Japan Fisheries Association

ISARIBI 漁火 Fishing Fire

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Views and Opinions of Japan's Fisheries Industry

Tuna issue

ICCAT demonstrates its capability as a responsible tuna resource management organization

--40% TAC cutback adopted for Eastern Atlantic bluefin tuna in 2010--
--"effective" measures for resource recovery also agreed by consensus--

The International Commission for the Conservation of Atlantic Tuna (ICCAT) decided to substantially reduce the overall annual quota of the Eastern Atlantic bluefin tuna for 2010 to 13,500 tons at its general meeting held in Recife, Brazil, November 11-15, 2009. This represented a reduction of about 40% from this year's quota of 22,000 tons.

At this year's meeting, attention was focused on how far the decision of ICCAT, as an international tuna resource management organization, can cover, amid the current circumstances surrounding the Atlantic bluefin tuna. Monaco has proposed Appendix I listing of Atlantic bluefin tuna at the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) with a view to enforce a total ban of international trade for this stock.

For the years in 2011 and afterwards, the Commission will establish quotas based on the results of stock assessment by its Scientific Committee next year. At the same time, it also incorporated in its decisions the option of totally banning fishing in 2011 in case the Scientific Committee recognized that there is a danger of the collapse of the stock (i.e. a situation extremely difficult for the stock to recover.) Thus, ICCAT has strongly set out its stance to implement its resource management thoroughly as a tuna resource management organization.

A high-ranking official of the Fisheries Agency of Japan gave a positive evaluation to the results of the ICCAT meeting. He said that "a consensus was formed among Member States on reduction of the quota in a way to bring a bit further the recommendation of the Scientific Committee, which called for a quota reduction to a level below 15,000 tons a year."

Besides a 40% quota cutback for 2010, ICCAT specifically agreed to shorten the purse-seine fishing season in the Mediterranean to one month (from May 16 to June 14) from the current season covering a period from April 16 to June 14. Further, the Commission agreed that each Member State should curtail their fishing capacity to meet their national total allowable catch (TAC) by 2013.

ICCAT further took note that it will hold an intersessional meeting before the start of next year's season in May, and it would check the state of compliance with the resource management measures by the Member States, and, in case those measures were not complied with, it could take further quota reductions. Thus, the Commission incorporated the requirement to reinforce its management framework to have its agreement thoroughly observed.

Regarding conservation and management measures for Western Atlantic bluefin tuna, ICCAT agreed that measures adopted last year will be maintained. It also agreed that quotas for bigeye tuna and swordfish will be kept at the level as in previous years.

MEL Japan News

MEL Japan presented at PICES --the first full-scale overseas presentation--

The Secretariat of Marine Eco-Label Japan (MEL Japan) made presentation on the scheme and certification of MEL Japan during the topic session at the 18th Annual Meeting of the North Pacific Marine Science Organization (PICES) held in Jeju Special Self-Governing Province in the Republic

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of Korea from October 23. This was the first full-scale overseas presentation on the scheme since its establishment.

As its name denotes, PICES is a body dedicated to marine science in the North Pacific and the surrounding areas. Its members comprise Canada, China, Japan, the Republic of Korea and the United States. PICES was established in 1992, based on the recognition that a marine science organization matching the International Council for the Exploration of the Sea (ICES), founded in 1902 for promotion of marine science in the Atlantic, was needed also for the Pacific.

The general impression of the meeting, although observed only partially, was that the greatest concern among participants was what is happening in the oceans. It seemed that the experts were discussing the issues based on scientific models on sea water temperatures, sea currents and fluctuations of the resources of feed organisms. (Mere mention of the Greek letter Σ in a mathematical formula would suffice to scare away the outsiders!) It seems that social and economic aspects are not focal points of discussion at this moment. Therefore, it may be some time in the future when the topic such as marine eco-labeling would attract attention of the participants.

MEL Japan's presentation was made jointly with Mr. Ishida, Director of Tohoku Regional Fisheries Laboratory of the Fisheries Research Agency, who kindly arranged for this valuable opportunity.

Starting with the brief introduction of the scheme, explanations were given on the types of fisheries certified under MEL Japan to the present day. It was also stressed that MEL Japan attaches importance to the role of certified fishermen (who have high degrees of awareness for the sustainability) to make an appeal to the society, through various means such as educating school children on the importance of sustainable fisheries.

Sakaiminato Center Reizo Co. obtains approval for Chain of Custody certification under MEL Japan scheme

Sakaiminato Center Reizo Co. in Tottori Prefecture, western Japan facing the Sea of Japan, has obtained approval for MEL Japan certification on Chain of Custody (i.e. distribution and processing) stage. The company deals with the distribution of the catches from the Sea of Japan red snow crab fishery that had earlier received MEL Japan production-stage certification.

It engages in processing of red snow crab as well as wholesaling of fresh fish and bait fish, storage of frozen fish and retailing of fresh fish.

