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BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 54

Amtsblatt des BSH

Jahrgang 95	Nr. 54	Friday, 11.02.2022	1

Übersicht

In den Schären der Bottenwiek liegt im Norden 40–60 cm dickes Festeis und im Süden 20–55 cm dickes Festeis. Außerhalb des Festeises liegt tails aufgeschobenes, sehr dichtes Eis. Auf See treibt in der zentralen Bottenwiek im Norden 20–50 cm dickes, sehr dichtes, aufgepresstes Eis und im Süden 5–35 cm dickes, sehr dichtes Eis. In Norra Kvarken liegt in den Schären bis zu 55 cm dickes Festeis und auf See treibt im Norden lockeres Eis. Entlang der Küsten und in den Schären der Bottensee, dem Schärenmeer und der Ålandsee liegt Festeis oder dünnes ebenes Eis und Neueis. Im Finnischen Meerbusen liegt entlang der Nordküste und im Osten bis 40 cm dickes Festeis, östlich von etwa 27°15‘E treibt auf See im Norden meist sehr dichtes, 10–30 cm dickes Eis und im Süden lockeres bis sehr lockeres Eis. Im Rigaischen Meerbusen befindet sich bis zu 25 cm dickes Eis im Moonsund und in der Pärnubucht. Dünnes, teilweise ebenes Eis kommt örtlich in der nördlichen Ostsee, dem Vänern und der südöstlichen Ostsee vor. Dünnes Eis kommt in geschützten Buchten der zentralen Ostsee vor. In einigen inneren Fjorden des Skagerraks liegt dünnes Eis oder Festeis.

Overview

In the archipelagos of the Bay of Bothnia, there is 40–60 cm thick fast ice in the north and 20–55 cm thick fast ice in the south. Off the fast ice, there is partly rafted very close ice. In the central part, there is very close, 20–50 cm thick, ridged ice in the north and 5–35 cm thick, very close ice in the south. In Norra Kvarken, there is up to 55 cm thick fast ice in the archipelagos, and open ice at sea in the north. Along the coasts and archipelagos of the Sea of Bothnia, the Archipelago Sea and Åland Sea, there is fast ice or thin level ice and new ice. In the Gulf of Finland, there is up to 40 cm thick fast ice along the northern and eastern coast. At sea east of about 27°15’E, there is mostly very close, 10–30 cm thick ice in the north, and open to very open ice in the south. In the Gulf of Riga, there is up to 25 cm thick ice in Moonsund and Pärnu Bay. Thin ice and thin level ice occurs at places in the northern Baltic, Lake Vänern and the southeastern Baltic. Thin ice occurs in sheltered areas of the central Baltic. Fast ice or thin ice is present in some inner fjords of the Skagerrak.

Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 40–60 cm thick fast ice, from the Finnish coast reaching out to Kemi-3, Oulu-2 and Johan. Off the fast ice in the east, there is 20–50 cm thick consolidated ice to Kemi-2 and Oulu-1. Further off there is very close ice, 10–40 cm thick in the north and northeast. In the west, there is very close, rafted ice, 10–20 cm thick. In the central part there is an area around 23°E 65°15’N of very close ice with large, partly ridged floes, 20–50 cm thick. In the southern Bay of Bothnia, there is 20–40 cm thick fast ice along the Swedish coast and 30–55

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cm thick fast ice in the eastern archipelagos. From Oulu-1 to off Raahe there is a narrow lead with thin ice. At sea, there is mostly very close 10–40 cm thick ice and 5-25cm thick open ice in the southernmost part. Off the Swedish coast, there is an area with open water northeast of Bjuröklubb, extending also further south as narrow lead.
Light to moderate frost and changing wind directions will lead to some ice formation over the weekend, but the overall situation will not change in considerable amount.

Norra Kvarken

In the archipelagoes off Vaasa, there is 25–55 cm thick fast ice to Ensten; further out to Norra Globsten there is 10–30 cm thick, very close ice. Along the Swedish coast, there is 20–40 cm thick fast ice in the archipelagos and open ice further out. Between the mainland and Holmöarna, there is mostly very close, 5–30 cm thick ice. At sea in the north, there is mainly open ice, 5–25 cm thick.
With mostly light frost over the weekend some ice formation will occur and the overall ice drift is towards the east. Overall no larger changes are expected.

