

# Eisbericht Nr. 106 Amtsblatt des BSH

Jahrgang 95	Nr. 106	Thursday, 28.04.2022	1
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#### Übersicht

In den Schären der Bottenwiek liegt im Norden 40–85 cm dickes Festeis und im Süden morsches Festeis. Auf See treibt südlich von 65°00'N bis zur Linie Bjuröklubb – Kallen, zumeist 15–70 cm dickes, dichtes bis sehr dichtes, aufgepresstes Eis, in dem aber auch Risse und offene Stellen vorkommen. Nördlich, westlich und südlich davon ist offenes Wasser mit einigen Schollen und kleinen Eisfeldern. In Norra Kvarken liegt in den Schären morsches Festeis und auf See kommt zumeist offenes Wasser vor. Entlang der Küsten und in den Schären der Bottensee, des Schärenmeeres und des westlichen Finnischen Meerbusens liegt örtlich morsches Eis. Im östlichen Finnischen Meerbusen liegt an der Küste im Norden morsches Eis und davor kommt offenes Wasser und örtlich etwas Treibeis vor.

#### **Overview**

In the archipelagos of the Bay of Bothnia, there is 40–85 cm thick fast ice in the north and rotten fast ice in the south. At sea, there is mostly 15–70 cm thick, close to very close, ridged ice between 65°00'N and the line Bjuröklubb – Kallen; cracks and openings are present in the ice field. North, west and south of this area, there is open water and some floes and patches. In Norra Kvarken, there is rotten fast ice in the archipelagos and at sea, there is mostly open water. Along the coasts and archipelagos of the Sea of Bothnia, the Archipelago Sea and the western part of the Gulf of Finland, there is rotten ice in places. In the eastern Gulf of Finland, there is rotting ice along the northern coast and further out, there is open water and locally some drift ice.

#### **Bay of Bothnia**

In and outside the northeastern archipelagos, there is 40–80 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 45–85 cm thick. Off the fast ice in the north, there is open water with some larger drifting floes and open water at places to about 65°00'N. Further south, extending to about the line Bjuröklubb – Kallan, there is 15–70 cm thick, close to very close ice with ridges. There are also larger

cracks and open areas in the ice field. Along the western fast ice edge, there is a lead of open water. In the southern Bay of Bothnia, there is some ice along the Swedish coast and along the eastern coast, there is mostly rotten ice in the archipelagos. Further out mostly open water.

Some ice melt is expected during daytime, but locally ice can form during night. The ice drift is towards the southeast.

#### Norra Kvarken

In the Vaasa archipelago, there is rotten fast ice

with open water further out. Along the Swedish

#### Herstellung und Vertrieb

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

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Ice melt continues with a southeasterly ice drift.

#### Sea of Bothnia

On upper Ångermanälven, as well as in some other sheltered bays, there is broken and rotten fast ice. In the archipelagos along the Finnish coast,

there is rotten ice in places with open water just outside.

Ice melt continues.

#### Archipelago and Aland Sea

Rotten ice is present in places of the inner archipelagos of the eastern coast.

Ice melt continues.

#### **Gulf of Finland**

In the inner Bay of Vyborg there is very close ice hinging the shores and very open ice further out. In the inner archipelagos of the northern coast, there are remnants of rotten ice in the west and in the east, there is rotten ice with open water further out. In Lake Saimaa, there is rotting ice, 5–40 cm thick with openings in the north and south and larger ones in the central part.

The ice melt continues.

Dr. J.Holfort

#### **Restrictions to Navigation**

	Harbour/District	At least	Ice Class	Begin
		dwt/hp/kW		
Finland	Tornio, Kemi and Oulu	4000 dwt	IA	21.03.
	Raahe and Kalajoki	4000 dwt	IA	08.03.
	Kokkola	2000 dwt	IA	01.02.
	Pietarsaari	2000 dwt	IB	28.04.
	Vaasa	-	cancelled	28.04.
	Northern Lake Saimaa	2000 dwt	IA	19.04.
	Southern Lake Saimaa	2000 dwt	II	22.04.
Sweden	Karlsborg	2000 dwt	IB	28.04.
	Luleå	2000 dwt	IB	28.04.
	Haraholmen and Skelleftehamn	2000 dwt	IB	28.04.

#### 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, POLARIS, ODEN, FREJ and ALE assist in the Bay of Bothnia. TYRSKY assists in the Lake Saimaa.

#### Russia

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

Icebreakers: K. IZMAILOV assists vessels to the port of Vyborg, Vysotsk and Primorsk.

First number:

#### **Baltic Sea Ice Code**

A	B Amount and arrangements of sea ice
0	Ice free
1	Open water – concentration less than 1/1
2	Very open ice - concentration 1/10 to 3/1

- 3 Open ice concentration 4/10 to 6/10 4 Close ice concentration 7/10 to 8/10
- Very close ice concentration 9/10 to 9+/10 6 Compact ice, including consolidated ice -
- concentration 10/10 Fast ice with drift ice outside
- Fast ice
- Lead in very close or compact drift ice or along the fast Ice edae
- 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
- Small ice floes 20 to 100 m across
- Medium ice floes 100 to 500 m
- Big ice foes 500 to 2000 m across
- 4 Vast or giant ice floes -
- more than 2000 m across or level ice
- Rafted ice
- Compact slush or shuga, or compacted brash ice
- Hummocked or ridged ice

Vaskiluoto – Ensten

Hamina – Suurmusta

- Thaw holes or many puddles on the ice
- Rotten ice
- No information or unable to report

#### 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)
- 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 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
- 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

Finland , 28.04.2022			
Röyttä – Etukari	8646	Russian Federation, 28.04.2022	
Etukari – Ristinmatala	8546	Vyborg, port and bay	1210
Ajos – Ristinmatala	8546		
Ristinmatala – Kemi 2	6476	Sweden , 28.04.2022	
Kemi 2 – Kemi 1	9226	Karlsborg – Malören	6576
Sea area SW of Kemi 1	1726	Sea area off Malören	5576
Kemi 2 – Ulkokrunni – Virpiniemi	8546	Luleå – Björnklack	6576
Oulu harbours – Kattilankalla	8546	Björnklack – Farstugrunden	6576
Kattilankalla – Oulu 1	6476	E and SE of Farstugrunden	1506
Sea area SW of Oulu 1	5476	Sandgrönn fairway	6576
High Sea N of the latitude of Marjaniemi	2446	Rödkallen – Norströmsgrund	1506
Raahe harbour – Heikinkari	8546	Haraholmen – Nygrån	6456
Heikinkari – Raahe lighthouse	7476	Sea area off Nygrån	6456
Raahe lighthouse – Nahkiainen	5476	Skelleftehamn – Gåsören	1506
Latitude Marjaniemi – Ulkokalla, Sea	5476	Sea area off Gåsören	1506
Rahja harbour – Välimatala	6366	Sea area off Bjuröklubb	4556
Vaelimatala to line Ulkokalla – Ykskivi	5476	Western Quark (W of Holmöarna)	1502
Sea betw. lat. of Ulkokalla –Pietarsaari	5476	Umeå – Väktaren	1502
Ykspihlaja – Repskär	8846	Örnsköldsvik – Hörnskaten	2392
Repskär – Kokkola lighthouse	6476	Hörnskaten – Skagsudde	2392
Sea area off Kokkola lighthouse	5476	Ångermanälven north Sandö Bridge	2422
Pietarsaari – Kallan	2416	Ångermanälven south Sandö Bridge	2422
Sea area off Kallan	5446	Hudiksvallfjärden	1492
Sea lat. Pietarsaari – NE Nordvalen	1326		

2492

1700