

Marine salt production in the Roman world: the salinae, their ownership, and organisation

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While we have abundant archaeological evidence for the many salting workshops that once operated in the Roman world, engaged in the salting of fish and meat, archaeological remains for the salt pans (the *salinae*) where the precious salt was produced are rarer. Discoveries such as those at the *salina* at O Areal at Vigo (Currás 2017), in the Fiumicino/Maccarese area near Rome (Grossi *et al.* 2015; see also Daveau and Sivan 2010 for possible saltworks at Antibes) or at Kaunos in southern Turkey (Atik 2008; but precise dating remains unclear) offer important data on the physical infrastructure for salt production and help understanding the references to salt production found in the literary texts such as Pliny the Elder's *Natural History*.

This paper will discuss the archaeological evidence for Roman marine salt pans and the important questions of ownership and organisation of production. It has often been stated, on the basis of passages from the *Digest* and epigraphic evidence (e.g., *Dig.* 39.4.13 pr.; 50.16.17.1), that in the Roman world marine salt pans were owned by the state (the *Populus Romanus*) and their exploitation was contracted out by the censors to *societates publicanorum*, in effect creating a state monopoly on salt production. While state control on the sale of salt is well documented for Roman Egypt, the situation in the rest of the Roman world, particularly Italy and the Western provinces, seems to have been much more varied.

The paper will argue that in Roman law salt pans could be held in private property, so they could be owned by individuals, municipalities, or entities such as sanctuaries and that while some saltwork were indeed owned by the state, there was no general monopoly on salt production. The great diffusion of fish-salting establishments along the coasts of the ancient Mediterranean, well attested by archaeological remains, is a good indicator that salt could be acquired in the quantities needed for this activity, presumably at a fair price. This was a crucial difference compared to later historical periods, when state monopoly on

salt seriously impacted on local dietary habits and various industries, including the fishing sector. Historical accounts of the late 19th-century Adriatic (Faber 1883, 45) remark on the vast amounts of fish that was wasted because the fishermen and salters could acquire only a limited quantity of salt from the Austro-Hungarian state at a set price. To purchase more would have been too expensive and not worth the effort of preserving the huge quantities of fish that was impossible to commercialise as fresh. On the contrary, in the Roman era we see that even small settlements or relatively remote locality featured small- and medium-sized establishments for fish salting (Marzano2013, 139-141). Besides the availability of good fisheries, these developments, which could be quite significant for local economies relied on the fact that producers could acquire salt relatively easily. The production of salt could be very well integrated with the salting activities of the *cetariae* and in the case of localities that flourished because of their fish-salting industry, such as Cartago Nova and Gades, it is probable that the same owners (or business partnerships) owned and operated both the *salinae* and the salting workshops.

References

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