

# Eisbericht Nr. 104

## Amtsblatt des BSH

Jahrgang 97

Nr. 104

Tuesday, 16.04.2024

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### Übersicht

In der Bottenwiek befindet sich in den nördlichen Schären bis 80 cm dickes, in den südlichen bis 50 cm dickes, teilweise morschес Festeis. Auf See treibt im Norden zumeist 40–70 cm dickes, sehr dichtes, örtlich aufgepresstes und übereinander geschobenes Eis, das teilweise schwer zu passieren ist. Weiter südlich treibt bis 40 cm dickes, dichtes Eis. Im Norden und entlang der schwedischen Küste verläuft eine Rinne mit meist offenem Wasser und örtlich größeren Eisschollen im Norden. An den Küsten von Norra Kvarken liegt bis 50 cm dickes, teilweise morschес Festeis. Auf See ist meist offenes Wasser mit örtlich Treib- eis um die Holmöarna. An den Küsten der Bottensee kommtt bis 35 cm dickes Festeis im Norden und morschес Festeis im Süden vor. Im Nordwesten treibt vor der Küste 10–30 cm dickes, meist dichtes Eis. Im Schärenmeer kommtt meist offenes Wasser vor. Im Norden des Finnischen Meerbusens liegt morschес Festeis oder offenes Wasser entlang der Küste.

### Overview

In the Bay of Bothnia there is fast ice in the archipelagos, up to 80 cm thick in the north and up to 50 cm thick and partly rotten in the south. At sea in the north, there is mostly 40–70 cm thick, very close, ridged and rafted ice that is difficult to force at places. Further south there is up to 40 cm thick close ice. In the north and along the Swedish coast runs a lead with mainly open water and some larger drifting floes in the north. In the Quark there is up to 50 cm thick, partly rotten fast ice at the coasts. At sea there is mainly open water with some drift ice around Holmöarna. At the coasts of the Sea of Bothnia there is rotten fast ice in the north and rotten fast ice or open water in the south. In the northwest 10–30 cm thick, close drift ice is present off the coast. In the Archipelago Sea is mainly open water. In the Gulf of Finland is rotten fast ice or open water along the northern coast.

### Bay of Bothnia

In the archipelagos of the Bay of Bothnia there is fast ice or consolidated ice; 50–80 cm thick in the north and 40–50 cm thick and partly rotting in the south. In the northeast the fast ice stretches out to Malören, Kemi-3, Oulu-3 and Raahe lighthouse. At sea in the northern part there is very close, 20–70 cm thick, ridged and rafted ice to about 64°00'N in the south. The ice field is difficult to force at places but there are also cracks and leads. Further south

at sea is mainly close, 10–40 cm thick ice in the eastern part. In the north and along the Swedish coast runs a lead all the way to the Quark with mainly open water and some larger drifting floes in the north.

No larger changes are expected the coming day but the ice will first drift to the south and later to the west.

### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)  
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### The Quark

There is 30–50 cm thick, rotting fast ice in the Vasa archipelago out to Storhästen. Along the Swedish coast there is up to 40 cm thick, partly rotten fast ice. At sea is mostly open water with some drift

ice around Holmöarna.

The ice continues to drift to the south and no larger changes are expected.

### Sea of Bothnia

Along the Swedish coast is rotten, up to 35 cm thick ice in the archipelagos in the north. Further south there is rotten fast ice at places or open water. On Ångermanälven, there is rotten ice. Off the Swedish coast around 63°00'N 19°30'E there is an

area of close, 10–30 cm thick drift ice. Along the Finnish coast there is rotten fast ice in the archipelagos and open water further out.

Some ice melt is expected especially in the south and the ice will continue to drift to the south.

### Archipelago Sea and Åland Sea

In the Archipelago Sea there is mostly open water with remnants of rotten ice. In the Åland Sea it is

ice-free.

Ice melt will continue the coming day.

### Gulf of Finland

In the archipelagos along the northern coast there is rotten ice at places in the west and rotten ice further east. Further out is open water. In Vyborg Bay are remnants of rotten ice or open water. In

Lake Saimaa is 25–50 cm thick, rotting ice with open areas.

Ice melt will continue the coming day.

