

***SOCA Undergraduate Symposium 2021***  
*Department of Sociology and Anthropology*  
*West Virginia University*

**Presentation 20**

Exploring Lemur Memory: Examining Eulemur mongoz (mongoose lemurs) and Lemur catta's (ring-tailed lemurs) Memory Through a Novel Enrichment Item

**Talia Buchman**  
*Anthropology*

**ABSTRACT**

Millions of years divide strepsirrhine evolution from that of anatomically modern humans. Researchers' fascination with understanding humans and their closest nonhuman primate relatives, creates a lack of thorough research completed on the cognition of early primates, such as lemurs. This study sought to investigate the memory of three lemurs living in a zoo facility, two mongoose lemurs and one ring-tailed lemur, using a self-designed enrichment item. Enrichment items are included in zoo exhibits to add variation to the nonhuman animal's lives through stimulation of their senses and natural behaviors. My enrichment item targeted the lemurs' foraging behavior by covering a favored fruit with moveable discs. Four experiments were conducted between the lemurs and the novel enrichment item to determine if they 1) interacted with the device 2) were able to retrieve the concealed food and 3) remembered the item during subsequent interactions. Through an analysis of the four experiments, the lemurs demonstrated clear signs of short-term and long-term memory through their increased ease in retrieving the fruit from the device. These results support the conclusion that lemurs have working memory, which can be exercised and researched through enrichment activities in zoo facilities.