It is expected that, as a result certification, Japanese consumers will find more seafood with MEL Japan label.

Marine environment conservation

Young fishermen in western Japan take initiative to foster forests in the sea

The Youth Group at Toushi Branch of Toba Isobe Fisheries Cooperative Association in Mie Prefecture, western Japan, has received the award of the Minister of Agriculture, Forestry and Fisheries for its contribution to the promotion of multi-lateral use of the marine environment.

In the following, Mineaki Hamaguchi, a member of the cooperative, introduces the group's project.

1. Regional outline

The Toushi Island is located at the mouth of Ise Bay, about 1.5 kilometers northeast of Toba Port in Toba City in Mie Prefecture, western Japan. With its coastlines extending 26.3 kilometers, it is the largest island in the prefecture, having a population of about 30,000.

Coastlines are intricate and a favorable fishing ground has been formed near the island as the Kuroshio Current from the Pacific and the nutrient-rich waters from the Ise Bay clash violently in the area.

The Toushi Island also has a long history dating back to ancient times.

2. Outline of fisheries

Diverse fisheries have been practiced in the area near the Toushi Island because there exist numerous natural reefs, and sand areas expand further into the offshore. Major local fisheries include boat-seine fishery targeting sand lance and sardine; pole-and-lining targeting sea bream, mackerel and horse mackerel; gillnetting targeting Iseebi lobster, Spanish mackerel and white croaker; diving fishery targeting abalone and top shell; and octopus pot fishery. Besides, aquaculture of wakame seaweed and black laver is carried out during winter.

3. Organization and management of a study group

The Youth Group of the Toushi Branch is composed of 38 members aged from 27 to 39, with the average age standing at 33. The members mainly engage in boat-seine fishing and laver aquaculture. Regardless the differences of the fisheries they engage, all of them have the hope to vitalize the local community. Up till now, they have participated in activities such as raising of juvenile flatfish for releasing into the sea, cleaning of beaches, and taking part in fishery educational programs at local elementary and high schools. Further, they have carried out juvenile abalone release program by means of diving with

the aim to maximize the effectiveness of the artificial release.

4. Motives for studies and selection of the project theme

The rock reef area in Toushi is blessed with rich coastal resources such as abalone and top shell, and fishery by female divers has been practiced since olden times. Previously, sea oaks used to grow as if they formed forests in the sea, and female divers engaged in abalone harvest by swimming through the forests of sea oaks. However, sea shores began to wither since around 1993, causing sea oaks to disappear on the side of the island facing the Ise Bay. This caused a drastic decrease in the stock of abalone which feed on sea oaks.

No recovery was observed in the sea oak grounds in subsequent years. Various efforts were made to restore the stock of abalone, including limitation of fishing days and release of juvenile shellfish into the sea. But landings of abalone remained stagnant. The seaweed beds including sea oak ground were important for spawning and growth of juvenile fish. The withered sea shores which cause a rapid decrease in seaweed beds has become a nationwide issue. Despite the zeal and willingness of fishermen to take some actions, no effective measures to stop the shore withering have been found as the causes were diverse.

Four years ago, consultations were made between fishermen and the Toba Fisheries Laboratory of Mie Prefecture. In the consultation, it was pointed out that production of sea oak seeds is possible and sea oak ground may be artificially formed using the seeds.

Female divers in the area, including my mother, had been worried that sea oak ground in Toushi area might disappear totally if the present situation continues. So we agreed to take some actions although there was no guarantee of success. The Youth Group thus decided to challenge the project to form sea oak forests.

5. Study and activities and their results

(1) The first challenge

In March 2005, we started working on forming a sea oak ground with the cooperation of the Toba Fisheries Laboratory. Contrary to our expectation, however, the results were miserable, with all the sea oaks were found withered or being eaten up by fish after four months.

(2) Formation of sea oak ground using natural rocks

Sea oaks in the natural environment stand with their own stems by attaching their adhesive organ on rocks. The base part was unstable when what we called "the rope method" (in which ropes was used to avoid oaks from being carried away) was used, and the oaks moved horizontally when tides changed their directions.

This caused damage on the oak body, causing it to wither.

In the second year, trials were made to stabilize the base of the oaks with the aim to solidify adhesive power. In this effort, we used natural rocks instead of ropes.

But this trial also ended in failure in six months, as the leaf parts of sea oak disappeared, with only stem parts remaining.

(3) Countermeasures against eating by fish

Although we were discouraged by the disappearance of sea oak leaves, we found that the project made a step forward as, compared with the former rope method, sea oaks were attached firmly on the natural rocks. We could easily detect the cause of the disappearance of sea oak leaves. The leaves clearly left the trace of being eaten by seaweed-eating fish species such as rabbitfish.

In the third year, in addition to the use of natural rocks as the base, we decided to take countermeasures against eating by fish.

