Visualizing Lemur Survival Data

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project update

Madagascar

- crucial part of the ecosystem

- primary food source for people

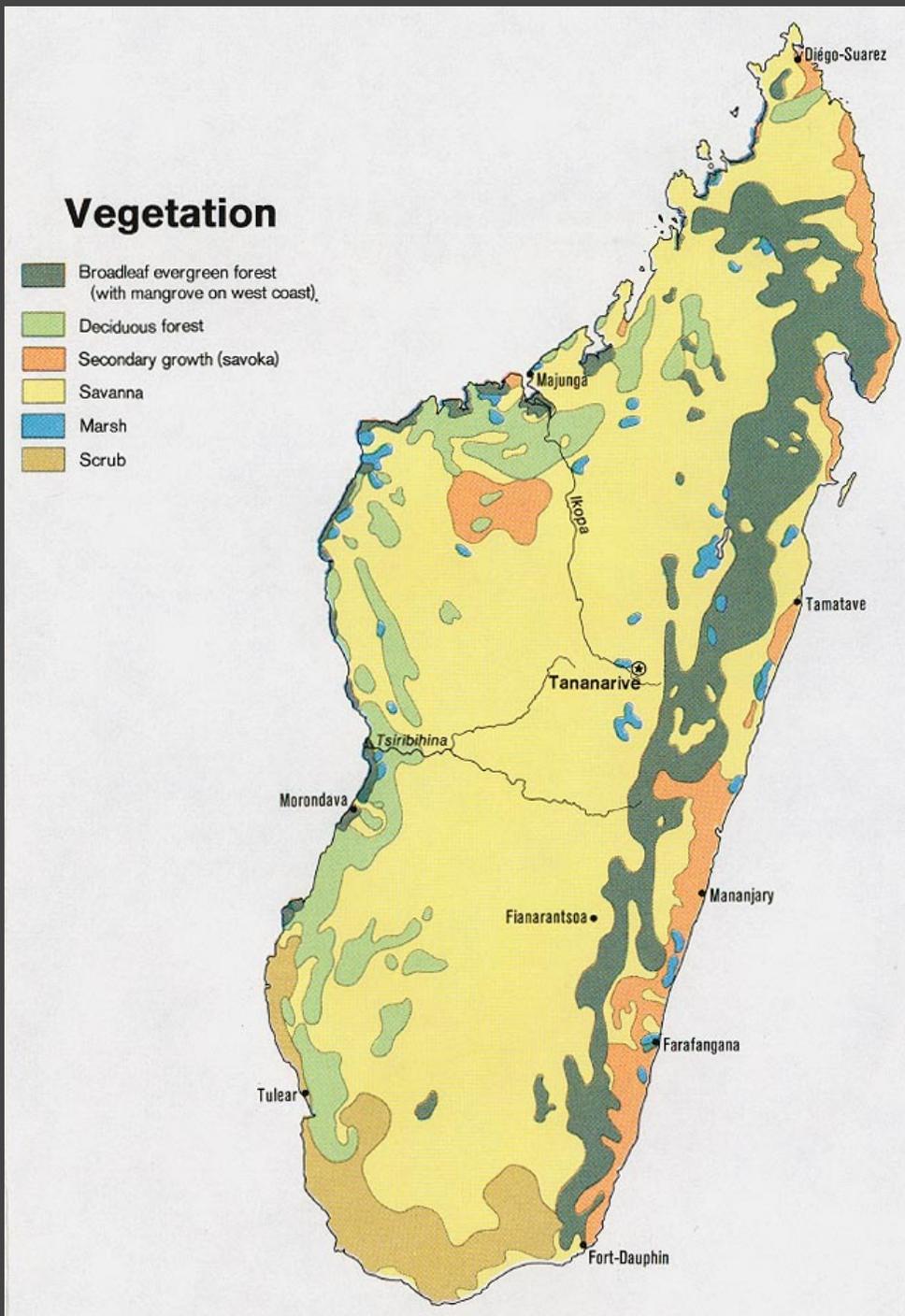- 50% population loss since 1950s

Lemurs

Clear-Cutting

- up to 90% forest loss since arrival of humans

- major cause of species loss

- little existing support for understanding importance of particular forest regions to species concretely

