present in the southern part. In the Bay of Vyborg and the Bjerkesund, there is mostly 15–35 cm thick compact or fast ice and very close ice somewhat further out. At sea east of Seskar and north of 60°00'N, there is 15–30 cm thick, very close ice. Along the southern coast, there is very open ice to

St. Petersburg. Further west is open water. In the archipelagos of the northern coast, there is 10–40 cm thick partly rotting fast ice in the west and 25–60 cm thick fast ice in the east. Further out, there is open water.

Ice melt is expected in the west and in the east some ice melt is expected the coming day. Ice drift will be slightly to the east.

## **Gulf of Riga**

In Moonsund it is mostly ice free. In Pärnu Bay, there is a few kilometre wide belt of rotten fast ice along the northern coast and else open water or

## ice free.

With temperatures above the freezing point, ice melt will continue.

## **Northern Baltic**

In Lake Mälaren, there is mostly open water or it is ice free. Along the Swedish coast, there is partly broken and rotten thin ice in the Stockholm archi-

## is pelago.

The ice will gradually disappear.

## **Swedish Lakes**

Lake Vänern is mostly ice free with rotten ice in a few sheltered places.

Dr. W. Aldenhoff

## **Restrictions to Navigation**

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Finland	Tornio, Kemi and Oulu	4000 dwt	IA	21.03.
	Raahe and Kalajoki	4000 dwt	IA	08.03.
	Kokkola and Pietarsaari	2000 dwt	IA	01.02.
	Vaasa	2000 dwt	I	31.03.
	Hamina	2000 dwt	II	29.03.
Russia	Vyborg	-	Ice 1	30.12.
	Vysotsk	-	Ice 1	01.04.
	Primorsk	-	Ice 1	06.04.
	Ust-Luga	-	Ice 1	04.01.
	St. Petersburg	-	required	31.12.
Sweden	Karlsborg	4000 dwt (2000 t)	IA	30.03.
	Luleå	4000 dwt	IA	19.02.
	Haraholmen and Skelleftehamn	4000 dwt	IA	19.02.
	Holmsund, Rundvik and Husum	2000 dwt	II	07.04.
	Örnsköldsvik	2000 dwt	II	30.03.
	Ångermanälven	2000 dwt	IB	06.01.
	Härnösand	2000 dwt	II	22.12.

## Information of the Icebreaker Services

### Finland/Sweden

The Saimaa Canal is closed for traffic from 30th of January.

The traffic separation schemes in the Quark are temporarily out of use from 15 January 2022.

Vessels bound for Gulf of Bothnia ports in which assistance restrictions apply, shall when passing latitude 60° 00' N report their nationality, name, destination, ETA and speed to ICE INFO on VHF channel 78. This report can also be given directly by telephone to +46 10 492 7600.

Vessels bound for Finnish or Swedish ports with assistance restrictions in the Quark or the Bay of Bothnia shall, 20 nautical miles before Nordvalen Lighthouse (63° 32.15' N 20° 46.60' E), report in accordance with the instructions for winter navigation to Bothnia VTS on VHF channel 67.

## Icebreakers:

OTSO, KONTIO, URHO, POLARIS, SISU, ODEN, FREJ, ALE and YMER assist in the Bay of Bothnia. ZEUS assist in the Quark and in the Sea of Bothnia.

## **Norway**

Hellefjorden (Kragerø): Navigation temporarily closed. (30.03.22)

## Russia

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk.

**Icebreakers:** Several icebreakers assist vessels to the port of Vyborg, Vysotsk, Primorsk, Ust-Luga and St. Petersburg.

