

# Eisbericht Nr. 37 Amtsblatt des BSH

 Jahrgang 96
 Nr. 37
 Wednesday, 18.01.2023
 1

# Übersicht

In den Schären der Bottenwiek befindet sich bis 40 cm dickes Festeis. Weiter außerhalb treibt im Norden 10–30 cm dickes, sehr dichtes Eis mit festgestampften Eis an 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. 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 40 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. 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 20–40 cm thick fast ice. Further out, there is a region of 15–30 cm thick, very close ice to about the line Rödkallen – Malören – Oulu5. In the north the ice is partly rafted or ridged and there is a brash ice barrier at the edge. On the Swedish side follows a band of open to very close ice that is up

to 20 cm thick. Thin very open ice drifts in places from Löyhä to Oulun portti and also off Raahe. In the southern Bay of Bothnia, there is 5–20 cm thick level or fast ice in the archipelagos and open water somewhat further out.

No major changes are expected the coming day. The ice will drift to the north.

# The Quark

There is 10-25 cm thick fast ice in the Vaasa archipelago out to Nygrund. Further out, there is very

open ice in places. On the Swedish side, there is mostly fast ice in inner bays along the coast and

# 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

thin close ice further out. At sea, there is open water.

Nr. 37

No major changes with a northerly ice drift are expected.

#### 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 in sheltered bays in the south and fast ice in inner

bays in the north. On Ångermanälven, there is 10–20 cm thick fast or level ice.

No major changes are expected but a northerly ice drift.

# Archipelago Sea

At the eastern coast, there is 3–10 cm fast or level ice in the inner bays.

No major changes are 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.

No major changes are expected.

#### **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. In the Bay of Vyborg, there is 15–25 cm thick fast ice. Further out, there is level ice followed by 5–15 cm thick, close ice to about Nerva. In the Bjerkesund, there is 5–

15 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.

The general ice situation will not change much the coming day with a westerly ice drift.

# **Gulf of Riga**

In Väinameri, there is 10–25 cm thick fast ice in sheltered bays and open water on the fairways. In the Bay of Pärnu, there is 10–20 cm thick fast ice. Further out to the line south tip of Manilaid – Suur-

na Nina, there is 10–20 cm thick, very close ice. No major change is expected the coming day with a southerly ice drift.

# **Southeastern Baltic**

In the Curonian Lagoon, there is 3–10 cm thick, very close drift ice at places in the western part.

No major changes are expected.

#### Skagerrak and Kattegat

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

No major changes are expected.

# Swedish Lakes

New ice and thin level ice is present in some sheltered bays of Lake Vänern.

No major changes are expected the coming day.

Dr. W. Aldenhoff

# **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**

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			
13 Openice – concentration 4/10 to 6/10			
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			
Lead in very close or compact drift ice or along the fast lce edge			
/ Unable to report			
,			
Third a make an			
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			
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			
/ No information or unable to report			

Nr. 37

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

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, 18.01.2023 Sea area ENE of Nordvalen 1106 Paernu, port and bay 7385 Sea area Nordvalen to W of Norrskär 0//6 Moonsund 1//0 Vaskiluoto - Ensten 8746 Ensten - Vaasa lighthouse 1106 Finland, 18.01.2023 Vaasa lighthouse - Norrskär 1106 Kaskinen - Sälgrund Röyttä – Etukari 8846 8745 Etukari – Ristinmatala Sea area off Sälgrund 7356 1005 Ajos – Ristinmatala 7356 Pori harb. to line Pori lighth. - Säppi 1101 Ristinmatala - Kemi 2 5356 Uusikaupunki harbour - Kirsta 8142 Kemi 2 - Kemi 1 Inkoo a. Kantvik - sea area Porkkala 5356 7105 Sea area SW of Kemi 1 0//6 Helsinki harbours - Harmaja 5145 Kemi 2 – Ulkokrunni – Virpiniemi Vuosaari harbour - Eestiluoto 5145 7356 Oulu harbours - Kattilankalla 7356 Valko Harbour - Täktarn 8745 Kattilankalla – Oulu 1 5356 Kotka – Viikari 5165 Sea area SW of Oulu 1 1106 Hamina – Suurmusta 8745 High Sea N of the latitude of Marjaniemi 0//6 Suurmusta – Merikari 8745 Raahe harbour – Heikinkari 1106 Heikinkari – Raahe lighthouse 1106 Norway, 18.01.2023 Raahe lighthouse – Nahkiainen 0//6 Svinesund – Halden 31// Latitude Marjaniemi – Ulkokalla, Sea 0//6 Drammensfjord 3212 Rahja harbour – Välimatala 5146 Tønsberg, inner harbour 8101 Vaelimatala to line Ulkokalla – Ykskivi 0//6 Langårsund (Kragerø) 8144 Sea betw. lat. of Ulkokalla -Pietarsaari 0//6 Ykspihlaja - Repskär Russian Federation, 18.01.2023 5146 Repskär – Kokkola lighthouse Port of St. Petersburg 83/3 1106 Sea area off Kokkola lighthouse St. Petersburg – E-point island Kotlin 0//6 33/2 Pietarsaari - Kallan 1106 E-point Kotlin – long. lighth. Tolbuhkin 2202 Sea area off Kallan 1106 Vyborg, port and bay 83/3 Sea lat. Pietarsaari - NE Nordvalen Island Vichrevoj - Island Sommers 4002 1106

Nr. 37

Strait Bjerkesund	81/2
E-point Bol'šoj Ber'ozovyj – Šepelevskij	50/2
Sweden, 18.01.2023 Karlsborg – Malören Sea area off Malören Luleå – Björnklack Björnklack – Farstugrunden E and SE of Farstugrunden Sandgrönn fairway Rödkallen – Norströmsgrund Haraholmen – Nygrån Sea area off Nygrån Skelleftehamn – Gåsören Sea area off Gåsören NE of Nordvalen SW of Nordvalen Western Quark (W of Holmöarna) Umeå – Väktaren Örnsköldsvik – Hörnskaten Ångermanälven north Sandö Bridge Ångermanälven south Sandö Bridge Härnösand – Härnön Sundsvall – Draghällan Hudiksvallfjärden Iggesund – Agö Sandarne – Hällgrund Ljusnefjärden – Storjungfrun Hallstavik – Svartklubben Köping – Kvicksund Västerås – Grönsö Grönsö – Södertälje	8446 5366 8446 5356 3326 8346 5352 5236 3126 1106 1106 1106 8346 8344 8344 5044 8344 5044 8242 5142 5142 4041 5144 1004
Stockholm – Södertälje	1004
Fairway to Karlstad	5142