

## Changing Landscapes in Tenth- and Eleventh-Century Italy: Human Activity, Climate, and the Environment

The growing corpus of evidence of environmental and ecological change in medieval Italy points to patterns appearing strongest when considered at local and regional levels. Close rereading of historical and archival sources and high-resolution studies of fossilized pollen taken from sediment cores present different narratives of this period, but together demonstrate active human agency in facing changing patterns of the Medieval Climatic Anomaly and new political challenges as various regimes gave way to others. This study focuses on three sites in Italy, the city of Ravenna on the Adriatic coast, the Rieti Basin northeast of Rome, and the site of Lago del Pesce in Basilicata, each with different qualities of paleoecological and historical sources that illuminate aspects of the major environmental transformations taking place in the tenth and eleventh century. Although influenced by different geographic, political, economic, and even cultural factors, these transformations represent periods of significant intensification in land use in various ways, and at times radical shifts: In Ravenna, the charters identify a focus on reclaimed marshland that was taking place throughout the Po delta; in the Rieti basin, the paleoecological data and histories from the neighboring monastery of Farfa suggest both land consolidation and a turn towards new economic avenues; in Basilicata, the period begins a dramatic transformation and selective reforestation playing to new political needs and to geographic and climatic conditions. Together, these examples present a complex story of land use in the Middle Ages, but one in which tighter human control becomes manifest across varied landscapes and sources in the wake of changing climate.