- need to communicate consequences of deforestation to policy makers and other non-experts

Goal

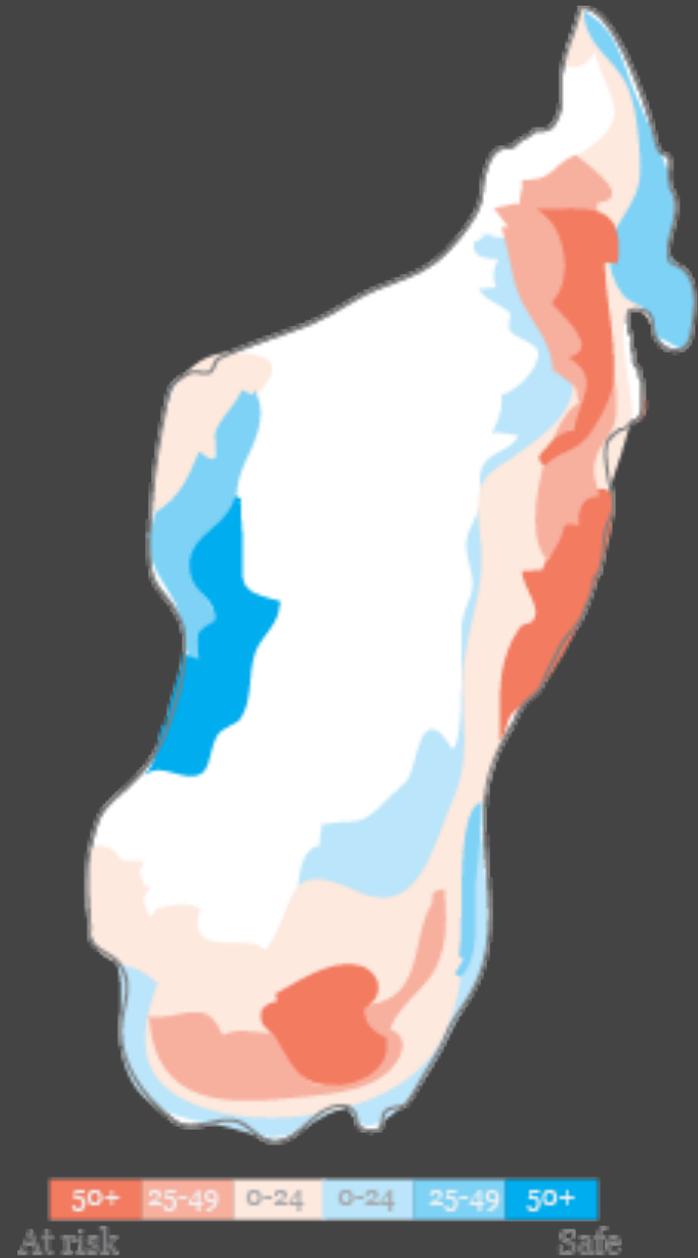- spatially-referenced visualization of lemur habitats

Biggest challenge: Data

- many species habitats not traversable by humans
- either non-existant or high uncertainty in population numbers
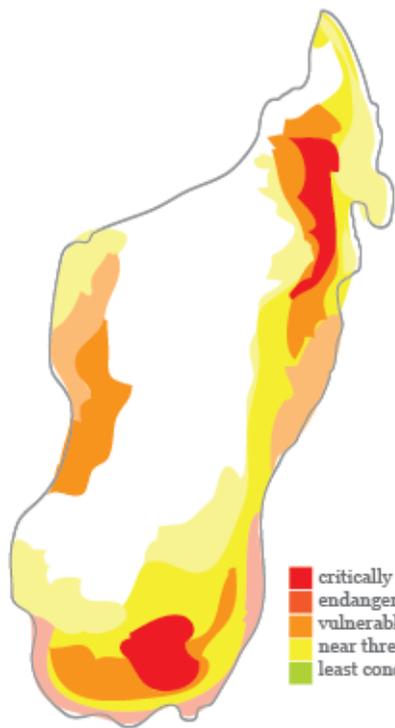
Alternative data

