

# FISHERIES NEWS

## The Seaside Flavor of Higashidoori

April-June 2018

### Funori Seaweed in Shiriya

People in Shiriya harvested Funori seaweed on sunny days during spring tide.

### Bottom Set Net

“Sokodate-ami”, bottom set net fishing off the coast of Sarugamori. What kind of fish was caught?

### Akamoku seaweed

“Akamoku” seaweed slowly comes into the Spotlight in Shimokita. What does this seaweed taste like?

### Column 1 “Fisheries in Setouchi region”

The author travelled Setouchi region and learned about fisheries there.

### Column 2 “Fisheries in China”

The author visited Fujian, China during his holidays, and observed the fisheries in this big country.



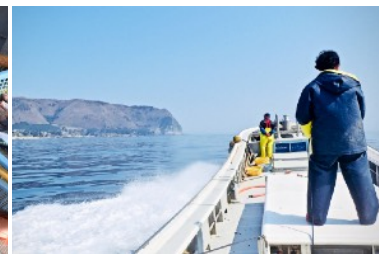
### Funori Seaweed Harvest in Shiriya

The author went to see locals in Shiriya harvesting and drying “Funori” seaweed on May 15th, the fresh air and green trees were beautiful. The Funori seaweed of Shiriya is mainly marketed as an ingredient of “Hegi-soba” buckwheat noodle, and harvested on the sunny and warm days around a spring tide from the end of April to the beginning of June. The weather must be sunny because the seaweed is dried under the sun immediately after the harvest. A parasitic Rhodophyta seaweed, “Funori-no-ushige” has been observed, and the opening of the Funori harvest has been delayed the last 2 years due to the timing of disappearance of the parasitic seaweed. Although the harvest has also delayed this year, the author could see the harvesting of the seaweed. The sight of locals in Shiriya harvesting Funori seaweed and packing it into colorful bags on the seashore, is a grand spectacle. It is the iconic scenery of Spring in Higashidori. The seaweed was washed in a tank, and snails, other seaweeds and sand were removed. The washed seaweed was brought to the backyards of each fisherman and dried under the sun for about 2 hours. The color of the seaweed turned from red to blackish brown as it was dried. The blackish brown seaweed turns into blight green when it is soaked in hot water. The seaweed harvested in Shiriya is long and thick, and the texture of the newly dried one is crispy. Therefore the author rather recommends it as salad instead of its miso-soup. The Funori harvest is very hard work. The author thanks locals in Shiriya for harvesting such an delicious seaweed for us.



## Bottom Set Net off the Coast of Sarugamori

The author went to see “Sokodate-ami” fishing off the Coast of Sarugamori on April 20th. The ocean was very calm without waves, and the surface was like a mirror. “Sokodate-ami” is the type of set net targetting bottom dwelling fishes. The net is set just above the sea floor. From the fishing boat, we cannot tell how the net is set in the ocean. Two buoys floating on the water are the sign which tells the location of the net. The net appeared on the surface as the rope from the buoys was retrieved. The net was lifted on the boat and slid toward the cod end. We caught a cod, anglerfish, flatfishes, rockfishes and Pacific octopus. Fishes like “Usumeburu” gold-eye rockfish floated on the surface because an air bladder was inflated by a sudden change in water pressure. A gold-eye rockfish was caught in the net which set offshore. The net which set inshore caught various flatfishes. It was interesting that there was a variation in the fishes between locations of nets. After taking pictures of the fish, the author helped with landing the net, learned the ropes and sorted fishes caught from the nets. It was fun to work on the boat and see many deep sea fishes. The spear squid and shellfish which the author tasted on the boat were very delicious. The author read an atlas of fishing gears and methods in Japan and reviewed the “Sokodate-ami” fishing.



## “Akamoku” ~Seaweed in Spotlight~

“Akamoku” seaweed is locally called “Gibasa” and has been eaten in Akita Prefecture. Contrarily this seaweed has been regarded as a troublesome seaweed in Shimokita region, Aomori because it becomes tangled in the screw propellers. The mass media introduced this seaweed as a healthy food because of its stickiness, which comes from fucoidan, which is good for health. This seaweed recently appeared at local supermarkets in Mutsu city. It seems that this seaweed has come into the spotlight in Shimokita region. As it happens, one day in April at Iwaya, the author found a spot where “Akamoku” seaweed grows. He introduced this seaweed to Iwaya Fisherwomen’s Group, and they said it was tasty and they wanted to sell experimentally. We sold “Akamoku” seaweed at a local market. Customers tasted the sample and said it was tasty. However, the customer’s eyes were on fresh fishes and the sale did not do well. Some customers showed an interest in this seaweed and bought some packs. We sold 16 packs of “Akamoku” seaweed. Higashidori Village is very rich with delicious seaweeds such as Kelp, Iwanori, Funori and Matsumo which grow in the cold North Pacific ocean. Nowadays the marine environment is changing dramatically as a stock of a common squid is rapidly decreasing. This dramatic change in ocean environment may affect the seaweeds in Higashidori, and it may be possible that the abundance of the seaweeds decreases. “Akamoku” seaweed also inhabits warm water region like Southern Japan. This time “Akamoku” seaweed did not grab much interest from the people in Shimokita region. However the author believes that this seaweed will come into the spotlight when the abundance of seaweeds in a cold water region decreases from environmental changes in the ocean.

