



## Fishing in the Black Sea (Antiquity)

### Summary :

Fish was always an important nutritional element, trade and health resource in the ancient world. Fishing in the rivers or in the open sea appears as one of the most ancient and important activities since prehistoric times. Abundant prehistoric traces of fishing tools, fish motifs in pre-Greek, Scythian, and Thracian ornaments around the Black Sea shores offer excellent evidence for activities of fishing in the broader Black Sea area although the large scale of activity remained restricted to local necessities.

### Date

Antiquity

### Geographical Location

Black Sea

### 1. Fishing in the Black Sea in ancient literature.

Ancient authors from [Hippocrates](#) (ca. 400 BC)<sup>1</sup> onward stressed, in different circumstances, the exceptional richness in fish of the Black Sea (*Pontos Euxinos*) basin, as well as the impact of this natural resource on the welfare of the coastal Pontic towns. The abundant supply of the Black Sea with fresh water from the biggest rivers of Europe (Istros/Danubius-Danube, Tyras-Dniester, Hypanis-Bug, Borysthenes-Dnepr, Tanais-Don) is particularly important, for a vast number of sea and river-mouth species of fish lived in both environments.<sup>2</sup>

Claudius Aelianus gives an overall account about fish in the Black sea: "Pontus Euxinus has plenty of fish, for it does not feed big animals. The fish is protected from all other animals even though it has very little seals and dolphins from place to place".<sup>3</sup> Pontus was also an ideal place where many species of fish used to mate in wintertime. Aelianus, [Oppianus](#) and Ammianus Marcellinus<sup>4</sup> stressed the fact that the Pontus Euxinus had very good natural refuges and shelters that protected the fish. Crayfish, crabs and polyps, which could have endangered other fish species, were absent.

Many species are common to both river and sea environments. Ammianus mentions that big shoals of fish enter the Black Sea to lay down their eggs into the fresher and healthier waters of the deep lagoons.<sup>5</sup> Pliny the Elder states clearly that fish are growing fast in the Pontus Euxinus because of the fresh water brought by the big rivers.<sup>6</sup> Sopatros of Paphos<sup>7</sup> refers to the "half salted great sturgeon" brought from the mouths of the Danube, naming it "the delight of the [Scythians](#)".

There is a remarkable number of species of fish recorded by ancient writers, living in the Black Sea and at the mouths of the rivers: pelamys (*pelamys*); tuna fish (*tonnoi*, *thynnoi*); swordfish (*xifiai*); white ouzel-fish (*kossufoi leukoi*); sea-raven (*korakinoi*); black carps (*melanes kyprinoi*); beluga (*antakaioi*), marsuin (*phykaina*). Oppianus<sup>8</sup> and Pliny the Elder<sup>9</sup> make special mention of the tuna (*thynis*), the pelamid (*pelamys*), the mackerel (scomber) and a special kind of fish, the *trichia*. The migration of fish from one environment to another was well-known at that time.

[Herodotus](#) mentions fishing at the mouths of the Dniepr River,<sup>10</sup> an information which is supported by the archaeological research as well. There have been found 2nd c. BC installations for commercial activities, in which fish trade held a prominent position at the Elizavetovka site.<sup>11</sup> Herodotus mentions a sort of fish called antacaei (*antakaioi*) without any prickly bones, and good for pickling, while Strabon records fishing activity of the same kind of marine animal in the Maeotis (the Azov Sea).<sup>12</sup> Aelianus records intense fishing in the territory of [Histria](#).<sup>13</sup> In the 2nd c. A. D. the fishing activity in Histria was officially regulated by the Roman authorities who "[...] deemed it right to maintain, by tradition, the permission to fish at the mouths of the Peuce arm and to bring wood for torches for each ones needs [...]".<sup>14</sup>



## Fishing in the Black Sea (Antiquity)

### 2. Fishing as an element of economy

Fishing was a basic branch of the economy for all the Pontic centres. This is clearly visible from the great amount of fish bones, shells and fishing tools (hooks, fishing weights) found in significant quantities during the excavations. Fishing and fish processing in the big Pontic towns could have reached an industrial scale in classical and Hellenistic times. The huge amount of **amphorae** found during the excavations and their use as recipients for fish transportation suggests that these operations were performed at a particularly large scale. Marine animals represented on coin issues like “eagle and dolphin” in Histria and in [Sinope](#), leaping dolphins in [Olbia](#), or the crab-fish in [Apollonia](#) give evidence to the exceptional importance of fish economy and bear a vast range of potential symbolic, mythological and religious connotations.

