

# BIOCULTURAL SUSTAINABILITY IN MADAGASCAR

## Objectives

Advance sustainable forest management in northeast Madagascar

- 1) Quantify the effects of deforestation on lemur population densities
- 2) Measure mid-term outcomes of Conservation Action Plan: environmental education, livelihood development



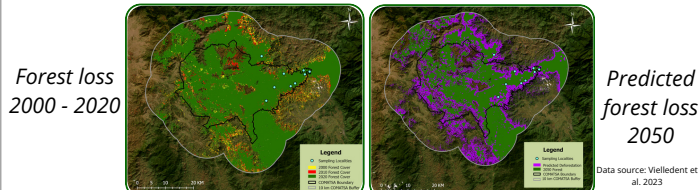
## Approach

- 1) Ecology research
  - Lemur surveys COMATSA protected area
    - 9 sites 29 transects, >1500km
  - Remote sensing & statistical modeling
- 2) Social science research
  - Program evaluations to assess conservation action plan

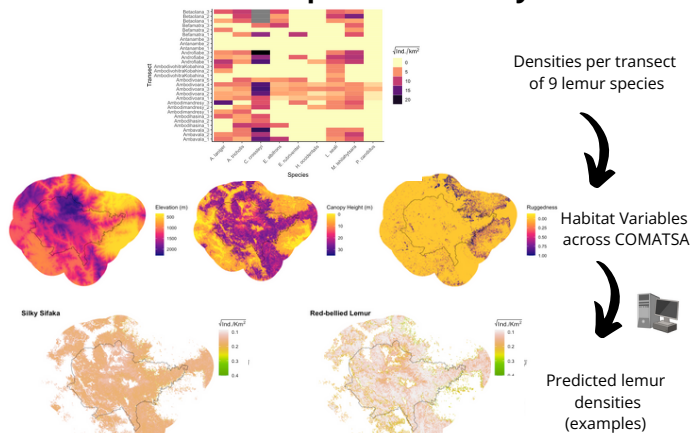


## Ecology Results

### 1. Forest loss in COMATSA

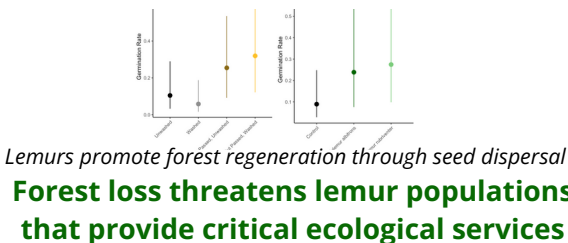


### 2. Lemur Population Density



Lemur densities vary throughout the landscape

### 3. Lemur-Tree Mutualism: Seed Dispersal



## Environmental Education Program Evaluation

### OBJECTIVES

- Gauge curriculum effectiveness in teaching environmental knowledge and awareness
- Evaluate environmental education programs using participant & teacher feedback

### SURVEY INSTRUMENT

- Consult with on-the-ground educators and community organizers
- Translation of survey instruments into Malagasy
- Creation of 5 survey instruments
- Current piloting of survey instruments on the ground in Madagascar



Our collaborating educators teaching about Madagascar biodiversity

## Sustainable Agriculture Program Evaluation Recommendations

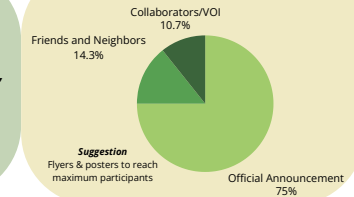
### Overall Experience

Positive experience in gardening & chicken husbandry workshops (n=28, 100%).

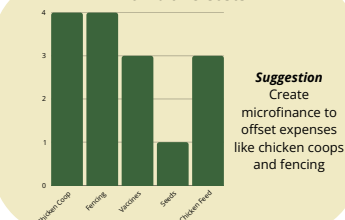
"In general, it was wonderful & worthwhile"

"Everyone could learn from their teaching techniques."

### Engaging Participants



### Prohibitive Costs



### Sustained Contact