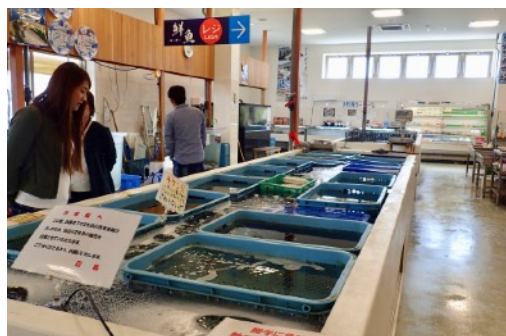


Boiled and chopped “Akamoku” which is sticky and crunchy. .



### Column 1 “Fisheries in Kochi, Okayama and Hyogo”

At the end of March when cherry trees were in full bloom, the author visited Sukumo in Kochi, Bizen in Okayama, and Himeji in Hyogo to see a fish market, fishing port and fisherman's market. In Sukumo, many fish such as yellow tail, spring mackerel and sea bream, that are landed at small fishing ports, were all gathered at Sukumo Bay Central Fish Market which was built by Sukumo Bay Fisheries Cooperative Society. From a mountain the author could see many fish farming cages of tuna, yellow tail and sea bream, and fishes were jumping with a splash and swarming around feeding machine in calm Sukumo Bay. Sea gulls were flying above the cage and looking for a chance to get some feed. There used to be many fisheries cooperative societies around Sukumo Bay, but all cooperatives societies had been in the red due to decreases in catches of wild fish and the price of farmed fishes. Sukumo Bay Fisheries Cooperative Society was born by uniting all small cooperative societies. The united cooperative society overcame the tough times. The fish price and fisherman's income increased significantly by gathering fishes at the central market, and the cooperative society into black. This cooperative society is the expected model of future fisheries cooperative societies in Japan. After the author left Sukumo, he visited a local fisherman's market “Gomi-no-ichi” in Hinase, Bizen City, Okayama. Unfortunately a shellfish poison was detected around Hinase, and there were not any fish at the market. However the author saw many oyster spat collectors made with scallop shells and bamboos for oyster raft at the fishing port, and he learned many things by watching these oyster farming materials. Next day the author visited a fisherman's market “Himeji Tore-Tore Ichiba” located at Mega fishing port in Himeji, Hyogo. Himeji's brand fishes, such as “Boze Saba” which is a farmed mackerel, “Shirasagi Salmon” which is a farmed trout, and “Boze Gani” which is a swimming crab caught in Himeji, were sold alive. If you buy a live fish at the market, a staff member processes live fishes with “Katsu-zime” and “Shinkei-zime” which keep its freshness. The author tried to ship the brand mackerel to Aomori, however, his idea was rejected because Aomori was too far away to eat it as Sashimi. The brand mackerel and salmon processed with “Katsu-zime” and “Shinkei-zime” are provided to a restaurant next to the market in its most fresh condition. A farmed mackerel “Boze Saba” was rich in fat and its texture was very nice. It was the best mackerel the author ever had. A brand farmed salmon “Shirasagi Salmon” and swimming crab “Boze Gani” were also delicious. The author's friend lives in Hyogo tasted the fishes and she said that it was very delicious. Since the restaurant is located near the world heritage site “Himeji Castle”, many locals and tourists come to have the tasty fishes at the lunch time. The author was satisfied with the fishes and went for a walk around the fishing port. The author met a local fisherman who was fixing his cage traps and he offered to show me his traps in the ocean. We went to see his traps along the shore strengthened with tetrapods. There were sea cucumbers and rockfishes inside the traps. The shape and size of the trap was different from the one in Aomori. It was very interesting to see fisheries in Setouchi region. The author learned many things during this trip from Sukumo to Himeji.