Sea of Bothnia

On Ångermanälven, there is 20–50 cm thick fast ice in the upper part and 20–35 cm fast or level ice in the lower part. In the bays along the western coast, there is 10–35 cm thick fast ice or new ice. Further out in the south, there is very open ice, and in the north, there is open water or open ice. Along the eastern coast, there is 10–30 cm fast ice in the inner archipelagos and thin very close ice at the ice edge.
On the larger scale warm air will enter the region from the southwest and some ice melt is expected over the weekend, especially in the south.

Archipelago and Åland Sea

10–30 cm thick ice and new ice is present in inner archipelagos of the coasts and around the Åland islands. In the outer archipelago at the eastern coast, there is mainly open water.

After light frost in the coming night, temperatures mostly about 0°C and a southwestern wind are expected over the weekend. Some ice melt is expected, but overall no larger change is expected.

Gulf of Finland

From St. Petersburg up to the longitude of Tolbuchin lighthouse, there is 30–40 cm thick fast ice In the Bay of Vyborg and the Bjerkesund, there is 25–35 cm fast ice. At sea north of about 60° N and east of about 27°15’ E, there is mostly very close, 15–30 cm thick ice. South of 60° N and east of about 27°40’ E, there is mostly open water and very open to open, 10–20 cm thick ice. In the archipelagos of the northern coast, there is fast ice, 5–30 cm thick in the west and 20–40 cm thick in the east. In Luga Bay, there is fast ice near the coast and 15–20 cm thick, very open ice further out. In Narva Bay, there is a narrow band of fast ice near the coast north of Narva, followed by a band of very close ice further out.
The air temperatures will increase to values around 0°C on Saturday, so the main change over the weekend will be an east/ northeasterly ice drift.

Gulf of Riga

In Moonsund, there is 10–20 cm thick fast ice near the coasts, open water on the fairways and close ice in the middle part. In Pärnu Bay, there is 15–25 cm thick fast or very close ice to Kihnu. Along the south coast of Saaremaa, there is open drift ice.
Over the weekend the ice drift will be to towards the east/northeast, but overall no larger changes are expected.

Northern Baltic

In Lake Mälaren, there is 5–30 cm thick fast ice or level ice in the western part, and further east, there is mostly thin level or new ice. Along the Swedish coast, there is new ice or thin open ice in sheltered bays.
Some ice melt is expected over the weekend.

Central Baltic

Thin open ice or new ice occurs in sheltered bays along the Swedish coast.

Ice melt is expected over the weekend.

Southeastern Baltic

In the Curonian Lagoon, there very close, 5–15 cm thick ice along the coast in the eastern part.

Over the weekend ice melt is expected.

Skagerrak and Kattegat
In some inner fjords of the Skagerrak, there is open water and also up to 30 cm thick is fast ice at a few places.
Ice melt is expected over the weekend.

Swedish Lakes
In Lake Vänern, there is 5–20cm thick fast ice or new ice in bays of the northern coast.
Ice melt is expected over the weekend.

Dr. J. Holfort

Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1C	17.12.
Finland	Tornio, Kemi and Oulu	2000/4000 dwt	IA Super(5000kW)/IA	09.02.
	Raahe	2000 dwt	IA	16.01.
	Kokkola, Kalajoki, Pietarsaari and Vaasa	2000 dwt	IA	01.02.
	Kristiinankaupunki, Pori, Rauma, Uusikaupunki, Naantali, Turku, Koverhar, Lappohja, Helsinki and Sköldvik	2000 dwt	II	01.01.
	Kaskinen, Taalintehdas, Förby, Inkoo, Kantvik	2000 dwt	I	16.01.
	Loviisa and Kotka	2000 dwt	I	04.01.
	Hamina	2000 dwt	I	01.01.
	Mussalo	2000 dwt	II	25.12.
Russia	Vyborg	-	Ice 1	30.12.
	Vysotsk	-	Ice 2	14.01.
	Primorsk	-	Ice 2	27.01.
	Ust-Luga	-	Ice 1	04.01.
	St. Petersburg	-	required	31.12.
Sweden	Karlsborg and Luleå	2000 dwt	IA	08.02.
	Haraholmen and Skelleftehamn	2000 dwt	IB	06.01.
	Holmsund, Rundvik and Husum	2000 dwt	IC	15.01.
	Örnsköldsvik	2000 dwt	IC	15.01.
	Ångermanälven	2000 dwt	IB	06.01.
	Härnösand - Skutskär	2000 dwt	II	22.12.
	Köping and Västerås	2000 dwt	IC	27.12.
	Bålsta	1300/2000 dwt	IC/II	27.12.

