

Sea Fishing Near Tomakomai Port

March 2018

East Iburi-Hidaka Sea Fishing Operation Safety Fund

Introduction

March 2018

Various fishery is run targeting at salmons, trouts, flatfishes, pollacks, horsehair crab, prawns, octopuses with fixed shore nets, gill nets, fishing baskets and fishing boxes in the sea area around Tomakomai port, between the Cape Chikyu-misaki and the Cape Erimo-misaki.

Particularly, in the area along the shore, a lot of fixed shore nets for the purpose of the capture such as a salmon, the trout are installed from the early spring to the early winter.

From October to February, many fishery persons use gill nets to catch a huge amount of pollacks in the offshore sea area from many years ago. It always becomes the main fishery thing.

These days, the fishery management is put in the severer situation due to the decreasing of fishes and aging of the fishery persons etc.

On the other hand, the Tomakomai port has been growing up to the biggest port in Hokkaido since the port opening in 1963. It treats about half of the port freight in Hokkaido.

In such situation, damage of fishing gear of various fishery by these ships occurs every year and suppress fishery management.

We suppose both operation fishing boats and navigation ships deepens understanding to prevent these accidents and thinks that it is necessary to plan the establishment of more effective safety measures.

For all who makes the sea a place of the life, ensuring safety is a top priority problem, and both understanding and mutual concessions are necessary.

We appreciate if you can refer to navigate ships as we gathered the situation of the fishery operation of the sea area concerned.

We would like special cooperation about accident prevention in future.

You can read about the operation situation by the homepage of the Tomakomai Port management union.

<https://www.jpmtmk.com/030business/03cautions.html>

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I. About fishery around Eastern-Iburi and Hidaka area

Eastern-Iburi and the Hidaka area (Pacific coast in Hokkaido: Cape Chkyu-misaki to Cape Erimo-misaki) has a coastline of about 300 kilometers.

In this area, salmon, flatfishes, pollacks, shrimps, octopus, seaweed such as Konbu etc. and Hokki surf clams are produced.

Many fisheries are used in this area such as:

Fishing nets for Salmon and trout etc.

Gill nets for flatfishes and pollacks etc.

Fishing baskets for horsehair crabs and prawns etc.

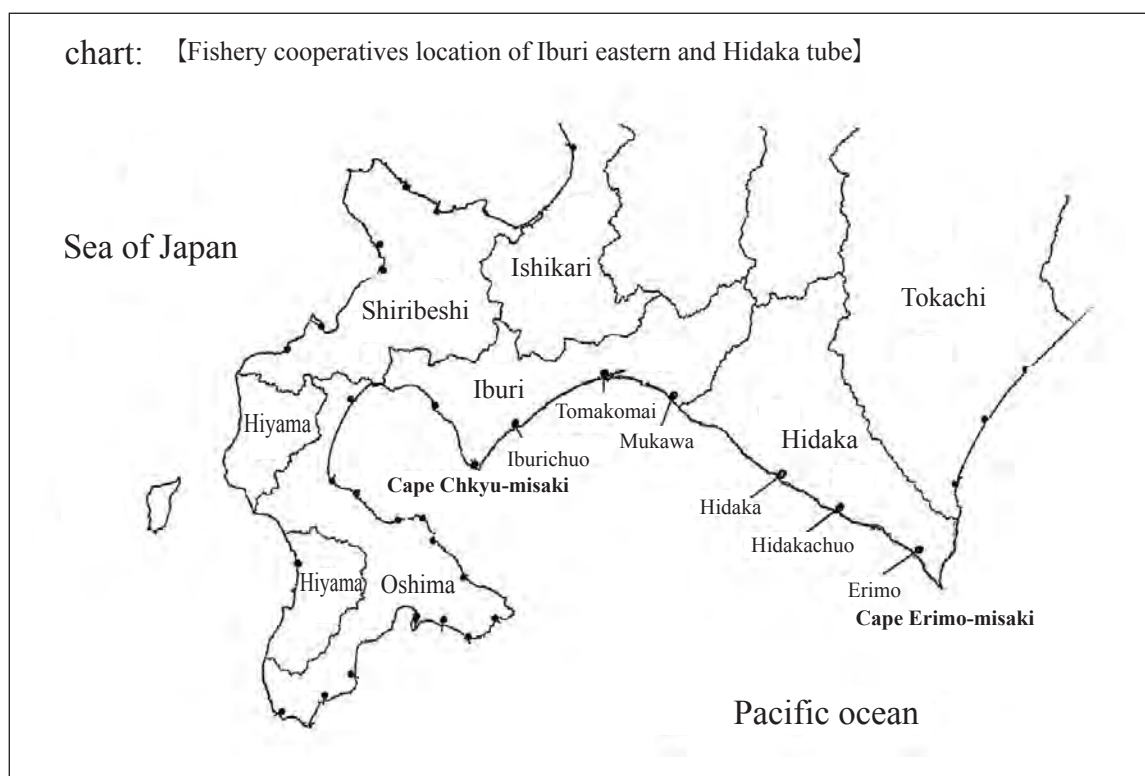
Fishing boxes and fishing nets with fishhook for octopus

Trawl fishing for pollacks

Other original nets for Shishamo-fish and clams and shellfishes

And to increase resources of coastal fishery, various fisheries promotion measures such as fishing ground construction and shellfish seedling migration and release are actively implemented.

There are seven fishermen's cooperative associations (the chart below) with coastal and offshore fishing grounds in the Eastern-Iburi and Hidaka area.



II. Operations

In this area, salmon with fishing nets, flatfishes and pollacks with gill nets, horsehair crabs and shrimps with fishing baskets, octopus fishing nets with fishhook and fishing methods are used.

1. Fishing nets

A net of about 1,000 to 2,000 meters is always installed on the prescribed sea surface. We catch salmons toward the east from the west on spring and toward the west from the east on autumn with this fishing nets.

Cutting accidents occur frequently in Hidaka-Mombetsu area because these fishing nets are offing about 4 nautical miles. Usually the fishing nets should be from the coast (1-2 nautical miles).

You must care in case of navigation in the west of Tomakomai port, there are some fishing nets offing 2 nautical miles from the shore.

(1) Operations

i. Operating period (note: some difference per fishing area)

Fishing net case are always placed in operating period. The nets are always placed in this period and are pulled off once to three times a day.

