This paper presents the results of excavations at the Roman kiln site at Pantanello, sponsored by the Institute of Classical Archaeology at the University of Texas under the direction of Joseph C. Carter. Excavations have revealed a large building complex associated with two kilns and related ceramic deposits, and have firmly established the chronology of the two distinct phases for this complex and elucidated the relationships between the structural remains. Ceramic evidence dates the first phase to the Hellenistic/Republican Roman period (circa 150 B.C.E.), demonstrates continued activity at the site through the second century C.E., and confirms a later phase associated with a second structure post-dating the third century C.E. This paper presents the excavated evidence and evaluates this site within the larger context of the Romanization of this region. Pantanello lies within the chora of ancient Metapontum just upslope from an archaic Greek sanctuary and Hellenistic oikos. Significant quantities of excavated residual materials attest to these earlier Greek phases. The new Roman phase (circa 150 B.C.E.) represents a radical shift in the function and economy of this site. Viewed within the broader context of the changing settlement patterns and economic transformation elucidated by the Metaponto Survey, Pantanello is an invaluable example of these larger trends. As one of relatively few sites dating to this period, Pantanello constitutes a key source of evidence for these fundamental changes in the Metapontine chora after the Roman colonization.