



Squid



Goosefish



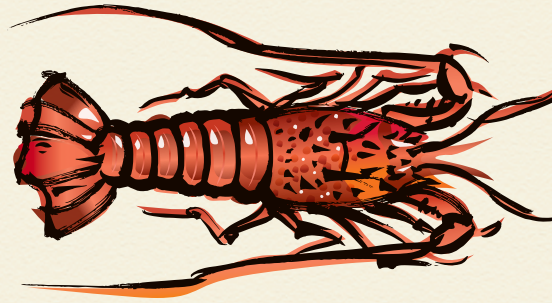
Fukushima
fish



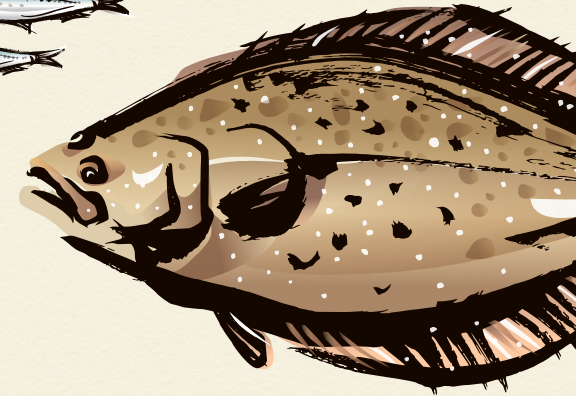
Sardine



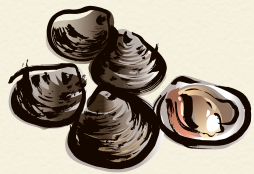
Pacific saury



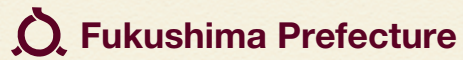
Japanese spiny lobster



Japanese flounder



Surf clam



Fukushima Prefecture
**Fukushima Prefecture Agriculture,
Forestry and Fisheries
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Conger eel



Greeneyes

Fukushima Joban Seafood

**Delicious seafood brought by
the Oyashio and Kuroshio currents**



Green nori



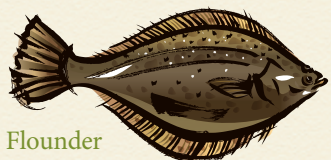
Octopus



Skipjack tuna



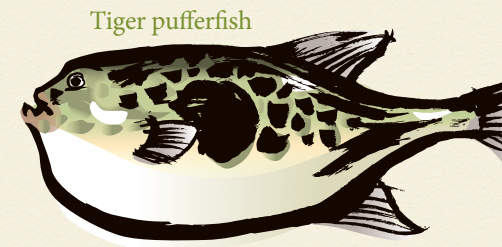
Mackerel



Flounder



Abalone



Tiger pufferfish



Sea urchin



Fukushima Prefecture

Hamadori, Fukushima Prefecture

📍 Tsurushihama Fishing Port
📍 Matsukawaura Fishing Port

📍 Manogawa Fishing Port

📍 Ukedo Fishing Port

📍 Tomioka Fishing Port

📍 Hisanohama Fishing Port

📍 Yotsukura Fishing Port

📍 Toyoma Fishing Port

📍 Ena Port

📍 Nakanosaku Port
📍 Onahama Port

📍 Obama Fishing Port

📍 Nakoso Fishing Port

Fukushima
Prefecture



Joban seafood from Fukushima!

Off the Fukushima coast,
the Oyashio and Kuroshio currents meet,
creating ideal fishing conditions.

The diverse, high-quality fish caught there are called
“Joban mono,” or Joban seafood,
and are highly acclaimed.

Blessed with rich natural resources,
Fukushima offers diverse,
top-quality Joban seafood every season.





Short-neck clams

The fishing season for short-neck clams in Fukushima Prefecture is from April to June. The clams can be eaten steamed in sake, cooked with rice, or sauteed in butter.

Short-neck clams steamed in sake

First rinse the clams in water, then place them in a frying pan with butter, garlic, and rape blossoms. Sprinkle on some sake and steam the clams, then serve.