Spring: from Mar. 21 to Aug. 20 (Operating from Apr. 6 to Aug.15)

Spring to Autumn: from Apr. 5 to Dec. 20 (Operating from Apr. 20 to Jul.31, Spt.1 to Nov.23)

Autumn: from Jun.1 to Dec. 15 (Operating from Aug.30 to Dec.3)

ii. Operating position

Operations are done only in the specified area. The specified area is within 2 nautical miles. Although, 4 nautical miles in Hidaka-Mombetsu area. See Fig. p8~10

iii. Number of the nets

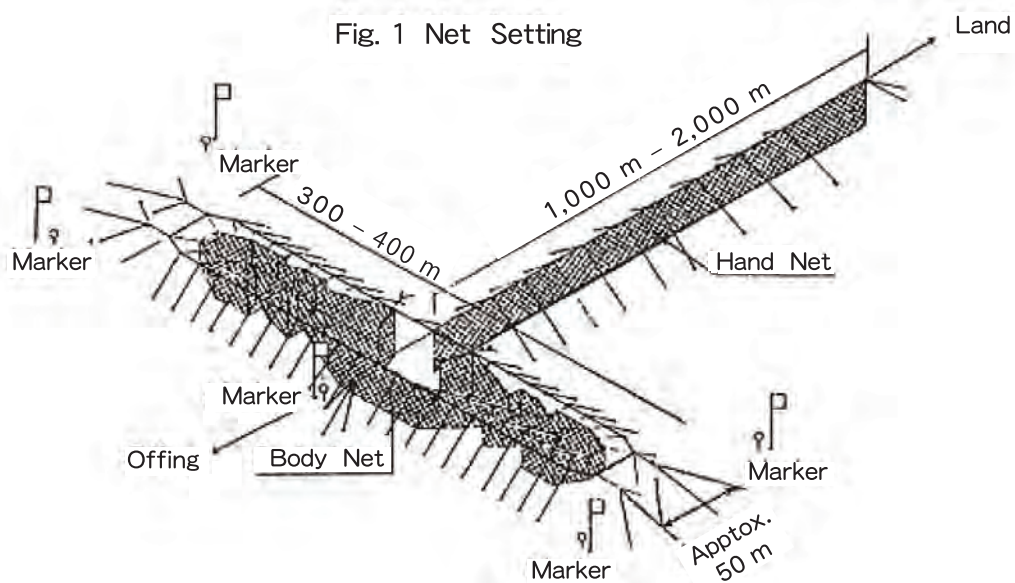
Area	Eastern-Iburi	Hidaka	Total
Spring	3	12	15
Spring to Autumn	-	19	19
Autumn	19	24	43
Total	22	55	77

iv. States of the nets

Hand nets (or fence nets) that guides migrating salmon is laid in a direction almost perpendicular to the land, and its length is about 1,000 to 2,000 meters

Capturing nets are laid in parallel with land in the offshore, and its width is about 300 to 400 meters

These nets are tightly installed with net floats, weights, and wire ropes. (Fig.1)



v. Operational indicators

A large fishing gear sign (flag), a light, a radar reflector, etc. are located around the laying net, although every hand net doesn't have the sign. And all signs are not same.

(2) Accidents

Most of the accidents are cutting nets or broken net systems by ships. Especially occurs in Hidaka-Mombetsu offshore area.

(3) Instructions in the navigation

Please sail offshore (more than 3 nautical miles away) since fishing nets are placed near the shore. The net systems are installed continuously and it's very hard to find the net systems. If you need to sail near the shore, you must check them out carefully as much as you can.

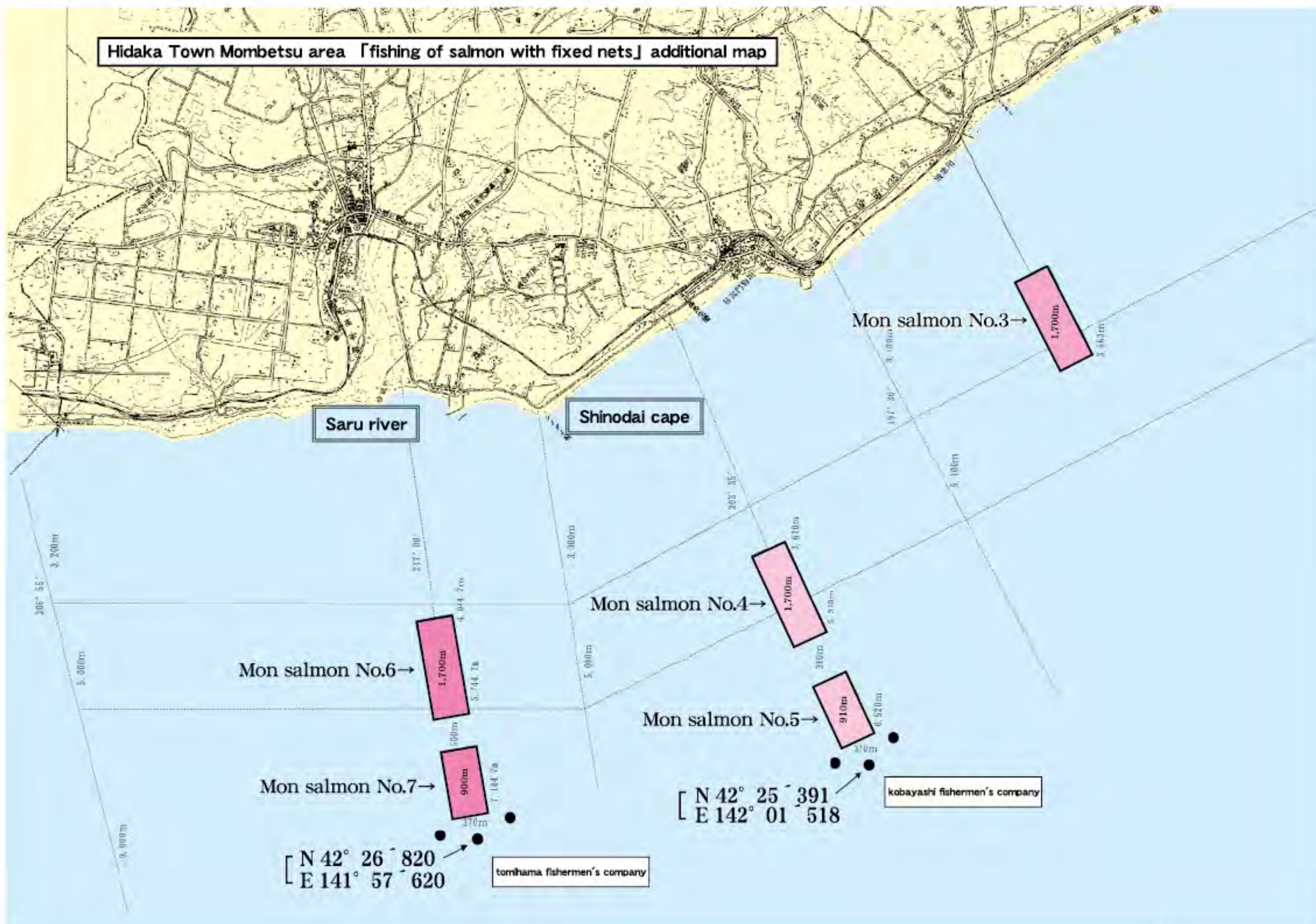
If you find these nets during sailing, move your ship to the offshore side since the nets are extended to the land side. In case of auto pilot navigation, please have a special care to them.

Be care with the fishing nets especially in the Hidaka-Mombetsu area when you make a navigation to the east from Tomakomai port.

It's so close to the nets when you make a direction 123 degree from the West Tomakomai Port or about 135 degree from the East Tomakomai port from April to August.

You must pay to fix the net systems when you make an accident and break them. Fishing nets are made of high quality parts to be used for long time. Please make a special care when you sail around the area, we don't want you pay for.