Damage caused by fish usually happen in aquaculture of laver and wakame seaweed. This damage could be prevented by surrounding the sea oaks with nets.

(4) Results

In the fourth year, we continued our efforts and succeeded in growing 1,300 sea oaks by using 500 pieces of natural rocks. Notably, sea oak growth was conspicuous after we installed nets. The sea oak, which was about 20cm at the time of planting in March, grew to exceed one meter after a year. The Fisheries Laboratory confirmed that these sea oaks were releasing zoospores, which provided the possibility for the sea oaks to propagate naturally in the surrounding sea area.

6. Spillover effects

Our efforts to form forests in the sea were reported by various media, including TV and newspapers, and fishermen in other areas of the prefecture launched similar activities. We began exchanges of information with those people, and came to know sea-shore withering had been spreading more extensively than we had imagined, causing serious impact on fisheries. It was crucial for local fishermen, who have the best knowledge on the surrounding sea, to participate in activities

to regain the forests in the sea because locations and sea conditions where withered sea shores occur and the state of damage by fish differed from one place to another.

7. Future issues

We could find out ways to make sea oaks grow, although our initial efforts had been continuous errors. The method we found out requires the work of divers. Therefore, how many divers can take part in the project would be crucial in deciding the scale of sea oak ground formation. At present, we are discussing ways to attach sea oak seeds directly to the rocks so that we can further expand the scale of ground formation.

JFA Symposium

Fish diet shown to have effects against Alzheimer's and metabolic syndrome

--JFA symposium on fish diet and aging--

The Japan Fisheries Association (JFA) held, jointly with the Tokyo Nutritionists Association, a symposium under the theme of "Anti-aging -- Fish Diet and Mental and Physical Health" in Tokyo on November 13. It was attended by about 160 people, including nutritionists, fisheries industry representatives and ordinary citizens.

The symposium featured lectures on the relations between Alzheimer's and dietary life and the seminar on muscle training to avoid bed-ridden life. Also the results of the survey on the possible effects of fish oil intake in relations to the factors conducive to metabolic syndrome.

At the outset, JFA Executive Managing Director Yoshiyuki Shige addressed the audience on behalf of the sponsor. He said: "A well-balanced food life is essential for maintaining health. It is important for us in the fisheries industry to engage, with pride and confidence, in our mission to enlighten the consumer that seafood is good for health. I hope this symposium will provide a good opportunity to promote your knowledge on seafood and health."

This was followed by a lecture of Prof. Akira Ueki of Jichi Medical University on the relations between Alzheimer's and food life. Ueki pointed out, as dangerous factors leading to Alzheimer (1) heredity, (2) vascular factors (high blood pressures, diabetes, high cholesterol, obesity, etc.) and (3) lifestyle-related factors.

As effective ways to avoid these negative effects, Ueki stressed the need of physical exercise and nutrition. He explained: "It is known that vitamins E and C and folic acid which are contained in large amount in vegetables and fruit have preventive effects. The only food item other than vegetables and fruit having similar effects is fish." Many data have been presented regarding unsaturated fatty acid contained in fish, and this acid is attracting attention recently from many sectors of medical studies including Alzheimer's, intestine-related diseases and respiratory diseases.

Ueki encouraged the participants to eat fish in its entirety from which nutrients, such as fish oil, protein, calcium, vitamin B group and taurin, can be consumed.

Following the lecture, a muscle training seminar was given by Ms. Yumi Tezuka, a well-known fitness trainer and instructor. She reported that falling down, which is the third largest cause of the bed-ridden status, has tripled during the past two decades, and introduced training methods to strengthen the large muscles running from the lumbar spine through the groin.

After the training session, Prof. Hiramitsu Suzuki of Kagawa Nutrition University lectured on possible effects of fish oil intake on metabolic factors based on the preliminary results of the survey he conducted in Tokyo. In the survey, participants were asked, without being informed, to choose between fish oil capsules and placebo capsules not containing fish oil, and to take them for the duration of three months.

As a result, the blood pressure and blood sugar levels of the participants did not show conspicuous differences from the time before the intake. But, upon examining blood plasma lipid, it was found that cholesterol and neutral fat tended to lower in the group of partipants consuming fish oil. As there was variation depending on the test subjects, the variation rates among individuals were compared, and significant difference was observed in neutral fat, although no statistically significant difference was seen in cholesterol.

Among the subjects who consumed placebo capsules, increase of neutral fat was observed in six, while, among those who consumed fish oil, six out of eight having higher neutral fat of 150mg/dl showed decrease in neutral fat.

Suzuki analyzed that "it became clear that fish oil has the effects of lowering neutral fat and improve liver functions. There is a possibility of blood pressures to be lowered by fish oil much later. It is also considered that blood sugar level will decline, contributing to preventing or improving metabolic syndrome." "I think it is safe to say that frequent intake of fish will help reduce the dangerous factors conducive to metabolic syndrome," Suzuki said.