### 3. Fishing techniques

The fishing technique changed little in antiquity and only a few environments presumably show an approach to fishing different from the traditional ones. Claudius Aelianus offers one of the most vivid pictures of the big fish-catch activity in the Histros River next to the Black Sea. The author narrates how a Histrian fisherman uses a strong angling rod (rope) and plumb with a big solid hook in which a bull's lung is stuck and pulls the fish out with a two oxen or horses cart.<sup>15</sup> The practice must have been widespread next to the large rivers' mouths as far as big fish-catch is concerned.

Fishing in ice-holes was a widespread method in the Pontic area. Strabon mentions that at [Panticapaeum](#), the fishermen caught the antacaei, (beluga or Black Sea sturgeon) with a special kind of trawl called gangama (*gaggame*) after they made a hole in the ice.<sup>16</sup> The same technique is described in detail by Aelianus in the case of ice-fishing on the River Histros.<sup>17</sup> A recent interpretation of the term *dæda* as “torches” in the text of the boundary regulations in Histria, dating to 100 AD, reveals the use of night fishing, a method recorded by Oppianus and by [Quintus of Smyrna](#).<sup>18</sup>

### 4. The processing of fish

The fish in the Pontic area were processed either through pickling, drying-and salting or smoking, as recorded in literary sources and confirmed by a large and growing volume of epigraphic and archaeological evidence.<sup>19</sup> At the Elizavetovka site, the remains of a smokehouse have been identified. Fresh fish were also traded especially in wintertime. The preparation and consumption of pickled fish (*garum*, *tarichos*), was widespread along the coasts of the Roman Empire from the Atlantic Ocean to the Black Sea. There is a considerable number of *garum* amphorae fitted for long-term maintenance and transportation of the fish. Salting vats of big capacity were recently found in Chersonesus (2000 cubic metres), [Myrmekion](#) and [Tyritake](#) (457 cubic metres).

Fish in general had also medicinal properties, as the work of the famous ancient physician [Galen](#) shows.

---

1. A comprehensive description of the early Scythian communities and their occupations, fishing inclusively, living around the Maeotic Lake (The Azov Sea) and northern Black Sea: Hippokr. 17-19; Strab. *Geogr.* 7. 4. 6. On the species of fish see: Ovid. *Trist.* 3. 10. 44 - 45; 48-49; Plin. *Nat. Hist.* 9. 15; 32. 11. 15. 3; see also Claud. Ael. *De Nat. Anim.* 4. 9. The author stresses that there were no predators in the Black sea to endanger these species and indicates some routes the different species follow, once they entered the sea. Some, says the author, never came back in the Mediteranean and this is the case with a particular species of mackerel (*Clupea harengus*); Solin.12. 3.

2. Herod. *Hist.* 4. 47; Plin. *Nat. Hist.* 9. 15. 49: “[...] causa multitudo amnium dulces inferentium aquas [...]”.

3. Claud. Ael. *De Nat. Anim.* 4. 9.

4. Claud. Ael. *De Nat. Anim.* 4. 9; [...]”;Oppian. *Hal* 3. 57; Plin. *Nat. Hist.* 32. 11. 152; Amm. Marc. 22. 8. 43: “[...] et constat ab ultimis



## Fishing in the Black Sea (Antiquity)

nostri finibus maris agminatim ad hunc secessum pariendi gratia petere pisces, ut aquarum suavitate salubrius fetus educant in receptaculis cavis - quae sunt ibi densissima- securi voracium beluarum: nihil enim in Ponto huius modi aliquando est visum, praeter innoxios delphinas et paucos [...]"

5. Amm. Marc. 22. 8. 43.

6. Plin. *Nat. Hist.* 9. 15. 49: "[...] pisces genus omne precipua celebritate adolescit [...]"

7. Athen. *Deipn.* 3. 19.

8. Oppian. *Hal.* 3. 79.

9. Plin. *Nat. Hist.* 32. 11. 52: "[...] animalia quae apud neminem alium reperiuntur, sed fortassis in Ponto nascentia [...]"

