



CONSERVING THE
CAROLINA GOPHER FROG
ON THE SRS: INTEGRATING
PARTNERSHIPS,
RESTORATION, AND
RESEARCH

Stacey Lance

CAROLINA
GOPHER
FROG
Rana capito





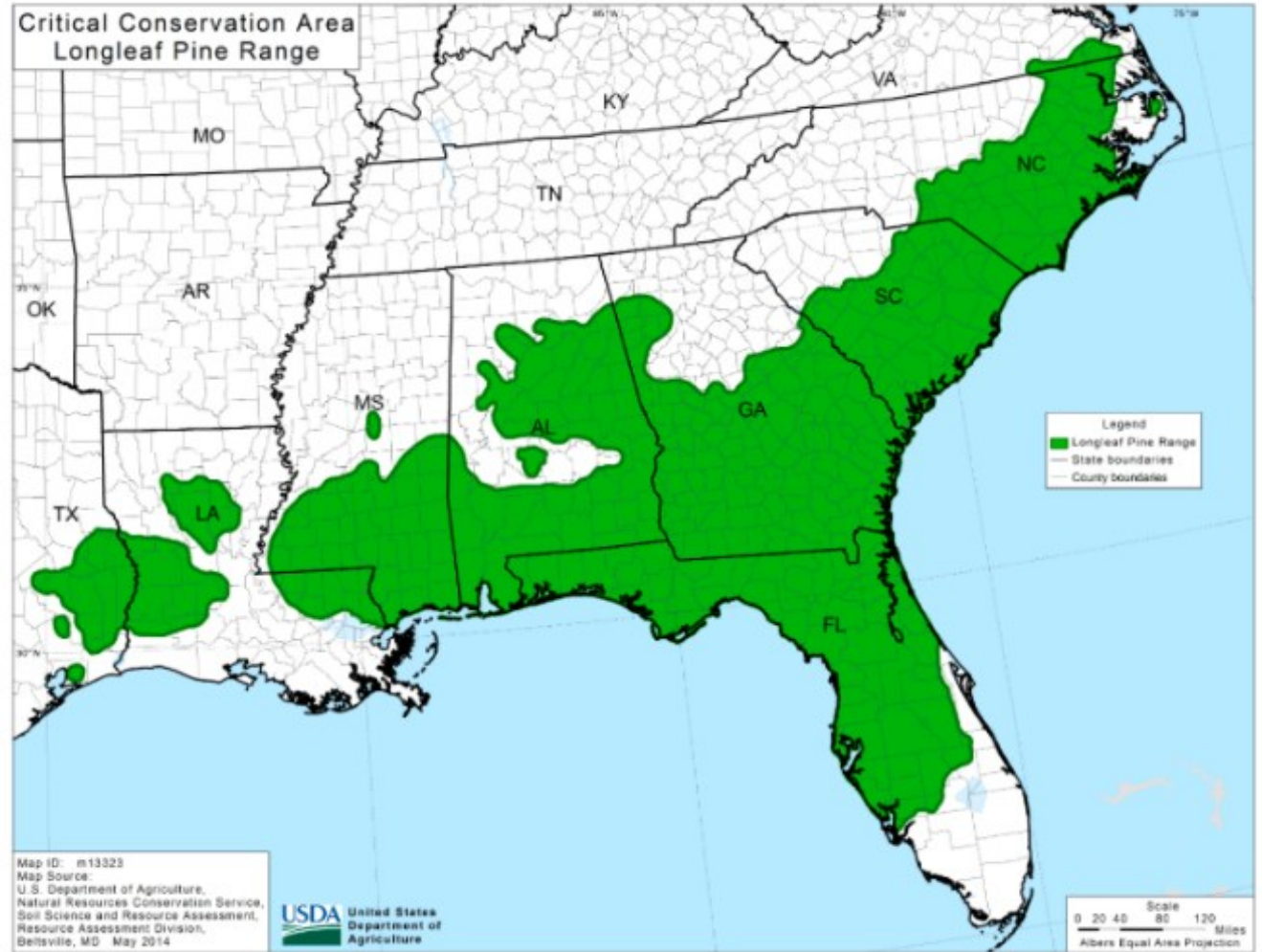
GOPHER FROGS ARE ASSOCIATED WITH FIRE-
MAINTAINED, OPEN PINE HABITATS WITH REFUGIA



