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BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

Eisbericht Nr. 101

Amtsblatt des BSH

Jahrgang 97	Nr. 101	Thursday, 11.04.2024	1

Übersicht

In der Bottenwiek befindet sich in den nördlichen Schären bis 80 cm dickes, in den südlichen bis 60 cm dickes Festeis. Im Osten verläuft außerhalb des Festeises eine Rinne mit größeren Treibeisschollen. Auf See treibt im Nordwesten zumeist 40–70 cm dickes, sehr dichtes, örtlich aufgepresstes und übereinandergeschobenes Eis, das teilweise schwer zu passieren ist. Weiter südlich treibt bis 40 cm dickes, dichtes Eis und im Osten kommt etwas offenes Wasser vor. An den Küsten von Norra Kvarken liegt bis 60 cm dickes Festeis. Auf See treibt im Norden sehr lockeres bis dichtes, 10-40 cm dickes Eis und ansonsten kommt meist offenes Wasser vor. An den Küsten der Bottensee kommt bis 35 cm dickes Festeis im Norden und morsches Festeis im Süden vor. Im Nordwesten treibt vor der Küste 10–35 cm dickes, dichtes Eis. Im Schärenmeer kommt morsches Festeis und offenes Wasser vor. Im Norden des Finnischen Meerbusens liegt morsches Festeis entlang der Küste. Östlich von Hamina treibt lockeres bis sehr dichtes Eis etwas weiter außerhalb.

Overview

In the Bay of Bothnia there is fast ice in the archipelagos, up to 80 cm thick in the north and up to 60 cm thick in the south. Outside the fast ice in the east there is a lead with vast drifting floes. In the northwest, 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 and some open water in the east. In the Quark there is up to 60 cm thick fast ice at the coasts. At sea there is 10–40 cm thick, very open to close ice in the north and open water elsewhere. At the coasts of the Sea of Bothnia there is up to 35 cm thick fast ice in the north and rotten fast ice in the south. In the northwest 10–35 cm thick, close ice is present off the coast. Rotten fast ice and open water is present in the Archipelago Sea. There is rotten fast ice along the northern coast of the Gulf of Finland. East of about Hamina there is some open to very close drift ice off the coast.

Bay of Bothnia

In the archipelagos of the Bay of Bothnia there is fast ice; 50–80 cm thick in the north and 40–60 cm thick in the south. In the northeast the fast ice stretches out to Malören, Kemi-3, Oulu-3 and Raahe lighthouse. West of about 23°50'E, there is 30–70 cm thick, ridged and rafted, very close north of about 64°10'N. The ice field is difficult to force at places. From Nygrån to Bjuröklubb runs a lead with very open ice. In the eastern part runs a lead with larger drifting floes and very open ice north of Nahkiainen and open water further south. In the southern Bay of Bothnia is mostly close, 10–40 cm thick drift ice with some open water and very open ice along the Finnish coast.

With temperatures around 0°C no larger changes are expected. The ice will drift to the east.

Herstellung und Vertrieb
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The Quark

There is 30–60 cm thick fast ice in the Vaasa archipelago out to Ensten. Along the Swedish coast there is up to 40 cm thick fast ice. At sea east of Holmöarna, there is 10–40 cm thick, very open to close drift ice. Else at sea is mostly open water.
With temperatures mostly slightly above 0°C some ice melt is possible. The ice will drift to the northeast/east.

Sea of Bothnia

Along the coasts there is up to 35 cm thick fast ice in inner bays in the northern part. In the southern part is rotten fast ice. On Ångermanälven, there is 15–35 cm thick fast ice. Off the Swedish coast north of about Högbonden, there is mostly close, 10–35 cm thick ice, partly ridged. Further out at both coasts is a narrow band of open water.
Ice melt will continue the coming day especially in the southern part. Some northeasterly/easterly ice drift in the north.

Archipelago Sea and Åland Sea

In the Archipelago Sea there is rotten fast ice in sheltered parts of the archipelago and mainly open water on the fairways. In the Åland Sea there are remnants of rotten fast ice in inner bays or open water.
Ice melt will continue the coming day.

Northern Baltic

Lake Mälaren and the outer archipelagos are ice-free.