Hidaka Town Mombetsu area 「fishing of salmon with fixed nets」 additional map



2. Fishing nets, baskets, boxes, and octopus fishing

We place fishing gear on the bottom of the sea and set a sign of the mark on the sea surface. It will be done in a concentrated location. And they will be done in similar places.

Please be care of floating balls for tide or connecting wire ropes around these marks on sea surface.

(1) Operations

Many kind of fishery is done all through the year around this area. The fishing implements are always laid during an operation period and is raised once a day. It should be there for days without raising if the wave is too high.

Operating positions are on Fig.p9~p11

These nets should be moved for miles for the kind of fishes or operation periods.

The fishing methods, operation periods, number of hours of work, etc. of major fish species are as follows:

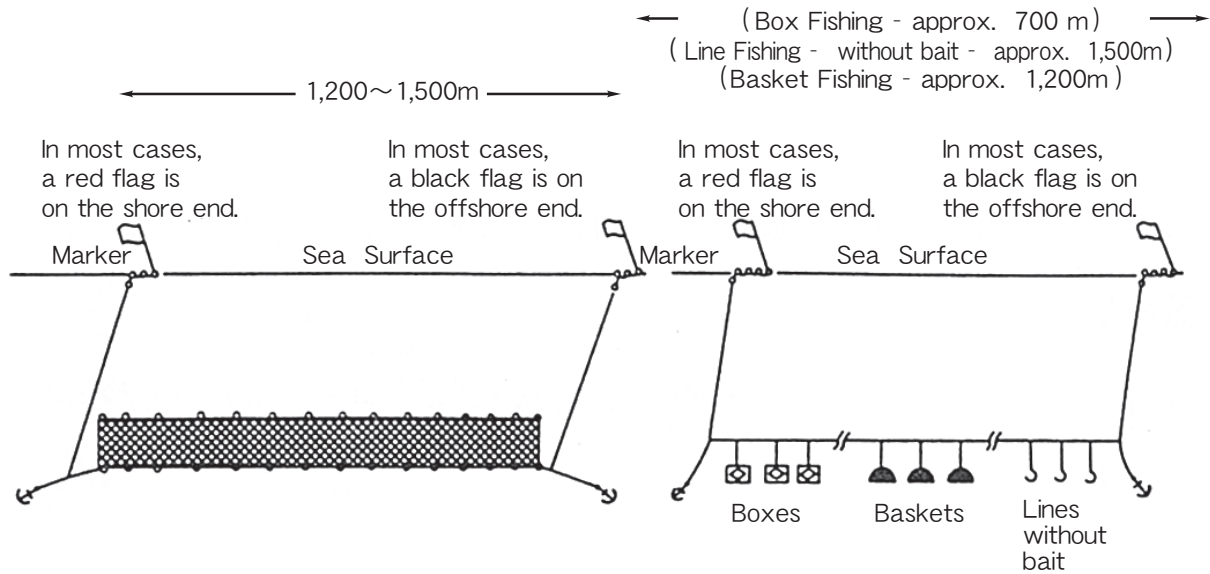
Fish	Methods	Operation season	Peak season	Number of approved boats
Pollacks		Aug. to Mar.	Nov. to Feb.	400
Flatfish		Whole year	May to Jul. Nov. to Jan.	678
Batoidea	Gill nets	Whole year	Apr. To Jul. Nov. to Feb.	342
Hokke		Whole year	Mar. to Sep.	293
Menuke		Whole year	Mar. to Sep.	55
Horsehair crab	Baskets	Jul. to Aug. Dec. to Mar.	Jul. to Aug. Jan. to Feb.	118
Prawns/Octopus		Mar. to Jan.	Mar. to May Aug. to Nov.	148
Whelk	Original boxnets	Whole year	Apr. To Aug.	417
Octopus	Boxes/Original	Whole year	Jul. to Sep. Nov. to Mar.	321

(2) Fishing implements

Most of fishing implements are usually sunk in the bottom of the sea.

Fishing gear signs(flag) with floating balls are located around the laying net on the sea surface. (Fig.2)

Fig. 2 Net Setting



(3) Fishing implements mark

There are some signs stipulated by agreement depending on fish species, but it is not particularly regulated.

Generally, when laying at right angle to the coastline, red flags are used on the land side, black or white flags on the offshore side are displayed on the sea surface. When laying parallel to the coastline, red flags on the west side and black or white flags at the east side are displayed on the sea surface. (Fig.2)

Most of these flags have lights or radar reflectors.

(4) Accidents

Most of the accidents are cuts or losses of ropes connecting fishing gear signs and floating balls. When the fishing gear signs at both ends disappear, the position of the net becomes unknown and it becomes a big damage.

Recently, the ropes are so durable and cannot be cut, that we may lost whole fishing net systems. There are also accidents which seems to be caused by ship anchors.