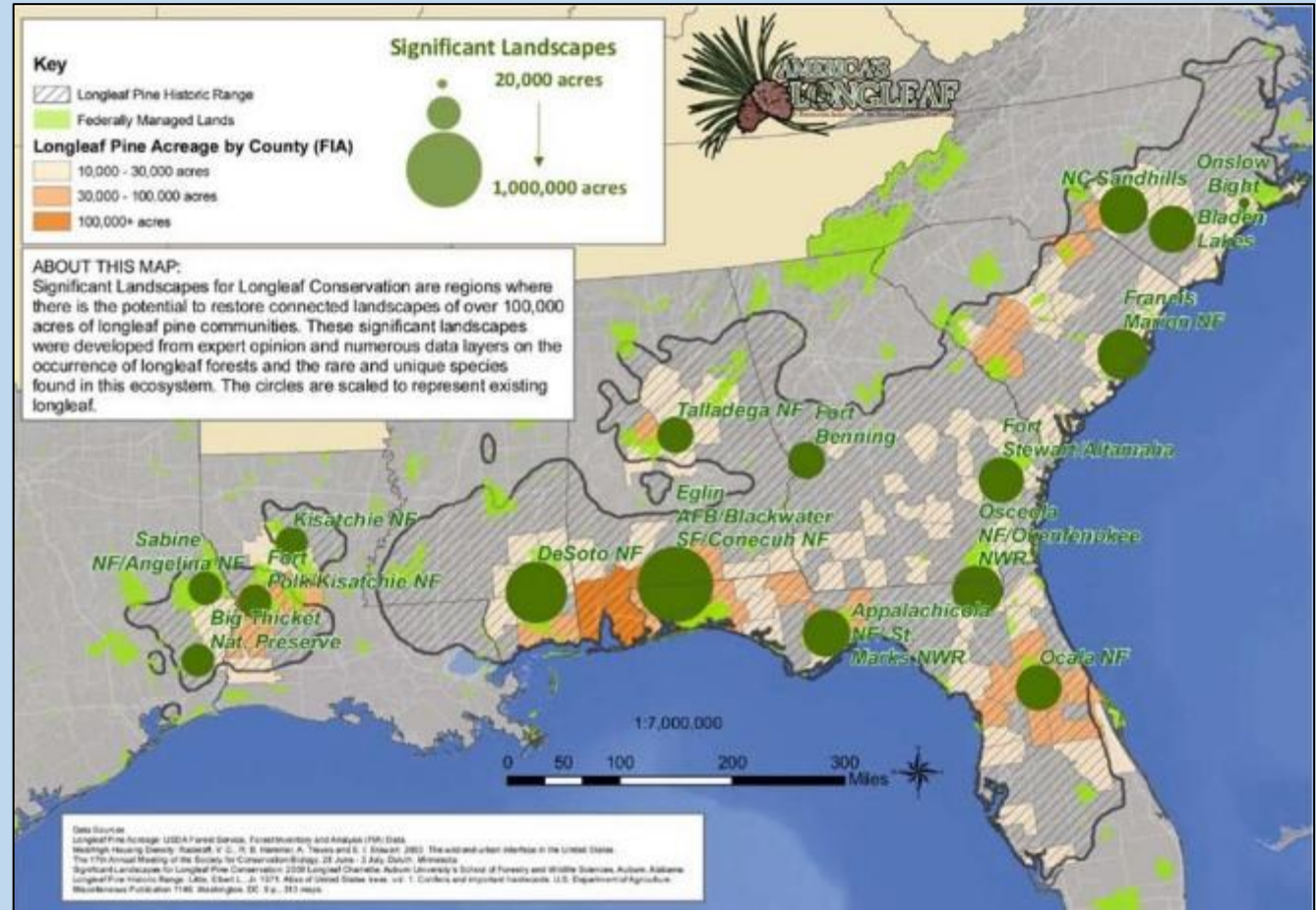
GOPHER FROGS BREED IN OPEN CANOPIED,
HERBACEOUS EPHEMERAL WETLANDS

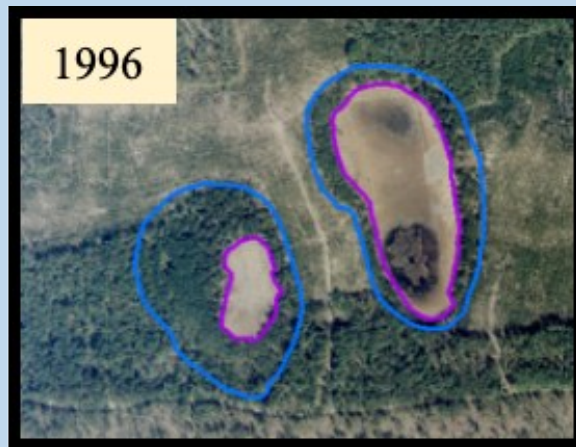
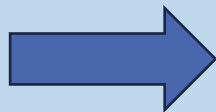