Deep-fried greeneyes

Lightly rinse the greeneyes and coat them with three parts katakuriko (potato starch powder) and one part cake flour. Then fry them in oil until golden brown.



Greeneyes

In Japanese this deep-sea fish is called *mehikari*, meaning "glowing eyes," due to their large eyes that appear to glow greenish. They may not look like much, but they taste amazing. Greeneyes are great deep-fried, grilled with nothing on them, or as sashimi or tempura.



Sardines

Sardines are also known in Japan as *nanatsu boshi*, or "seven stars," due to the black dots that line their sides. If their blue-tinted backs are shiny and they have a plump belly and vivid black spots on their bodies, it means they will be delicious.



Deep-fried sardines

Fillet the sardines into three pieces and coat them first with flour, next egg, and then panko breadcrumbs. Then fry them in oil.

View of Onahama Port from Misaki Park in spring



Japanese icefish

Japanese icefish (*Neosalangichthys ishikawae*) are caught in the spring in Fukushima.



Deep-fried Japanese icefish

Japanese icefish make good sashimi but are also great fried. Coat with katakuriko (potato starch powder) and fry in oil at 160°C until golden brown, then serve.

Spring Fish Gathering to the ports in the spring

Octopus

Joban octopi that live in the rich fishing grounds here eat mainly abalone and crab, so they are distinctively flavorful with an umami-rich taste.



Octopus with rice

Boil water, soy sauce, mirin, sugar, and salt in a pot. Add octopus when it comes to a boil. Turn off the heat once the octopus has soaked up the broth. Remove the octopus, pour the broth into a rice cooker, and cook rice in it. Add the cooled octopus to the rice cooker, steam with the rice for about ten minutes, then serve.





Whitebait

In Fukushima, whitebait is caught with a method called *kakemawari*, in which a single vessel is used to catch the fish. Speed is crucial for ensuring freshness. When the whitebait is hauled onto the ship, they are immediately put on ice to quickly cool them so they stay fresh. They can be caught everywhere in the prefecture. Because they are affected by changes in sea conditions, the catches vary from year to year.



Whitebait pizza

Spread tomato sauce on pizza dough and sprinkle on some sliced cherry tomatoes and basil. Add the whitebait and cheese, then bake and serve.

Sauteed Japanese seabass

Cut an "x" into the skin and sprinkle on salt and pepper. Lightly coat both sides with flour and sauté in oil and garlic until lightly browned.



Japanese seabass

A mild white fish, Japanese seabass is great salt-grilled or simmered. Fresh seabass also makes great sashimi.

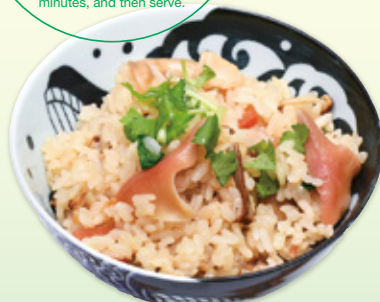
Surf clams

Surf clams, or *Spisula sachalinensis*, are carefully managed in Fukushima to ensure that sustainable harvests continue into the future. It is prohibited from catching the clams from February to May and from catching clams under 7.5cm.



Surf clams with rice

Put water, soy sauce, mirin, sugar, and salt in a pot, bring to a boil, and then add surf clams. Turn off the heat once the clams turn red. Remove the clams, pour the broth into a rice cooker and cook the rice in it. Add the cooled surf clams to the rice cooker, steam them with the rice for about ten minutes, and then serve.



Sea urchin kaiyaki

Filling surf clam shells to the brim with raw sea urchin and steam-baking them on small stones is a local Iwaki delicacy.



Usuiso Beach and Shiroyasaki Lighthouse

Summer Fish Caught off the breezy Joban coast

Sea urchin

In Fukushima, their harvesting season is from May to September, peaking in the summer. *Kaiyaki*—steam-baked sea urchin on surf clam shells—is an Iwaki City specialty.

Seared skipjack tuna sashimi

Rub skipjack tuna sashimi with salt and lightly sear it. Then cool it in ice water and cut it in 1cm slices. Add condiments and ponzu sauce, and enjoy.