Information of the Icebreaker Services

Estonia
Icebreaker: EVA-316 assists to the port of Pärnu.

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, FREJ, SISU, ALE, ODEN and YMER assist in the Bay of Bothnia. ATLE and ZEUS assist in the Quark, VOIMA in the eastern Gulf of Finland.

Norway

Husøysund, Tønsberg indre havn and Vestfjorden (Tønsberg): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. (28.12.21)
Hellefjorden (Kragerø): Navigation temporarily closed. (10.01.22)

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_B 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 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 Ice edge
/ Unable to report

Second number:
S_B Stage of ice development
0 New ice or dark nilas (less than 5 cm thick)
1 Light nilas (5 - 10 cm thick) or ice rind
2 Grey ice (10 - 15 cm thick)
3 Grey-white ice (15 - 30 cm thick)
4 White ice, first stage (30 - 50 cm thick)
5 White ice, second stage (50 - 70 cm thick)
6 Medium first year ice (70 - 120 cm thick)
7 Ice predominantly thinner than 15 cm with some thicker ice
8 Ice predominantly grey-white ice (15 – 30 cm) with some thicker ice
9 Ice predominantly thicker than 30 cm with some thinner ice
/ No information or unable to report

Third number:
T_B 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
/ No information or unable to report

Fourth number:
K_B Navigation conditions in ice
0 Navigation unobscured
1 Navigation difficult or dangerous for wooden vessels without ice sheathing
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 Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice
4 Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker
5 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
7 Icebreaker assistance can only be given to vessels after after special permission
8 Navigation temporarily closed
9 Navigation has ceased
/ Unknown

Estonia , 11.02.2022

Shipping route from Narva-Jõssuu	3//0
Paernu, port and bay	73/5
Shipp. route from Paernu to Irben Strait	1//0
Moonsund	42/2

Russian Federation , 11.02.2022

Port of St. Petersburg	84/3
St. Petersburg – E-point island Kotlin	84/3
E-point Kotlin – long. lighth. Tolbuhkin	84/3
Lighth. Tolbuhkin – lighth. –Šepelevskij	52/2
Lighthouse Šepelevskij – island Sescar	53/3
Island Sescar – Island Sommers	53/3
Island Sommers- S-point island Gogland	53/3
Vyborg, port and bay	84/3
Island Vichrevoj – Island Sommers	53/3
Strait Bjerkesund	53/3
E-point Bol'šoj Ber'ozovyj – –epelevskij	53/3
Luga bay	2312
Appr. Luga bay – line Mo–.-–epel.	2312