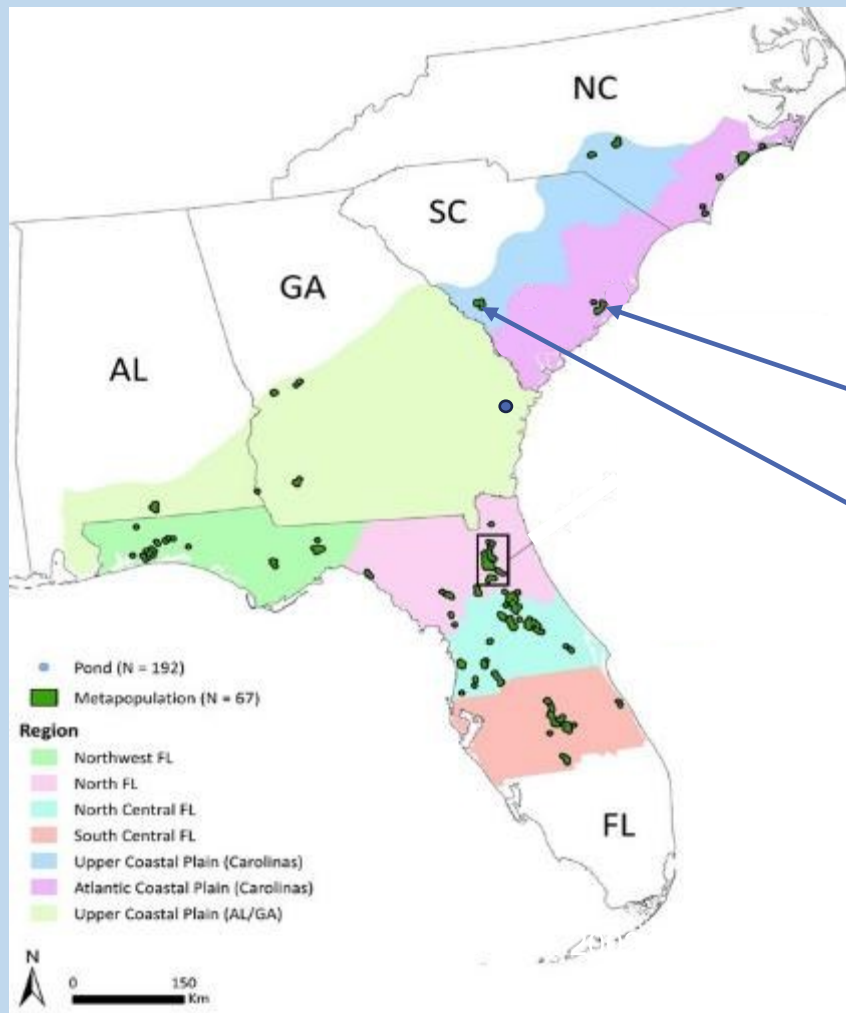
LONGLEAF
ECOSYSTEM
USED TO
COVER 90
MILLION
ACRES



