

TOKYO BAY

FISHERY INFORMATION

M A P



Japan Association of Marine Safety

The Purpose of Tokyo Bay Fishery Information Map (TBFIM)



Conger Tube Fishing Boat



Oil Tanker

Tokyo Bay Fishery Information Map/TBFIM is a map that displays main fisheries carried out in the bay of Tokyo. This map is made for the improvement of safety of both shipping agents and fishermen in Tokyo Bay.

TBFIM only shows the major characteristics of Tokyo Bay and its fishery. Therefore, it is important to note that there are other shipping/fishery operations in this area that not shown in this map.

We hope that utilizing this map will contribute to safety navigation in shipping and fishery field.



Small Scale Trawl Fishing Boat



Tugboat

Examples of Accidents between General Ships and Fishing Boats in Tokyo Bay

Conger Tube Fishing

- A fishing boat was collecting conger tubes at night. It touched with a general boat and sunk in 10 minutes.

Small Scale Trawl Fishing

- When a fishing boat was operating a trawl, a general ship caught the wire.

Purse Seine Fishing

- A fishing boat was capsized when a large size ship circled near around her fishing net and caught the net.
- A general ship sailed on the net and cut it off.

Gill Net Fishing

- A general ship cut off the gill net by sailing astern of the fishing boat.

Pole and Line Fishing

- When a fishing boat was anchor mooring and fishing, a general ship caught its anchor chain to the boat and caused it to capsize.

Set Net Fishing

- A general ship entered set net and cut it.

Seaweed Farming

- Several general ships entered seaweed farming areas and broke it.

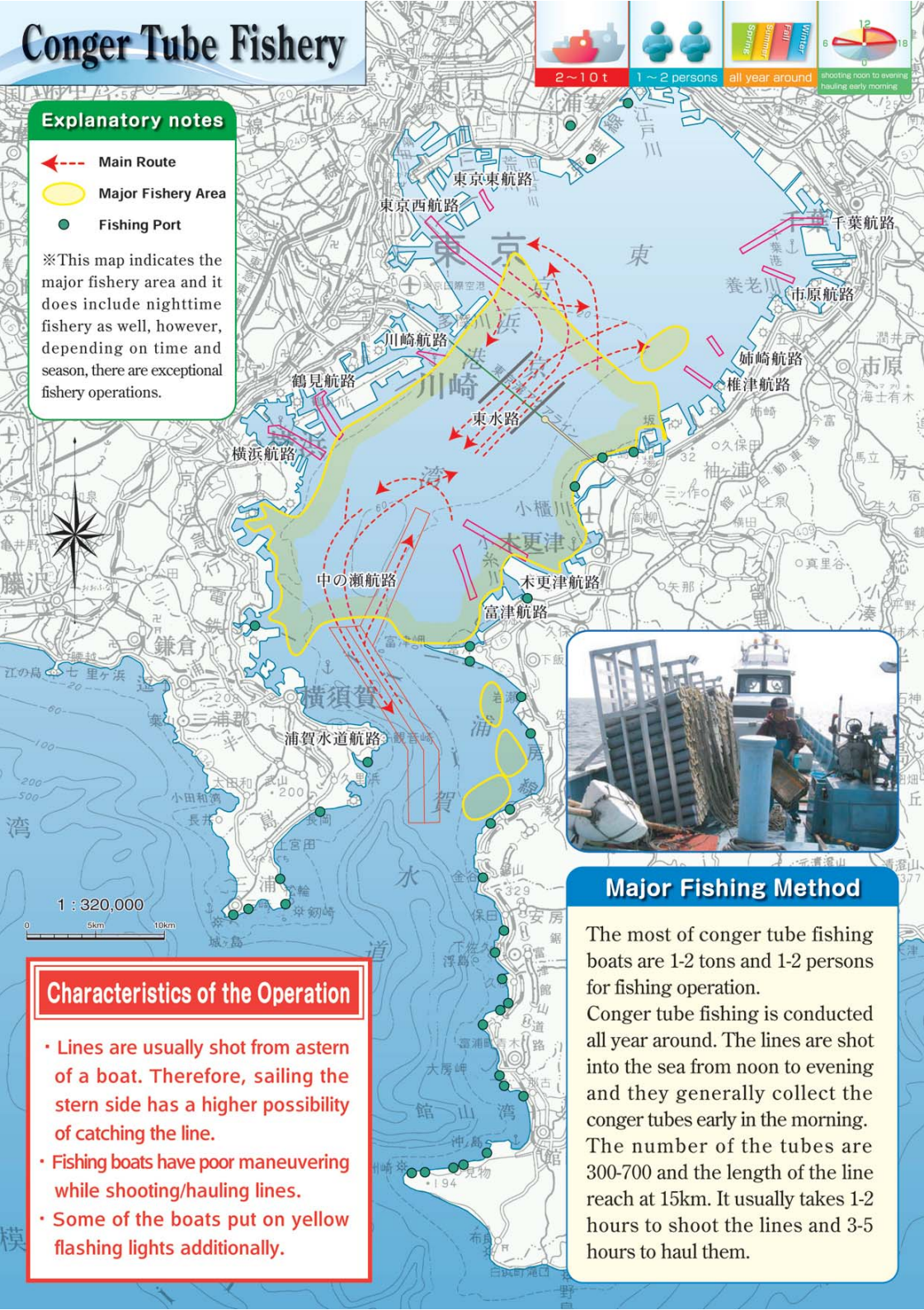
Conger Tube Fishery

2 ~ 10 t	1 ~ 2 persons	all year around	shooting from dawn to evening hauling early morning
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Explanatory notes

- Main Route
- Major Fishery Area
- Fishing Port

※This map indicates the major fishery area and it does include nighttime fishery as well, however, depending on time and season, there are exceptional fishery operations.



