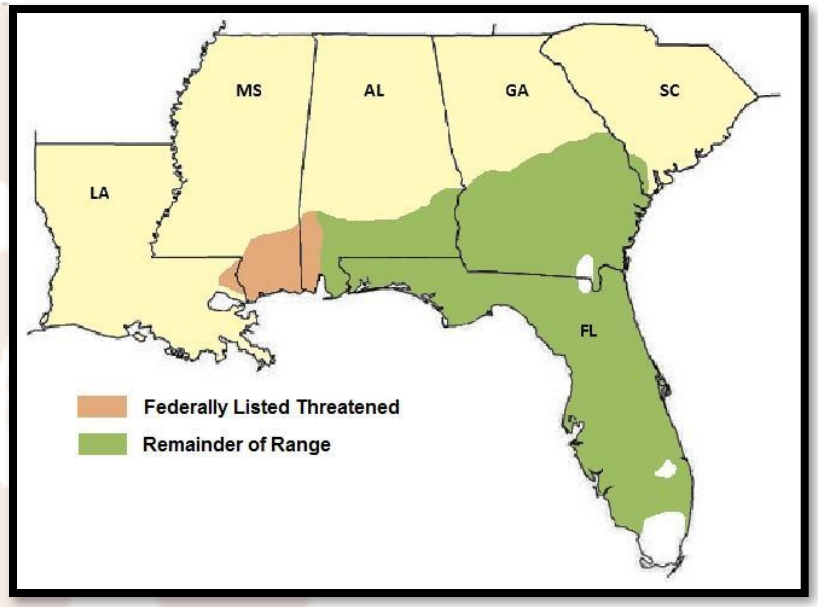
GEORGIA
DEPARTMENT OF NATURAL RESOURCES
WILDLIFE RESOURCES DIVISION

Gopher Tortoise Conservation Initiative

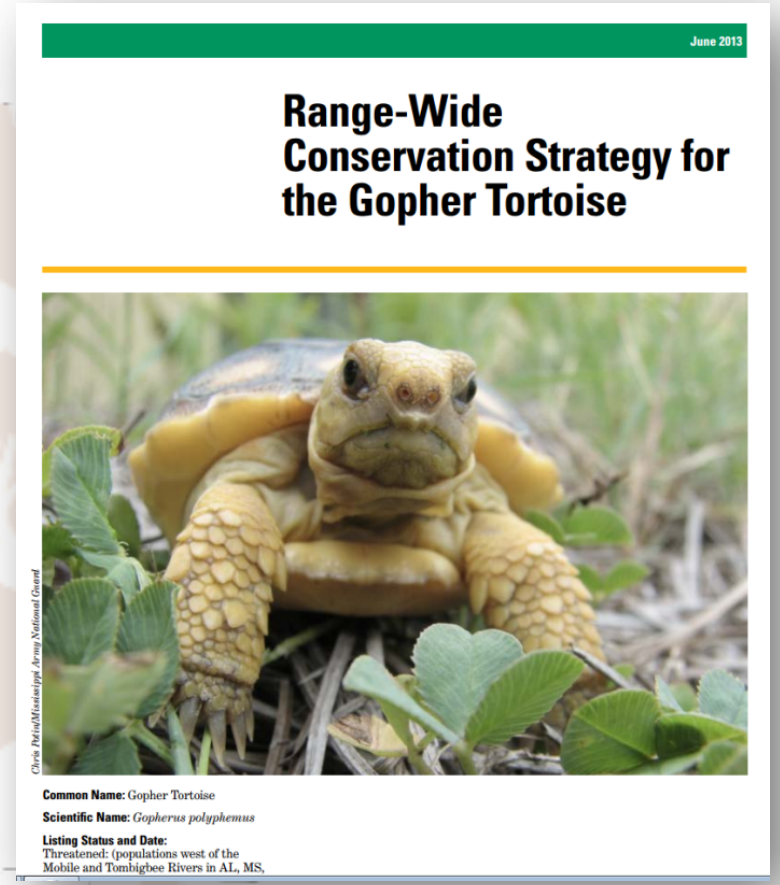
Gopher Tortoise Status

