

Understanding the causes and consequences of parasite infection to inform socioecological theory and conservation

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Overview

How do organisms cope with fluctuating environments?

Sociality: What are the causes and consequences of variation?

Life history: How does sociality change over the life span and what are the physiological mechanisms underlying those changes?

Applying the same methods and findings to **conservation**

Methods

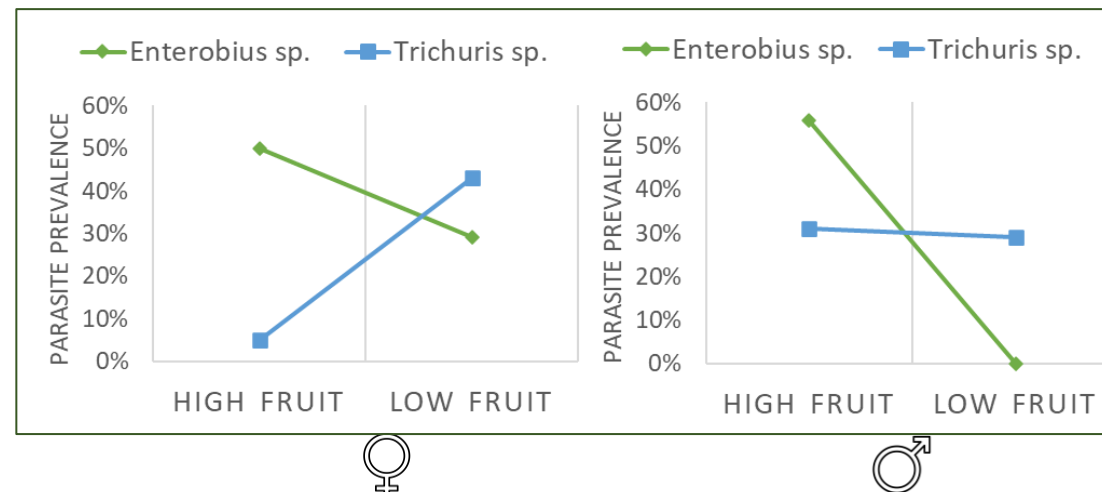
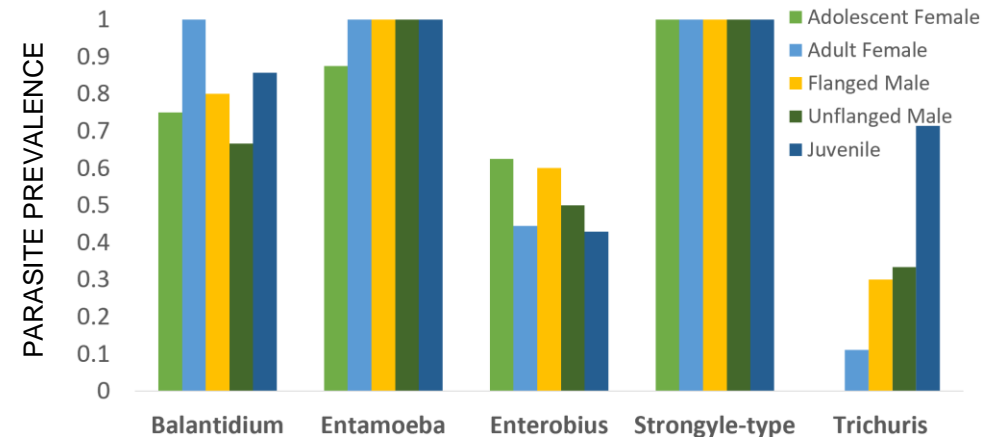


- On-site flotation and direct smear
- Behavioral observation
- Urinary biomarkers
- Forest phenology
- Nutritional analysis

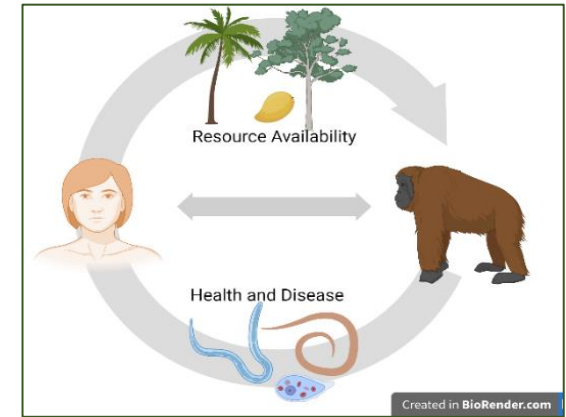
Results

Factors that increase the likelihood of a social event taking place:

- High fruit availability
- Age-sex class: adolescent females



Future Directions



- How do **other biomarkers** vary with parasite infection?
- **On-site genetic analysis** of parasites
- **One Health:** collaboration with cultural anthropologists, conservation NGOs, rehabilitation and release centers, and local medical personnel
 - Parasites in humans in and around the national park
 - Community-level health assessments in parallel with primate population health