

## **Annabella Helman**

annabella.helman@gmail.com | (317) 989-7438

### **EDUCATION**

B.S. Biology, Animal Behavior Conc. | December 2020 – Duke University, Durham, NC

B.S. Environmental Science | December 2020 – Duke University, Durham NC

- Senior Thesis: Predicted Responses of Large Carnivores to Climate Change | Advised by Dr. Stuart Pimm and Dr. Vincenzo Penteriani | Awarded Distinction

### **RESEARCH / FIELDWORK EXPERIENCE**

**Carnivore Monitoring Crew Member** | U.S. Forest Service/Great Basin Institute - Sierra & Sequoia National Forests, CA | June 2021 - November 2021

- Set camera trail stations, gun brush hair snares, and track plates to assess endangered Pacific fisher (primary target species) and other carnivore populations in the region.
- Identified mammal species in trail camera pictures, with a particular focus on carnivores.
- Coordinated data entry and analysis for a US Forest Service long-term monitoring project
- Hiked off-trail in rugged Sierra Mountain terrain with heavy equipment

**Research Assistant** | Dr. Stuart Pimm's Lab - Duke University, NC | 2017 - 2021

- *Field Experience* - Banded sea birds in Dry Tortugas National Park during the 2018 field season to monitor their dispersal and migration patterns
- Assisted with data analysis, figure creation, and science communication

**Research Assistant** | Dr. Christine Drea's Lab - Duke Lemur Center, NC | 2018 - 2021

- Contributed to several research projects examining lemur cognition and behavior
- Independent project assessing ester sensory thresholds in ring-tailed lemurs, Coquerel's sifakas, and black and white ruffed lemurs (2020 - 2021)
- Measuring short term memories of various lemur species to map relative cognitive abilities (2019 – 2020)
- Measuring preference for fruit ripeness in various lemur species (2018)

**Research Assistant** | Dr. Herman Pontzer's Lab - Duke Lemur Center, NC | Summer 2020

- Investigating metabolic responses to changes in daily physical activity in Coquerel's sifakas and ring-tailed lemurs

**Research Intern** | Botswana Predator Conservation Trust - Okavango Delta, Botswana | Summer 2019

- *Field Experience* - Tracked wild dogs and lions via satellite and radio telemetry and recorded behavioral and morphometric data to assist carnivore conservation efforts and a wild dog dispersal study

**Research Intern** Wildlife Habitat and Population Analysis Lab - Dr. Marcella J Kelly, Virginia Polytechnic Institute and State University, VA | 2018 - 2019

- *Field Experience* - Aided in collaring and processing trapped black bears, setting bear and coyote traps, and hiking and checking trap lines daily and analyzed scavenging behavior of black bears, coyotes, and bobcats

## PUBLICATIONS

### *Submitted for Peer Review*

8. **Helman, A. R.**, Pimm, S. Penteriani, V. (2021) "Understanding large carnivore responses to climate change". Manuscript submitted for publication in *Hystrix*.
7. Nevo, O., Valenta, K., **Helman, A. R.**, Ganzhorn, J. U., Ayasse, M. (2021) Fruit scent as an honest signal for fruit quality. Manuscript submitted for publication in *Oecologia*.

### *Published*

6. Pimm, S., **Helman, A.** (2021) "Everything About Bears" [Review of the book *Bears of the World: Ecology, Conservation, and Management* by Penteriani, V., Melletti, M.] *International Bear News*: Vol. 30: no. 3, 44-45
5. Helman, A. R. (2020) "Understanding Large Carnivore Habitat, Diet, and Behavioral Responses to Climate Change" Undergraduate Senior Thesis for Duke University. Advised by Dr. Stuart Pimm and Dr. Vincenzo Penteriani.
4. Helman, A. R. (2019) "Sloth Bear Genetic Diversity" *Bear Conservation: Working for Bears*. Available: <https://bit.ly/2KpUS5J>
3. Helman, A. R. (2018) "A Call for Proactive Human–Bear Conflict Mitigation," *Human–Wildlife Interactions*: Vol. 12: Iss. 3, Article 15. DOI: <https://doi.org/10.26077/jvav-9j12>
2. Helman, A. R. (2017) "An Update on the Yellowstone Grizzly Bear Population," *Bear Conservation: Working for Bears*. Available: <https://bit.ly/2YoCsbD>
1. Helman, A. R. (2017) "Why Genetic Diversity Matters and What it Means for the Yellowstone Grizzly Bear," *Bear Conservation: Working for Bears*. Available: <https://bit.ly/2CFLvER>