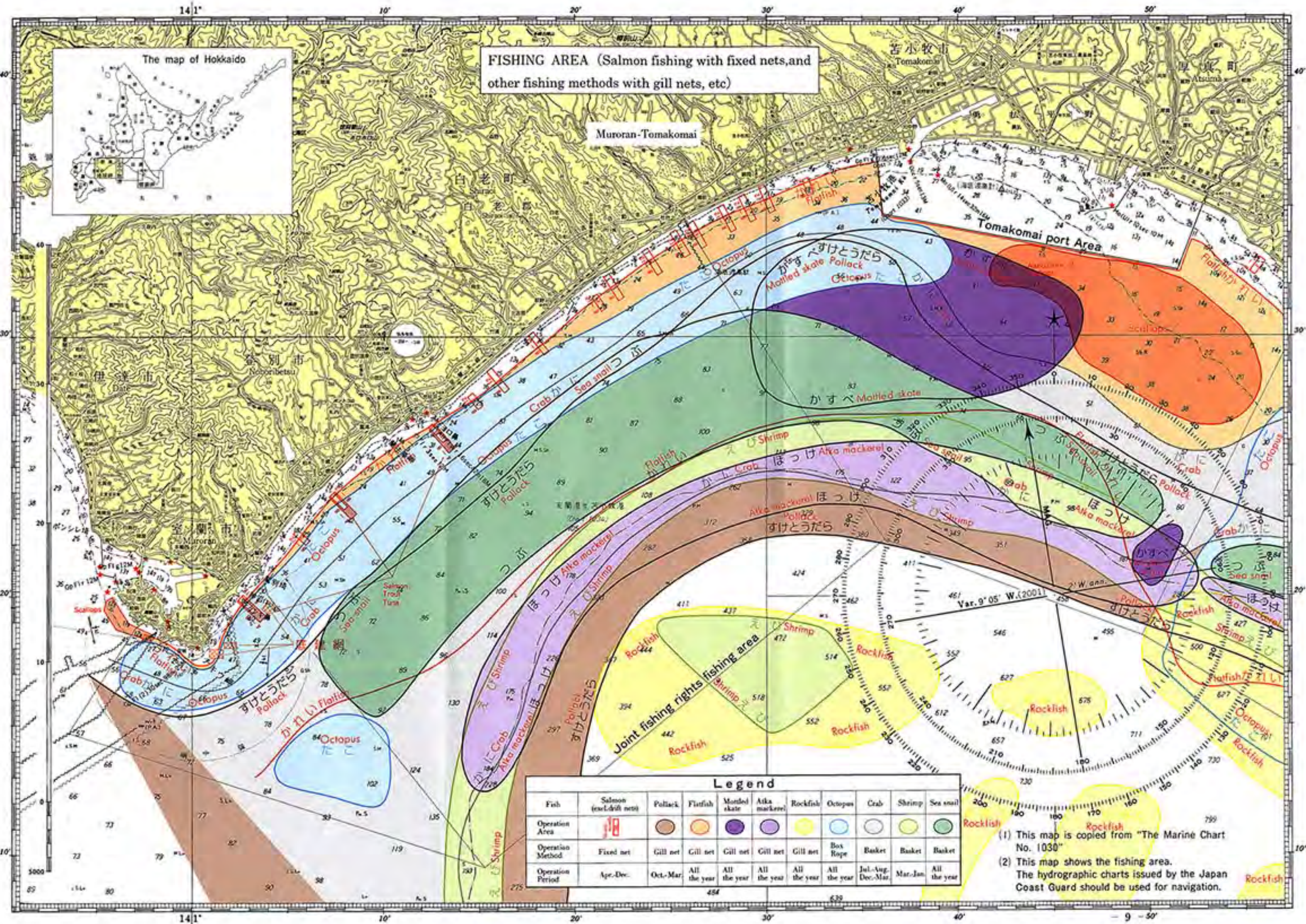
(5) Caution on navigating ships

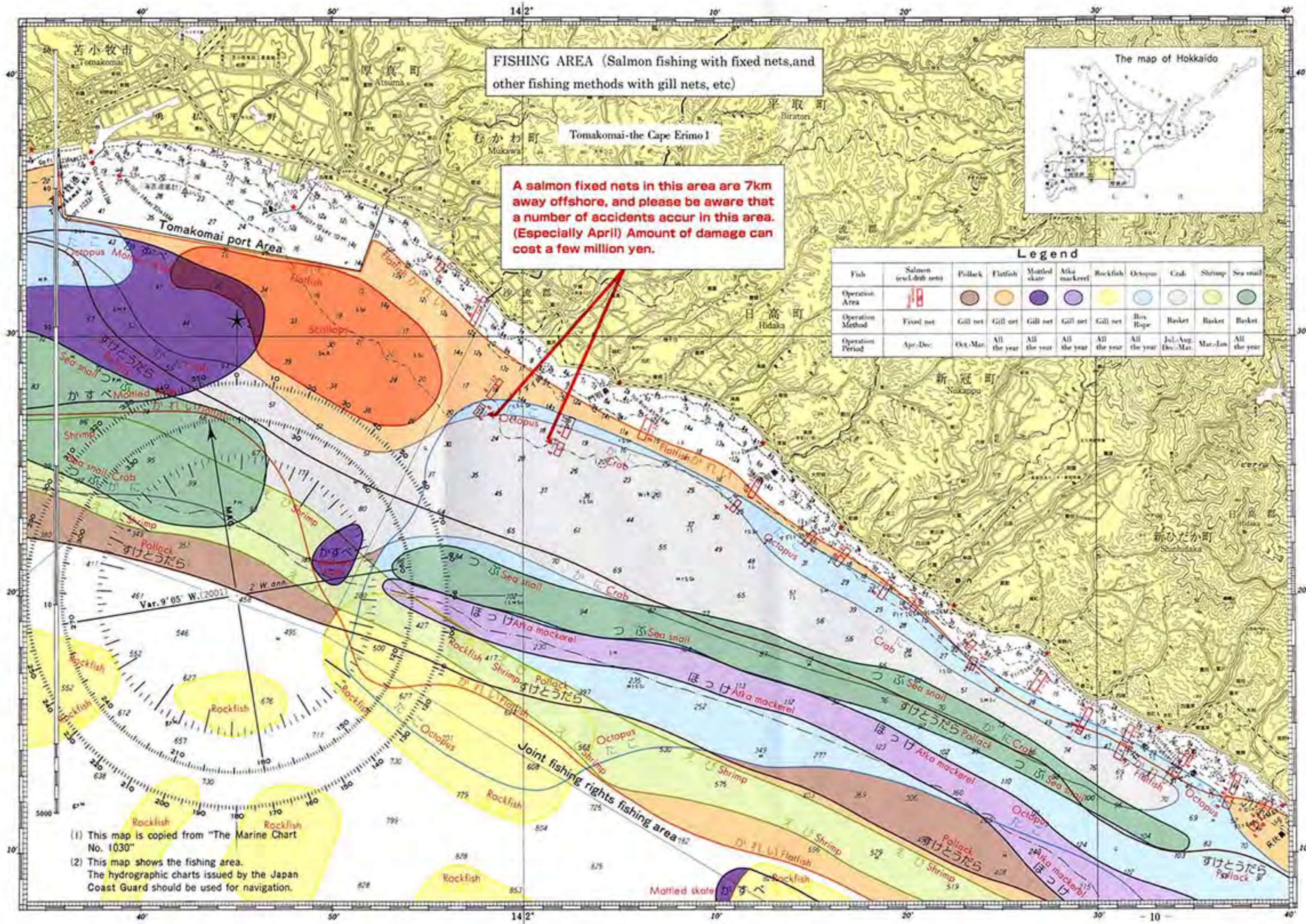
The fishing nets may not be damaged on usual navigation because they are usually laid on the sea floor. But you had better not to navigate this area because so many fishery nets or something are placed around. **Please make special caution on the marks to avoid any accidents** when you navigate this area.

In case of avoiding the marks, please keep sailing on the downstream side as the float is upstream of the tide flow from the sign. You must detour greatly when sailing upstream.

Please be careful when dropping the anchor especially around the shore.
Especially, around the cape Erimo-misaki, make a big caution on dropping the anchors because so many fishing nets are in the sea.

