

RESIDUE ANALYSIS OF MODERN AND ANCIENT CHIMPANZEE POUNDING TOOLS FROM BOSSOU AND DIECKÉ, GUINEA: DEFINING A PRIMATE ARCHAEOLOGICAL SIGNATURE

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The application of archaeological methods to primatological data presents an opportunity to bring novel techniques to bear on questions of primate behavioural evolution. One promising technique involves the examination of primate tools for microscopic residues and wear patterns, to determine how they were used in the past. However, successful application of this approach depends on the development of a comparative database of residues and damage on both modern and archaeological primate artefacts. Here we present initial data from an ongoing project documenting the functional residues of chimpanzee stone-tool pounding behaviour. Artefacts were collected during 2008-09 (10 months) in two different forests (Bossou and Diecké, Guinea), inhabited by different groups of chimpanzees using stone tools to crack open different nut species (Bossou: *Elaeis guineensis*; Diecké: *Panda oleosa* and *Coula edulis*). Samples were taken from modern and archaeologically-recovered tools, as well as soil samples on transect lines. We include discussion of the field and laboratory requirements for further development and application of this method.

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