Dating Formulas in Archaeology

Mean Ceramic Date
South 1972 and 1977

\[ Y = \frac{\sum X_i * f_i}{\sum f_i} \]

where
\( X_i \) = the median date for manufacture of each type
\( f_i \) = the frequency of each ceramic type
\( n \) = the number of ceramic types in each sample

Pipestem date
Binford 1961 based on Harrington 1954

\[ D = 1931.85 - 38.26x \]

where \( x \) = the average bore diameter of the sample

Window glass

Ball formula (Ball 1983)
\[ D = \frac{M - 1.00 \text{ mm} + 1800}{0.0286} \]

Moir formula (Moir 1987)
\[ (84.22 * M) + 1712.7 \]

take at least three thickness measurements with a digital calipers to determine the mean thickness of the sherd; works best for glass dating between ca. 1780 - 1920

Lower Ohio Valley Mississippian
Wesler 1994, revised 2001

handle formula
\[ D = \text{A.D.} \ 1500 - 500r \]
where \( r \) = thickness/width

plate rim formula
\[ D = \text{A.D.} \ 1175 + (1450 - 1175)(x/122) \]
where \( x \) = rim width (mm)
Sources:
Ball, Donald B.

Binford, Lewis R.

Harrington, J. C.

McKelway, Henry S.

Moir, Randall W.

South, Stanley


Wesler, Kit W.