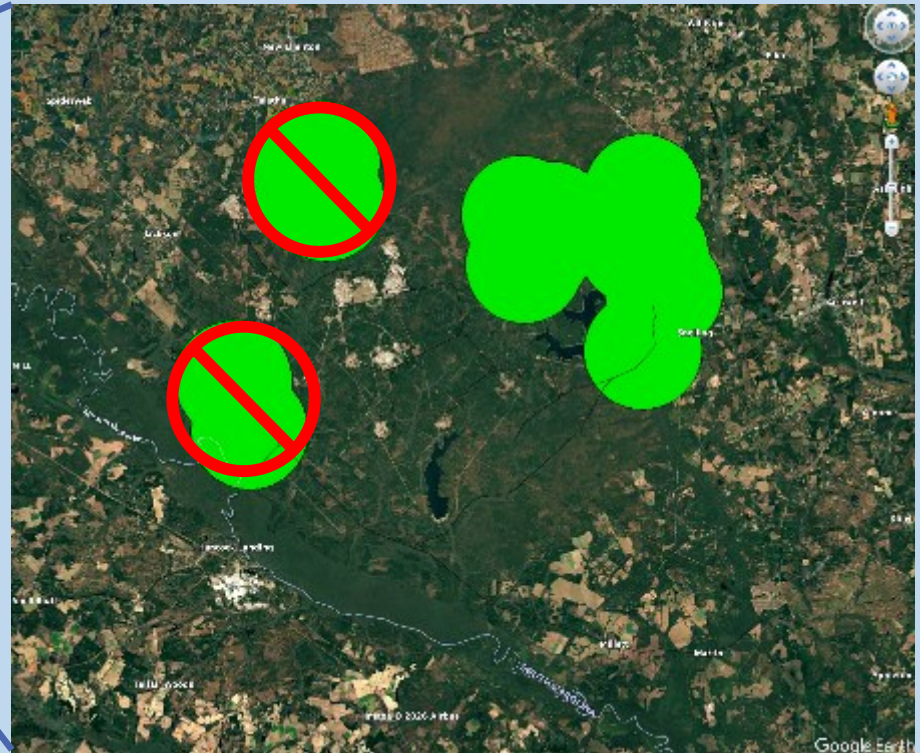
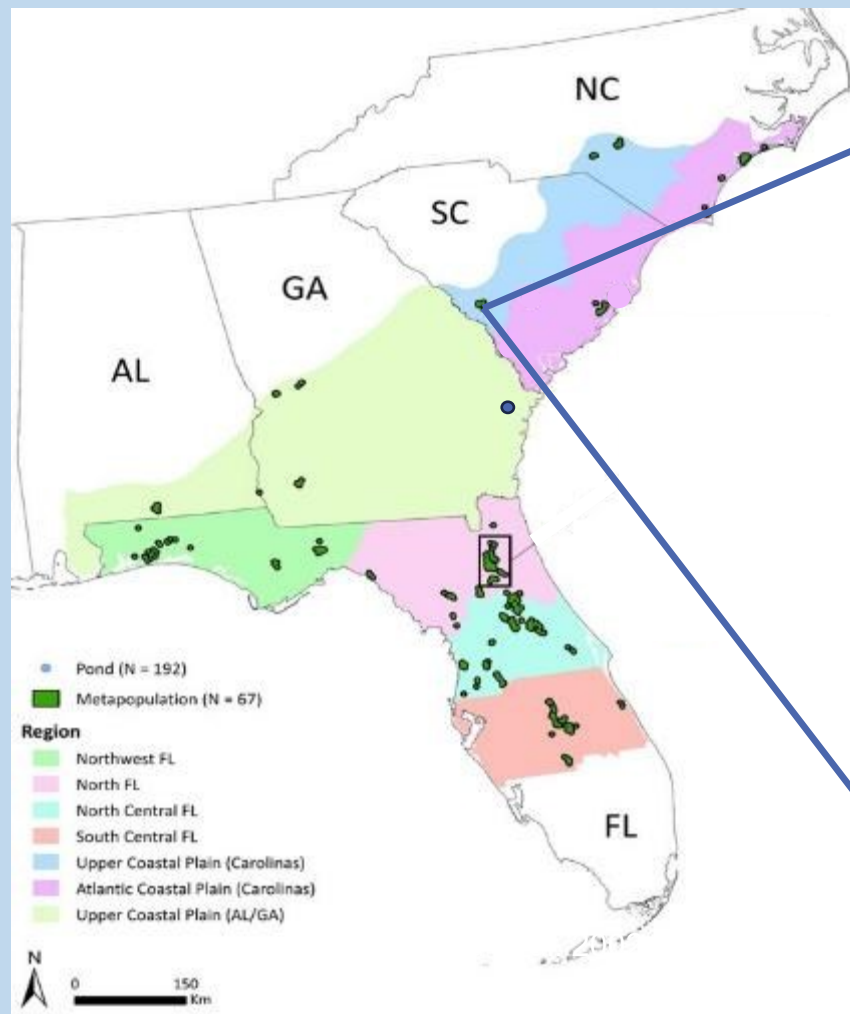
LONGLEAF ECOSYSTEMS ARE HIGHLY FRAGMENTED