Major Fishing Method

The most of conger tube fishing boats are 1-2 tons and 1-2 persons for fishing operation.

Conger tube fishing is conducted all year around. The lines are shot into the sea from noon to evening and they generally collect the conger tubes early in the morning. The number of the tubes are 300-700 and the length of the line reach at 15km. It usually takes 1-2 hours to shoot the lines and 3-5 hours to haul them.

Characteristics of the Operation

- Lines are usually shot from astern of a boat. Therefore, sailing the stern side has a higher possibility of catching the line.
- Fishing boats have poor maneuvering while shooting/hauling lines.
- Some of the boats put on yellow flashing lights additionally.

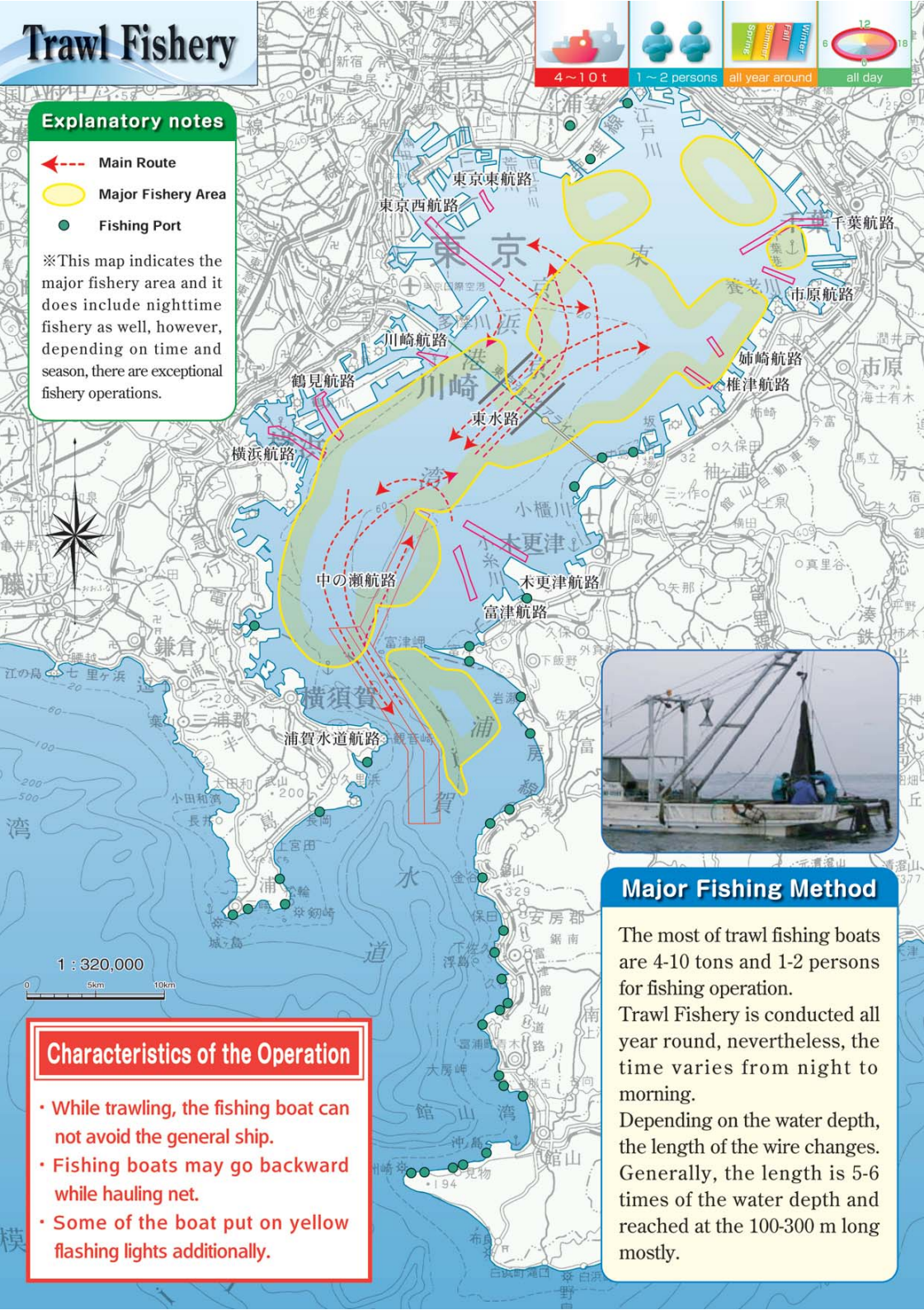
Trawl Fishery

4~10 t 1~2 persons all year around all day

Explanatory notes

- Main Route
- Major Fishery Area
- Fishing Port

※ This map indicates the major fishery area and it does include nighttime fishery as well, however, depending on time and season, there are exceptional fishery operations.



Major Fishing Method

The most of trawl fishing boats are 4-10 tons and 1-2 persons for fishing operation.

Trawl Fishery is conducted all year round, nevertheless, the time varies from night to morning.

Depending on the water depth, the length of the wire changes. Generally, the length is 5-6 times of the water depth and reached at the 100-300 m long mostly.

Characteristics of the Operation

- While trawling, the fishing boat can not avoid the general ship.
- Fishing boats may go backward while hauling net.
- Some of the boat put on yellow flashing lights additionally.