- threat level
- estimated habitats

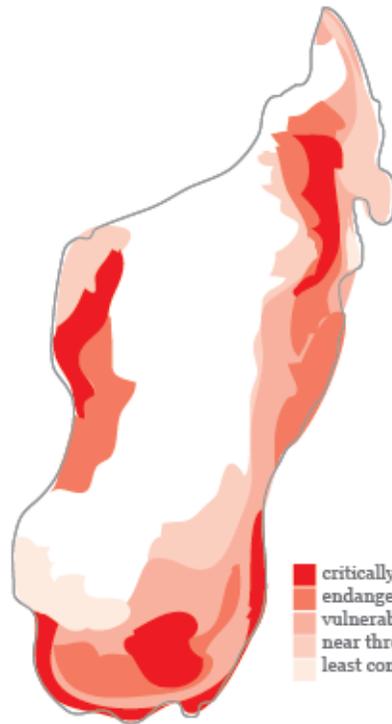Proposed
solution:
a threat/
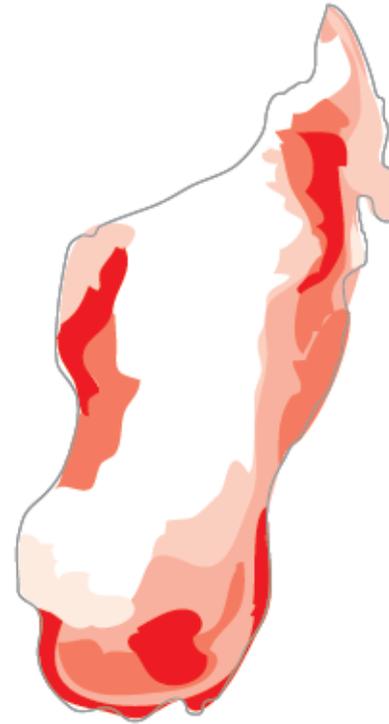habitat
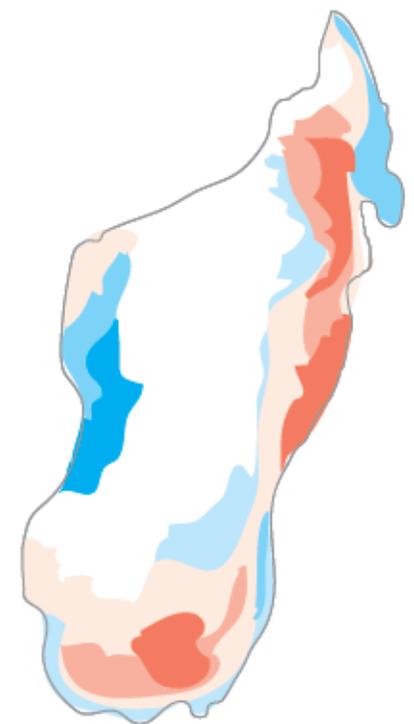choropleth

