

# Eisbericht Nr. 41 Amtsblatt des BSH

Jahrgang 96	Nr. 41	Tuesday, 24.01.2023	1
-------------	--------	---------------------	---

#### Übersicht

In den Schären der Bottenwiek befindet sich bis 45 cm dickes Festeis. Weiter außerhalb treibt im Norden 10–30 cm dickes, sehr dichtes Eis mit festgestampften Eis entlang der Eiskante. In der südlichen Bottenwiek befindet sich in den Buchten dünnes ebenes Eis oder Festeis. In Norra Kvarken liegt bei Vaasa bis 25 cm dickes Festeis. Ansonsten kommt an den Küsten dünnes ebenes Eis vor. In der Bottensee und dem Schärenmeer kommt dünnes, ebenes Eis oder Festeis entlang der Küsten vor. Im Mälarsee liegt dünnes, ebenes Eis oder Neueis. Im Finnischen Meerbusen liegt in den östlichsten Buchten bis 40 cm dickes Festeis oder sehr dichtes Eis. Auf See im Osten kommt Neueis oder dünnes Treibeis vor. In den Schären und Buchten entlang der Küsten kommt im Norden Festeis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–25 cm dickes Festeis in geschützten Buchten und etwas weiter außerhalb Treibeis verschiedener Konzentration.

#### Overview

In the archipelagos of the Bay of Bothnia, there is up to 45 cm thick fast ice. Further out in the north, there is 10–30 cm thick, very close ice with a brash ice barrier along the ice edge. In the southern Bay of Bothnia, there is thin level ice or fast ice in the inner bays. In the Quark, there is up to 25 cm thick fast ice near Vaasa and else thin level ice along the coasts. In the Sea of Bothnia and the Archipelago Sea, there is fast ice or thin level ice along the coasts. In Lake Mälaren, there is thin level ice and new ice. In the Gulf of Finland, there is up to 40 cm thick fast ice or very close ice in the easternmost bays. At sea in the east, there is new ice or thin drifting ice. In the archipelagos and bays along the coasts, there is fast ice in the north. In the northeastern Gulf of Riga, there is 10–25 cm thick fast ice in sheltered bays and drifting ice of varying concentration somewhat further out.

### **Bay of Bothnia**

In the archipelagos of the northern Bay of Bothnia, there is 25–45 cm thick fast ice. Further out, there is a region of 15–35 cm thick, very close ice to about the line Rödkallen – Malören – Oulu5. In the north, the ice is partly rafted or ridged and a jammed brash ice barrier or very close shuga is present along the entire ice edge. New ice is present along the eastern and western ice edge. In

the southern Bay of Bothnia, there is 5–20 cm thick level or fast ice in the archipelagos. Further out, there is thin drifting ice in places.

Stronger south-westerly winds will compress the ice in the northeast. With temperatures above 0°C no ice will form (although some slush formation is possible this night) and even some melt will occur, especially 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

#### The Quark

There is 10–25 cm thick fast ice in the Vaasa archipelago out to Storhästen. Further out, there is very open ice in places. On the Swedish side, there is mostly fast ice in inner bays along the coast. West of Holmöarna, there is very open to

Nr. 41

open drift ice.

With an inflow of warmer air from the southwest, some ice melt may occur, the drift will be towards the northeast.

#### Sea of Bothnia

In the archipelagos along the eastern coast, there is 5–20 cm thick fast ice and in places shuga. Along the western coast, there is thin level ice or new ice in sheltered bays in the south and fast ice

in inner bays in the north. Further out in the north, there is new ice or very open thin ice. On Ångermanälven, there is 10–20 cm thick fast or level ice. The whole Wednesday ice melt is expected.

# Archipelago Sea and Åland Sea

At the eastern coast, there is 3–10 cm fast or level ice in the inner bays and new ice somewhat further

ice. In the western part new ice along the coast. Ice melt is expected.

#### **Northern Baltic**

In Lake Mälaren, 3-10 cm thick level ice is present in the western part and mostly open water in the eastern part. New ice occurs in sheltered places

and along the coast.

Ice melt is expected at least until Thursday.