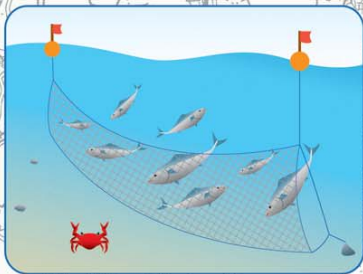
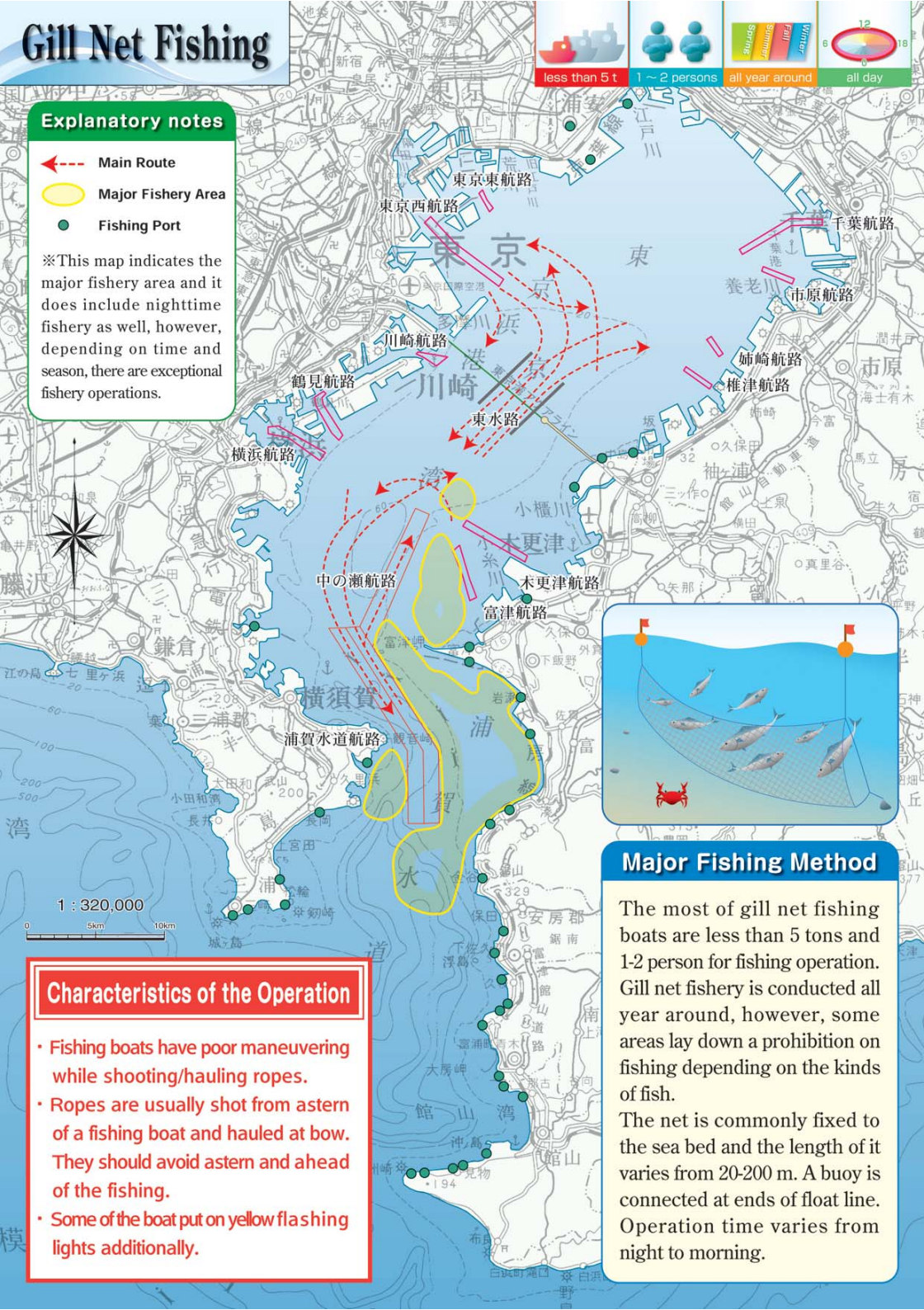
Gill Net Fishing



Explanatory notes

- > Main Route
- Major Fishery Area
- Fishing Port

※This map indicates the major fishery area and it does include nighttime fishery as well, however, depending on time and season, there are exceptional fishery operations.



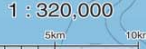
Major Fishing Method

The most of gill net fishing boats are less than 5 tons and 1-2 person for fishing operation. Gill net fishery is conducted all year around, however, some areas lay down a prohibition on fishing depending on the kinds of fish.

The net is commonly fixed to the sea bed and the length of it varies from 20-200 m. A buoy is connected at ends of float line. Operation time varies from night to morning.

Characteristics of the Operation

- Fishing boats have poor maneuvering while shooting/hauling ropes.
- Ropes are usually shot from astern of a fishing boat and hauled at bow. They should avoid astern and ahead of the fishing.
- Some of the boat put on yellow flashing lights additionally.