## Column 2 "The World Biggest Fishery Country, China"

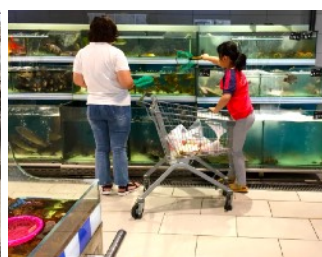
The author visited Fuqing, Fuzhou and Ningde in Fujian, China during his holidays to see my friend who has spent time with in Kiunga, Papua New Guinea. When he met him in Osaka last March, the author asked my friend if he wanted to see the fisheries industry in China which is the biggest fishery country in the world. My friend made arrangements for the study tour, and the author could see many aquaculture fields of sea bass, oyster, manila clam, razor clam and prawn in Fujian. The coast of Fujian has many inlets which are suitable for aquaculture, and people utilized the land and ocean very efficiently. There were so many sea bass culture cages and oyster rafts on the ocean, and dug out ponds for clams and prawns in the wetland. The author was overwhelmed by the landscape of the world biggest aquaculture producer. The sea bass and prawn are exported alive and processed in Korea, and marketed around the world. Some of the products may be exported to Japan. A oyster spat is collected on a small tile, and the tile is tied to a rope and cultured. The size of the oyster was small although it is cultured in a fertile river mouth. The oyster seed in Ningde has been distributed all around China. The sea bass fingerlings are produced at a hatchery in China, and it is cultured in a cage for 2 years. The manila clam, razor clam and prawn are cultured in a dug out pond in a brackish wetland area. Clams are fed a natural feed such as a phytoplankton which are proliferated by adding a fertilizer into a pond. The prawn is fed a commercial feed and natural feed in a pond. Clams and prawns are harvested by draining water in a pond when the time comes. An integrated aquaculture of clams and prawns is also practiced there. Some prawns are cultured in a greenhouse to grow bigger and faster under a warm environment.



After the author visited the aquaculture sites, he also visited a fishing port, market and supermarket to see how fisheries products are landed and marketed. At a fishing port, many old fishing boats were anchored, and there were some buildings for brokers and buyers. However there was no fish in the buildings, and it was very quiet. Since the transportation and delivery service has developed rapidly in the past few years, it seemed that fishes are distributed to local markets and supermarkets immediately after landing. Local women were cracking oysters, and selling live fishes such as rockfishes, crabs, clams and horseshoe crab.



The local market was not as clean as Japan, however, it was very interesting to see many fishes around Fuqing and Fuzhou. At supermarkets like Walmart, fish tanks were well equipped and live fishes such as a crayfish, carp, sea bass, octopus, abalone and flounder were stocked. Marine fishes were lined up on an ice. Most people would rather go to clean supermarkets than local markets recently. Chinese food culture which values live fish is very strong, therefore fish tanks are well equipped in supermarkets and restaurants even if they are small. It was as if like an aquarium. At a restaurant, we catch a fish with a net, and tell the waiter how we want it cooked. Food culture around freshwater fishes has significantly developed, and freshwater fishes such as grass carp and crayfish, which is avoided by Japanese because of muddy smell, were cooked very nicely and deliciously. Spicy crayfish cooking, which is the author's favorite food he never forgets, is very popular nowadays. Thus the aquaculture production of crayfish has increased recently, and it has been sold at supermarkets around China. The author experienced the Chinese culture which utilizes edible aquatic organisms efficiently, and he thought that this culture gives us many ideas that can help with the problem of fisheries stocks in Japan rapidly decreasing.





**Column 2 (continue)**

Although a “Katsu-zime” and “Shinkei-zime” freshness keeping techniques were not carried out in China at this time of visit, the author felt that these techniques will spread over China in the near future because Chinese people are very enthusiastic about learning, mastering and applying new techniques and ideas for their business. During the 8 days trip, the author learned many things about China as the biggest fishery country in the world. What the author saw, knew, and experienced in this vibrant fishing country became an invaluable memory for his life. The author obtained many ideas. Although fisheries industries in Japan are experiencing difficulties due to stock depletion, the technologies and techniques of food processing and freshness keeping such as “Katsu-zime” and “Shinkei-zime” which has evolved in Japan are the keys to overcome the difficulties. The author thinks that the Japanese fishery industry will be more famous among the world if we evolve these unique and identical technologies and techniques combining with ideas from other countries. The author is very thankful to my friends in China for providing him an invaluable experience.



July 1st 2018

**Dear Readers of Fisheries News,**

The author is very sorry to announce that this is the last issue of “Fisheries News”. The Facebook page “Fishes of Higashidori” also won’t be updated, however, the author will keep it as the information page for whom interested in Higashidori Village. He decided to make a career move to achieve his lifetime goal. He is very grateful to everyone for reading the articles. He hopes somebody else publishes more interesting Fisheries News in the future. Thank you very much. From the country of the picture.



Many thanks,

The author