#### **Gulf of Finland**

From St. Petersburg out to Kotlin there is 20–40 cm thick fast ice, with 10–25 cm thick, very close ice on the fairway. In the bay north of Kotlin, there is 20–30 cm thick fast ice at the coast and 10–20 cm thick very close ice outside. Further out to the lighthouse Šepelevskij, there is very close thin ice and further to Seskar there is very open ice. In the Bay of Vyborg, there is 15–25 cm thick fast ice. Further out, there is 5–15 cm thick, close ice to about the line Kotka – Kotlin. In the Bjerkesund,

there is 10–20 cm thick fast ice with 5–15 cm thick, very close ice at the entrance. Along the northern coast, there is 5–20 cm thick fast ice in the eastern archipelagos with shuga in places at the edge. In the western archipelagos thin ice. New ice is present further out and in places along the southern coast.

The ice will drift towards the northeast and some melting will occur during Wednesday.

## **Gulf of Riga**

In Väinameri, there is 10–25 cm thick fast ice in sheltered bays and open water or very open drift ice on the fairways. In the Bay of Pärnu, there is 10–20 cm thick fast ice and further out to the line south tip of Manilaid – island Sorgu – Suurna Nina,

there is 10–20 cm thick, very close ice. On the fairway from Riga to Kolka, there is open water. With an inflow of warmer air from the southwest, the ice will begin to melt and drift towards the northeast.

# Southeastern Baltic

In the Curonian Lagoon, there is thin ice at a few places.

Ice melt is expected the coming days.

# Skagerrak and Kattegat

Up to 10 cm thick ice or new ice is present in some Norwegian Fjords.

Some ice melt may occur. .

# Swedish Lakes

Thin level ice is present in few sheltered bays in the north of Lake Vänern.

Ice melt is expected the coming day.

Dr. J.Holfort

# **Restrictions to Navigation**

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1 C	23.12.
Finland	Tornio, Kemi and Oulu	2000 dwt	IB	07.01.
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	I	07.01.
	Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo	2000 dwt	II	07.01.
	Loviisa, Kotka and Hamina	2000 dwt	I	24.12.
Sweden	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund, Rundvik, Husum and Örnsköldvik	2000 dwt	II	21.12.
	Angermanälven	2000 dwt	IB	07.01.
	Köping	2000 dwt	IC	07.01.
	Västeras	2000 dwt	IC	07.01.
	Balsta	1300/2000 dwt	IC/II	22.12.

#### **Estonia**

# Icebreakers:

EVA-316 assists in the port of Pärnu.

#### Finland/Sweden

The Saimaa Canal is closed for traffic since 4th January.

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 82. 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:

KONTIO, OTSO, ATLE, YMER and FREJ assist in the Bay of Bothnia. ZEUS assists in the Quark and the Sea of Bothnia. ALE assists in the Quark. CALYPSO assists in the region of Kotka and Hamina.

# 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**

fast

First number:
A <sub>B</sub> Amount and arrangements of sea ice
0 Ice free
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 4/10 to 6/10
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
Ice edge
/ 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
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
I / No information or unable to report

Sea area Nordvalen to W of Norrskär

Second number:

S<sub>B</sub> 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

8 Ice predominantly grey-white ice (15 – 30 cm) with some thicker ice

9 Ice predominantly thicker than 30 cm with some thinner

No information or unable to report

Fourth number:

#### K<sub>B</sub> 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 vessels even with ice sheathing not advisable

3 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

6 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 Unknown

Estonia, 24.01.2023 Vaskiluoto - Ensten 8746 Ensten - Vaasa lighthouse Shipping route from Narva-Jõssuu 1000 2126 Vaasa lighthouse - Norrskär Paernu, port and bay 7385 2126 Kaskinen - Sälgrund 5745 Finland, 24.01.2023 Sea area off Sälgrund 0//5 Pori harb. to line Pori lighth. - Säppi Röyttä – Etukari 8446 2001 Etukari – Ristinmatala 7356 Uusikaupunki harbour – Kirsta 8142 Ajos – Ristinmatala 7356 Naantali and Turku - Rajakari 4041 Ristinmatala - Kemi 2 5356 Koverhar - Hästö Busö 4041 Kemi 2 - Kemi 1 Inkoo a. Kantvik – sea area Porkkala 5356 8145 Kemi 2 – Ulkokrunni – Virpiniemi 7356 Helsinki harbours - Harmaja 4045 Oulu harbours - Kattilankalla 8446 Harmaja - Helsinki lighthouse 0//5 Kattilankalla - Oulu 1 8446 Fairway Helsinki – Porkkala – Rönnskär 0//5 Sea area SW of Oulu 1 Vuosaari harbour – Eestiluoto 0//6 3115 High Sea N of the latitude of Marjaniemi 4746 Eestiluoto – Helsinki lighthouse 0//5 Raahe harbour – Heikinkari 4046 Porvoo harbours – Varlax 5045 Heikinkari – Raahe lighthouse 4046 Varlax – Porvoo lighthouse 0//5 Raahe lighthouse - Nahkiainen 4046 Valko Harbour – Täktarn 8745 Rahja harbour – Välimatala Archipelago fairway Boistö – Glosholm 5045 5146 Vaelimatala to line Ulkokalla – Ykskivi 2126 Archipelago fairway Glosholm-Helsinki 5045 Sea betw. lat. of Ulkokalla -Pietarsaari 2126 Kotka - Viikari 8745 Ykspihlaja - Repskär 5146 Viikari - Orrengrund 5045 Repskär – Kokkola lighthouse Orrengrund - Tiiskeri 2126 5045 Sea area off Kokkola lighthouse Tiiskeri – Kalbådagrund 0//5 2126 Pietarsaari - Kallan Hamina – Suurmusta 8745 5146 Sea area off Kallan 2126 Suurmusta – Merikari 8745 Sea lat. Pietarsaari - NE Nordvalen 2126 Merikari – Kaunissaari 5045 Sea area ENE of Nordvalen 2126

3036

# Latvia , 24.01.2023

Port of Riga	1000
Riga to the Cape of Mersrags, fairway	1000
Mersrags to Irben Strait, fairway	1000

# Russian Federation , 24.01.2023

Port of St. Petersburg	83/3
St. Petersburg – E-point island Kotlin	53/2
E-point Kotlin – long. lighth. Tolbuhkin	2202
Lighth. Tolbuhkin – lighth. –Šepelevskij	2201
Lighthouse Šepelevskij – island Sescar	21/1
Island Sescar – Island Sommers	31/2
Vyborg, port and bay	83/3
Island Vichrevoj – Island Sommers	42/2
Strait Bjerkesund	82/2
F-point Bol'šoj Ber'ozovyj – Šepelevskij	51/2

Sweden , 24.01.2023	
Karlsborg – Malören	8446
Sea area off Malören	5366
Luleå – Björnklack	8446
Björnklack – Farstugrunden	4336
E and SE of Farstugrunden	4046
Sandgrönn fairway	8446
Rödkallen – Norströmsgrund	5376
Haraholmen – Nygrån	8346
Sea area off Nygrån	4046
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	4046
Sea area off Bjuröklubb	4046
Western Quark (W of Holmöarna)	3026
Umeå – Väktaren	8346
SE of Väktaren	3026
Fairway to Husum	4046
Örnsköldsvik – Hörnskaten	8246
Hörnskaten – Skagsudde	4046
Sea area off Skagsudde	4046
Fairway W of Ulvöarna	4046
Sea area E of Ulvöarna	4046
Ångermanälven north Sandö Bridge	8344
Ångermanälven south Sandö Bridge	8344
Härnösand – Härnön	2024
Sea area off Härnö	2024
Sundsvall – Draghällan	8242
Draghällan – Åstholmsudde	4041
Off Åstholmsudde and Brämön	4041
Hudiksvallfjärden	5242
Iggesund – Agö Sandarne – Hällgrund	5242
	5142
Ljusnefjärden – Storjungfrun	5142
Gävle – Eggegrund	5142
Öregrundsgrepen	4041
Hallstavik – Svartklubben	5142
Köping – Kvicksund	5144
Västerås – Grönsö	5144
Grönsö – Södertälje	1004
Stockholm – Södertälje	1004
Fairway to Karlstad	5142