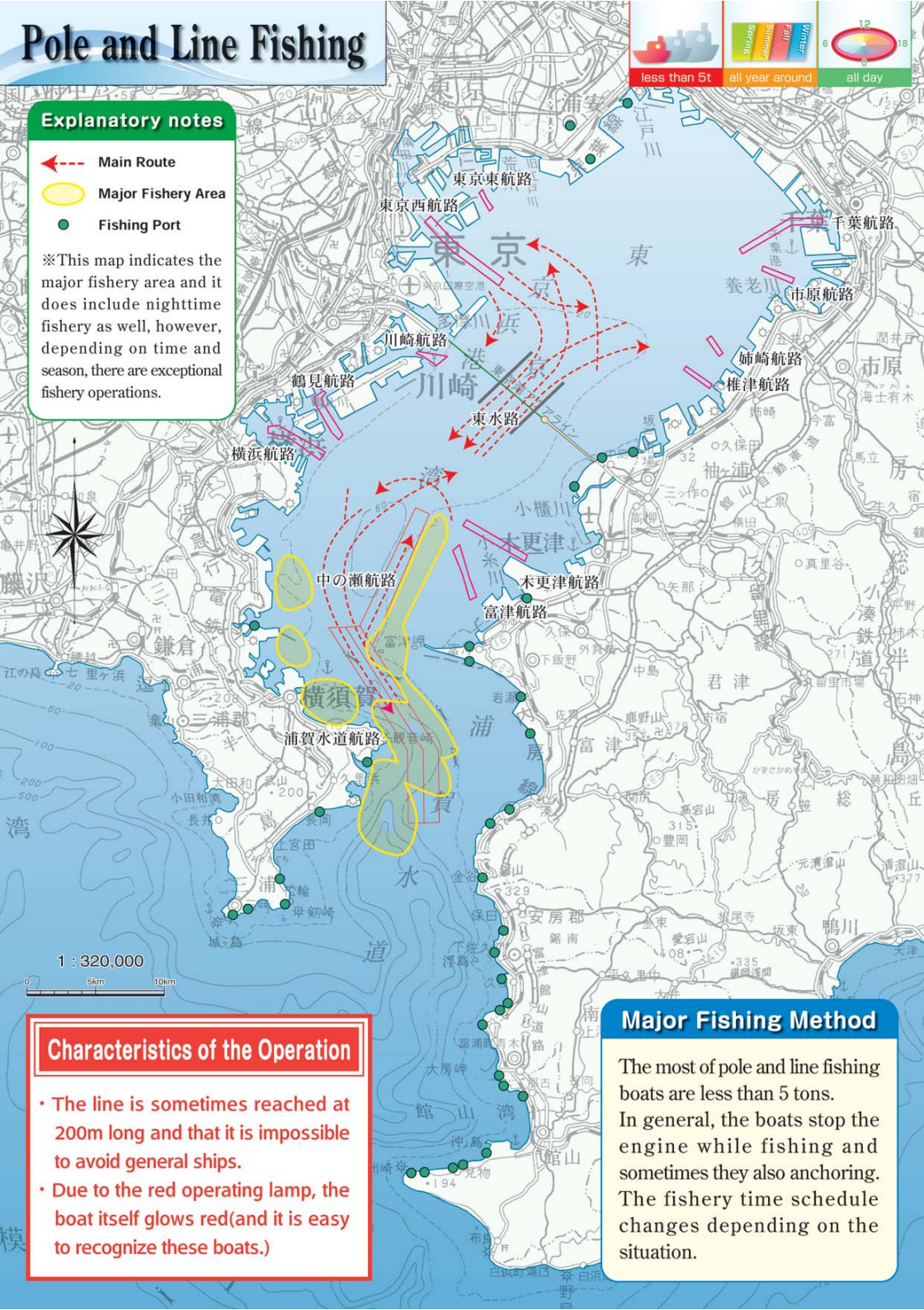
Pole and Line Fishing



Explanatory notes

- - - Main Route
- Major Fishery Area
- Fishing Port

※This map indicates the major fishery area and it does include nighttime fishery as well, however, depending on time and season, there are exceptional fishery operations.



Characteristics of the Operation

- The line is sometimes reached at 200m long and that it is impossible to avoid general ships.
- Due to the red operating lamp, the boat itself glows red (and it is easy to recognize these boats.)

Major Fishing Method

The most of pole and line fishing boats are less than 5 tons. In general, the boats stop the engine while fishing and sometimes they also anchoring. The fishery time schedule changes depending on the situation.

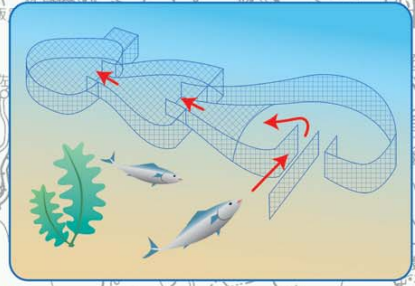
Set Net Fishery



Explanatory notes

- Main Route
- Major Fishery Area
- Fishing Port

※This map indicates the major area of the large set net. Therefore, there is also the area of the small set net besides it.

