SNAPSHOT SERENGETI: Analyzing Wildlife Relationships in BIOL 301 Ecology

Thomas Jefferson University- East Falls

Dr. Anne Bower

**Supplemental Materials**

Assignment 1: **Classify Camera Trap Data from WildCam Gorongosa in Mozambique**

Gorongosa Think Like a Scientist Interactive Video: <https://www.biointeractive.org/classroom-resources/think-scientist-gorongosa>

Gorongosa Interactive Timeline of Conservation Actions: <https://media.hhmi.org/biointeractive/click/gorongosa-timeline/timeline.html>

Gorongosa: The Guide and E. O. Wilson:

<https://media.hhmi.org/biointeractive/films/TheGuide.html>

Gaynor,K., Branco, P., Long, R., Gonçalves, D., Granli, P., Poole, J. Effects of human settlement and roads on diel activity patterns of elephants (*Loxodonta africana*). *African Journal of Ecology.* 2018. 56 (4): 872-881.

<https://doi.org/10.1111/aje.12552/>

Stalmans, M. Peel, M.,Gonçalves., D. Aerial wildlife count of the Gorongosa National Park,Mozambique, October 2022. <https://gorongosa.org/wp-content/uploads/2022/11/GorongosaAerialWildlifeCount-October-2022.pdf>

Sells, S. et al. Increased Scientific Rigor Will Improve

Reliability of Research and Effectiveness of Management. *The Journal of Wildlife Management* 2020. 82(3):485–494; 2018; DOI: 10.1002/jwmg.21413

**Assignment 2: SNAPSHOT SERENGETI ecological analysis for two species**

Bartzke GS, Ogutu JO, Mukhopadhyay S, Mtui D, Dublin HT, Piepho HP. Rainfall trends and variation in the Maasai Mara ecosystem and their implications for animal population and biodiversity dynamics. *PLoS One*. 2018 Sep 19;13(9):e0202814. doi: 10.1371/journal.pone.0202814. PMID: 30231048; PMCID: PMC6145597.

Beaudrot L, Palmer MS, Anderson TM, Packer C. Mixed-species groups of Serengeti grazers: a test of the stress gradient hypothesis*. Ecology*. 2020 Nov;101(11):e03163. doi: 10.1002/ecy.3163. Epub 2020 Sep 9. PMID: 32799323; PMCID: PMC7685109.

Egna N, O'Connor D, Stacy-Dawes J, Tobler MW, Pilfold N, Neilson K, Simmons B, Davis EO, Bowler M, Fennessy J, Glikman JA, Larpei L, Lekalgitele J, Lekupanai R, Lekushan J, Lemingani L, Lemirgishan J, Lenaipa D, Lenyakopiro J, Lesipiti RL, Lororua M, Muneza A, Rabhayo S, Ole Ranah SM, Ruppert K, Owen M. Camera settings and biome influence the accuracy of citizen science approaches to camera trap image classification. *Ecol Evol*. 2020 Oct 6;10(21):11954-11965. doi: 10.1002/ece3.6722. PMID: 33209262; PMCID: PMC7663993

Swanson A, Kosmala M, Lintott C, Simpson R, Smith A, Packer C. Snapshot Serengeti, high-frequency annotated camera trap images of 40 mammalian species in an African savanna. *Sci Data*. 2015 Jun 9;2:150026. doi: 10.1038/sdata.2015.26. PMID: 26097743; PMCID: PMC4460915.

Veldhuis MP, Ritchie ME, Ogutu JO, Morrison TA, Beale CM, Estes AB, Mwakilema W, Ojwang GO, Parr CL, Probert J, Wargute PW, Hopcraft JGC, Olff H. Cross-boundary human impacts compromise the Serengeti-Mara ecosystem. *Science*. 2019 Mar 29;363(6434):1424-1428. doi: 10.1126/science.aav0564. Epub 2019 Mar 28. PMID: 30923217.