Abstraction

Color designs

critically endangered
endangered
vulnerable
near threatened
least concern

1. All categories/densities

critically endangered
endangered
vulnerable
near threatened
least concern
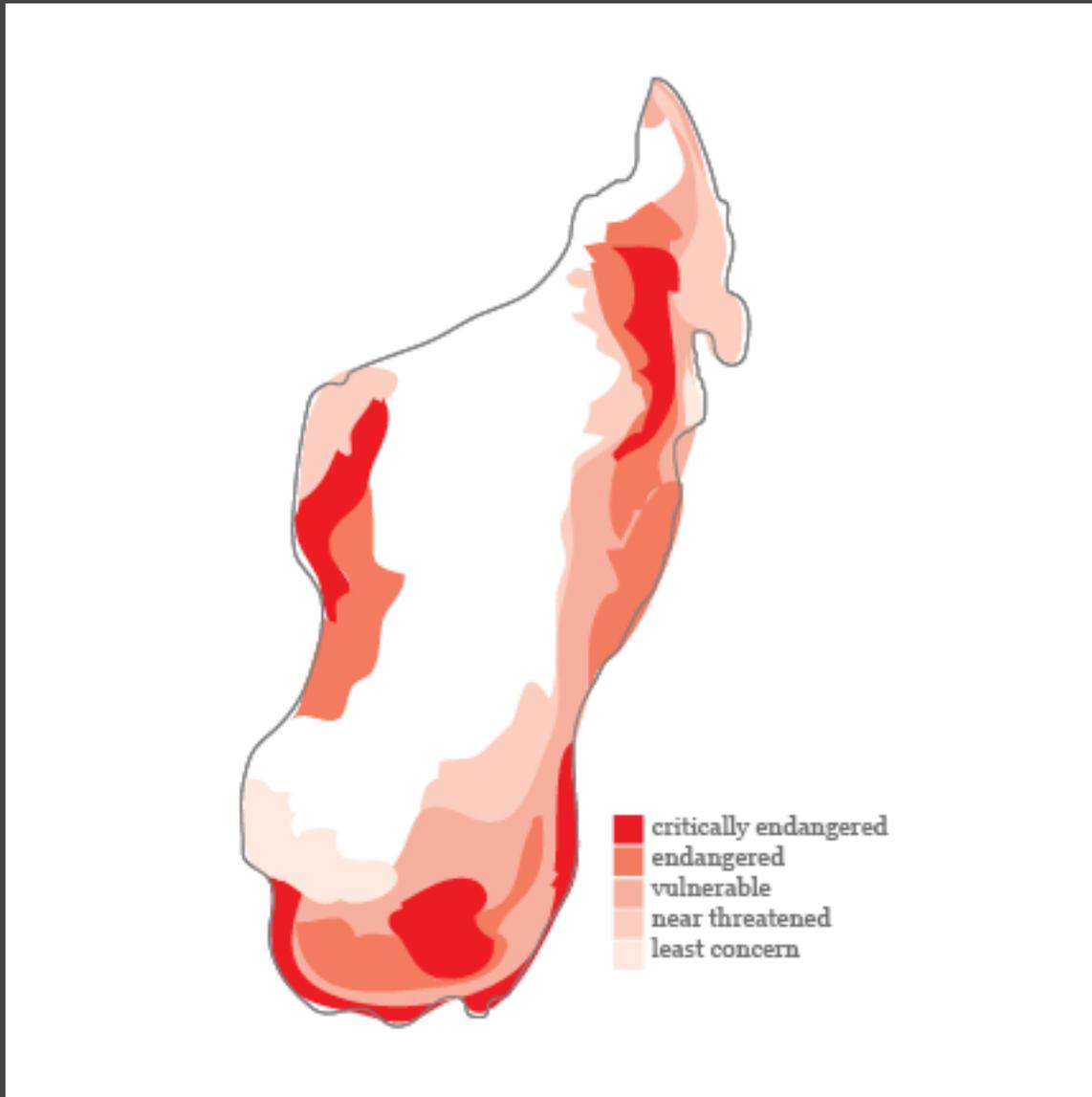
2. All categories/no densities