Dr. W. Aldenhoff

### Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Finland</b>	Tornio, Kemi and Oulu	4000 dwt	IA	02.04.
	Raahe, Kalajoki, Kokkola and Pietarsaari	4000 dwt	IA	13.01.
	Vaasa	2000 dwt	I	15.04.
	Lake Saimaa	2000 dwt	IA	08.01.
	Saimaa Canal	2000 dwt	IA	08.01.
<b>Russia</b>	Vyborg	-	Ice 1	28.03.
	Vysotsk	-	Ice 1	28.03.
	Primorsk	-	Ice 1	25.03.
<b>Sweden</b>	Karlsborg	4000 dwt	IA (2000 t)	14.01.
	Lulea, Haraholmen and Skelleftehamn	4000 dwt	IA	14.01.
	Rundvik, Husum and Örnsköldsvik	2000 dwt	IC	15.04.
	Holmsund	2000 dwt	IB	12.04.
	Angermanälven	2000 dwt	IB	27.03.
	Härnösand	2000 dwt	IC	15.04.
	Söråker and Sundsvall	2000 dwt	II	09.04.

### Finland/Sweden

The traffic season of the Saimaa deep fairways begins on 17 April 2024 at 9 a.m.

The traffic separation schemes in the Quark are temporarily out of use from 20 December due to ice conditions.

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

### Russia

There are restrictions for small crafts going to St. Petersburg, Vyborg, Vysotsk and Primorsk. Barge towed by tug not allowed to navigate in ice. Vessels without ice class to Vyborg, Vysotsk and Primorsk are only allowed with icebreaker assistance, with ice class Ice 1 or higher according to instructions.

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

### Baltic Sea Ice Code

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

### Finland, 16.04.2024

Röyttä – Etukari	8546
Etukari – Ristinmatala	8546
Ajos – Ristinmatala	8546
Ristinmatala – Kemi 2	7476
Kemi 2 – Kemi 1	6676
Sea area SW of Kemi 1	6676
Kemi 2 – Ulkokuranni – Virpiniemi	8546
Oulu harbours – Kattilankalla	8546

Kattilankalla – Oulu 1	6576
Sea area SW of Oulu 1	6576
High Sea N of the latitude of Marjaniemi	5576
Raahe harbour – Heikinkari	8546
Heikinkari – Raahe lighthouse	6476
Raahe lighthouse – Nahkiainen	5476
Latitude Marjaniemi – Ulkokalla, Sea	5476
Rahja harbour – Välimatala	8446
Väelimatala to line Ulkokalla – Ykskivi	3326

Sea betw. lat. of Ulkokalla –Pietarsaari	5476
Ykspihlaja – Repskär	8446
Repskär – Kokkola lighthouse	3326
Sea area off Kokkola lighthouse	3326
Pietarsaari – Kallan	1706
Sea area off Kallan	2326
Sea lat. Pietarsaari – NE Nordvalen	2336
Sea area ENE of Nordvalen	1706
Sea area Nordvalen to W of Norrskär	1706
Vaskiluoto – Ensten	3416
Ensten – Vaasa lighthouse	1706
Vaasa lighthouse – Norrskär	1706
Sea area SW of Norrskär	2706
Kaskinen – Sälgrund	1702
Sea area off Sälgrund	0/2
High sea from N to latitude Yttergrund	1702
Uusikaupunki harbour – Kirsta	1702
Kotka – Viikari	1102
Hamina – Suurmista	1702

**Sweden, 16.04.2024**

Karlsborg – Malören	8646
Sea area off Malören	5676
Luleå – Björnklack	8646
Björnklack – Farstugrunden	5576
E and SE of Farstugrunden	5576
Sandgrönn fairway	6556
Rödkallen – Norströmsgrund	5576
Haraholmen – Nygrän	6556
Sea area off Nygrän	5556
Skelleftehamn – Gåsören	8446
Sea area off Gåsören	5456
Sea area off Bjuröklubb	5456
NE of Nordvalen	1406
SW of Nordvalen	1406
Western Quark (W of Holmöarna)	2456
Umeå – Väktaren	2456
SE of Väktaren	2456
NE and SE of Sydostbotten	1406
Fairway to Husum	1406
Örnsköldsvik – Hörnskaten	8496
Hörnskaten – Skagsudde	5356
Sea area off Skagsudde	1406
Fairway W of Ulvöarna	2356
Sea area E of Ulvöarna	1406
Ångermanälven north Sandö Bridge	8494
Ångermanälven south Sandö Bridge	8494
Härnösand – Härnön	1404
Sea area off Härnö	1404
Sundsvall – Draghällan	1406
Off Åstholsudde and Brämön	1406
Hudiksvallfjärden	8392
Igesund – Agö	8392
Sandarne – Hällgrund	1302
Ljusnefjärden – Storjungfrun	1302