Happy Oceans Campaign, "Preserving and Eating Oceans"

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ABSTRACT: We agree on the motion of the Happy Oceans, "Preserving and Eating Oceans", and making a skipjack tuna migrating tropical seas around the world as a symbol of the stable resources. We turn on a traffic light of red, blue, yellow reflecting natural resources of the fish, and declare herewith to contribute sustaining Japanese food culture together with customers. In reference to the information of the Food and Agriculture Organization of the United Nations, FAO, we turn on a green light of approximately 20% resources of moderate use, and turn on yellow light for approximately 50% of resources if they do the same use because it is in a condition of the surplus use to cause the drying up of resources, furthermore, we turn on a red light in 30% of excessive fishery or of drying up states. We will reflect the information such as the fisheries research institutes or the local fisheries experimental stations, for the purpose to reflect more accurate information to turn on a traffic light.

INTRODUCTION

At Aquamarine Fukushima, we conduct environmental exhibitions based on the concept of "The Oceans and What They Say about Our Future on Earth" through exhibitions of various aquatic organisms. In addition, we also use these aquatic organisms as food resources. Natural resources can be largely classified as finite coal resources and marine resources that can be reproduced. By implementing appropriate management of marine resources, they can be used continuously. The increase of the world's population in recent years, has also led to an increase of the use of marine resources. However, if their unregulated use continues, there is always the possibility that it may lead to the depletion of resources.

ABOUT HAPPY OCEANS

At Aquamarine Fukushima, we are engaged in the Happy Oceans activities in order to convey the current situation of marine resources to visitors based on the slogan, "Happy Relation with Fish and Human." The skipjack tuna is used as the logo symbol for the Happy Oceans initiative (Fig.1). Skipjack tuna are a migratory fish that travel across wide ranges in groups, and Onahama Port, where the aquarium is located, is a popular landing harbor for skipjack tuna.

HAPPY OCEANS LEAFLET

We have created leaflets regarding the current situation of the volume of resources of 60 different species of fish and shellfish categorized into red, yellow and green color symbols, and transmit this information to our visitors (Fig.2,3). The color symbol standards are evaluated based on the combination of the resource evaluation criteria published by the Fisheries Agency (high/middle/low) and their rate of change in volume (increase/level/decrease.) In addition, we are also considering a new evaluation standard method through a joint collaboration with Yokohama National University.



Fig.1. Happy Oceans logo.



Fig.2. Happy Oceans Leaflet

ACTIVITIES OF HAPPY OSEANS

At Aquamarine Fukushima, we are engaged efforts such regular exhibitions and educating visitors at the on-site shops and sushi restaurant through the Happy Oceans leaflets, offering educational activities, holding lectures for our visitors (once a year) and holding meetings about the fish from the Jomon period to come together and think about the use of new marine resources (once a month,) and the details of these activities are as follows.

RESTAURANT: OISHII AQUARIUM

The fish belonging to the red and yellow categories on the leaflet are offered at this restaurant (Fig.4). Dai Yamamoto, the head chef, agreed with our philosophy and shut down his own restaurant in Tokyo to come work at this restaurant.

SUSHI SHOP "HAPPY OCEANS"

Sushi is a cuisine that originated during the Edo period, and is prepared by placing a sushi topping (seafood) on top of vinegared rice. Currently, sushi cultures are being developed in various parts of Japan that are unique to that land. "Shiome Sushi" was opened in front of the current rip tanks that is linked to the region (Fig.5). The restaurant is positioned as an important educational area where visitors can experience and gain a deeper understanding of the various fish swimming inside the aquarium using all five senses (Fig.6).

EDUCATIONAL ACTIVITIES

Japan is an island nation that is surrounded by the sea. Fishing activities have been conducted here using rivers and oceans from ancient times. Here, the "Aquamarine Uonozoki children's fishing museum," where visitors can learn about the history of the fishermen and the fishing industry at the "Aquamarine Egg" (Fig7, 8). We are also spreading the purpose of the Happy Oceans initiatives to our visitors here.

LECTURES

Through various themes relating to the ocean, rivers and mountains, we implement lectures that connect researchers with our visitors. For researchers, these lectures are opportunities for them to freely convey their research to the general public, and serve an important role as a place where the general public can learn about the latest research information. Visitors here can learn about previous themes, gain deeper understanding of the mehikari (*Chlorophthalmus borealis*,) learn about radiation and think about the use of marine resources.







Fig.5. Sushi shop in front of the current rip tanks.



Fig.6.Enjoy sushi while watching aquarium



Fig.7. Maiwai (Fisherman's Festive Clothes)



Fig.8. Experience of bonito cutting

ZAKO ASSOCIATION

The mehikari (*Chlorophthalmus borealis*,) which originally had a low utility value, serves as the official fish of Iwaki(Fig.9). Fish with low

utility value are referred to as zako (small fish.) Ever since the *Chlorophthalmus borealis* was selected as the official fish of the city, its market value has increased. Once a month, a meeting of the Zako Association is held at the aquarium in order to find the next mehikari(Fig.10). By collaborating with the region, we are continuously considering further unused resources and the branding of zako fish.



Fig.9. Mehikari - Bigeyed greeneye (*Chlorophthalmus borealis*)



Fig.10. Donko - Japanese codling (Physiculus maximowiczi)

CONCLUSION

Aquamarine Fukushima is located between a fishing port and an industrial port, and was constructed as a waterfront redevelopment project. The aquarium itself is a popular tourist spot, but we will continue to transmit our environmental messages from Onohama Port under the label of an "environmental aquarium" while collaborating with the local region to provide lifelong studies and next-generation educational activities.