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***Castanea* as a Multiplex Resource**

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Castanea as a Multiplex Resource

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Throughout history, plants have provided humans with numerous valuable resources. The many, diverse, and useful goods derived from plants have characterized entire time periods. Plants and trees were able to become sources of subsistence as well as profit and were influenced by varying climatic and political contexts. As such, humans transported plants to new regions of the world, displaying how the history of plants and humans overlaps. During the Early Medieval Era, the Mediterranean region played host to a plant that had become woven into the lives of humans: the chestnut. Specifically, the well-recorded history of humans interacting with chestnuts in Campania and neighboring Corsica allows one to believe that the plant was somewhat sacred to the Mediterranean world at the time. The stabilized climate also granted chestnuts the ability to flourish and become an important part of this region of the Mediterranean. As a foodstuff, chestnuts had the capacity to sustain humans for extended periods of time. This was facilitated by the growing methods and cultivation techniques that developed to allow the trees to become established and productive. As a result, the chestnut developed a cultural significance to the people of Campania and Corsica while simultaneously establishing biological relations with the environment.

The ecosystems of Campania and Corsica during the Early Medieval Era had a supple nature that allowed chestnuts to grow in their fertile lowlands. As survival in the Mediterranean was dependent upon the amount of rainfall, the abundant precipitation of Campania and Corsica promoted chestnut growth. The entire genus of *Castanea* originated in Asia Minor, but was able to tolerate the soil of the Mediterranean that rested on top of deposits of red limestone. Partnered with an adequate supply of water, the chestnut was able to establish itself in this part of planetary history.¹ As the Holocene epoch had brought warm and steady weather patterns to the Mediterranean, Campania and Corsica developed a favorable Atlantic climate. The first half of the first millennium CE, the Roman Transitional Period, saw a change in that the power of the environment was now able to produce subsistence, where the power of the population of a plant had previously determined success. Meaning, large crops no longer equated to a successful season and small crops no longer necessarily equated to a disappointing season because the plants themselves had become sustainable. By the time of the Late Antique Little Ice Age in the second half of the first millennium CE, a temperate climate with arid summers and wet winters created extreme natural diversity. As such, the environments of Campania and Corsica transitioned from what could be described as a more open landscape to a forested environment. Chestnuts composed the forested environment, which allowed for the trees to become a part of the landscape. The suitable environment that developed in Campania and Corsica complemented the growing habits of chestnuts, which prompted the relationship between the plants and humans.²

In Campania and Corsica, chestnuts were maximized as a foodstuff, as records indicate extensive use of the plant. In Campania, chestnuts were cultivated mostly for fruit in woodlands known as “castanietum,” which were devoted solely to chestnuts. The versatility and usefulness of the plant was clearly demonstrated in Naples from 400 to 700 CE. The city saw a stark population decline that established chestnuts as a food that could be produced in abundance for little work. In Corsica, chestnuts were seen as a food strictly for the lower class. Even though

chestnuts could be used to make bread, the elite only consumed bread made from wheat, as it was a pure form representing the body of Christ.³ Any negative societal association with the lower class was ultimately outweighed because chestnuts were easy to farm, and natural forests were often managed for easy production, eliminating plowing and supplemental care of other crops. As chestnuts do not take massive amounts of water, extensive irrigation was not required, which also contributed to a simple production process.⁴ In Corsica, a “chestnut civilization” developed due to how chestnuts were consumed. The Corsican economy relied mainly upon the island’s forests, which produced chestnuts in a location where cereals failed to grow. Chestnuts were first eaten as a mush or porridge but were eventually incorporated into a flat cake known as chestnut bread. Chestnuts very well could have served as a main diet, as they provided energy over a long time period, whether eaten raw, dried, or skinned. Chestnuts were eventually made into a solid porridge, polenta essentially, in the place of a loaf of bread. More complex meals were developed, including a goat’s milk soup made with dried white chestnuts known as “suppa a cuchjara ritta.” The flexibility of chestnuts as a foodstuff provided humans with a reliable source of nutrition and was able to be transformed into various foods.⁵