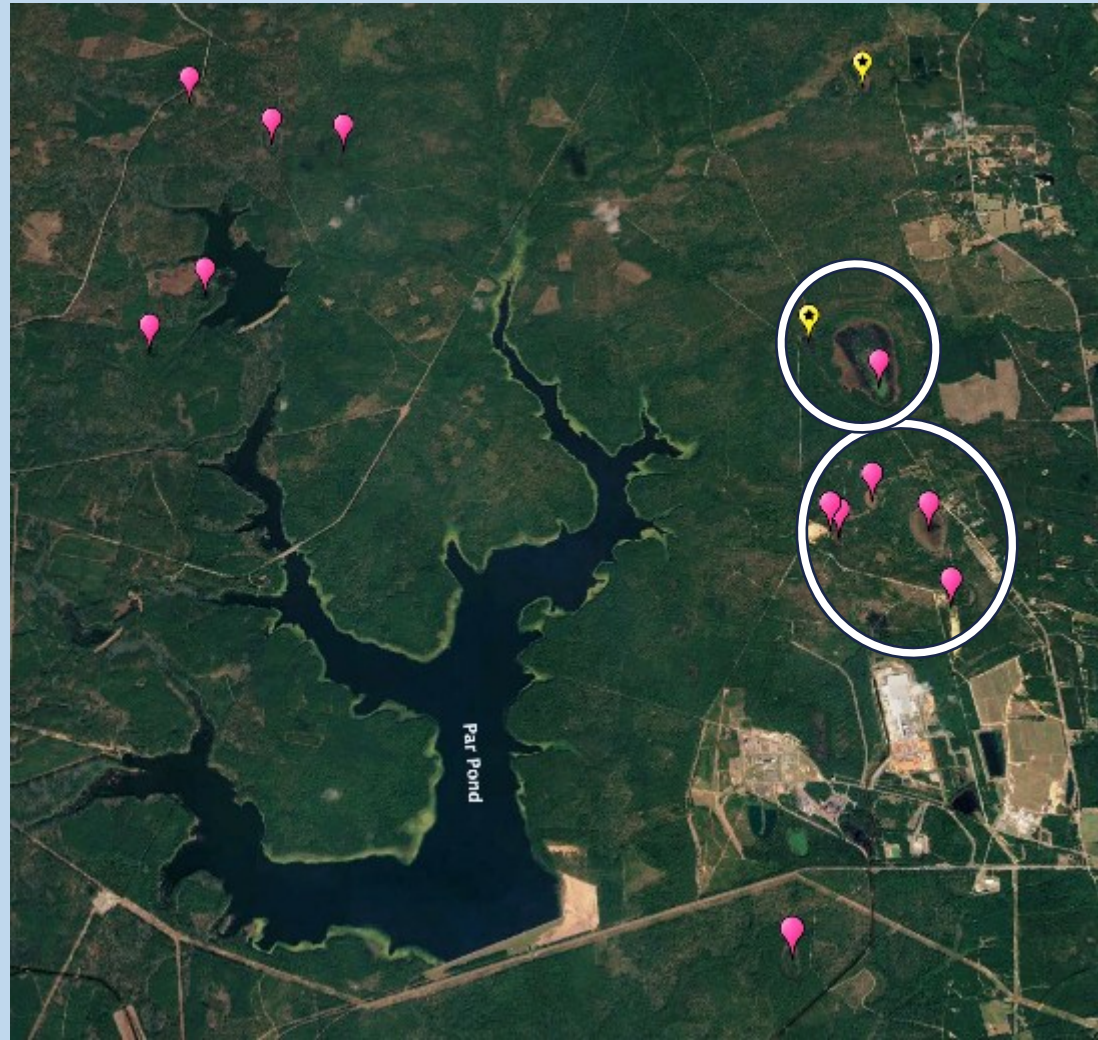


- Up for federal listing
- State endangered in SC
 - 2 metapopulations left
 - Francis Marion National Forest
 - Savannah River Site



CURRENT STATUS OF GOPHER FROGS ON THE SRS

- 9 possible breeding wetlands left on SRS
 - 2 shared with Energy Solutions
- 5 on neighboring Energy Solutions

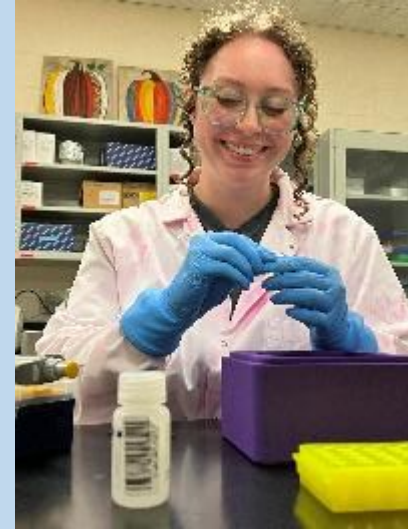


WHAT ARE WE DOING ABOUT IT?

