

EFFECTS OF DIETARY COMPOSITION ON BEHAVIOR OF MALE GORILLAS AT THE SANTA BARBARA ZOO

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Abstract

Regurgitation and reingestion (R/R), a behavior that is observed in gorillas in human care but not in their wild counterparts (Lukas *et al.*, 1999), remains poorly understood and is likely multifactorial in origin (Hill, 2018). Western lowland gorillas (*gorilla gorilla gorilla*) consume over 200 species and varieties of plants and 100 species and varieties of fruit (Popovich *et al.*, 1997), and this dietary diversity and associated foraging time is not easily replicated in human care. In 2017–2018, two bachelor western lowland gorillas at the Santa Barbara Zoo were transitioned to a low-starch biscuit-free diet (Less *et al.*, 2014) to elicit a reduction in R/R. Here we quantify rates of R/R as well as effects on overall activity budget when biscuits were subsequently reintroduced into the diet in Spring 2021 due to weight management and other husbandry considerations, followed by a return to baseline. Implications for behavioral management of this critically endangered ape in human care will be discussed.

Literature Cited

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