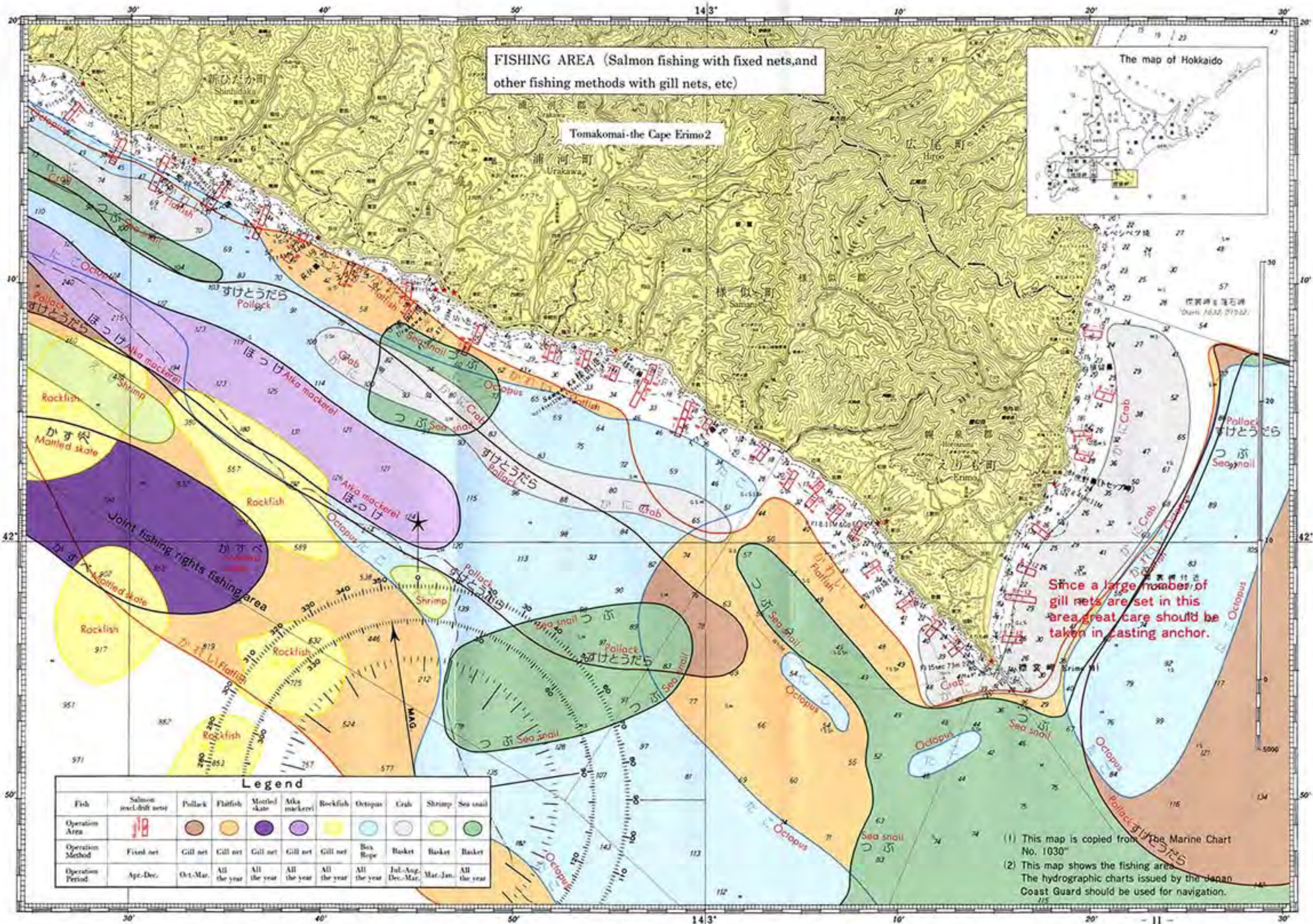
For fishing, bottom trawling, dotted netting etc., we omitted the description in this document because the fishing boat and the fishing gear are integrated in operation, such as hanging the fishing gear from the fishing boat or drawing fishing gear with the fishing boat.





(1) This map is copied from "The Marine Chart No. 1030"

(2) This map shows the fishing area. The hydrographic charts issued by the Japan Coast Guard should be used for navigation.



3. Salmon and trout drift net fishing - small boat (under 30 tons)

This is one of the major fishery accidents. This fishery nets should be placed near the sea surface to catch salmon and trouts for several kilometers. It's too hard to find these nets because of a heavy fog on the sea in the peak season and some reasons.

However, recently, the number of operations has decreased, and the main fishing grounds are off the east coast of Hokkaido (Nemuro and Kushiro area), and operations in the west of Cape Erimo-misaki are decreasing.

(1) Operations

i. Operation period (scheduled)

From Apr.10 to Jul.7

In early May, when the surface temperature of the sea water reaches 4 to 5 degrees, the fish school appears from the offshore of Muroran to Tomakomai and moves to Hidaka area gradually. In the latter half of June, they gradually move off to Cape Erimo-misaki and to offshore of Kushiro.

The peak period is from mid-May to mid-June where the water temperature will be 7 to 11 degrees. Therefore, the fishing ground will move from the west to the east (from Muroran towards Tomakomai / Erimo) sequentially.

ii. Operation time

Departing around noon, choosing a fishing ground, starting the casting net from around 15 o'clock. It takes about one and half an hour. Lift nets start from about 22 to 24 o'clock and end at about 3 to 4 o'clock, but sometimes it may extend to around 7 o'clock. Normally, it takes about 3 to 4 hours. It depends on fishing situation, returning port time is after 3 o'clock

iii. Operation area

The operation is carried out targeting at all sea areas. (Fig.p15)

The operation position moves by the situation of the fishing ground of the day.

At the place where various gill nets fishing is done, the drifting net fishing is not carried out.

iv. Operation situations

The average length of the net is 5,000 meters (permission is up to 10,000 meters), and the nets are placed about 6 to 7 meters' depth from sea surface. These are density packed in good fishing places. Throwing net is done at the stern and lifting net is done at the bow of the fishing boat. (Fig.3,4)

The direction of laying nets is done in a direction almost perpendicular to the tidal current, same as coastline. Net directions are North-northwest between Muroran and Tomakomai, North-northeast between Tomakomai and Erimo and are to be separated from the adjacent net by 900 meters or more. They are not constant because they drift after laying them. (Fig.5)

Fig. 3 Net Casting

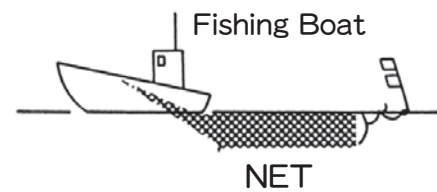
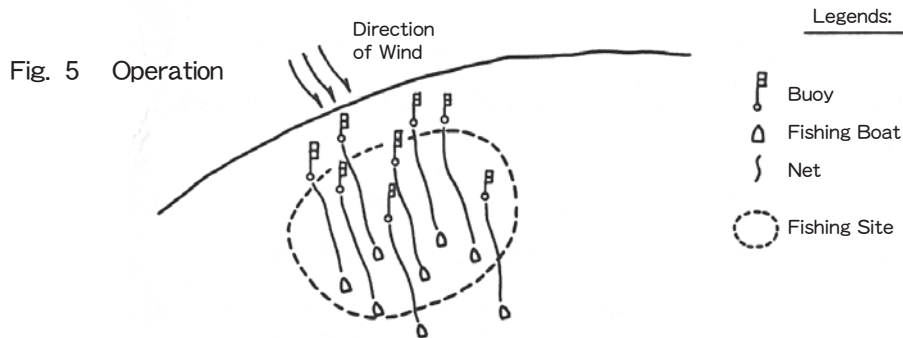
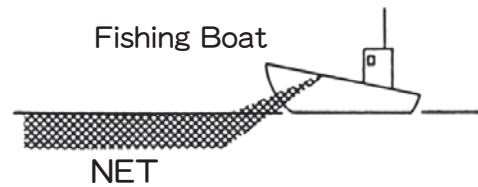