1. Monitor Population & Breeding Status
2. Increase our Population Sizes
3. Habitat Restoration



WHAT ARE WE DOING ABOUT IT?





1. MONITORING POPULATION STATUS

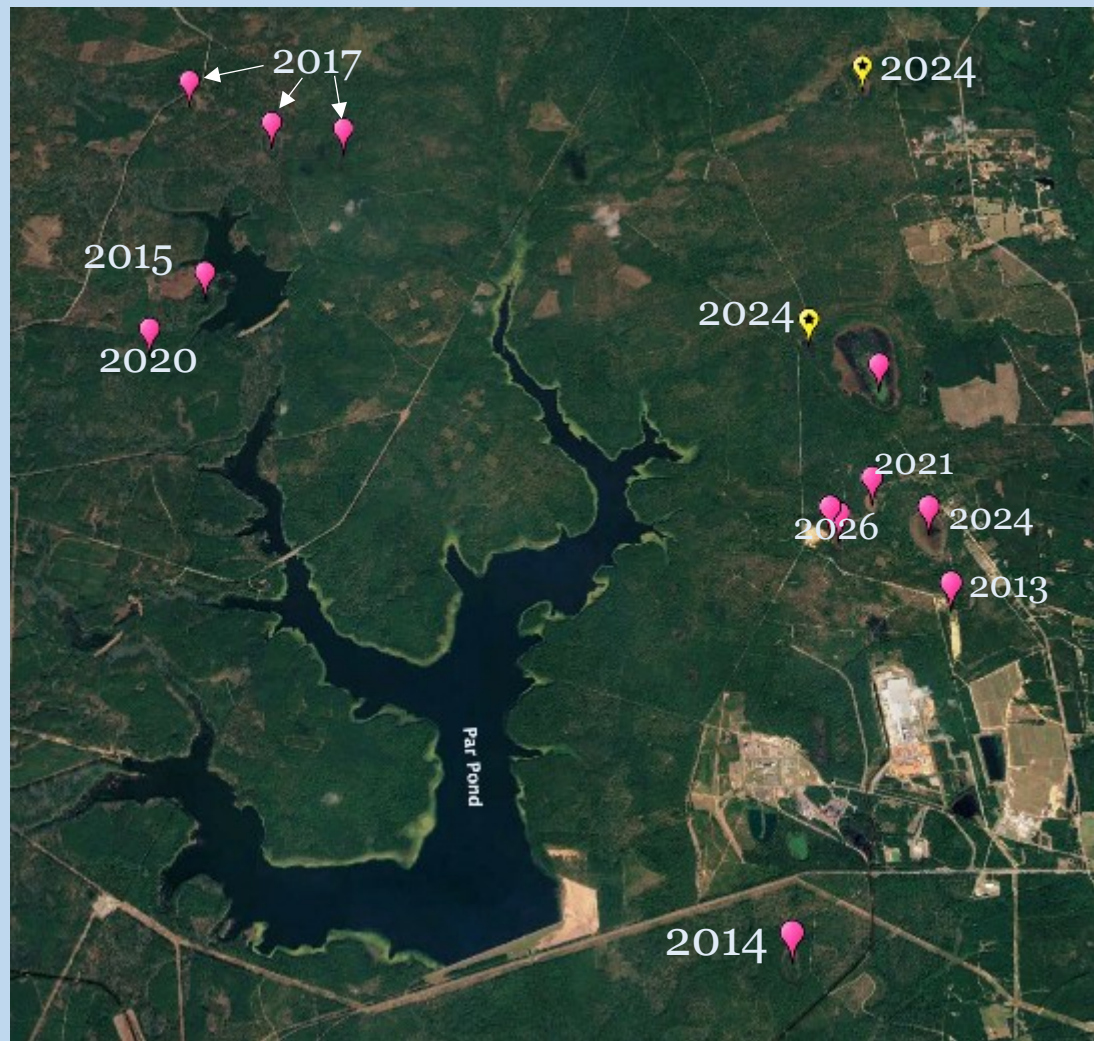


SURVEYS: TRAIN CONSERVATION K-9

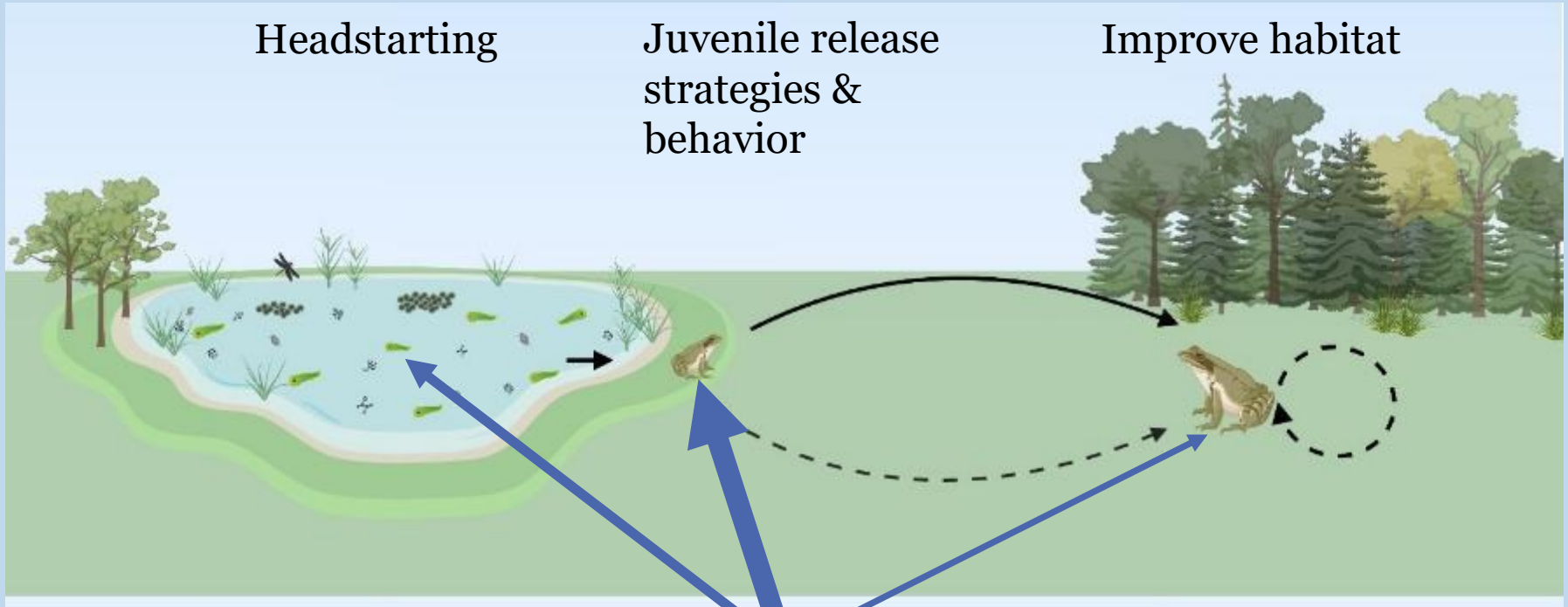


ALMOST NO BREEDING

- Even when we do find eggs
 - 1 – 4 per wetland

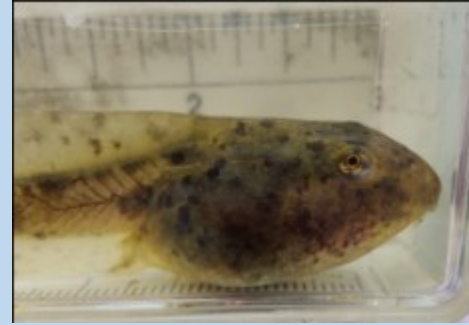


2. INCREASE POPULATION SIZES



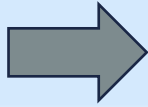
Ideally -- improve survival at all life stages!

HEADSTARTING TO INCREASE LARVAL SURVIVAL



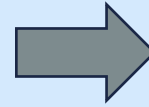
- Lance Lab started headstarting in 2020
- Rear between 500 – 1200 tadpoles a year