Skipjack tuna

Skipjack tuna is synonymous with early summer. Boasting some of the largest catches in Japan, local Iwaki City has a thriving food culture.

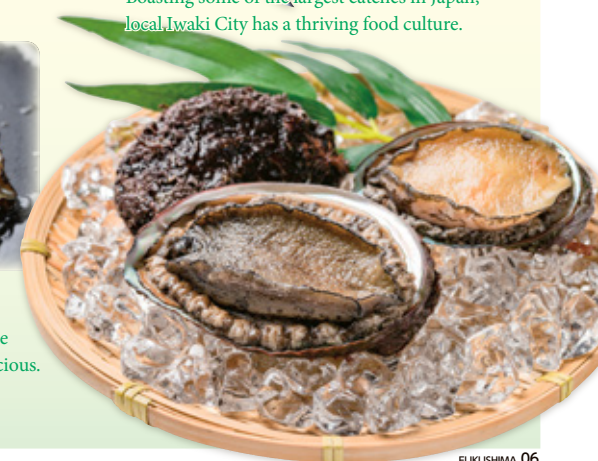
Abalone fried in butter

Remove any dirt from the abalone with a scrub brush and cut small squares into it with a knife. Put oil, butter, salt, and pepper in a frying pan, and cook. Turn off the heat when it is done. Pour on some soy sauce, then serve.



Abalone

Young abalone are raised and stocked in Fukushima. Abalone that grow plump on high-quality seaweed are absolutely delicious. It takes about three to four years for them to reach maturity.





Japanese flounder

This is the main fish in resource-controlled fisheries and fish-farming fisheries being implemented in Fukushima. Initiatives carried out there include fishermen releasing juvenile fish and a ban imposed on catching fish under a total length of 30cm. “Midwinter Japanese flounder” is tasty from fall to winter.



Japanese flounder sashimi

Japanese flounder is normally filleted into five pieces. It has a big, thick backbone, making it surprisingly easy to prepare. The *engawa* (the muscles that move its fins) has a uniquely crunchy texture, so make sure not to throw that part away.

Conger eel

In Japanese its name literally translates to “hole child.” One theory on the origin of the name is that it is due to the fact that the eels spend their days in holes in the rocks or sand. Conger eels are similar to freshwater eels but have white spots that line their heads and bodies. They are generally said to be in season in July, but they are particularly tasty when plump in the winter.



Conger eel pressed sushi

Cook the eel in sweet soy sauce until lightly browned. Fill a moistened sushi mold with sushi rice. Place the cooked eel on the rice and press down. Then remove it from the mold and serve.



Tiger pufferfish

A large pufferfish that can grow up to 70cm long and 11kg, tiger pufferfish have distinctive large spots near the pectoral fins. Since 2020, catches have sharply increased, with wild tiger pufferfish catches among the highest in Japan.



Autumn Fish

When big catch flags fly



Pacific saury fishing vessel departing Onahama Port

Pacific saury

Pacific saury that have grown up off the east coast of Hokkaido start migrating south in summer, reaching the coast off Fukushima between October and December. A symbol of autumn, the fish is usually salt-grilled or eaten as sashimi.



Japanese spiny lobster

They are mainly caught with a method called gillnetting (using stationary nets). Since their price falls greatly if their antennae or legs come off, fishermen must be extra careful when removing them from nets. They are mainly caught in the Iwaki area.



Best way to eat Japanese spiny lobster

Serve the meat in the body as sashimi and cook the head in miso soup to savor every part. It is also great split in the middle and cooked with mayonnaise.

Salt-grilled Pacific saury

One of the best ways to eat Pacific saury is grilled on a *shichirin* stove (a traditional portable clay grill). Make a charcoal fire, place the grate on top, and put on the fish sprinkled with salt until lightly browned.





Mackerel

Mackerel is a very nutritious fish. It contains a variety of nutrients, including EPA that helps blood flow and DHA that prevents and reverses dementia. A dinner table staple in Japan, it is often simmered in miso or salt grilled.