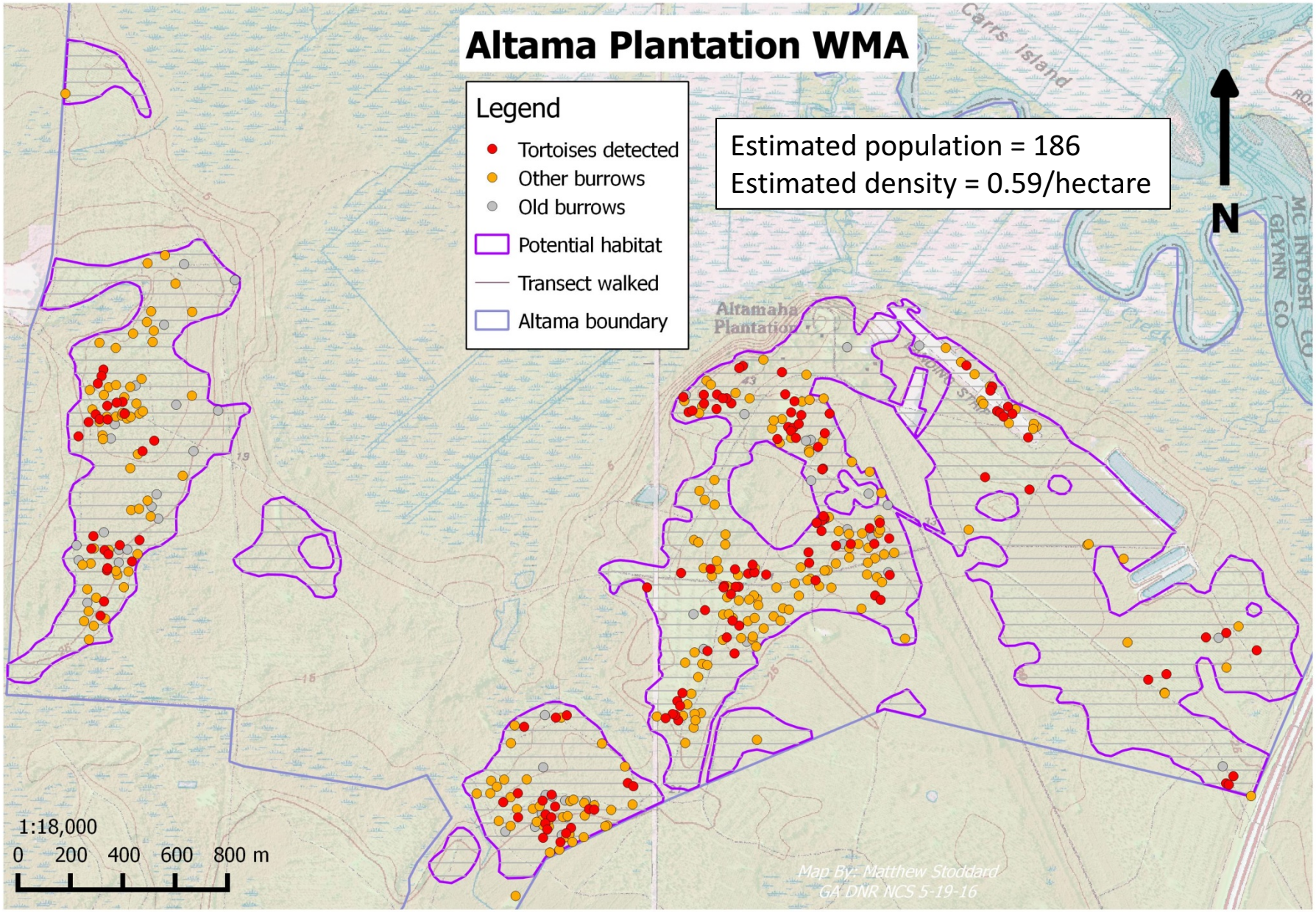
- State protected species
- Candidate for federal protection under Endangered Species Act
- Impacted by habitat loss and fragmentation
- Federal listing could result in significant economic impacts



