ANTHROPOLOGY PAPER ABSTRACTS

EVIDENCE FOR THE ENDEMIC SPECIATION OF ROBUST AUSTRALOPITHS AT STERKFONTEIN, SOUTH AFRICA. *JASON HEATON*, BIRMINGHAM-SOUTHERN COLLEGE.

During the early Pleistocene, dramatic environmental change appears to have led to rapid speciation within the hominin lineage. And for over a million years, our ancestors lived alongside a rather enigmatic group, the robust australopithecines. Their origins remain uncertain even 70 years after their discovery. The main robust species, *Australopithecus aethiopicus*, *A. boisei* and *A. robustus*, exhibit a suite of uniquely derived characters relating to an extreme development of their teeth, especially premolars and molars, and jaws. What remains unclear is whether this group is monophyletic or simply a case of homoplasy among hominins. To assess dental variation within the South African sample, breadth and length measurements for specimens (N=81) attributed to *Australopithecus africanus/prometheus*, *A. robustus* or *A. sediba* were contrasted. Within the Sterkfontein sample, a high degree of variability was observed while a steady increase in overall tooth size was noted at the later sites, such as Swartkrans and Kromdraai. In contrast, *Australopithecus sediba* exhibited comparatively small teeth (like early Homo) combined with molarized premolars and may represent a late-occurring gracile form of A. africanus. Some Sterkfontein specimens (e.g. StW 252 and StW 498) exhibit morphology that seemingly bridges the gap between the gracile and robust forms in South Africa. Therefore, the preliminary analysis of dental variation suggests that the robusts originated as two separate (i.e. diphyletic) lineages within eastern and southern Africa.

CONNECTING THE PUBLIC TO THEIR NATURAL AND CULTURAL HERITAGE. *ALEXANDRIA SMITH*, US ARMY CORPS OF ENGINEERS.

Using the US Army Corps of Engineers' ecosystem restoration study of Proctor Creek in Atlanta, Georgia, I will be explaining the local, regional, and national implications of connecting communities with their natural and cultural resources. This presentation will include the challenges and opportunities with creating combined ecological recreation and historic trails. This will include discussions of how these resources are intertwined with the local economy and culture, including community ties to ecological recreation; community ties to cultural resources in the area; the economic viability of ecological recreation and heritage trails; and how this recreation could be used as a means to preserve these ecological and cultural resources. I will be using Alabama's Mobile Bay and Delta and its extensive natural and cultural resources as a proposed comparative case study. This comparison will consider how partnerships between federal and local governments and local communities could enhance ecological recreation and heritage trails in the Bay and Delta, especially in light of the recent potential discovery of the wreck of the slave ship Clotilda.

CAN GORILLA DENTAL WEAR SCORES BE USED AMONG FOSSIL HOMINIDS?. *SARAH CATHERINE MURPHY*, BIRMINGHAM-SOUTHERN COLLEGE. JASON HEATON, N/A.

Early hominid paleodemography is an ongoing issue, as fossil remains are often discovered in a fragmentary state. Fortunately, dental enamel is one of the hardest substances in the body; therefore, isolated teeth and jaws are among the most frequently recovered fossil elements. Our goal is to determine the relationship between the wear stages of teeth, to better understand attritional patterns among *Gorilla*. Each individual tooth was assigned a wear score based upon Smith's (for incisors, canines and premolars) or Scott's (for molars) method of wear categorization. Our sample includes both, males and females, of *Gorilla* (N=61). Among our *Gorilla* sample, we found significant correlations ($p<0.05$) between wear stages and in tooth classes (e.g. incisor, canine, premolar and molar). Our study suggests that upon recovery of an isolated tooth, researchers could predict teeth that may belong to the same individual (within a site's sample). The result would refine calculations of the number of individuals preserved, as well as lead to a better understanding of fossil demographic patterns. Preliminarily, we applied this technique to robust *Australopithecus* from Swartkrans, South Africa.

BARBARY MACAQUE ETHNOPRIMATOLOGY AND INTERDISCIPLINARY CONSERVATION IN NORTHERN MOROCCO. *SHERRIE ALEXANDER*, UNIVERSITY OF ALABAMA AT BIRMINGHAM.

The endangered Barbary macaque (*Macaca sylvanus*) of North Africa, the only macaque outside of Asia and north of the Sahara, has experienced a continual decline in numbers over the course of several decades. Moreover, understanding perceptions of endangered species and attitudes towards conservation may be critical to conservation initiatives and their durability. Using an ethnoprimatological approach, I look at perceptions of Barbary macaques as well as macaque conservation in the Rif Mountains of northern Morocco. In doing this, I investigate the practices of Barbary Macaque Awareness and Conservation (BMAC), a Moroccan NGO whose sociocultural approach to macaque conservation seeks to aid both people and macaques. Additionally, I conducted semi-structured interviews (n=24) with urban and rural Moroccans exhibiting various degrees of contact with macaques and BMAC. Results indicate that macaques are commonly viewed as valuable endemic species and seen as important to local ecologies. There were significant differences in how urban and rural experiences shaped their perceptions of macaques. Despite some negative religious connotations, respondent attitudes were positive towards macaques and macaque conservation across all groups. BMAC's biosocial peace approach to conservation, which is interdisciplinary and highly inclusive of local populations, may be a critical model to follow for future primate conservation endeavors.

A BANNERSTONE PRODUCTION KIT FROM THE THRASH SITE. *ZACHARY SMITH*, TROY UNIVERSITY.

The purpose of this paper is to discuss a bannerstone production kit found at the Thrash site (1PK71) last summer. The kit includes two quartzite hammerstones and an unfinished possibly

catlinite bannerstone, found on what seems to be a production floor. Other artifacts found at 1Pk71 date the bannerstone to the Late Archaic. I will attempt to explain the methods used to shape, bore, and polish the stone during production. The exotic material used in the production of the bannerstone suggest that the people of the Late Archaic who occupied this site may have had trade contacts as far as the Great Plains.

THE ARTIFACTS OF THE LIVING FLOOR AREA AT THE THRASH SITE: 1PK71. *MARINDA LAWLEY*, TROY UNIVERSITY.

This is a discussion on the found artifacts of an obvious living floor within a few units at the 1Pk71 site, or Thrash site. This site is a known Late Archaic site located about a half-mile from the banks of the Pea River in Pike County, Alabama. Some of the artifacts found include projectile points, a bannerstone production kit, two large clay nodules that are believed to be residual from a cooking technique used by the occupants of the site, and other artifacts which suggest a significant amount of domestic activity. The units in discussion also contained a large pit that contained multiple elements of a cooking pit, as well as a trash pit.