Mackerel simmered in miso

Make diagonal, shallow cuts into the mackerel and pour boiled water over it to remove any fishy odor. Mix miso, sugar, and sake in a pot, add thinly sliced fresh ginger and the fish, and cover with an *otoshibuta* (drop lid). Simmer until the liquid is reduced, then serve.



Flounder simmered in soy sauce

Put flounder fillet, ginger, soy sauce, sake, mirin, and sugar in a pot and cook. Pour the liquid over the fish from time to time and cook until the fish becomes glossy.

Flounder

Some 15 species of flounder and sole, such as brown sole and stone flounder, are caught here. In December and January slime flounder and marbled sole with roe are highly prized.



Squid

Small squid caught from autumn to early winter are tender and great for tempura. Spear squid with roe caught in the spring are great simmered with the eggs.



Squid tempura

Remove the skin and coat the squid completely with flour. Dust off any extra flour. Then dip in tempura batter. Fry in 200°C oil, flipping them over from time to time with chopsticks, then serve.



Winter Fish

Cultivated in the junction between two currents



Pacific saury fishing vessel departing Onahama Port



Green nori

Green nori is farmed on beds in Matsukawaura Lagoon where you can see carpets of vibrant green nori from winter to spring. With a rich marine aroma, it can be used in a wide range of dishes including miso soup, tempura, salad, and pasta. Dried nori and *tsukudani* (small seafood and sea vegetables cooked in soy sauce and mirin) are popular souvenirs.



Miso soup

First make the soup with miso and dashi broth. Then add green nori for a rich miso soup with a rich marine aroma.

Goosefish hotpot

There are two kinds of flavors: miso and soy sauce. Simmer goosefish with your favorite seafood and vegetables in a pot and eat once they are cooked. Add rice to the pot near the end for a delicious savory porridge.



Goosefish

The taste of goosefish in the winter season is highly prized. Fukushima is one of the largest producers in Japan. Warm up with goosefish hotpot, *tomoae* (goosefish liver paste), or deep-fried goosefish.





MEL Certification for 4 fish species caught in Fukushima Fishing obtained

Marine EcoLabel Japan (MEL) certification is a scheme that certifies seafood producers who fish sustainably in consideration of the environment and marine resources. Certified producers can place a MEL label on marine products so consumers can make selective purchases.

The four species caught or produced in Fukushima with MEL certification as of March 2024 are chub mackerel, whitebait, skipjack tuna, and green nori, all of which are on the market now.

Chub mackerel



Whitebait



Skipjack tuna



Green nori



Fukushima Prefecture

The pride of Fukushima

Learn, buy, eat, make, and study about Joban seafood—
Discover everything you need to know about Fukushima marine products including quality and safety initiatives.

知る (Learn) 買う (Buy) 食べる (Eat) 作る (Make) 専 (Specialty)

Fukushima Joban Seafood Navi

<https://fukushima-jobanmono.jp/>

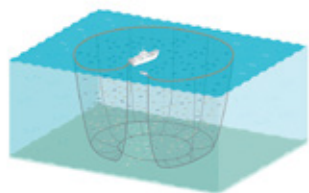
Joban Seafood Seasonal Catch Calendar

		Month of catch												Season
Species	Season	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	
Horse mackerel														
Conger eel														
Abalone														
Goosefish														
Squid														
Sea urchin														
Skipjack tuna														
Flounder														
Bighand thornyhead														
Tiger pufferfish														
Chum salmon														
Mackerel														
Pacific saury														
Japanese icefish														
Japanese spiny lobster														
Octopus														
Cod														
Japanese flounder														
Surf clam														
Japanese sardine														
Greeneyes														

The work carried out in abundant fishing grounds, where cold and warm currents meet

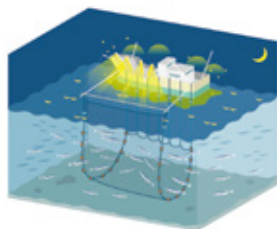


An illustrated guide to the fishing methods used in the fishing ports and grounds off the coast of Fukushima



Purse seine fishing

This method consists of placing a net in the water to surround a school of fish and catch them by closing the bottom of the net. It requires several ships—each with a different role—to work as a team. One boat pulls the net, one acts as the lightship, and one or two carry the haul. It requires a total crew of 47–50 people.