Fig. 4 Net Recovery



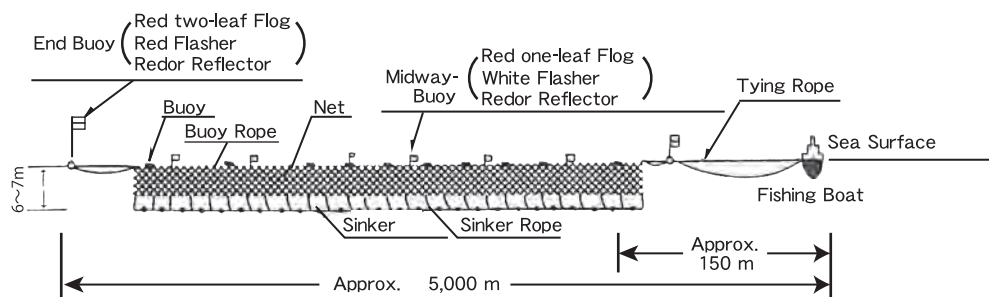
v. Operation signs

When laying net toward the offshore, a large fishing flag or a red flag (1m × 0.8m or more) is placed on the stern when laying on the stern, and on the bow when laying toward the land. There are two red flags and red flash lights on both ends of the net, and one red flag and a white flashing light in the middle between 500 and 800 meters. (Fig.6)

These flash lights can be delivered in one to two nautical miles.

Some radar reflectors are also installed to most of the nets to allow the network to recognize it as a line when viewed on a radar.

Fig . 6 Net Laying



(2) Accidents

Cutting nets accidents have occurred on these areas for many times. Also the main fishing area is eastern Hokkaido these days, but there is concern about the occurrence of accidents such as cutting nets by ships and losing nets in the sea area.

(3) Caution on navigating ships

To avoid the fishing ground is extremely difficult because the salmon and trout nets are densely laid and so unfindable.

Especially, it's extremely difficult to avoid under adverse conditions such as nighttime and heavy fog, please do not sail on fishing grounds that are operating as much as possible. If you should navigate in the fishing area, please strictly observe the watch and sail with full attention. Please make special care when you use automatic navigation.

Detour greatly in front of the fishing boat if you find a fishing boat throwing nets (around 15 to 19 o'clock), the net will extend in the stern direction. (Fig.7)

And detour greatly behind the stern if you find them lifting nets (around 22 to 4 o'clock), the nets will extend in the front of the boats. (Fig.8)

When you find the net, you must avoid them and navigate your ship to the place where a red light or fishing boats are. (Fig.9)

According to the Article 36 of the Maritime Collision Prevention Law, if you find a ship that approaches the net laid at night, **fishing boats will indicate the direction in which the net is laid** with a search light etc. Please avoid navigating them. (Fig.10)

Be careful to operate your ship because there are following nets also after avoid one net in the fishing grounds.

Fishing boats in operation are often are connected with the nets, so you can't even make a free navigation. Please **detour greatly as soon as possible** if you find them.

Fig.7 At Net Casting

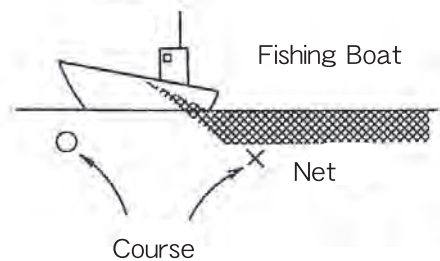


Fig.8 At Net Recovery

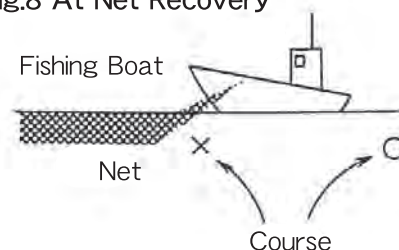


Fig. 9

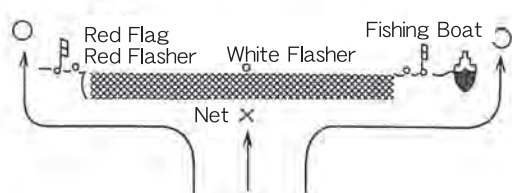
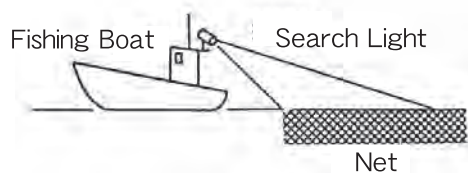
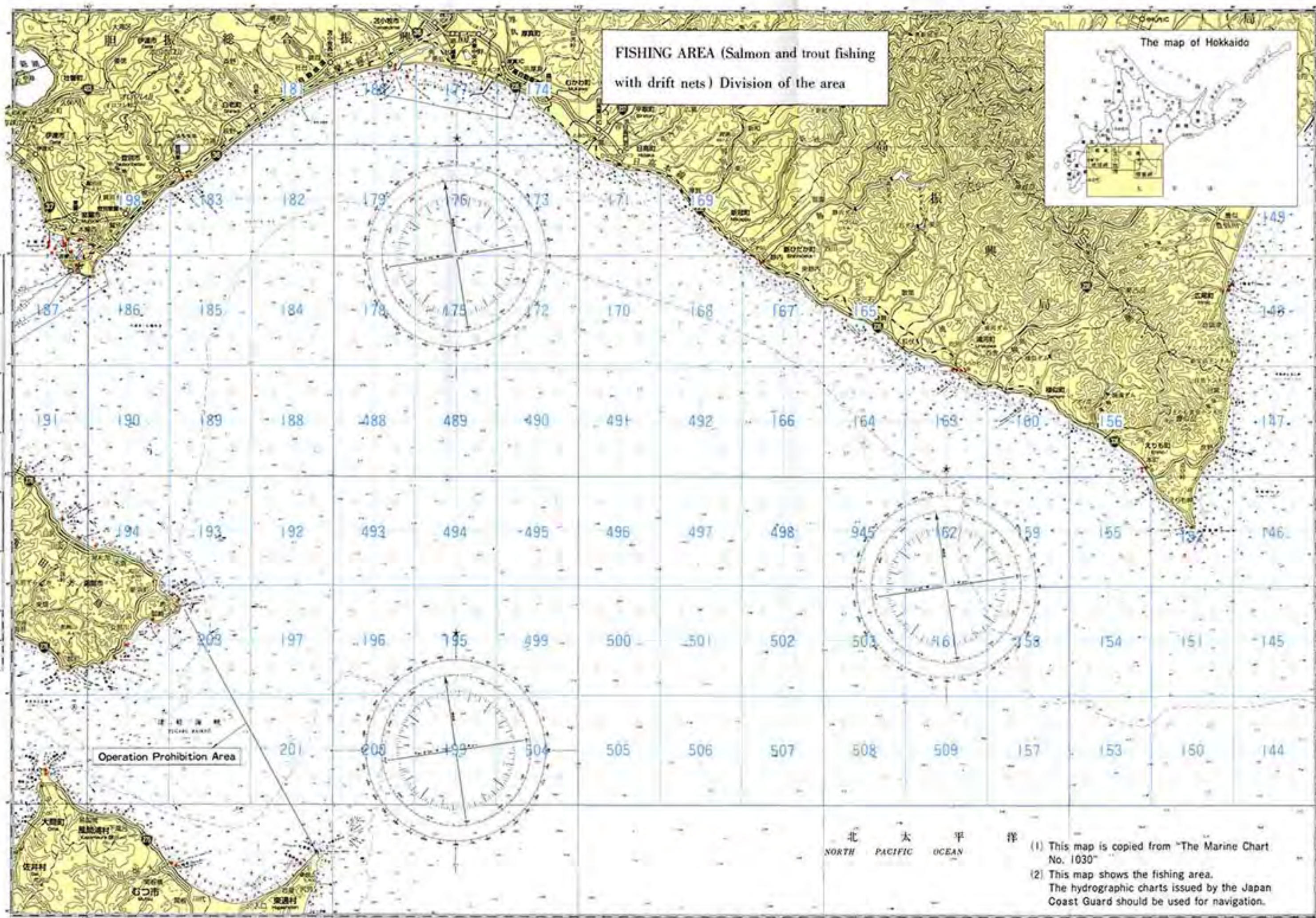