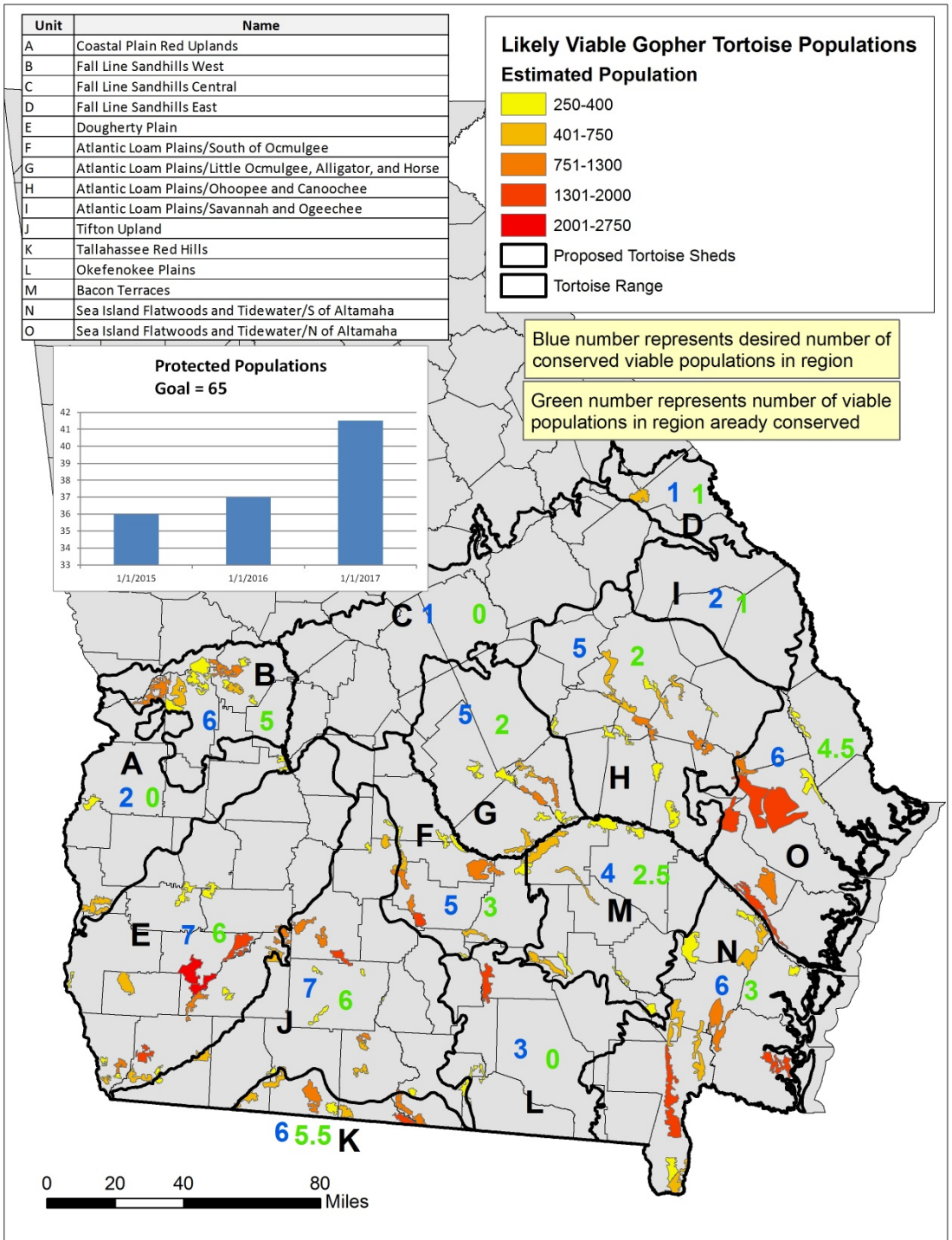
Gopher Tortoise Population Viability

- Criteria developed in 2013 by working group
- Viable = Likely to persist for 100+ years
- Minimum of 250 adults
- Minimum density of 0.4/ha (1 per 6.2 acres)



