

"L'area di studio di Spannocchia: descrizione stazionale, cenni storici, elaborazioni grafiche" (Area Study of Tenuta di Spannocchia: Site Characteristics, History, Cartography and Spatial Analysis, 1823-2002)*

Gil Latz

Geography Department, Portland State University

Castello di Spannocchia:

- located approximately 13 miles southwest of Siena.
- Majority of the 1000 acre estate is wooded, approximately 83 percent, consisting predominately of low density (4 percent) and high density (85 percent) stands of coppiced oak (*quercus ilex*, etc.), mixed with chestnut (*castagno*) and other species.
- Virtually all of the forests are coppiced, a forest management technique that encourages the sprouting of multiple shoots, and which leaves approximately one mature tree every seven meters to provide shade, encourage regeneration, and make available large diameter trunks for harvesting on a multi-year cycle (so-called 'coppicing with standards').
- A secondary concentration of the forested area is high stand, coppiced chestnut and mixed chestnut with the ingress of associated species (3 percent).
- A similarly small percentage of the forested area is low density, high stands of maritime pine (6 percent), with associated oak and chestnut species.
- The remainder (17 percent)) of Spannocchia is pasture for farm animals, or cultivated farm land that raises wheat and other grains, hay, olives, grapes, etc. Wine is produced and consumed on the estate, as are olive oil, honey, faro (spelt), and sausage; with the exception of sausage, each is sold to visitors, but not on the open market. The estate produces the majority of its vegetables in intensively managed garden(s) adjacent to the main castle.
- There are seven farm houses on the property, in addition to the main castle complex; these serve as popular rental properties, primarily for a foreign audience.
- Analysis of forest distribution clarifies the two primary historical uses of Spannocchia's woods:
 - for building material, and for charcoal production;
 - secondary uses of the forest include wood pasture, wild vegetables, and mushroom gathering.
- Charcoal was especially important to income generated by estate resources until the period immediately after WWII, representing roughly 60 percent of the gross estate project between 1925 and 1940, for example, with evidence of the significance of charcoal production stretching much further into the estate's past

Four research findings lay the foundation for ongoing study:

- The land use relationships between the maps of 1954 and 2002. The earlier map date was selected because it allowed for digitization of the first aerial photographs of the area after WWII. This aerial information, in turn, could be incorporated in and compared to the most recent aerial coverage of the area, in 1996. In the comparison of these two ‘snapshots’ of land uses at Spannocchia, there is dramatic evidence of the extent to which the wooded portions of the property supported charcoal production.
- Comparison of the 20th and 21st century maps reveals that there has been a slow but steady expansion of forested area, from 77 to 83 percent, a change in arable land use of about 30 HA. This reflects but clearly does not come close to mirroring province-wide trends that indicate Tuscany today is 60 percent more forested than a half century ago. The degree of land-use continuity reflected by the Spannocchia case suggests that the site more clearly reflects the traditional, mezzadria-influenced Tuscan landscape. This past land-use pattern is represented by the more extensive crop land associated with the main castle complex, and some of its peripheral properties (i.e., Santa Lucia), both areas that by 1996 saw a net increase of arable land that had become reforested.
- The research project’s earliest, detailed land-use records, 1823, present a remarkable story in comparison to the 21st century, in two respects:

- whereas in 2002 the forested area of the estate stood at 83 percent, in 1823 the amount of forested land at Spannocchia was 67 percent of the total area (71 percent, if one includes ‘wood pasture’ in the calculation). This finding is significant as an indication of the degree to which land was used for field crop production at that time.

- contrasts in the pattern of past forest vegetation, in comparison with the present. What stands out in the analysis of the earlier, 1823 map is the extent to which the forested areas, though smaller in absolute areal terms compared to the present, are nonetheless used more intensively and managed more precisely. Examples of the complexity of resource use as a feature of the estate’s economy in 1823 can be illustrated by the fact that there were three specific designations for the chestnut tree at this time: *palina* (groves managed for planking and poles); *marroneta* (groves managed for low quality nuts and wood); and *castagneto* (groves managed for high quality nuts and wood).

*These observations are excerpted, with modifications, from: Gil Latz, , in Il paesaggio agro-forestale toscano. Strumenti per l'analisi, la gestione e la conservazione (The Agricultural and Forested Landscape of Tuscany: Instruments for Analysis and Conservation Management). Florence: Agenzia Regionale per lo Sviluppo e l'Innovazione nel settore Agricolo-forestale, 2002, pp. 111-22; and Gherardo Chirici and Carlo Mirra, “Analisi storica dell’evoluzione del paesaggio dell’area della Tenuta di Spannocchia”, *Relazione Tecnica*, Firenze, Settembre 2002; and Gil Latz. “Comparative international research on agricultural land-use history and forest management practices: the Tuscan estate of Castello di Spannocchia and Vermont’s Marsh-Billings-Rockefeller National Historical Park”. In Mauro Agnoletti, ed. The Conservation of Cultural Landscapes. Oxfordshire: CABI Publishing, In Press.