Fig. 10





III. Status grasp and fishing implements damage payment business of the ship

The system for maritime accidents and safety communication so far provided sea status information and the like to ships and aimed for quick search operation when marine accidents occurred. Furthermore, in response to the need for a ship and coastal station to automatically transmit and receive information such as ship name, position, course, speed etc. to prevent collision, Automatic Identification System (AIS) has been mandated for ships designated by laws and regulations.

With the cooperation of the Hidaka Fishery Radio Station, our association will grasp the ship from the cape Chikyu-misaki to the cape Erimo-misaki and accumulate the data since 2010. These data are used for safety measures business.

We will improve our system to grasp movement of every ship more from 2017.

We are engaged in projects to compensate for fishing gear damage such as business to secure operational safety of coastal fishery from ship entering and leaving Tomakomai port and disconnection and loss of fishing gear caused by ship navigation.

For fishing gear damage, we have been providing relief funds for the damage of 412 cases in 2011. In recent years, although there is a decreasing trend, there are still applications for more than 250 fishing gear damage.

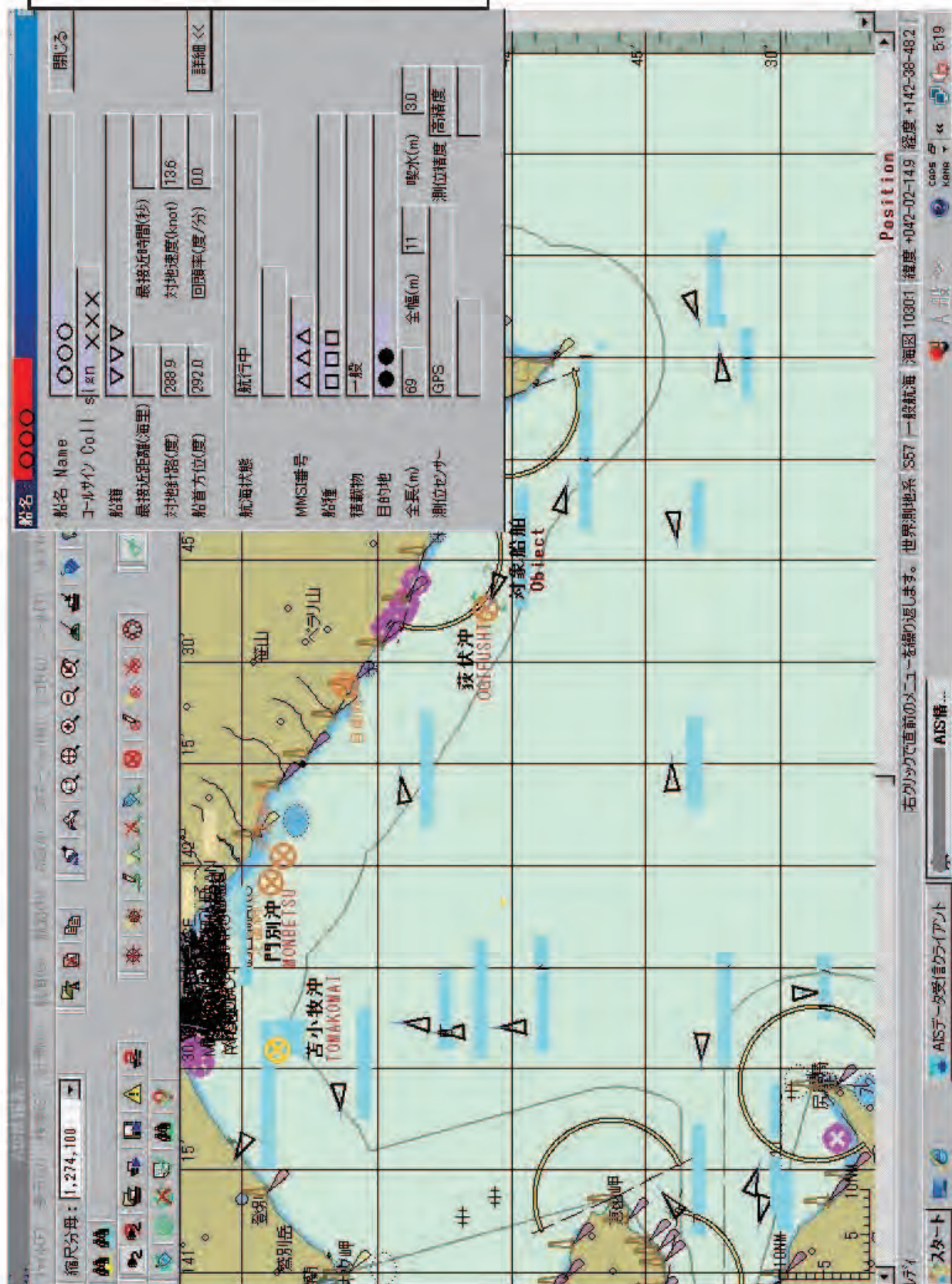
Particularly, in 2017 of the last year, the damage of the fishery tools of 340 occurs and is increasing a lot.

We analyze ship movements and will make every effort to make fishermen or fishery persons to raise awareness and calling attention to reduce damages.