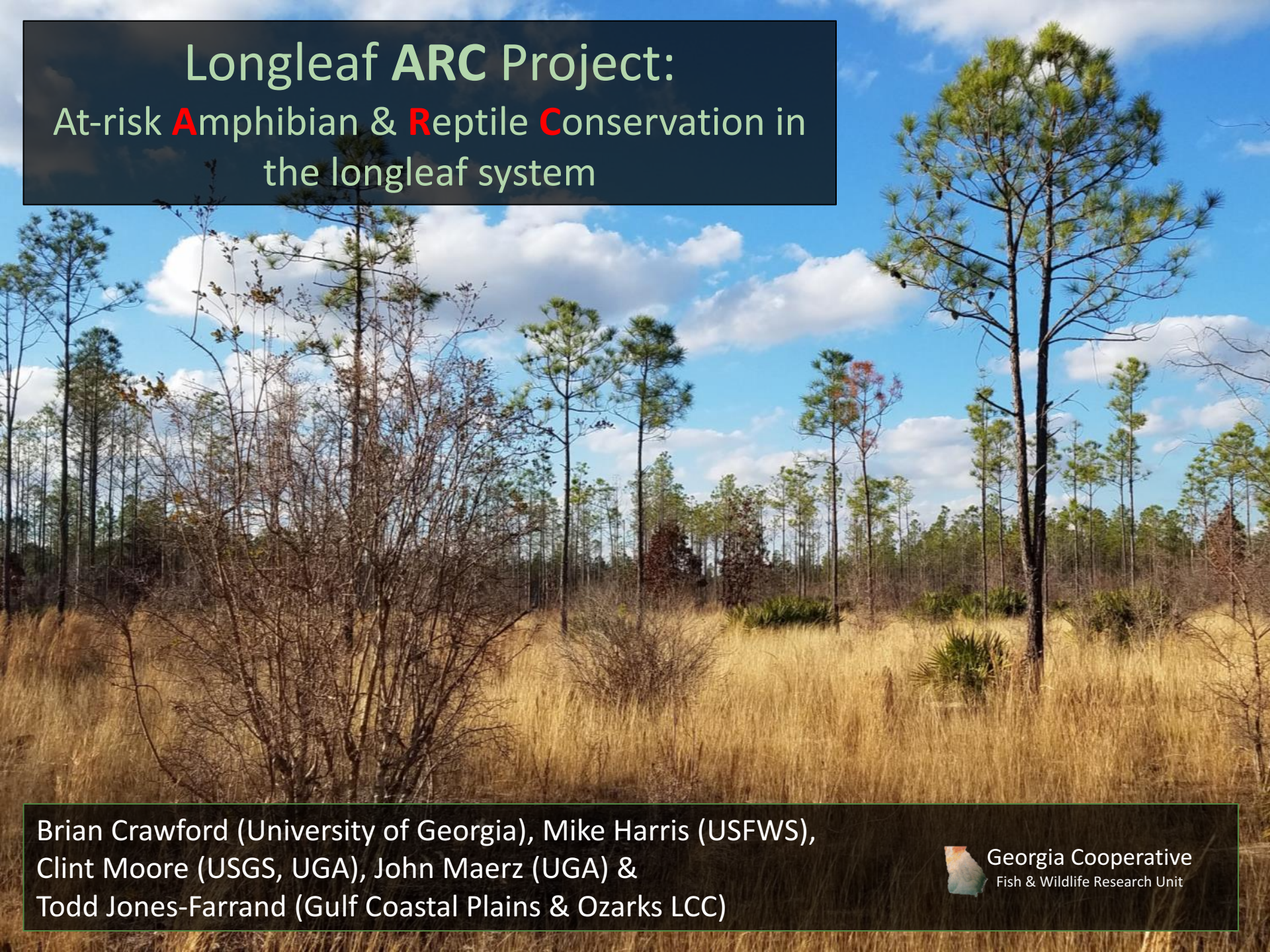

Altama Plantation WMA
Legend
Tortoises detected
Other burrows
Old burrows
Potential habitat
Transect walked
Altama boundary
Estimated population = 186
Estimated density = 0.59/hectare
N
Carrs Island
Altamaha Plantation
MC INTOSH CO
GLYNN CO
1:18,000
0 200 400 600 800 m
Map By: Matthew Stoddard
GA DNR NCS 5-19-16

Unit	Name
A	Coastal Plain Red Uplands
B	Fall Line Sandhills West
C	Fall Line Sandhills Central
D	Fall Line Sandhills East
E	Dougherty Plain
F	Atlantic Loam Plains/South of Ocmulgee
G	Atlantic Loam Plains/Little Ocmulgee, Alligator, and Horse
H	Atlantic Loam Plains/Ohoopee and Canoochee
I	Atlantic Loam Plains/Savannah and Ogeechee
J	Tifton Upland
K	Tallahassee Red Hills
L	Okefenokee Plains
M	Bacon Terraces
N	Sea Island Flatwoods and Tidewater/S of Altamaha
O	Sea Island Flatwoods and Tidewater/N of Altamaha



Longleaf **ARC** Project:

At-risk **A**mphibian & **R**eptile **C**onservation in the longleaf system

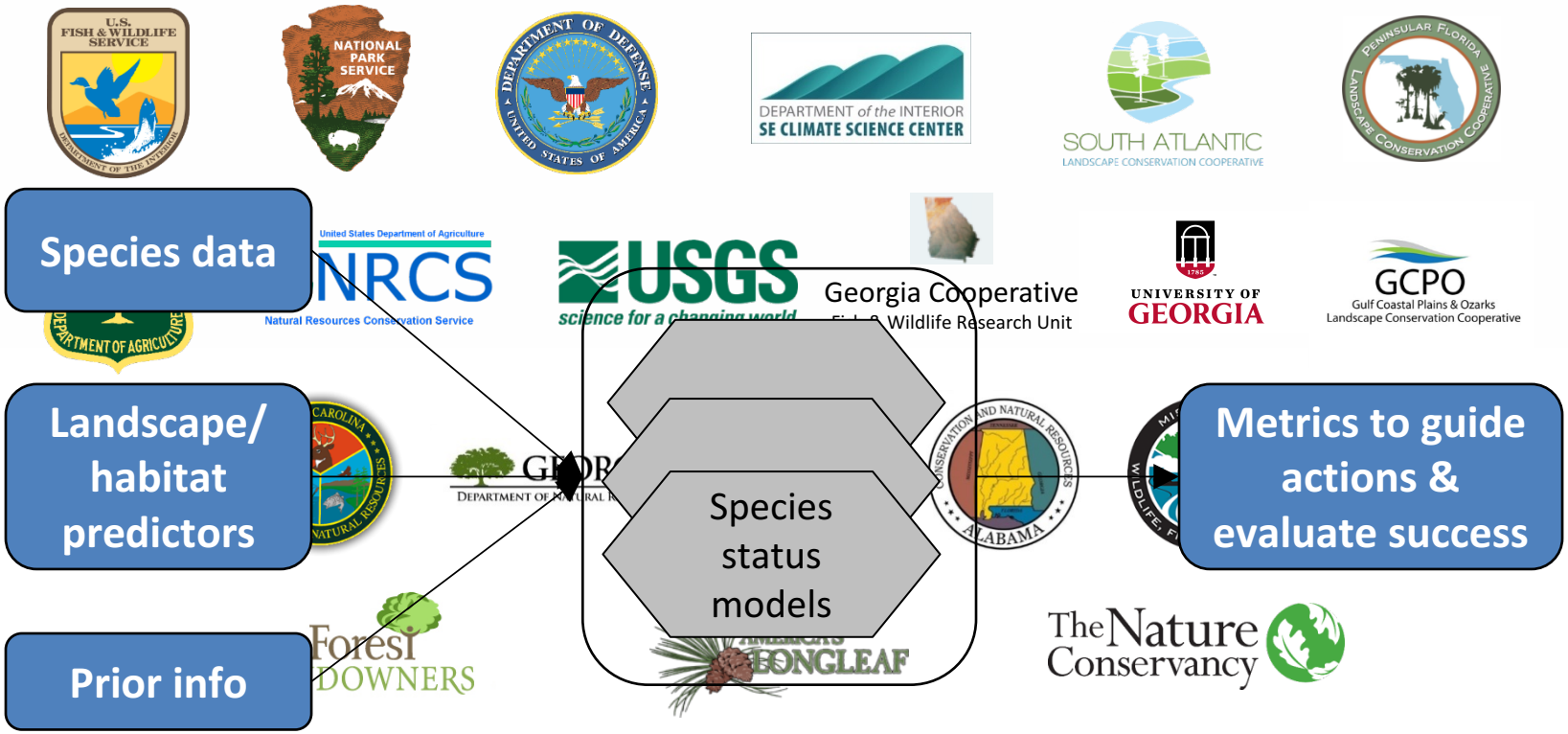


Brian Crawford (University of Georgia), Mike Harris (USFWS),
Clint Moore (USGS, UGA), John Maerz (UGA) &
Todd Jones-Farrand (Gulf Coastal Plains & Ozarks LCC)