10. Herod. *Hist.* 4. 53.

11. Gavriljuk, N. in: *Ancient Fishing and Fish Processing in the Black Sea Region* (Black Sea Studies vol. 2), Århus 2005, pp. 105-113

12. Strab. *Geogr.* 7. 4. 6 mentions an intense fish trade in the area of Maeotis Lake saying that "[...] in still earlier times the Greeks imported their supplies of grain from here, just as they imported their supplies of salt-fish from the lake [...]" in 11. 2. 4 the author speaks about two important markets in the Cimmerian Bosphorus: Phanagoreaia for the products around the Maeotid Sea and Panticapaeum for those coming from the Black Sea. In this environment dominated by rivers' fresh waters and seas, fish became a basic product both to be traded on the spot or preserved and later sent to different locations.

13. Claud. Aelian. *De Nat. Anim.* 14. 25.

14. ISM 1, 67, 68.

15. Claud. Aelian. *De Nat. Anim.* 14. 25.

16. Strab. *Geogr.* 7. 3. 18.

17. Claud. Aelian. *De Nat. Anim.* 14. 26.

18. Pippidi, D.M., "Pești și pescari la Istros și la Odessos", *Studii Clasice* 7 (1965) p. 324-329; Oppian. *Hel.* 3. 81.

19. For the archaeological aspect see the volume *Ancient Fishing and Fish Processing in the Black Sea Region* (Black Sea Studies vol. 2), Århus 2005.

---

### Bibliography :

	<b>Michel S.</b> , <i>Fisch in der skythischen Kunst: zur Deutung skythischer Bildinhalte</i> , Lang, P. (ed.), Frankfurt am Main – New York 1995
	<b>Pippidi D.M.</b> , "Pești și pescari la Istros și la Odessos", <i>Studii Clasice</i> , 7, 1965, 324-329
	<b>Højte J.M.</b> , "The Archaeological Evidence for Fish Processing in the Black Sea Region", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 133-



## Fishing in the Black Sea (Antiquity)

	160
	<b>Wilkins J.</b> , "Fish as a Source of Food in Antiquity", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 21-30
	<b>Stolba V.F.</b> , "Fish and Money. Numismatic Evidence for Black Sea Fishing", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 115-132
	<b>Gabrielsen V., Lund J.</b> , "A Fishy Business. Transport Amphorae of the Black Sea Region as a Source for the Trade in Fish and Fish Products in the Classical and Hellenistic Periods", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 161-169
	<b>Bekker-Nielsen T.</b> , "The Technology and Productivity of Ancient Sea Fishing", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 83-95
	<b>Curtis R.I.</b> , "Sources for Production and Trade of Greek and Roman Processed Fish", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 31-46
	<b>Ejstrud B.</b> , "Size Matters. Estimating Trade of Wine, Oil and Fish-Sauce from Amphorae in the First Century AD", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 171-181
	<b>Gavriljuk N.A.</b> , "Fishery in the Life of the Nomadic Population of the Northern Black Sea Area in the Early Iron Age", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 105-113
	<b>Jacobsen A.L.L.</b> , "The Reliability of Fishing Statistics as a Source for Catches and Fish Stocks in Antiquity", Bekker-Nielsen, T. (ed.), <i>Ancient Fishing and Fish Processing in the Black Sea Region</i> , Århus 2005, Black Sea Studies 2, 97-104

### Webliography :

	Ancient fishing
<a href="http://www.pontos.dk/publications/books/black-sea-studies-2">http://www.pontos.dk/publications/books/black-sea-studies-2</a>	

### Glossary :

	<b>amphora, the</b>
from the greek words "αμφί"(on both sides) and "φέρω" (carry): vessel with long ovoid body and a considerably narrower neck made in various sizes from the smaller perfume oil container to the large storage receivers of liquids and solids. It stands on a small foot and it bears two invariable vertical handles on either side. Some of the distinguished types of the amphorae are these whose lower part is tapering to the point (narrow bottomed), the neck type, the Nicosthenian, the Nola, the Panathenaic, the Tyrrhenian, the SOS type.	

### Sources

Amm. Marc. 22.8.43

Athen, *Deipn.* 3.19

Claud. Ael., *De Nat. Anim.* 4.9, 14.25, 14.26

Herod., *Historiae* 4.47, 4.53



## Fishing in the Black Sea (Antiquity)

Hippocr. 17-19

Oppian., *Hal.* 3.57, 3.79, 3.81

Ovid., *Trist.* 3.10.44-45, 3.10.48-49

Plin., *Nat. Hist.* 9.15, 32.11, 15.3

Solin 12.3

Strab., *Geogr.* 7.3.18, 7.4.6

ISM 1.67-68