Wild and farmed bluefin tuna – evaluation of taste

The taste of Japanese people has been changing as time goes by and according to age group. The overall change is that people like less salty and more fatty foods. When I was a kid, a pickled plum (umeboshi in Japanese) was very salty and sour. Such umeboshi is becoming rare recently and the less salty one is the mainstream. A toro (a fatty part of tuna), which used to be considered a low class food, is now very popular. Farmed salmon, which is more popular than tuna for sushi, is also fatty. On the other hand, some people do not necessarily like imported farmed bluefin tuna that can be frequently found at supermarkets as it is too fatty and too soft. Other people prefer farmed bluefin tuna to wild ones since the former is cheaper and contains more fatty part. This article touches upon the difference of taste between wild and farmed ones and how the taste has been shifting.

How do Japanese people appreciate farmed and wild bluefin tuna?

You need to eat both farmed and wild ones to compare the tastes, but not so many people usually do this. I believe that a person who has the experience in eating both prefer the taste of wild ones to farmed ones, setting aside the price. Of course, the taste of each individual for the degree of fattiness and the texture varies, but the most conspicuous difference between the two is its flavor. Farmed ones lack refreshing flavor of wild ones. It should be noted, however, that the price of wild bluefin tuna at tuna auctions differs tremendously even though the feature and the weight are similar. This means that the taste of wild ones differs greatly. As farmed ones occupy the bluefin tuna market, those who are familiar with only farmed ones may consider that the taste of farmed ones is the true taste of bluefin tuna. Those people may tend to prefer farmed ones as it is fatty, tasty and cheaper than wild ones. Looking at different generations, younger generations tend to prefer farmed ones as they like fatty ones while older generations to which I belong prefer less fatty and more flavored wild ones.

The taste of both wild and farmed ones varies, depending on the size and the timing of the catch. After spawning, the quality of the meat greatly deteriorates with the less fat content and the color of the meat becomes blackish. It loses weight so much that the head looks bigger than usual. It is sometimes called "rakkyo (pickled Japanese scallion) tuna." The bluefin tuna farming originally started to feed bluefin tuna temporarily which had lost weight and value after spawning. The purpose was to recover the quality of the meat and thereby fetch higher prices at the tuna market. Since consumers' preference for "toro" was getting higher, bluefin tuna farmers also started to raise bluefin tuna before spawning to increase the fat content. Toro is more expensive than red meat and slightly fatty meat. They try to make the percentage of the

toro part in a fish higher to earn more money. Whether this is because farmers appealed the taste of toro to consumers to earn money or because consumers' preference for toro forced farmers to produce more fatty tunas is not clear. Perhaps, both hypotheses are true.

How do foreign people appreciate farmed and wild bluefin tuna?

How do foreigners (Europeans) appreciate the taste of farmed and wild bluefin tuna? I asked fishermen working for the trap fishery in the Strait of Gibraltar. His answer may not be representative, but I would like to introduce it as I did not expect to hear it. Most of the bluefin tuna caught in the Atlantic Ocean are destined for farming and the amount of wild bluefin tuna available for sale is much smaller than that of farmed ones. Bluefin tuna caught by Japanese long line fishing vessels off Ireland is a representative wild bluefin tuna. Other than this, bluefin tuna caught by some of the traps in the Strait of Gibraltar are also sold without going through farming. I thought that farmed (fatty) bluefin tuna gain much more popularity than wild ones, but the fact is that the demand for wild one is increasing in Spain and wild ones are exported to other European countries. When I visited the central market in Madrid about 20 years ago, most of the big fish were sword fish and few tunas were found. Recently, as the demand for bluefin tuna has been increasing, wild bluefin tuna caught off Boston are sometimes found in the market. This means that, like in Japan, there are a certain number of people who stick to wild fish. Such people may be the ones who are relatively rich and conscious about the health. The price of farmed bluefin tuna is proportionate to the fat content. Farmers try to increase the fat content as much as possible, which sometimes causes problems, including the less tastiness. Some farmers feel a dilemma between the higher price and the less tastiness.

Appreciation of taste involves complex factors

I stated my views above on how to appreciate the taste of bluefin tuna. This actually involves various complex factors and it is not easy to do. The production of aquaculture fish is more stable than that of wild fish. It is economically in a more advantageous position than wild in that it can plan a production to a certain extent and the price is cheaper than wild one. However, it has to consume a large amount of fish for feeding, which would be otherwise used for human consumption, and this draws a criticism. The amount of production of bluefin tuna caught by Japanese long line fishing vessels in the high latitude areas of the north Atlantic is much smaller than that of farmed one. It has a long-standing popularity despite its high price. At the same time, it is somewhat hard for me to understand why those vessels have to spend a large amount of oil to go to such distant area and operate fishing under harsh conditions.

The total allowable catch (TAC) for the eastern stock of Atlantic bluefin tuna, which occupies the majority of the catch of Atlantic bluefin tuna and the most of which goes to farming, has been increasing. It is not possible to predict how the TAC will change as well as the relationship between supply and demand in the future. The eastern stock has just started a new management scheme called an MP (management procedure), which is robust enough to secure sustainable use of the stock. Due to the nature of the scheme, it is difficult to imagine a continuous big increase in TAC. Some people express concern that a further increase in TAC may cause excessive competition at the market.

The problems of energy, food and environment is getting even more serious because of the war in Ukraine. Under such circumstances, it may be worthwhile to give thoughts to how to utilize the Atlantic bluefin tuna resource while securing the position of both wild and farmed ones at the market.