Georgia Cooperative
Fish & Wildlife Research Unit

Project objectives

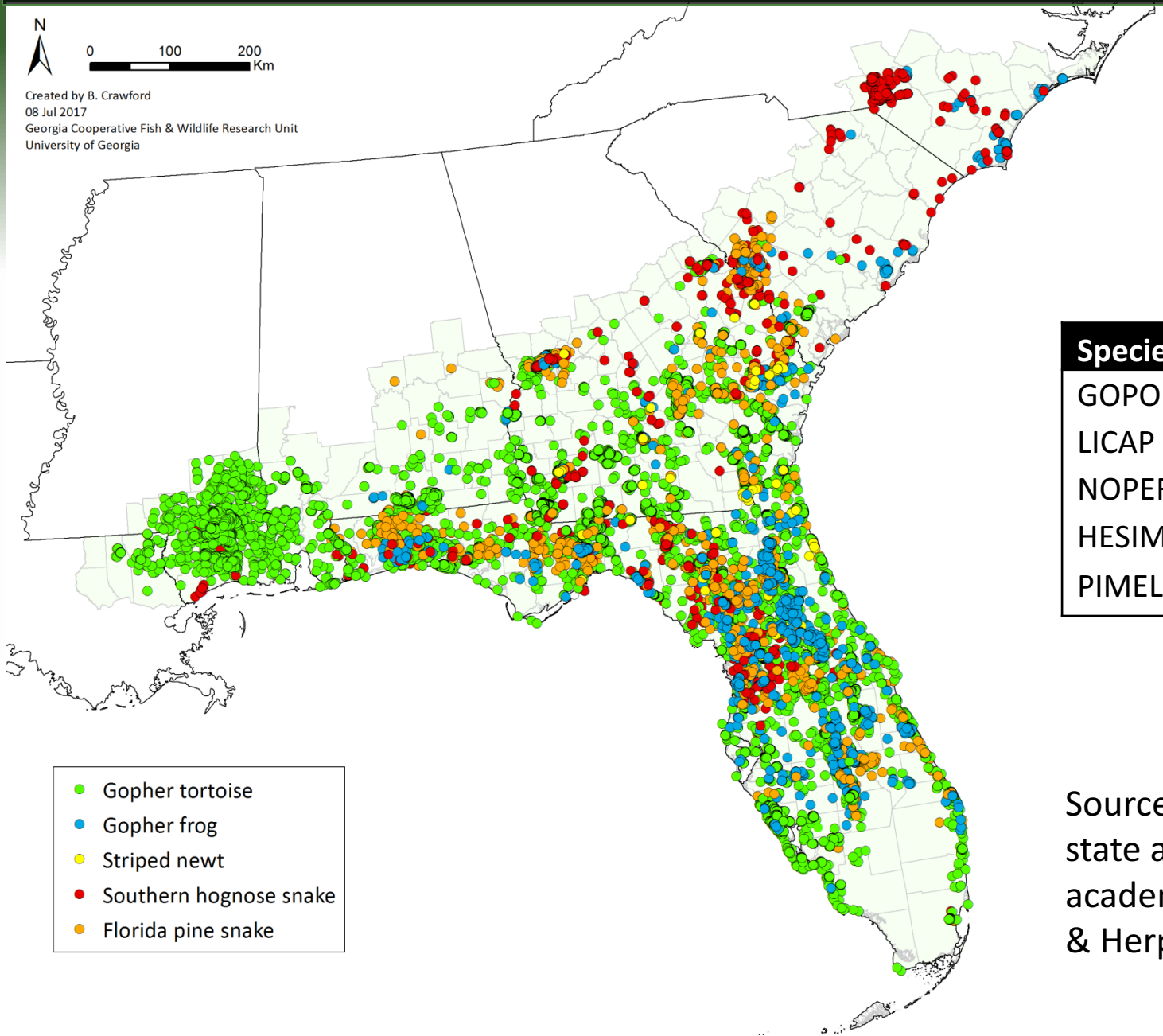
- Strengthen partner network
  - Decision-makers, managers, researchers, landowners, enthusiasts
- Synthesize data & knowledge
  - Multiple data types
  - Formal expert input
- Range-wide species status models
  - Current status
  - Future threats
  - Potential management



Longleaf ARC Project

OVERALL GOAL: Inform *where* and *how* to invest conservation resources for five at-risk herpetofaunal species in the longleaf pine ecological system

