

ABSTRACTS

video and field notes. Lemur interactions with deer were also captured during individual focal follows. SCL lemurs most encountered ($n=231$ events) raptors (57%), deer (20%), raccoons (9%), armadillos (9%), and wild pigs (3%). There was no significant difference in encounter counts among social groups (Kruskal-Wallis: $H(2)=0.159$, $p=0.92$). Group behavioral responses consisted of vigilance, startling, antipredator vocalizations, or a sequence of these behaviors. Additionally, during daily provisioning, deer would often wait under feeding platforms for lemurs to drop unwanted food or follow individuals around a feeding site, and several instances ($n=16$) of individuals both initiating and receiving aggression with deer were observed. Overall, these behavioral findings suggest that the SCL lemurs view other species like raccoons and armadillos primarily as threats and highlight a competitive relationship with deer over provisioned resources.

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Sleep quality, social support, stress, and personality traits in a sample of Canadian university students during the 2020-2021 online academic year

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Background: Sleep is influenced by social support, loneliness, and stress. Individual factors like personality traits may be associated with the tendency to experience loneliness and so should be considered for a better understanding of the effects of social isolation on sleep. The COVID-19 pandemic changed the way individuals could interact over the past academic year, with ongoing isolation measures necessitating decreased in-person contact. Here, we present results from university students on their sleep patterns, loneliness, and stress during online learning. **Methods:** We surveyed 126 students using the Pittsburgh Sleep Quality Index (PSQI), the Medical Outcomes Study Social Support Survey, the Three-Item Loneliness Scale, the Perceived Stress Scale, and the Ten-Item Personality Inventory to explore the relationship between sleep, social support, loneliness, stress, and personality traits. **Results:** Average sleep duration over the past academic year was reported to be 7.14 hours ($SD=1.30$). After controlling for age and gender, results indicate that poor sleep quality as measured by total PSQI score is significantly predicted by higher stress (estimate=0.88, $SE=0.35$, $p=0.013$) and loneliness (estimate=2.78, $SE=0.36$, $p<0.001$). Loneliness is predicted by lower perceived social support (estimate=-1.29, $SE=0.26$, $p<0.001$) and more introverted personality (estimate=-0.54, $SE=0.26$, $p=0.045$). Perceived stress is significantly associated with lower emotionally stable

personality (estimate=-2.56, $SE=0.54$, $p<0.001$). **Significance:** Our results highlight the relationship between sleep, perceived social support, loneliness, stress, and personality traits, suggesting that they should be considered together for a more complete understanding of the individual factors that affect sleep and health in response to conditions of social isolation.

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What is a paleodeme? Theoretical considerations and applications using the East Asian hominin fossil record

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Populations are fundamental units of evolutionary biology for understanding essential phenomena such as natural selection, speciation, and adaptation. In paleoanthropology, paleodemes are frequently used to represent past populations of hominins in evolutionary studies. Paleodemes are useful units for assessing phylogenetic affinities, evolutionary trends, and dispersal patterns among fossil hominins. Although paleodemes are frequently recognized in paleoanthropology, they are commonly defined using either arbitrary blocks of time and space or morphology, which can create a circular argument when studying variation. Here, we discuss criteria that should be considered when constructing hominin paleodemes, and introduce a new approach using temporal and geographic boundaries that reflect ecology and topography. Specifically, paleodemes were identified corresponding to Marine Isotope Stages and geological basins. We then apply this approach to the East Asian hominin fossil record as an example, resulting in a minimum number of 30 identifiable hominin paleodemes across Pleistocene East Asia. These paleodemes can then be used to facilitate phylogenetic, biogeographic, and other evolutionary analyses. In principle, these fine-scale paleodemes could be combined into coarser units. Ultimately, the scale of the paleodemes should depend on the nature of the research question being addressed. Regardless, however, it is important to define paleodemes using non-arbitrary criteria.

Tales in teeth – dental analyses of childhood health, mortality, and status from the Early and Late Classic Maya Belize (250-900 CE)

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Dental tissue has the unique capacity to inform on past life histories in the absence of well-preserved skeletal material and reliable documentary sources. We demonstrate the efficacy of dental analyses in reconstructing information about childhood health, mortality, and status from skeletal samples from Early and Late Classic (250-900 CE) Maya settlements in the Belize Valley. This project is a collaborative study led by two undergraduate women from the University of South Dakota (Anthropology). Dental and skeletal data were derived from the BVAR skeletal collection, resulting in a test sample of 27 individuals. Osteological analyses included age-estimation for adults and nonadults. Dental enamel defects (LEH) were scored and estimated for age of incidence following criteria developed by Reid and Dean (2006). Status was reconstructed from mortuary evidence including household volume and organization, burial location, grave artifacts, and dental modifications (e.g. filing, obsidian and jade inlays). Fisher's exact tests and Kaplan Meier survival analyses were conducted to examine associations and survivorship trends. Results show that there are significant associations between status and LEH ($p=0.03$) with commoners more likely having endured childhood stress events. Kaplan Meier results ($p=0.4$) show increased survivorship for individuals with LEH, but this is likely an artifact of selective mortality and sample size. Chronological estimates of enamel defects show that most experienced physiological stress events between the ages of 2-3.6 years, possibly representing diseases, malnutrition, or weaning. Our study demonstrates how dental tissues are versatile in skeletal reconstruction of childhood health and social status where taphonomic damage is extensive.

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Catching their Strides: A comparative analysis of wild platyrrhine walking kinematics on naturally variable substrates

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We are just beginning to understand the variability and flexibility of primates' walking gaits when moving through their complex, arboreal habitats. Most gait studies take place in laboratories and focus on single substrate use; however, wild primates use multiple substrates with different characteristics and transition among substrates as they move. This comparative analysis of wild platyrrhine walking gait kinematics integrates