Finnland , 11.02.2022

Röyttä – Etukari	8446
Etukari – Ristinmatala	8846
Ajos – Ristinmatala	8846
Ristinmatala – Kemi 2	6876
Kemi 2 – Kemi 1	5756
Kemi 1, Seegebiet im SW	5756
Kemi 2 – Ulkokrunni – Virpiniemi	8446
Oulu, Hafen – Kattilankalla	8446
Kattilankalla – Oulu 1	6876
Oulu 1, Seegebiet im SW	4746
Offene See N-lich Breite Marjaniemi	5756
Raahe, Hafen – Heikinkari	8346
Heikinkari – Raahe Leuchtturm	4746
Raahe Leuchtturm – Nahkiainen	4746
Breitengrad Marjaniemi – Ulkokalla, See	5876
Rahja, Hafen – Välimatala	6366
Välimatala bis Linie Ulkokalla – Ykskivi	4746
Breitengrad Ulkokalla – Pietarsaari, See	5346
Ykspihlaja – Repskär	8846
Repskär – Kokkola Leuchtturm	6366
Kokkola Leuchtturm, See außerhalb	4746
Pietarsaari – Kallan	7846
Kallan, Seegebiet außerhalb	4746
Breite Pietarsaari – Nordvalen im NE	3726
Nordvalen, Seegebiet im ENE	3716
Vaskiluoto – Ensten	8446
Ensten – Vaasa Leuchtturm	5746
Kaskinen – Sälgrund	5746
Sälgrund, Seegebiet außerhalb	4246
Pori – Linie Pori Leuchtturm – Säppi	5145
Rauma, Hafen – Kylmäpihlaja	7745
Kylmäpihlaja – Rauma Leuchtturm	5145
Uusikaupunki, Hafen – Kirsta	8745
Kirsta – Isokari	5245
Naantali und Turku – Rajakari	7245
Rajakari – Lövskär	2115
Lövskär – Korra	5145
Korra – Isokari	3115
Lövskär – Berghamn	2115
Lövskär – Grisselborg	2115
Hanko – Vitgrund	4145
Koverhar – Hästö Busö	1115
Inkoo u. Kantvik – Porkkala See	7206
Vuosaari Hafen – Eestiluoto	3015
Porvoo, Hafen – Varlax	4145
Valko, Hafen – Täktarn	7746
Glosholm–Helsinki, Schärenfahrwasser	2215
Kotka – Viikari	5346
Viikari – Orrengrund	5346
Orrengrund – Tiiskeri	2215
Hamina – Suurmusta	7846
Suurmusta – Merikari	5346
Merikari – Kaunissaari	5346

Norwegen , 09.02.2022

Svinesund – Halden	31//
Mossesund	1//1
Husøysund – Tønsbergkanal	8245
Tønsberg, Innenhafen	8345
Vestfjord (Tønsberg)	8345
Langårsund (Kragerø)	2212

Schweden , 10.02.2022

Karlsborg – Malören	8546
Malören, Seegebiet außerhalb	5356
Luleå – Björnklack	8446
Björnklack – Farstugrunden	5476
Farstugrunden, See im E und SE	5476
Sandgrönn Fahrwasser	8446
Rödkallen – Norströmsgrund	5356
Haraholmen – Nygrån	8446
Nygrån, Seegebiet außerhalb	5356
Skelleftehamn – Gåsören	5256
Gåsören, Seegebiet außerhalb	5256
Bjuröklubb, Seegebiet außerhalb	1356
Västra Kvarken W-lich Holmöarna	8346
Umeå – Väktaren	8446
Väktaren, See im SE	3226
Husum, Fahrwasser nach	2226
Örnsköldsvik – Hörnskaten	8446
Hörnskaten – Skagsudde	8446
Ångermanälv oberhalb Sandöbrücke	8444
Ångermanälv unterhalb Sandöbrücke	8444
Härnösand – Härnön	1004
Sundsvall – Draghällan	8346
Draghällan – Åstholmsudde	1006
Åstholmsudde/Brämön, außerhalb	1006
Hudiksvallfjärden	8346
Iggesund – Agö	8346
Sandarne – Hällgrund	8346
Hällgrund, Seegebiet außerhalb	2026
Ljusnefjärden – Storjungfrun	2026
Storjungfrun, Seegebiet außerhalb	2026
Gävle – Eggegrund	8346
Örskär, Seegebiet außerhalb	2020
Öregrundsgrepen	3222
Hallstavik – Svartklubben	8342
Stockholm – Trälhavet – Klövholmen	4041
Köping – Kvicksund	8344
Västerås – Grönsö	8344
Grönsö – Södertälje	5244
Stockholm – Södertälje	5244
Södertälje – Fifong	5041
Norrköping – Hargökalv	4041
Västervik – Marsholmen – Idö	4041
Karlstad, Fahrwasser nach	8342
Kristinehamn, Fahrwasser nach	8342
Otterbäcken, Fahrwasser nach	5041