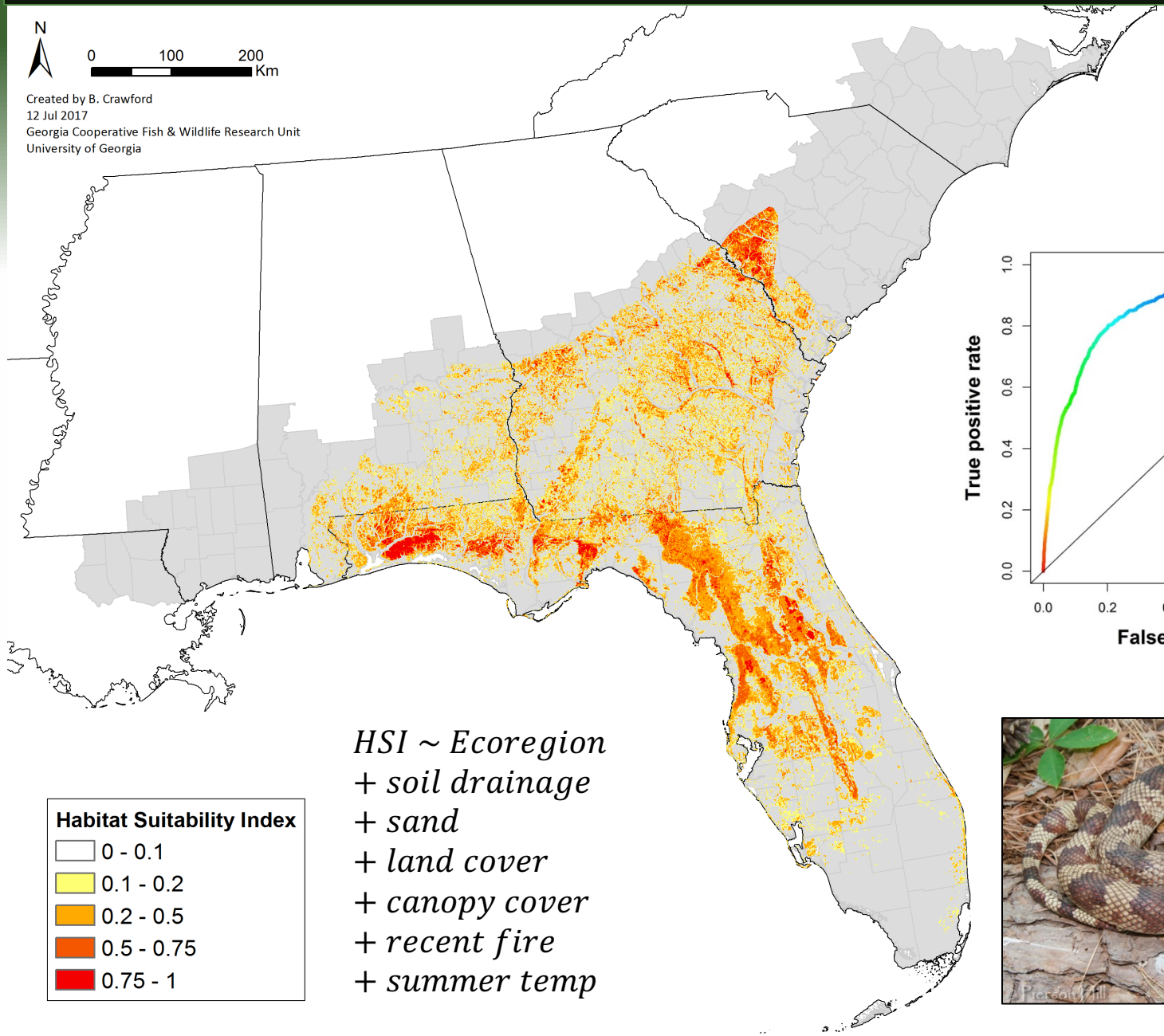
Progress: Species data

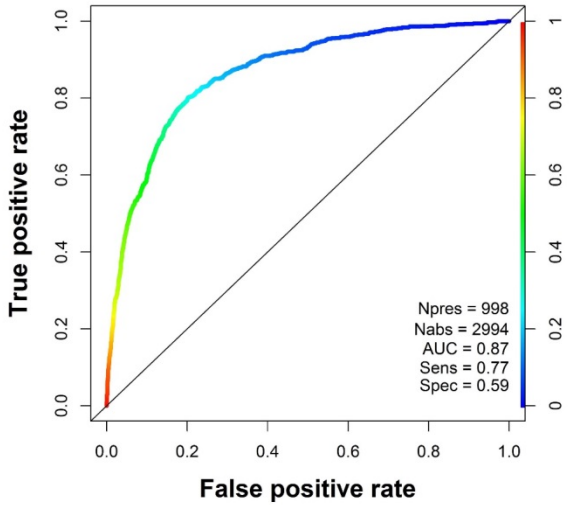


Species	Records
GOPOL	61,870
LICAP	2,381
NOPER	301
HESIM	1,745
PIMEL	1,122

Sources include: NHPs, state agency databases, academic researchers, & HerpMapper

Progress: Species status models





Habitat Suitability Index

- 0 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- 0.5 - 0.75
- 0.75 - 1

$$HSI \sim Ecoregion + soil\ drainage + sand + land\ cover + canopy\ cover + recent\ fire + summer\ temp$$