0-9 10-19 20-29 30-49 50+
Endangered species
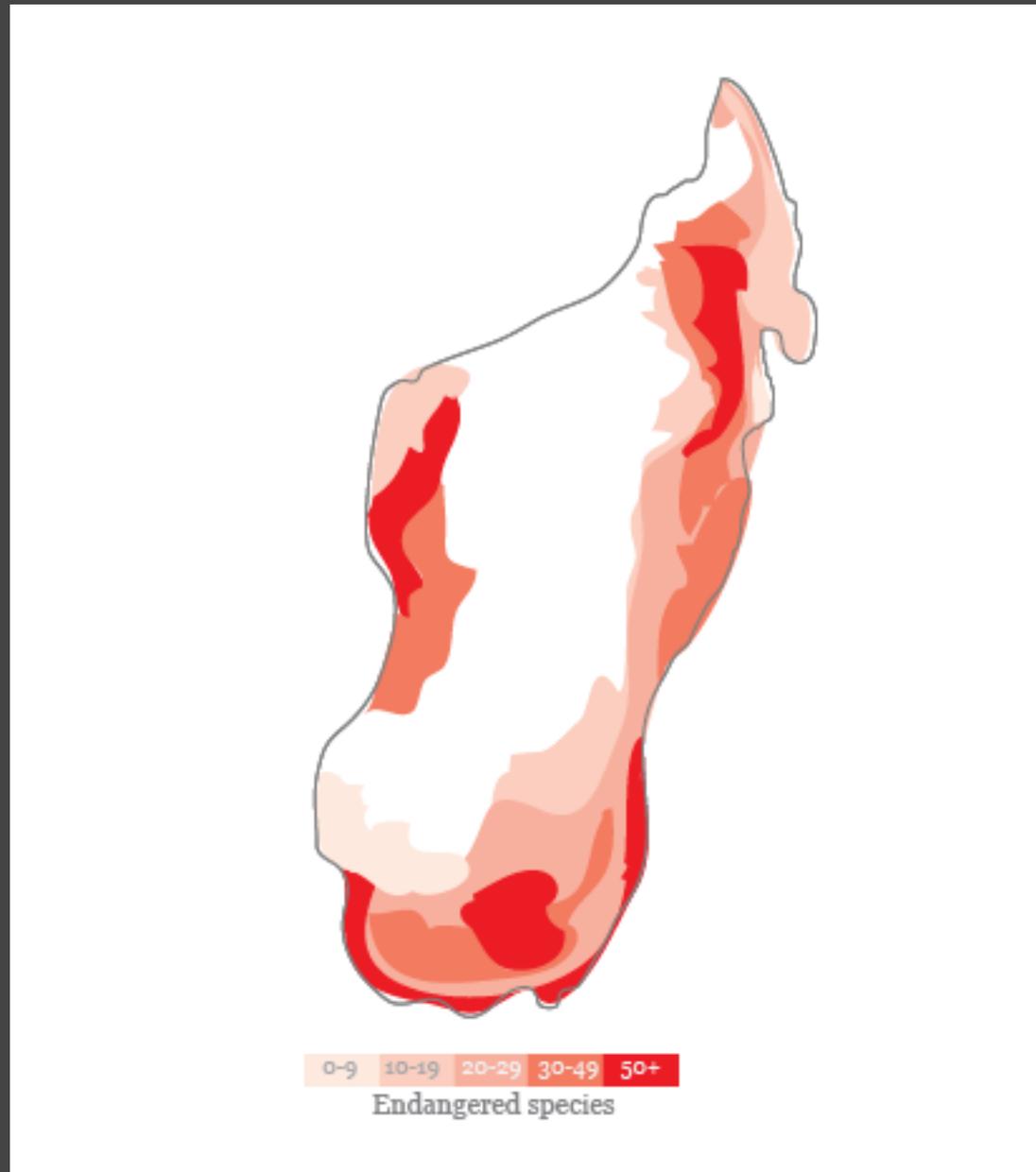
3. One category/all densities

