

Southeastern data inconsistent with Paleoindian demographic reconstruction

Buchanan *et al.*'s (1) statistical evaluation of radiocarbon dates as a demographic proxy depends on accurate and complete datasets. However, their database is incomplete for the Southeast, where 181 radiocarbon dates from Paleoindian and Early Archaic deposits are now available (2). Only a fraction of these are included in their analysis. Within the more complete dataset only 4 of these determinations fall between 12,850 and 12,600 calibrated yrs BP, and all of these are at the recent end of this range. In the Southeast, at least, there appears to be an \approx 250- to 300-year "gap" in the distribution of radiocarbon dates from \approx 12,900–12,600 calibrated yr BP. These data are consistent with a post-Clovis decline in projectile point frequencies noted in North Carolina and South Carolina (3, 4) and in Virginia (5). This same pattern is visible more broadly across the Southeast within the Paleoindian Database of the Americas (<http://pidba.utk.edu>). A significant decline occurs between Clovis ($n = 1,993$ points) and presumably immediate post-Clovis full fluted forms ($n = 947$ points). Point numbers increase after the immediate post-Clovis decline, from 947 full fluted to 1,717 unfluted and then 2,594

Dalton points. Such analyses are, of course, fraught with potential error due to many possible kinds of collection sampling bias and the potential misidentification or inaccurate dating of diagnostic forms. Improving the accuracy of existing chronologies and culture sequences is critically important in the Southeast and beyond.

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