



Elizabeth Freeman, PhD

Associate Professor, School of Integrative Studies

Education

PhD, Environmental Science and Public Policy, George Mason University

Key Interests

Conservation Biology | Animal Behavior | Endocrinology | Mammals | Chemical Ecology | Evolutionary Biology | Reproduction | Physiology | Stress

CONTACT

Phone: 703-993-9272 | Email: efreeman@gmu.edu

SELECT PUBLICATIONS

- › Freeman, E. W., *et al.* (2013). Ovarian cycle activity varies with respect to age and social status in free-ranging elephants in Addo Elephant National Park, South Africa. *Conservation Physiology*, 1(1), cot025.
- › Freeman, E. W., *et al.* (2014). Impacts of environmental pressures on the reproductive physiology of subpopulations of black rhinoceros (*Diceros bicornis*) in Addo Elephant National Park, South Africa. *Conservation Physiology*, 2(1), cot034.
- › Jones, M. K., *et al.* (2018). Physiological impacts of housing maned wolves (*Chrysocyon brachyurus*) with female relatives or unrelated males. *General and Comparative Endocrinology*, 267, 109-115.

Research Focus

As a conservation biologist, I am most interested in applied research that focuses upon how to save endangered species from extinction. The main focus of my research is behavioral endocrinology, which broadly means I investigate how the [internal and external] environment affect the hormones and behavior of species. My projects have a wide-ranging scope from animal behavior, to chemical ecology, evolutionary biology and reproductive, stress physiology. My expertise and the majority of my work has been on mammals, but I welcome collaborations on any taxonomic group. I have experience working with the captive community as well as conducting field work in Africa and have advised graduate students on field projects in Asia and South America. I collaborate with scientific partners from other departments and universities, as well as zoos and governmental agencies. My overall goal is to conduct ethically sound research that can have a positive impact on the species of this planet.

Current Projects

- Investigating the social and environmental factors that contribute to reproduction in elephants
- Understanding the contributions of biotic and abiotic factors to black rhino health and reproduction
- Evaluating red panda reproduction, health and well-being
- Using non-invasive methods to investigate canid biology