MS Thesis

Department of Environmental Science and Policy

College of Science

George Mason University

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Defense Date and Time: April 28, 2025, at 9:30am

Defense Location: Exploratory Hall, Room 3301 & virtual on Zoom

Title: Assessment of African rhinoceros temperament and its implications for management

Thesis Director: Dr. Elizabeth Freeman

Committee: Dr. Lara Metrione, Dr. Kathleen Hunt, Dr. David Luther

ABSTRACT

The temperament and mental state of an animal are critical components of its wellbeing yet are

not frequently evaluated. The temperament of white and black rhinos was assessed using

keeper surveys and novel object tests. Survey traits were clustered into boldness/shyness,

activity/inactivity, and anthrophilia/anthrophobia for both species, plus stoicism/reactivity in

white rhinos. Furthermore, surveys were best at characterizing boldness/shyness in both

species and anthrophilia/anthrophobia in black rhinos, while novel object tests were best at

characterizing exploration in both species, plus activity in black rhinos. Consideration of

temperament expression allows tailoring expectations for daily behaviors, interactions with

enrichment, conspecifics, and people.