## **Baltic Sea Ice Code**

First number:  A <sub>B</sub> Amount and arrangements of sea ice  1 Open water – concentration less than 1/10  2 Very open ice - concentration 1/10 to 3/10  3 Open ice – concentration 4/10 to 6/10  4 Close ice – concentration 7/10 to 8/10  5 Very close ice – concentration 9/10 to 9+/10  6 Compact ice, including consolidated ice – concentration 10/10  7 Fast ice with drift ice outside  8 Fast ice  9 Lead in very close or compact drift ice or along the fast lce edge  / Unable to report	0 1 2 3 4 5 6 7	Second number:  B Stage of ice development  New ice or dark nilas (less than 5 cm thick)  Light nilas (5 - 10 cm thick) or ice rind  Grey ice (10 - 15 cm thick)  Grey-white ice (15 - 30 cm thick)  White ice, first stage (30 - 50 cm thick)  White ice, second stage (50 - 70 cm thick)  Medium first year ice (70 - 120 cm thick)  Ice predominantly thinner than 15 cm with some thicker ice  Ice predominantly grey-white ice (15 - 30 cm) with some thicker ice  Ice predominantly thicker than 30 cm with some thinner ice  No information or unable to report
Third number:  T <sub>B</sub> Topography or form of ice  0 Pancake ice, ice cakes, brash ice – less than 20 m across  1 Small ice floes – 20 to 100 m across  2 Medium ice floes – 100 to 500 m  3 Big ice foes – 500 to 2000 m across  4 Vast or giant ice floes – more than 2000 m across – or level ice  5 Rafted ice  6 Compact slush or shuga, or compacted brash ice  7 Hummocked or ridged ice  8 Thaw holes or many puddles on the ice  9 Rotten ice  7 No information or unable to report	0 1 2 3 4 5 6 7 8 9	Fourth number:  B Navigation conditions in ice Navigation unobscured Navigation difficult or dangerous for wooden vessels without ice sheathing Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessel even with ice sheathing not advisable Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size Icebreaker assistance can only be given to vessels of special ice class and of special size Icebreaker assistance can only be given to vessels after after special permission Navigation temporarily closed Navigation has ceased Inknown

Estonia, 11.04.2022		Sea area ENE of Nordvalen	1326
Paernu, port and bay	7293	Vaskiluoto – Ensten	7446
		Ensten – Vaasa lighthouse	1326
Finland, 11.04.2022		Vaasa lighthouse – Norrskär	1326
Röyttä – Etukari	8646	Uusikaupunki harbour – Kirsta	1100
Etukari – Ristinmatala	8546	Naantali and Turku – Rajakari	1190
Ajos – Ristinmatala	8546	Rajakari – Lövskär	1190
Ristinmatala – Kemi 2	6476	Inkoo a. Kantvik – sea area Porkkala	7291
Kemi 2 – Kemi 1	9226	Valko Harbour – Täktarn	5742
Sea area SW of Kemi 1	2216	Hamina – Suurmusta	7145
Kemi 2 – Ulkokrunni – Virpiniemi	8546	Suurmusta – Merikari	1015
Oulu harbours – Kattilankalla	8546	Merikari – Kaunissaari	0//5
Kattilankalla – Oulu 1	6476		
Sea area SW of Oulu 1	9476	Russian Federation, 11.04.2022	
High Sea N of the latitude of Marjaniemi	9476	Port of St. Petersburg	54/3
Raahe harbour – Heikinkari	8546	St. Petersburg – E-point island Kotlin	54/3
Heikinkari – Raahe lighthouse	9216	E-point Kotlin – long. lighth. Tolbuhkin	53/3
Raahe lighthouse – Nahkiainen	3726	Lighth. Tolbuhkin – lighth. –Šepelevskij	53/2
Latitude Marjaniemi – Ulkokalla, Sea	5476	Lighthouse Šepelevskij – island Sescar	53/2
Rahja harbour – Välimatala	6366	Vyborg, port and bay	84/3
Vaelimatala to line Ulkokalla – Ykskivi	9116	Island Vichrevoj – Island Sommers	53/2
Sea betw. lat. of Ulkokalla –Pietarsaari	5476	Strait Bjerkesund	63/2
Ykspihlaja – Repskär	8846	E-point Bol'šoj Ber'ozovyj – Šepelevskij	52/2
Repskär – Kokkola lighthouse	9716		
Sea area off Kokkola lighthouse	9426	Sweden, 10.04.2022	
Pietarsaari – Kallan	7856	Karlsborg – Malören	6476
Sea area off Kallan	9716	Sea area off Malören	5576
Sea lat. Pietarsaari – NE Nordvalen	3826	Luleå – Björnklack	6476

Björnklack – Farstugrunden	6476
E and SE of Farstugrunden	5356
Sandgrönn fairway	6476
Rödkallen – Norströmsgrund	5556
Haraholmen – Nygrån	6456
Sea area off Nygrån	6456
Skelleftehamn – Gåsören	6456
Sea area off Gåsören	6456
Sea area off Bjuröklubb	5556
NE of Nordvalen	1306
SW of Nordvalen	1302
Western Quark (W of Holmöarna)	5556
Umeå – Väktaren	1306
SE of Väktaren	1306
Örnsköldsvik – Hörnskaten	8446
Hörnskaten – Skagsudde	8446
Ångermanälven north Sandö Bridge	5434
Ångermanälven south Sandö Bridge	1404
Hudiksvallfjärden	8442
Hallstavik – Svartklubben	3392
Köping – Kvicksund	1000
Västerås – Grönsö	1000
Stockholm – Södertälje	1000