## GRANTS

2020	<b>Duke University Internship Funding Program Grant   \$2500</b>
2019	<b>Duke University SPIRE Fellowship Summer Enrichment Grant   \$2000</b>
2018	<b>Duke University SPIRE Fellowship Summer Enrichment Grant   \$1000</b>
2018	<b>Duke University Dean's Summer Research Fund Award   \$1000</b>

## HONORS AND AWARDS

2022	<b>NSF GRFP Honorable Mention</b>
2021	<b>Segal AmeriCorps Education Award</b>
2020	<b>Graduation with Distinction</b>
2018-2019	<b>Dean's Summer Research Fellowship</b>
2018	<b>Dean's List   Spring and Fall Semester</b>
2017-2020	<b>SPIRE STEM Diversity and Inclusion Fellowship, Duke University</b>

## PRESENTATIONS

### *Invited*

Helman, A. R. (2021). What's that smell? Investigating lemur olfactory sensitivity to aliphatic esters. Bangor University's School of Natural Sciences and the Behaviour, Ecology & Physiology Seminar Series (BEPSS) - Bangor, Wales

**Conference**

Helman, A. R. (2019). Scavenging Behaviors of Black Bears (*Ursus americanus*), Coyotes (*Canis latrans*), and Bobcats (*Lynx rufus*) in Bath County, VA. Duke University Visible Thinking Symposium - Durham, NC.

**PROFESSIONAL EXPERIENCE**

**Teaching Assistant** | SPIRE Fellowship “House Course” | Spring 2020

- Coordinated lectures and discussions concerning diversity and inclusion for underrepresented minorities in the STEM fields
- Mentored students pursuing STEM-based internships, jobs, and volunteer experience by reviewing CVs, resumes, cover letters, and additional application materials

**Teaching Assistant** | Nicholas School of the Environment - Duke University | Spring 2018

- Delivered lectures concerning wildlife conservation of large carnivore species
- Assisted in syllabus creation, assigning work, grading, and camera trap data management for the Big Cats Conservation Special Topics course taught by Dr. Stuart Pimm

**SERVICE EXPERIENCE**

**Alumni Interviewer** | Duke University | 2021 - Present

- Conducted multiple informational and evaluative interviews for local prospective students

**Volunteer** | Exotic Feline Rescue Center - Centerpoint, Indiana | Summer 2018

- Aided in the daily care of 170+ captive big and small cat species including cleaning enclosures, feeding, and enrichment preparation, which involved work with machinery
- Assisted and observed routine veterinary procedures and led tours detailing conservation efforts

**North America Campaign Manager** | Bear Conservation | 2017 - 2018

- Managed information campaigns representing the three bear species North America is home to in the form of research articles, informational brochures, and connecting communities with professional wildlife organizations dedicated to the coexistence of humans and bears

**SKILLS**

**Languages:** Proficient in Spanish

**Computer Skills:** R, ArcGIS, ArcMAP, CPW PhotoWarehouse, and BaseCamp

**Field Research Skills:** Radio telemetry (VHF and GPS), handheld GPS and compass backcountry navigation, 4WD and manual transmission vehicle operation, invasive and noninvasive animal research methods, camping in remote field conditions

**Interests:** Hiking, backpacking/camping, art and illustration, travel, and dog rehabilitation and training