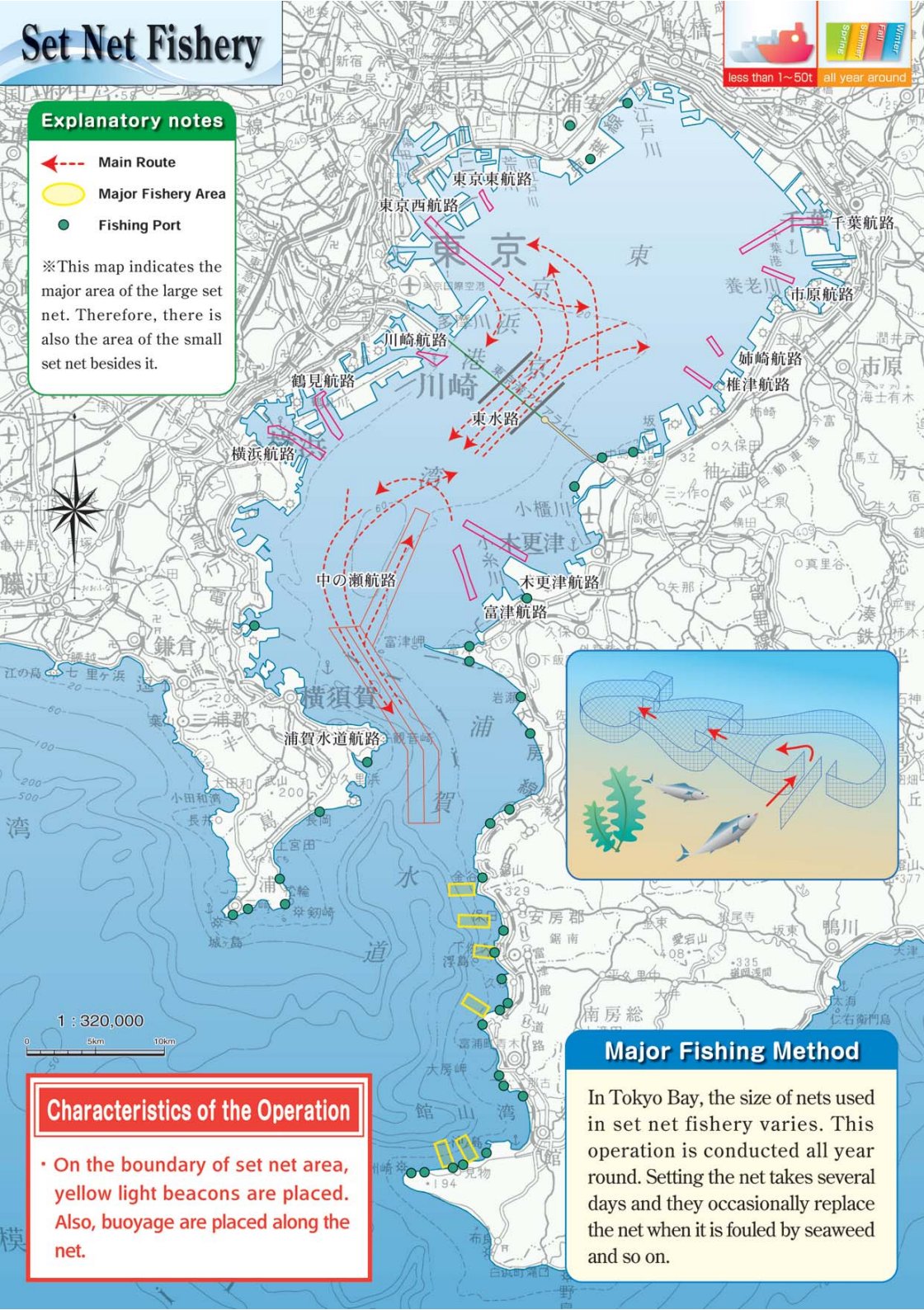


Characteristics of the Operation

- On the boundary of set net area, yellow light beacons are placed. Also, buoyage are placed along the net.

Major Fishing Method

In Tokyo Bay, the size of nets used in set net fishery varies. This operation is conducted all year round. Setting the net takes several days and they occasionally replace the net when it is fouled by seaweed and so on.



