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**Toward a Regional Radiocarbon Model for the East Texas Woodland Period**

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**WOODBAND RADIOCARBON**

Archaeologists have a lengthy history of tinkering with the manipulation of 14C data, and have made much progress since first advocating for a more flexible method of processing data through the employment of a punch-card data retrieval system (see Taylor et al. 1968). The inductive methodology employed here informs a regional chronology for East Texas Woodland sites. The goals are to explore the process of 14C date combination from sites with four or more samples (n=11) to decrease sampling bias for statistical analysis and determine the modified summed probability distributions (see Bamforth and Grund 2012). McKelvey and Pauluz 2004, Williams 2012), and secondly to employ the resulting median dates within a statistical analysis of regional trends.

**ABSTRACT**

The 13 °C dates from the Woodland period occupation at the Broadway site were combined into three groups (Figure 12). Group 1 consists of two assays (Beta-157990 and Beta-173089), Group 2 has six assays (Beta-154857, Beta-157991, Beta-154858, Beta-157992, Beta-173089, and Beta-173095), and Group 3 has five assays (Beta-173090, Beta-157991, Beta-182401, Beta-173097, and Beta-182402). Group 3 dates from A.D. 257-344, Group 2 has an age range from A.D. 442-574, and Group 1 dates from A.D. 653-771, indicating a temporal hiatus of 98 calendar years during the late and better-understood Caddo period. This is prior to a 200-year peak in dates from the Sulphur and Sabine River basins for A.D. 50-220, after which a marked increase occurs in the number of dated Woodland sites for the Sulphur, Cypress, Sabine, and Neches River basins from A.D. 600-800.

**RESULTS**

Although the number of sites is small, they highlight a possible temporal hiatus of nearly 400 years in the Red River basin, and another of nearly 200 years in the Cypress Creek basin, both of which appear here on the basis of data from one site in each river basin. The remaining peaks correlate with populations from the kernel density plot, and they illustrate a small peak in the Red River basin around 400 B.C. followed by slight increases in the dates from the Sulphur, Cypress, and Sabine basins around 200 B.C. This is prior to a 200-year peak in dates from the Sulphur and Sabine River basins for A.D. 50-220, after which a marked increase occurs in the number of dated Woodland sites for the Sulphur, Cypress, Sabine, and Neches River basins from A.D. 600-800.

**CONCLUSIONS**

We are quickly approaching an era where typological assignments can be associated with radiocarbon samples in this same manner, but significant advances in correlating these data with specific aspects of archaeological assemblages still need to be made as we progress in our understanding of the archaeological and historical contexts of the East Texas Woodland period. This database of radiocarbon dates from the East Texas Woodland period is a representative of this period and speaks to the need for further research.