Gulf of Finland

Along the northern coast there is rotten fast ice in the archipelagos in the east and at places in the west. On the fairways in the west and further out there is mainly open water. East of Hamina, there is some very open to close drift ice to the entrance of Vyborg Bay. In the Vyborg Bay there is rotten fast ice along the coast and else mostly open water with some drift ice at places. Elsewhere is open water or it is ice-free. In Lake Saimaa is 25–50 cm thick 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
Finland	Tornio, Kemi and Oulu	4000 dwt	IA	02.04.
	Raahe, Kalajoki, Kokkola and Pietarsaari	4000 dwt	IA	13.01.
	Vaasa	2000 dwt	IB	02.04.
	Hamina	2000 dwt	II	08.04.
	Lake Saimaa	2000 dwt	IA	08.01.
	Saimaa Canal	2000 dwt	IA	08.01.
Russia	Vyborg	-	Ice 1	28.03.
	Vysotsk	-	Ice 1	28.03.
	Primorsk	-	Ice 1	25.03.
Sweden	Karlsborg	4000 dwt	IA (2000 t)	14.01.
	Lulea, Haraholmen and Skelleftehamn	4000 dwt	IA	14.01.
	Rundvik, Husum and Örnsköldsvik	2000 dwt	IA	19.02.
	Holmsund	2000 dwt	IA	17.02.
	Angermanälven	2000 dwt	IB	27.03.
	Härnösand	2000 dwt	IB	26.02.
	Söråker and Sundsvall	2000 dwt	II	09.04.

Finland/Sweden

The transit traffic west of Holmöarna is temporarily prohibited.
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:
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

Finland, 11.04.2024

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 – Ulkokrunni – Virpiniemi	8576
Oulu harbours – Kattilankalla	8546
Kattilankalla – Oulu 1	6476
Sea area SW of Oulu 1	6476
High Sea N of the latitude of Marjaniemi	9006
Raahe harbour – Heikinkari	8546
Heikinkari – Raahe lighthouse	6476
Raahe lighthouse – Nahkiainen	4446
Latitude Marjaniemi – Ulkokalla, Sea	9416
Rahja harbour – Välimatala	8446
Vaelimatala to line Ulkokalla – Ykskivi	1106
Sea betw. lat. of Ulkokalla –Pietarsaari	4476
Ykspihlaja – Repskär	8446
Repskär – Kokkola lighthouse	3476
Sea area off Kokkola lighthouse	1006
Pietarsaari – Kallan	8446
Sea area off Kallan	1006
Sea lat. Pietarsaari – NE Nordvalen	2326
Sea area ENE of Nordvalen	1316
Sea area Nordvalen to W of Norrskär	3736
Vaskiluoto – Ensten	8446
Ensten – Vaasa lighthouse	1216
Vaasa lighthouse – Norrskär	1206
Sea area SW of Norrskär	2716
Kaskinen – Sälgrund	1302
Sea area off Sälgrund	1302
High sea from N to latitude Yttergrund	1302
Pori harb. to line Pori lighth. – Säppi	0//2
Rauma, Harbour – Kylmäpihlaja	0//2
Uusikaupunki harbour – Kirsta	1302
Naantali and Turku – Rajakari	1702
Rajakari – Lövskär	1302
Lövskär – Korra	1702
Korra – Isokari	0//2
Lövskär – Berghamn	0//2
Berghamn – Stora Sottunga	0//2
Stora Sottunga – Ledskär	0//2
Lövskär – Grisselborg	0//2
Koverhar – Hästö Busö	0//2
Inkoo a. Kantvik – sea area Porkkala	1302
Helsinki harbours – Harmaja	1302
Fairway Helsinki – Porkkala – Rönnskär	0//2
Vuosaari harbour – Eestiluoto	0//2
Porvoo harbours – Varlax	1702
Varlax – Porvoo lighthouse	0//2
Valko Harbour – Täktarn	0//2
Archipelago fairway Boistö – Glosholm	0//2
Archipelago fairway Glosholm–Helsinki	0//2
Kotka – Viikari	1102

Viikari – Orrengrund	0//2
Orrengrund – Tiiskeri	0//2
Hamina – Suurmusta	3326
Suurmusta – Merikari	0//5
Merikari – Kaunissaari	0//5

Russian Federation, 11.04.2024

Vyborg, port and bay	42//
Island Vichrevoj – Island Sommers	11//

Sweden, 11.04.2024

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 – Nygrån	6556
Sea area off Nygrån	5556
Skelleftehamn – Gåsören	8446
Sea area off Gåsören	5576
Sea area off Bjuröklubb	5576
NE of Nordvalen	1306
SW of Nordvalen	1306
Western Quark (W of Holmöarna)	4456
Umeå – Väktaren	2456
SE of Väktaren	1306
NE and SE of Sydostbrotten	1306
Fairway to Husum	2456
Örnsköldsvik – Hörnskaten	8446
Hörnskaten – Skagsudde	8446
Sea area off Skagsudde	4456
Fairway W of Ulvöarna	8446
Sea area E of Ulvöarna	3456
Ångermanälven north Sandö Bridge	8444
Ångermanälven south Sandö Bridge	8444
Härnösand – Härnön	2424
Sea area off Härnö	2424
Sundsvall – Draghällan	1306
Draghällan – Åstholmsudde	1306
Off Åstholmsudde and Brämön	1306
Hudiksvallfjärden	8392
Iggesund – Agö	8392
Sandarne – Hällgrund	8392
Ljusnefjärden – Storjungfrun	8392
Gävle – Eggegrund	1302