1 : 320,000
0 5km 10km

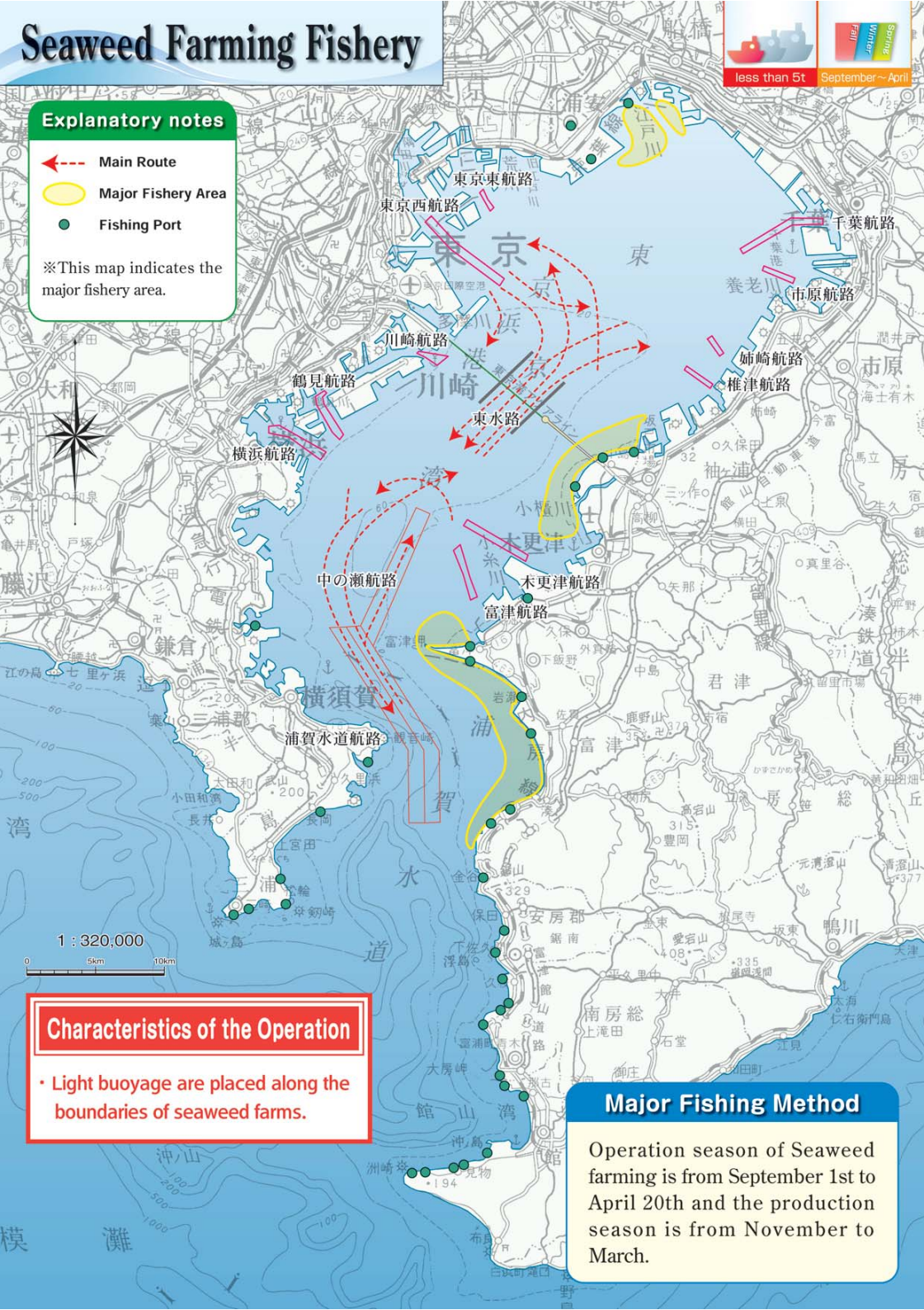
Seaweed Farming Fishery



Explanatory notes

- Main Route
- Major Fishery Area
- Fishing Port

※This map indicates the major fishery area.



Characteristics of the Operation

- Light buoyage are placed along the boundaries of seaweed farms.

Major Fishing Method

Operation season of Seaweed farming is from September 1st to April 20th and the production season is from November to March.

1 : 320,000
0 5km 10km

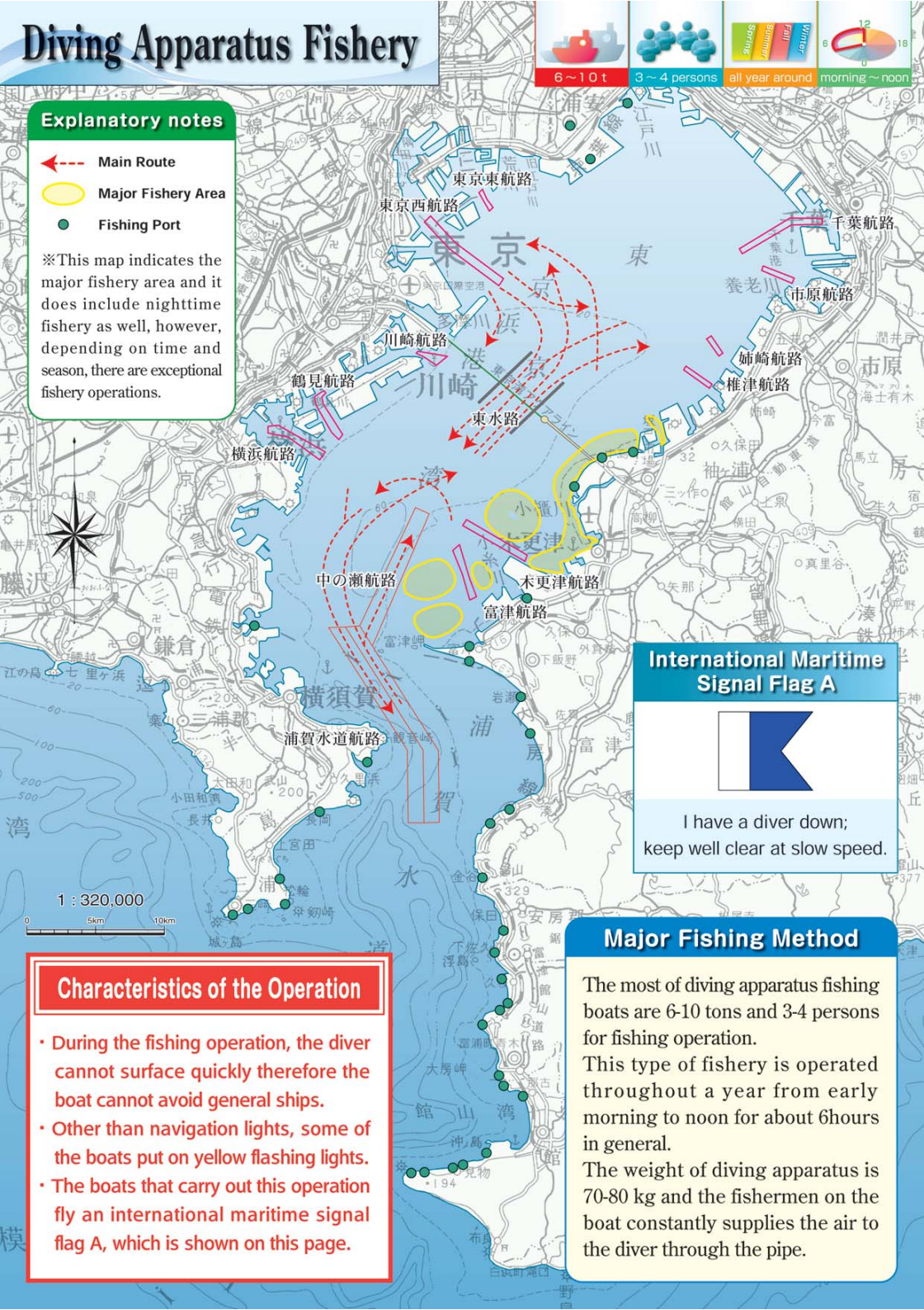
Diving Apparatus Fishery

6~10 t 3~4 persons all year around morning~noon

Explanatory notes

- Main Route
- Major Fishery Area
- Fishing Port

※This map indicates the major fishery area and it does include nighttime fishery as well, however, depending on time and season, there are exceptional fishery operations.