Saury stick-held dip net fishing

Pacific saury stick-held dip net fishing is carried out from sunset to dawn. Fish instinctively gather towards light at night. The instinct is especially strong in Pacific saury and large schools swim up towards the surface. When they gather in the light, they swim in a circle in the same direction and tend not to separate from each other. Taking advantage of this instinct, the saury are led into the net and caught.



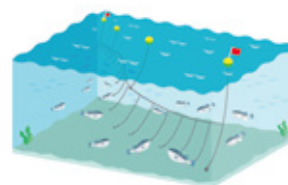
Dredging

Shellfish dredging is a type of bottom trawling. A heavy, rigid structure called a dredge is towed along the seabed to harvest clams and other bivalves. The dredge consists of a bag-like net on a frame with teeth, which is dragged along the seabed to dig up and collect shellfish. Most dredges in Fukushima have a device that shoots jets of water from the bottom of the frame.



Nori farming

Nori is cultivated on nets suspended across pillars on the seabed. It is harvested with a special device mounted on a boat that sucks up seawater and the nori. Nori is farmed in one of two ways. The first consists of cultivating nori on nets attached to pillars on the seabed mentioned above. The other method is cultivating nori on nets attached to a raft that floats on the surface of the water. In Matsukawaura Lagoon, where nori is produced in Fukushima, it is mostly farmed with the first method.



Longline fishing

A main line with several hooks attached is placed in the sea to catch fish with the hooks. There are several different kinds of longlines, each targeting a specific type of fish, such as tiger puffer, Pacific cod, Japanese seabass, and fat greenling.



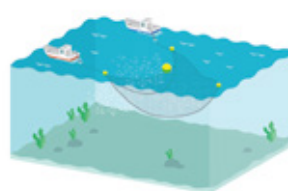
Abalone harvesting

In this method, a diver with an oxygen tank on their back and a net on their waist dives down to the seabed to collect creatures such as abalone, sea urchin, and sea cucumber. In Japan this is traditionally a women's job (called "ama"), but in Fukushima it is done only by men.



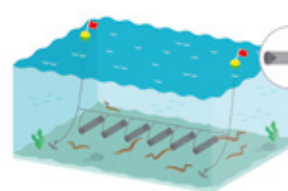
Short-neck clam harvesting

This method uses a tool consisting of a wooden pole with a metal basket on one end with teeth at the opening. Clams in the seabed are dug up with the teeth and collected in the basket. In Matsukawaura Lagoon and other areas, fishermen wade in the water up to their waist or chest and dig up the clams by dragging the tool while walking backwards.



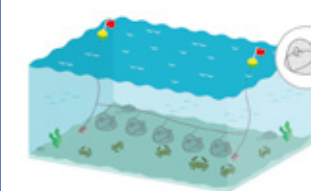
Boat seine fishing

This method consists of pulling a net to catch fish that swim near the surface such as Pacific sandlance, Japanese anchovy, and Ishikawa icefish.



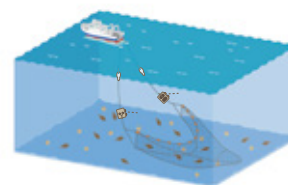
Eel trapping

In this method, several cylindrical baskets with bait inside are attached to short branch lines on a main line and dropped to the seabed. It is mainly used to catch conger eel.



Basket fishing

In this method, several baskets with bait inside are attached to short branch lines on a main line and dropped to the seabed. It is mainly used to catch crab and octopus.



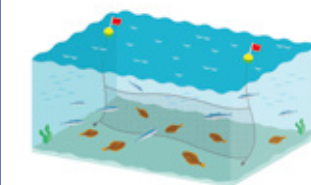
Bottom trawling

This method consists of pulling a long bag-shaped net on the seabed to catch fish that live there like Japanese flounder, righteye flounders, and whitespotted conger. In Fukushima, bottom trawling is carried out from 60m to 500m deep underwater.