50+ 25-49 0-24 0-24 25-49 50+

At risk   Safe
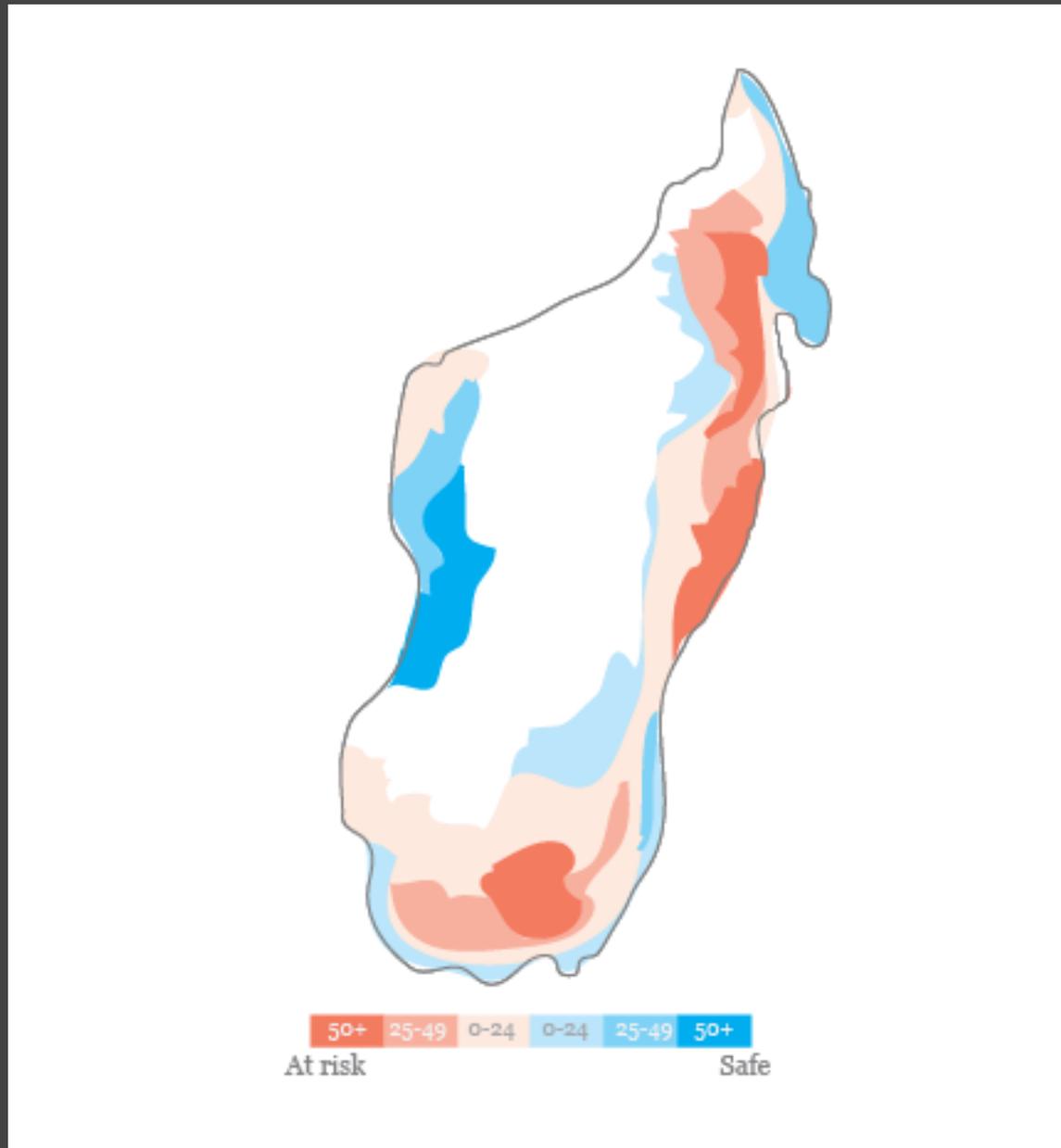
4. Two categories/all densities

Changes to proposal

- population numbers for traces scatterplot don't exist
- either:
    - show history of species in different way, possibly traces of conservation status categories
    - concentrate on choropleth