International Maritime Signal Flag A



I have a diver down;
keep well clear at slow speed.

Characteristics of the Operation

- During the fishing operation, the diver cannot surface quickly therefore the boat cannot avoid general ships.
- Other than navigation lights, some of the boats put on yellow flashing lights.
- The boats that carry out this operation fly an international maritime signal flag A, which is shown on this page.

Major Fishing Method

The most of diving apparatus fishing boats are 6-10 tons and 3-4 persons for fishing operation. This type of fishery is operated throughout a year from early morning to noon for about 6 hours in general. The weight of diving apparatus is 70-80 kg and the fishermen on the boat constantly supplies the air to the diver through the pipe.

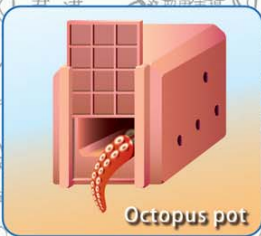
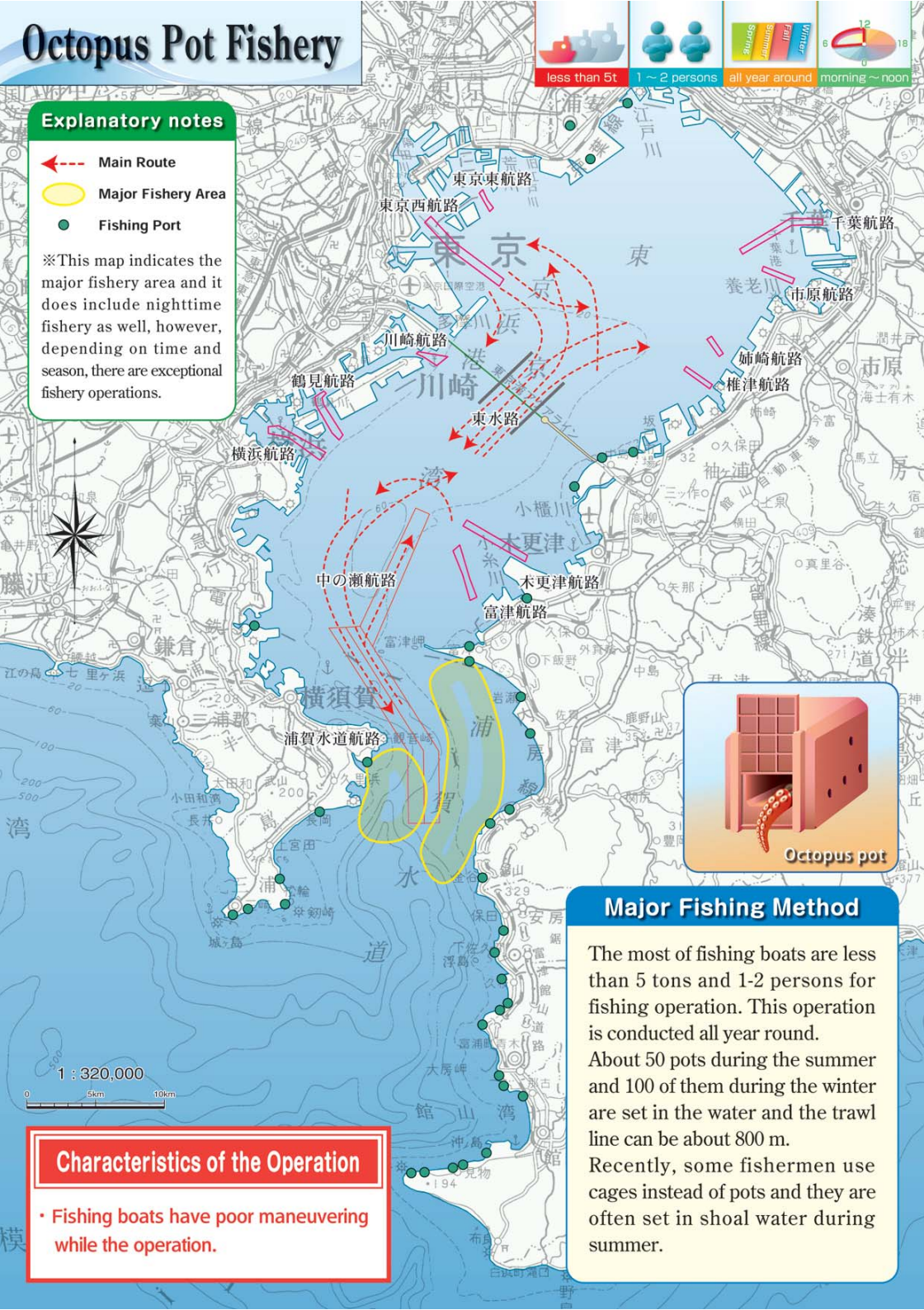
Octopus Pot Fishery



Explanatory notes

- Main Route
- Major Fishery Area
- Fishing Port

※This map indicates the major fishery area and it does include nighttime fishery as well, however, depending on time and season, there are exceptional fishery operations.