The cultivation methods of chestnuts in Campania and Corsica during the Early Medieval Era were important, as entire groves were devoted specifically to chestnuts. Decades of growth were required to develop a reliable chestnut grove, yet chestnuts were still much simpler to grow than hazelnuts and grapes, which required fencing and extensive plowing. As the value of a chestnut grove was determined by its output, great care was taken in developing and maintaining healthy and vigorous plants. Multiple types of chestnuts came to be cultivated due to selective breeding by humans for desired traits, as well as natural selection favoring the plants best equipped for the environment. For breeding purposes, chestnuts were preferable over hazelnuts and walnuts due to the ease of choosing certain chestnut trees to reproduce based upon traits deemed beneficial for growth and production. In order to preserve specific genetic strains, scions of differing chestnut varieties were grafted onto various rootstocks so as to maintain the population of the superior plants. Additionally, “insiteta” were developed, which were a type of chestnut especially prized for superior fruit production. Chestnut groves were left unfenced, which allowed for animals, wild and domestic, to pasture as they pleased in the forest.⁶ Chestnuts grow best when grown close to one another, as beneficial biological processes take place underground when the trees are in close proximity. In the soil, vast social networks are created by mutualistic mycorrhizal fungal species. This system connects the trees and facilitates exchanges of carbon and nutrients between the roots.⁷ People of Campania and Corsica took great care in cultivating a wide variety of chestnuts by taking advantage of the growth habits and natural characteristics of chestnuts.

Chestnuts developed a cultural significance to the people of the Mediterranean and became a prized resource. The extensive records from the Early Medieval Era demonstrate that chestnuts were an important part of not just the landscape, but also a component of local culture. The term “oecumene” was coined to describe the sustainable and friendly interactions between chestnuts, humans, and the environment.⁸ Chestnuts were utilized as legal instruments in representing the transactions of rent and sales, as well as donations. This served to bridge the divide between neighboring regions, as well as political boundaries. Landlords transitioned from using chestnuts as currency to collecting rent in coins in an effort to make chestnuts more marketable. In addition, chestnuts were a key element in social configuration. Rulers, clerics, and monasteries were involved in the buying, selling, renting, and donations of chestnut forests. The multiple varieties of chestnuts that were developed catered to peasants and well-off farmers

alike. Chestnuts played a role in social hierarchy, and even related to gender. Chestnut groves were given as dotal assets, as the single harvest season of chestnuts was much more desirable than the consistent upkeep of alternative crops. Even as properties were divided, the land was managed “in common,” as humans didn’t want to disturb the natural relationships that the trees had established between themselves. Chestnuts were able to consistently meet the specific wants of Early Medieval landowners. Trees that ripened at a convenient time, had better flavor, and resisted rot were usually favored over trees that had steady nut production. As chestnuts became integrated into the landscapes of Campania and Corsica, the plants developed a cultural component to their cultivation, as chestnuts were seen as having high value.⁹

The Early Medieval Era in the Mediterranean regions of Campania and Corsica can be characterized by the relationships between humans and a plant that had diverse uses. With the stabilized climate of the time period, chestnuts became established in this region of the Mediterranean, where they would flourish for years. Humans took advantage of such a versatile crop, and the intersection of chestnuts with human history demonstrates how the plant became such an important component of society. The favorable climate allowed for chestnuts to become a food staple, where the various cultivation methods aided in the plant becoming a part of Mediterranean culture. The well-recorded interactions between humans and chestnuts display how the plant arguably developed into a defining factor of the region. Chestnuts proved to be a superior plant to cultivate because they required very little input of work for considerable outputs of fruit. Chestnuts were even transformed into a political tool that served to connect different regions. The historical overlap of chestnuts and humans established the chestnut as an exceptional plant in the ecological community, while shaping the local economies, social structures, and landscapes of Campania and Corsica.

Endnotes

¹Squatriti, Paolo. *Landscape and Change in Early Medieval Italy* (Cambridge: Cambridge University Press, 2013), pgs. 130-163.

²Harper, Kyle. *The Fate of Rome* (Princeton & Oxford: Princeton University Press, 2017), pgs. 1-14.

³Squatriti, *Landscape and Change in Medieval Italy*.

⁴Blondel, Jacques, and James Aronson. *Biology and Wildlife of the Mediterranean Region* (Montpellier: Oxford University Press, 2000), pgs. 197-223.

⁵Maguelonne Toussaint-Samat. *A History of Foods* trans. Anthea Bell (Oxford: Blackwell, 1994 [1987]), pgs. 711-712.

⁶Squatriti, *Landscape and Change in Medieval Italy*.

⁷Wohlleben, Peter. *The Hidden Life of Trees* trans. Jane Billinghurst (Vancouver/Berkeley: Greystone Books, 2016), pgs. 247-249.

⁸Jacques Blondel and James Aronson, *Biology and Wildlife of the Mediterranean Region*.

⁹ Squatriti, *Landscape and Change in Medieval Italy*.

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