

Reconstructing the dietary signal of the primate taxon *Cercopithecoides williamsi*  
from the Plio-Pleistocene caves of South Africa

William Glenn Anderson & Dr. Frank L'Engle Williams

The taxon known as *Cercopithecoides williamsi* has been reconstructed as a terrestrial primate folivore from its dental morphology and heavy dental microwear. It was recovered at a number of Plio-Pleistocene caves in South Africa, including Makapansgat, Sterkfontein Member 4, Sterkfontein West Pit and Bolt's Farm. For the purposes of corroborating or contradicting previous dietary reconstructions, six specimens of *Cercopithecoides williamsi* were examined and compared with the extant primate taxa *Papio ursinus* (n = 2), *Papio cynocephalus* (n = 2) and *Colobus polykomos* (n = 2) to provide a frame of reference, using low-magnification stereomicroscopy in conjunction with an ocular reticle (0.04 mm x 0.04 mm) as a standard sampling strategy. Least Square Means derived from Analyses of Variance and Tukey's post-hoc tests of significance detected significant signals in the dataset. *Papio ursinus* is significantly distinct from the other specimens in its low pit count and high scratch frequency, indicative of the consumption of grass blades and underground storage organs. *Colobus polykomos* is significantly distinct in its high number of pits and low scratch frequency, indicating folivory. *Cercopithecoides williamsi* lies between these two extremes by exhibiting moderate amounts of pits and relatively low numbers of scratches, which is more similar to *Colobus polykomos*, corroborating prior inferences of folivory in this taxon. The Sterkfontein West Pit specimen, SWP 495, however, is somewhat variant from the other *Cercopithecoides williamsi* individuals in its heavy scratch count, indicating a mixed diet, perhaps from a drier habitat at the terminal Pliocene or early Pleistocene.