Angling

This method is used to catch fish such as Japanese flounder, righteye flounders, Japanese seabass, and fat greenling. It causes little damage to the fish and keeps them fresh, so fish caught with this method can be sold for a high price on the market.



Gillnetting

In this method, a curtain-like net is placed in the water and fish become tangled in the net. The main types of nets used are set gillnets and drift nets. Drift nets float on the current and set gillnets are fixed in place with temporary anchors to catch fish that try to swim through.

Fukushima Seafood Inspection System



Monitoring Inspection by the Fukushima Government

- ◎ **Public inspection** to confirm **food safety**
- ◎ Regular weekly inspections (approx. 150/week)
- ◎ Lifting of shipping restrictions
- ◎ Selection of species for fishing trials



Inspection by germanium semiconductor detector (Fukushima Agricultural Technology Center laboratory)

Voluntary Inspection by the Fisheries Cooperative

- ◎ **Voluntary inspection** so products can be consumed with **confidence**
- ◎ Conducted every fishing day at each market
- ◎ Seafood exceeding 25Bq/kg is subject to a thorough inspection by a prefectural inspection facility



Inspection by CsI and NaI scintillation detector (Onahama fish market laboratory)

Voluntary Inspection Process



1. Preprocessing

At least one sample per fish species is collected each fishing day. It is cleaned and processed according to the way it is eaten.



It is either minced or sliced depending on the inspection equipment.



2. Inspection

The inspection is conducted in a laboratory.

Note: Lower limit is 12.5 Bq/kg or less (1/4 of the 50 Bq/kg voluntary standard)



3. Product shipped with results attached

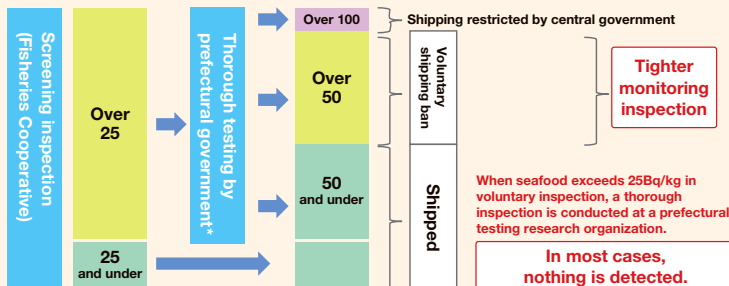
The Fukushima Prefectural Federation of Fisheries Co-operative Associations' inspection certificate and results are attached to each fish species, which are then shipped to the destination market.

Shipping Policy

The Fukushima Prefectural Federation of Fisheries Co-operative Associations' shipping policy sets **the voluntary standard at 50 Bq/kg**.

This is to safeguard against seafood exceeding 100 Bq/kg (the national standard) being shipped in error.

*Fukushima Prefectural Fisheries and Marine Science Research Centre
Fukushima Prefectural Research Institute of Fisheries Resources



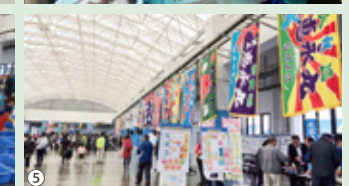
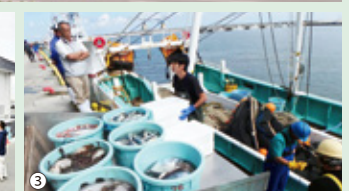
Soma Haragama area wholesale market (Matsukawaura Fishing Port)

All fishing-related facilities at the fishing ports in the Soma-Futaba area suffered immense damage in the giant tsunami generated by the Tohoku Earthquake. Among these, the Haragama sorting facility (the Soma Haragama area wholesale market), which played a central role in the region's fisheries, was completed and opened in September 2016. Japanese elements such as gabled roofs and namako walls (walls with a white grid pattern on black slate) have been incorporated into the facility to convey the history and tradition of Soma.