Major Fishing Method

The most of fishing boats are less than 5 tons and 1-2 persons for fishing operation. This operation is conducted all year round. About 50 pots during the summer and 100 of them during the winter are set in the water and the trawl line can be about 800 m. Recently, some fishermen use cages instead of pots and they are often set in shoal water during summer.

Characteristics of the Operation

- Fishing boats have poor maneuvering while the operation.

1 : 320,000



The effects of ship waves

In Tokyo Bay, many of the fishing boats are small and just only 1-2 persons operate. Even waves that can not have any effect on general ships, however, have dangerous effect to the small fishing boats.

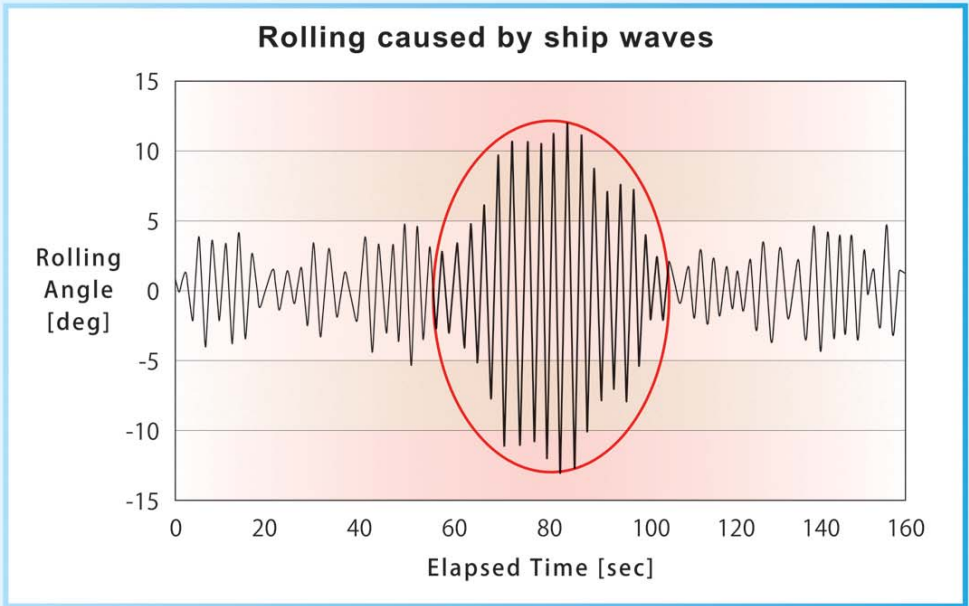
Similarly, the ship waves created by the general ships can cause the fishing boats to rolling motion. Also, the fishing boats cannot avoid the ship waves because of their poor maneuvering during fishing operations. In fact, fishermen in Tokyo Bay are very nervous about the ship waves.

Accidents caused by ship wave

- Crews falling down
- Collapse of fishing gear and fish catch
- Breaking the mooring line
- Damageing the fishing gear

Accidents fishermen are taking care about

- Falling into the sea
- Collapse of fishing gear and catch of fish
- Net fishing boats collision each other (purse seine net fishing)
- High speed vessels around the fishing boats during operation
(cannot control the encounter angle of ship waves)



The figure shows the rolling angle of a small fishing boat when they encounter ship waves. The vertical axis represents the rolling angle and the horizontal axis represents the elapsed time. The positive numbers indicate the starboard inclination and the negative numbers to the port side.

The red circle on the figure shows when it encountered ship waves. It can be seen that the ship was rolling within only 5 degrees without ship waves and inside of the red circle, which is when it met with ship waves, the rolling angles reached more than 10 degrees.

Fortunately, there has not been a severe accident caused by ship waves in Tokyo Bay. However, in order to keep the safety of the small fishing boats, all vessels should decrease the effect of ship waves for slowing speed and keeping away from them.

For Pleasure Boat Owners

In order to keep the safety of Tokyo Bay, when you find fishing boats, especially fishing boats in operation, please keep away from them. The suggestion mentioned above should be applied to when fishermen are trying to call your attention by using hands or lighting as well.

Tokyo Bay is one of the most congested areas in the world. As it has been mentioned in this brochure, there have been many accidents between general ships and fishing boats. Unfortunately, these accidents include ones between pleasure boats and fishing boats too.



Example of accidents between pleasure boats and fishing boats

- Collision with trawl fishing boat.
- Dropping an anchor on a line of conger tubes.
- Cutting off a net by crossing the astern of gill net fishing boat while shooting net.
- Entering on seaweed farming area or a fixed net and breaking a net, etc.





Dial 118 for emergency calls

Please calm down and report briefly about “when”, ”where” and “what happened”

Bureau	Phone Number
① 3rd Regional Coast guard Headquarters	+81-45-211-1118
② Chiba Coast Guard Office	+81-43-301-0118
③ Tateyama Coast Guard Detachment, Chiba Coast Guard Office	+81-470-20-0118
④ Funabashi Coast Guard Detachment, Chiba Coast Guard Office	+81-47-432-4118
⑤ Kisarazu Coast Guard Station	+81-438-30-0118
⑥ Tokyo Coast Guard Office	+81-3-5564-1118
⑦ Yokohama Coast Guard Office	+81-45-671-0118
⑧ Kawasaki Coast Guard Station	+81-44-266-0118
⑨ Yokosuka Coast Guard Office	+81-46-862-0118
⑩ Tokyo Wan Traffic Advisory Service Center	+81-46-842-0118

For inquiries

Japan Association of Marine Safety

TEL : +81-3-3502-2231

URL : <http://www.nikkaibo.or.jp/>

