Monmouth College 2012 Bernice Fox Lecture

Outline of "Tuna in Ancient Greece and Modern Tuna Population Decline"
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Introduction.

After looking at the modern scientific names and ancient Greek names for tuna, this describes the size and speed of this animal, which can raise its body temperature by as much as twenty degrees Centigrade above ambient conditions. The ancient peoples of the Mediterranean valued the tuna immensely. They delighted in its taste, and profited by its harvest. They wrote about them, drew their pictures, and inscribed their images on coins. This delicacy inspired poets and playwrights, attracted the attention of scientists and geographers, and served as sacrificial offerings to the gods themselves.

Opsophagy. Love of Fish.

Athenaeus defines the Greek craving for fish, "opsophagy" thus: "It is no wonder, my friends, that among all the specially prepared dishes which we call an *opson*, the fish is the only one which has won its way, on account of its excellent eating qualities, to be called by this name, because people are so mad for this kind of food..." and "We give the name "relish eaters," *opsophagoi* rather to people who gad about among the fishmongers' (276f7).

Love of Tuna.

Archestratus of Gela wrote an epic poem about luxuriousness, in which he says that as much as eels were valued as the best of all foods, so the fattest tuna is that much superior to the most utterly worthless fish, the so-called "raven fish" (*korakinon*,). Greeks valued tuna in many forms. They served it by the grilled slice (*temakhos*), and they dried, salted, and pickled it, making the important staple *tarikhos* (preserved fish), which was shipped throughout the Mediterranean. The sixth-century BCE iambic poet Hipponax of Ephesus wrote a poem about a man who literally wasted his life by luxuriously overindulging in tuna with a savory sauce: It is a free man who eats tuna. Slaves cannot afford it. Greeks especially esteemed the fat-rich belly-pieces of tuna (*ta hypogastria*), as do the contemporary Japanese, who call it *o-toro*. Other edible pieces include the shoulders, or 'keys' (kleides = claviculae), and the head. Two lost comedies by Antiphanes apparently praised the "middle slice of the very best Byzantine tunny" and the 'tail-cut' (*to ouraion*) of the female tuna.

Tuna Migration.

Tuna got around more than other fish, a fact which fascinated the ancient Greeks, especially because accurate knowledge of fish migration led to rich fish harvests. Great shoals of tuna used to migrate in and out of the Black Sea, and provided wealth for the people of Byzantium. Oppian's epic on fishing speaks poetically of the tuna migration from the Atlantic past Spain, France, Italy, and Sicily. The spring is the important time for the migrating tuna to spawn. Atlantic bluefin tuna lay their eggs in the Gulf of Mexico

in April, at roughly the same time that BP's Deepwater Horizon oilrig exploded in 2010. We still await the result of this disaster on the tuna population.

Hunting Tuna.

Many ancient authors write about the *thunnoskopoi*, men who went to high bluffs or mounted tall "tuna towers" to watch for the migrating fish and to direct the operations of the boats which would set out on the hunt. Seeing the tuna is most important. Since the days of the tuna towers, Mediterranean tuna hunters in modern times have used helicopters and spotting aircraft – even when it has been declared illegal.

Tuna and the Gods.

Mammals were the preferred sacrifice for the Olympian deities, due to their large supply of blood, but tuna, because of the fact that they alone among fish have an abundant amount of blood, were probably acceptable sacrifices to Poseidon. The people of Halae offered to Poseidon a thynnaion (*tunny offering*). The Roman satirist Persius enigmatically refers to a Jewish holiday, perhaps the Sabbath, which includes wine, specially decorated lamps and "the tail of tuna fish swimming coiling around the red bowl."

Etymology.

The movement of these fish gave the Greeks a notion of the origin of their name: *thunnos*, from the verb *thuno*, that means 'to dart, or move quickly,' but D'Arcy Wentworth Thompson throws cold water on this fishy etymology: "The word θύννος is non-Hellenic, like much else of the vocabulary of the Greek fishermen (βύσσος, κῆτος, πίννα, σαγήνη, int. al.); but its origin is unknown."

Oistros, the Tuna Parasite.

Numerous authors, Aristotle included, describe how a parasite that they call *oistros* (gadfly) is responsible for a frenzy that makes both tuna and swordfish leap out of the water, sometimes into ships. Modern Scientists have found that this symbiont copepod (Brachiella thynni) is very common, occurring on 70% of tuna populations in the Atlantic and Caribbean.

Ancient Images of Tuna.

The most common images of tuna surviving from the ancient Mediterranean are on coins, notably those from Gades (near the Pillars of Heracles), and Cyzicus (in the Propontis, at the entrance to the Black Sea). This is not surprising, because these two areas were the most well known for tuna fishing wealth.

Future Prospects for Tuna.

The massive schools of tuna that used to range the Mediterranean and the world's great oceans have dwindled precipitously. International agreements to control the taking of the most coveted varieties have failed. Mediterranean tuna harvesting and aquaculture farms have prevented them from reaching their spawning grounds. Humanity's short-term gustatory gratification is currently leading to possible long-term — and permanent — population decline. The modern use of long-line hooks catches great numbers of tuna,

but does not discriminate in their favor, and the "by-kill" ratios are hazardous to other marine populations. The ancients used large purse seines to trap their prey, but modern versions of the same mode of capture are more efficient, and many times more numerous. The danger here is that immature fish are taken with the mature ones, and do not get the chance to spawn. The Japanese, who now import 90% of the world's bluefin tuna, have turned to the Mediterranean, and Japanese companies have frozen stockpiles of blue fin – at least 20,000 tons. The 2010 publication of Paul Greenberg's *New York Times* Bestseller *Four Fish* has again brought the bluefin tuna's plight to public attention. The problem is the fantastic prices they fetch. A single wild bluefin can fetch \$10,000, but in January of 2010, a 510 lb. bluefin tuna caught off the northern tip of Japan's main island Honshu sold for \$175,000.

Possible Solutions.

Proposed solutions include the creation of "safe areas" in the seas, enforcement of quotas on catching them — current limits are violated with impunity — and educating people and corporations about the need to let the tuna re-populate. Replacing tuna consumption with other comparable, more plentiful fish, and ones that can be easily farmed is another tack. Finally, governments that subsidize the massive fishing fleets that ply the world's oceans could re-direct their investments to sustainable fishing and breeding programs.

Conclusion.

Like the ancients, we use elaborate and efficient means of catching the tuna, which have become an important part of our diet and our economy. The best tuna fetch astronomical prices. But the main difference between "then" and "now" consists of our present power to put an end to the existence of this species, due to two other characteristics we share with the ancient Greeks: we love to eat the best fish, and we are clever hunters. Fish are irresistible. Tuna are the best fish to eat, and we are willing to pay for them to please our palates. Opsophagy rules.

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