Soma Haragama area wholesale market (Matsukawaura Fishing Port)

- ◆ Three stories, total area approx. 8,432m²
- ◆ Features an exhibition hall, observation deck (can host events) and kitchen to attract tourists; auction and radioactivity inspection tours also available

1. Sorting facility
2. Unloading station that has taken anti-bird damage measures
3. Unloading seafood
4. Seafood bidding
5. Event at the sorting facility



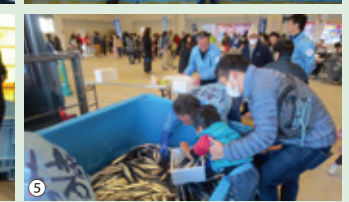
Onahama fish market (Onahama Port)

The Onahama fish market was severely damaged in the Tohoku Earthquake, but it was rebuilt with a grant from the Onahama Regional Fisheries Facilities Revival and Maintenance Project to revive regional fisheries. The market was given new life as a fish market with a focus on hygiene control. (Completed March, 2015)

Onahama fish market (Onahama Port)

- ◆ Five stories, total floor area approx. 9,000m²
- ◆ Has an advanced hygiene control market (building A) that handles seafood from coastal fisheries and an enclosed market (building B) capable of unloading two large fishing boats simultaneously, and practices thorough hygiene control
- ◆ Has the capacity to make 50t of ice per day and store 500t of ice
- ◆ Equipped with a laboratory for measuring radioactive substances inside the fish market

1. Onahama fish market
2. Unloading skipjack tuna
3. Bidding in the advanced hygiene control market (building A)
4. Delivering fish to the enclosed market (building B)
5. Event at the market



Fukushima Prefectural Research Institute of Fisheries Resources

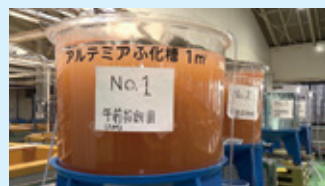
Fukushima Prefectural Research Institute of Fisheries Resources is a research institute in Soma City and a base for fish farming and demersal fish resource research.



Fish Laboratory



Juvenile Fish Nursery



Brine shrimp incubation tanks



R/V Takusui



Abalone farming



Juvenile Japanese flounder

Main research

- ◎ Research related to larvae production technology for stock enhancement fish
- ◎ Research related to releasing techniques for stock enhancement fish
- ◎ Investigative research related to coastal demersal fish resources and resource control
- ◎ Research related to stabilizing aquaculture at Matsukawaura Lagoon

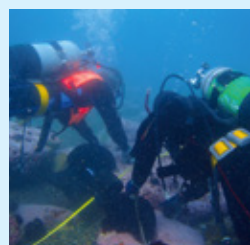
Address: 1-1-14 Koyo, Soma, Fukushima

Research facilities:

- ◎ Main building: General research, administration of the facility (measuring fish, measuring radioactivity, diagnosing fish diseases, monitoring panels)
 - ◎ Fish Laboratory: Six 20-ton tanks (breeding of parent fish, fish egg production)
 - ◎ Closed Recirculating Aquaculture Laboratory: Closed Recirculating System
 - ◎ Filtration tanks: Filtration rate of 1,200 tons/per hour (seawater filtration)
- Production capability: 1 million Japanese flounder, 3 million ayu, 1 million abalone

Fukushima Prefectural Fisheries and Marine Science Research Centre

The Fisheries and Marine Science Research Centre is located in Onahama, Iwaki City. It is the hub for Fukushima's fisheries research institutes and the base for pelagic fish resource research.



Seashore inspection



Analysis of radioactive substances



R/V Iwaki-Maru



Main research

- ◎ Research of accumulative process of radioactive substances related to the ecology of fish
- ◎ Research related to supporting sea urchin and abalone fisheries and offshore fisheries
- ◎ Development of method to predict formation of fishing grounds and oceanic conditions
- ◎ Development of new technology in cooperation with other fields and sharing of information on the results

Address: 13-2 Matsushita, Shimokajiro, Onahama, Iwaki, Fukushima

Research facilities: Radioactivity Research Building (Radioactivity Analysis Laboratory, Dry Ashing Laboratory, Seafood Composition Analysis Laboratory, etc.) and General Research Building (Fish Population Dynamics Laboratory, Marine Environmental Analysis Laboratory, etc.)