



This research was conducted in State College, Pennsylvania which is part of the unceded land of the Susquehannock. We would like to acknowledge the Susquehannock and pay our respects to their past, present, and future elders.

Challenges in Radiocarbon Dating Leather

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Leather can absorb diverse organic molecules during its manufacturing and from its environment. Radiocarbon ratios (F¹⁴C) of variously pretreated leather samples and extracts produced dates that varied by hundreds, and occasionally thousands of years. Leather pretreatment should remove exogenous carbon and purify endogenous skin proteins to allow accurate radiocarbon dating. XAD (CC purification of amino acids with XAD resin stationary phase) yielded radiocarbon dates that were consistent with known ages or dates on paired organic material in five of six samples.