Progress so far

- data collection
    - species geographic habitats
    - species categories of threat
- rendering framework
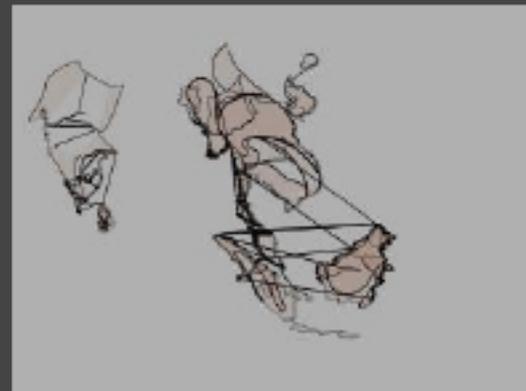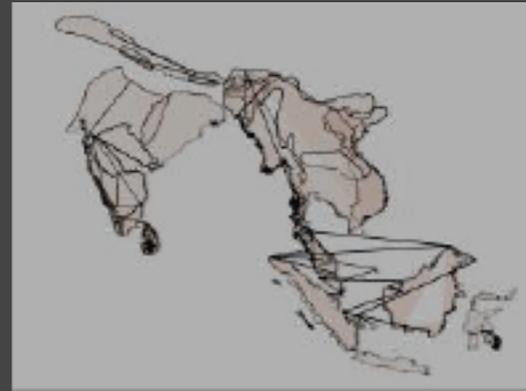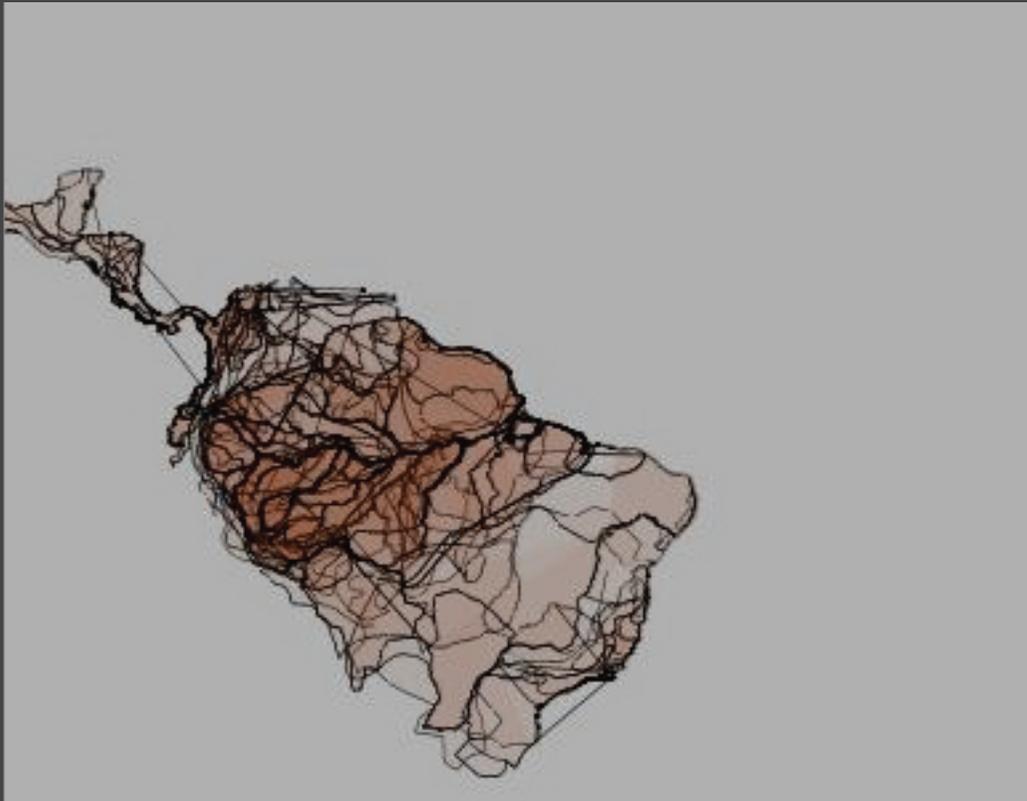   - shapefiles in PolyMaps (done) and Processing (kind of)

PolyMaps framework

- data for all primates in Madagascar

- species habitats shown as white polygons at 60% opacity

PolyMaps framework

Rendering in Processing

Next steps

- wrangle data
- render shapefiles
- hue/opacity coding
- interaction for selection/drill down

Thank you!
Questions?