Figure 1

a: data from the terminal of AIS in HFTS

b:
identifying data
of vessel
(upper right)



List of Damage Value and Benefit Value of Fishing Category and Fishery Association in 2015

[Period 2015'1.1~2015'12.31]

Unit : JPY

Association Name	Division	Fisheries Difference													Total	
		Pollack Gill Net	Flatfish Gill Net	Pacific cod Gill Net	Mottled Skata Gill Net	Alka Mackerel Gill Net	Thornyhead Gill Net	Ocean Perch Gill Net	Sandfish Gill net	Shrimp Basket	Crab Basket	Sea Snail Basket	Octopus Box	Octopus Line	Salmon Fixed nets	Total
Noboribetsu Branch	Events			4								1				5
	Application Value			61,172							19,670					80,842
	Supply Value			32,012							12,709					44,721
kojyohama	Events	3		26					1	3			1			34
	Application Value	100,164		467,006					15,603	52,743		19,661				655,177
	Supply Value	36,390		247,193					11,702	27,316		10,057				332,658
Shiraori Branch	Events	12	8	3	2					4	24	3				56
	Application Value	209,449	127,917	50,718	39,578				15,603	108,224	331,992	56,630				832,434
	Supply Value	153,238	93,697	37,536	28,792				11,702	68,090	243,897	39,015				614,183
Iburichuo – Fisheries Cooperative Association	Events	15	8	33	2				1	7	25	4				95
	Application Value	309,613	127,917	578,896	39,578				15,603	108,224	331,992	56,630				1,568,453
	Supply Value	189,628	93,697	316,741	28,792				11,702	68,090	243,897	39,015				991,562
Tomakomai – Fisheries Cooperative Association	Events	15	20	1	5					22	29	1				94
	Application Value	333,564	378,432	13,890	13,890	139,234				391,808	369,143	34,110				1,674,071
	Supply Value	251,690	268,963	9,062	8,515	102,627				244,583	260,538	21,013				1,166,991
Hidaka – Fisheries Cooperative Association	Events									3		1		3		7
	Application Value									103,519		33,610		38,171		175,300
	Supply Value									56,619		18,486		18,415		93,520
Hidakachuo – Fisheries Cooperative Association	Events		5				3			22		3		25		58
	Application Value		96,622				81,720			542,456		6,804		335,800		1,063,402
	Supply Value		53,140				44,590			297,760		3,741		165,085		564,316
Total	Events	30	33	34	3	5	3		1	54	54	9		28		254
	Application Value	643,177	602,971	592,786	53,468	139,234	81,720		15,603	1,146,007	701,135	131,154		373,971		4,481,226
	Supply Value	441,318	415,800	325,803	37,307	102,627	44,590		11,702	667,052	504,435	82,255		183,500		2,816,389

List of Damage Value and Benefit Value of Fishing Category and Fishery Association in 2016

[Period 2016'1.1~2016'12.31]

Unit : JPY

Association Name	Division	Fisheries Difference													Total	
		Pollack Gill Net	Flatfish Gill Net	Pacific cod Gill Net	Mottled Skata Gill Net	Alka Mackerel Gill Net	Rockfish Gill Net	Thornyhead Gill Net	Ocean Perch Gill Net	Shrimp Basket	Crab Basket	Sea Snail Basket	Octopus Box	Octopus Line	Salmon Fixed nets	Total
Noboribetsu Branch	Events									12	1	1				14
	Application Value									181,446	18,112	6,721				206,279
	Supply Value									108,867	13,584	5,041				127,492
kojyohama	Events		1	1	5					5		2				14
	Application Value		14,192	19,742	59,566					86,799		35,896				216,195
	Supply Value		10,644	14,807	44,515					64,841		26,842				161,649
Shiraori Branch	Events	4	11	10	2					3	14					44
	Application Value	86,022	171,332	147,195	23,242					36,320	188,040					652,151
	Supply Value	57,280	128,775	109,037	17,432					27,240	140,398					480,162
Iburichuo – Fisheries Cooperative Association	Events	4	12	11	7					20	15	3				72
	Application Value	86,022	185,524	166,937	82,808					304,565	206,152	42,617				1,074,625
	Supply Value	57,280	139,419	123,844	61,947					200,948	153,982	31,883				769,303
Tomakomai – Fisheries Cooperative Association	Events	11	14	1	4	1				18	52	15				116
	Application Value	102,068	251,417	13,858	46,526	9,212				334,547	629,810	232,838				1,620,276
	Supply Value	67,986	172,368	9,080	31,190	7,347				218,670	468,524	146,210				1,121,375
Hidaka – Fisheries Cooperative Association	Events		2					1		5				9		17
	Application Value		67,220					49,500		198,098				259,872		574,690
	Supply Value		31,818					20,071		97,181				59,952		209,022
Hidakachuo – Fisheries Cooperative Association	Events		3		4		6			25		4		18		60
	Application Value		63,288		118,952		161,686			631,336		57,934		230,112		1,263,308
	Supply Value		33,887		65,424		88,14			346,764		31,746		115,866		681,901
Total	Events	15	31	12	15	1	6	1		68	67	22		27		265
	Application Value	188,090	567,449	180,795	248,286	9,212	161,686	49,500		1,468,546	835,962	333,389		489,984		4,532,899
	Supply Value	125,266	377,492	132,924	158,561	7,347	88,214	20,071		863,563	622,506	209,839		175,818		2,781,601

List of Damage Value and Benefit Value of Fishing Category and Fishery Association in 2017

[Period 2017'1.1~2017'12.31]

Unit : JPY

Association Name	Division	Fisheries Difference													Total	
		Pollack Gill Net	Flatfish Gill Net	Pacific cod Gill Net	Mottled Skata Gill Net	Alka Mackerel Gill Net	Rockfish Gill Net	Thornyhead Gill Net	Ocean Perch Gill Net	Shrimp Basket	Octopus Basket	Crab Basket	Sea Snail Basket	Octopus Box	Octopus Line	Salmon Fixed nets
Noboribetsu Branch	Events	1									13	1				15
	Application Value	26,861									199,846	18,160				244,867
	Supply Value	20,146									118,597	14,528				153,271
kojyohama	Events	2			2						17	1	28			50
	Application Value	34,521			25,748						280,387	11,784	390,016			742,456
	Supply Value	25,891			19,311						183,584	9,427	301,772			539,985
Shiraori Branch	Events	9	12	7	1						54	16				99
	Application Value	197,645	234,629	132,365	24,804						884,371	214,973				1,688,787
	Supply Value	145,624	175,041	98,116	18,603						669,138	166,505				1,273,027
Iburichuo – Fisheries Cooperative Association	Events	12	12	7	3						84	18	28			164
	Application Value	259,027	234,629	132,365	50,552						1,364,604	244,917	390,016			2,676,110
	Supply Value	191,661	175,041	98,116	37,914						971,319	190,460	301,772			1,966,283
Tomakomai – Fisheries Cooperative Association	Events	5	15			7					14	20	66			127
	Application Value	98,313	177,734			28,244					259,542	177,434	810,605			1,551,872
	Supply Value	76,218	136,303			22,596					189,734	141,389	607,265			1,173,505
Hidaka – Fisheries Cooperative Association	Events		1	1							2		6		7	17
	Application Value		33,610	31,229							59,755		180,862		103,721	409,177
	Supply Value		15,909	16,972							22,411		88,967		39,864	184,123
Hidakachuo – Fisheries Cooperative Association	Events		8								11		5		8	32
	Application Value		192,950								268,020		71,556		101,584	634,110
	Supply Value		102,766								147,413		39,118		51,120	340,417
Total	Events	17	36	8	3	7					111	38	105		15	340
	Application Value	357,340	638,923	163,594	50,552	28,244					1,951,921	422,351	1,453,039		205,305	5,271,269
	Supply Value	267,879	430,019	115,088	37,914	22,596					1,330,877	331,849	1,037,122		90,984	3,664,328

East Iburi-Hidaka Sea Fishing Operation Safety Fund Association

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