Research
alternative
release
strategies

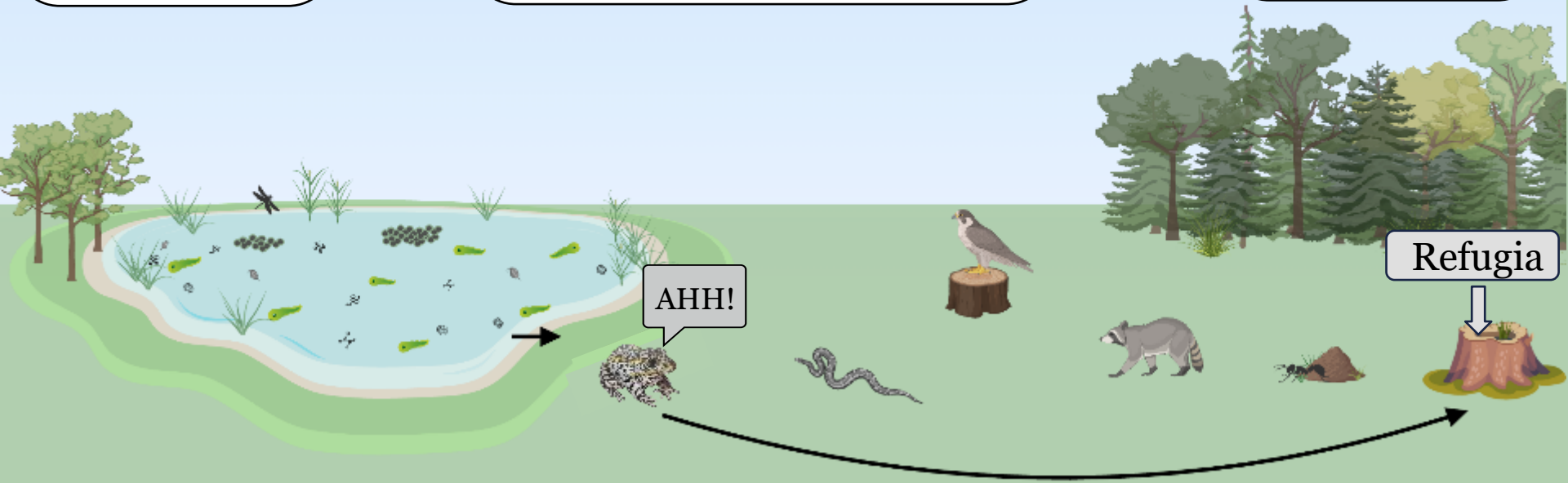


Movement distances

Use of underground refugia



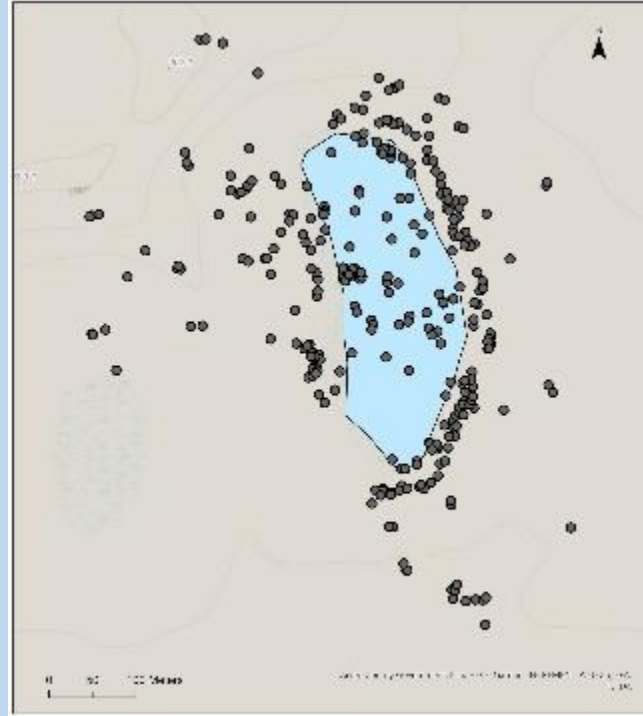
Improve
juvenile
survival



DEMONSTRATED FROGS WILL OCCUPY ARTIFICIAL BURROWS & THEY IMPROVE SURVIVAL



RADIOTRACKING TO INFORM BEHAVIOR, HABITAT SELECTION, & SURVIVAL



RADIOTRACKING TO INFORM BEHAVIOR, HABITAT SELECTION, & SURVIVAL



The image is a horizontal split-screen composition. The left half shows a forest of tall, thin pine trees with green needles, standing in a field of tall, yellowish-green grass. The right half shows a vast, flat landscape covered in dense, bright green grass under a blue sky with scattered white clouds. A semi-transparent white rectangular box with a thin black border is centered horizontally across the middle of the image, containing the text '3. HABITAT RESTORATION'.

3. HABITAT RESTORATION

Desired Condition

UPLAND RESTORATION



WETLAND RESTORATION



HOW DO WE GET RAPID RECOVERY AND WHAT DOES IT COST?

Tucker Stonecypher, MS 2023

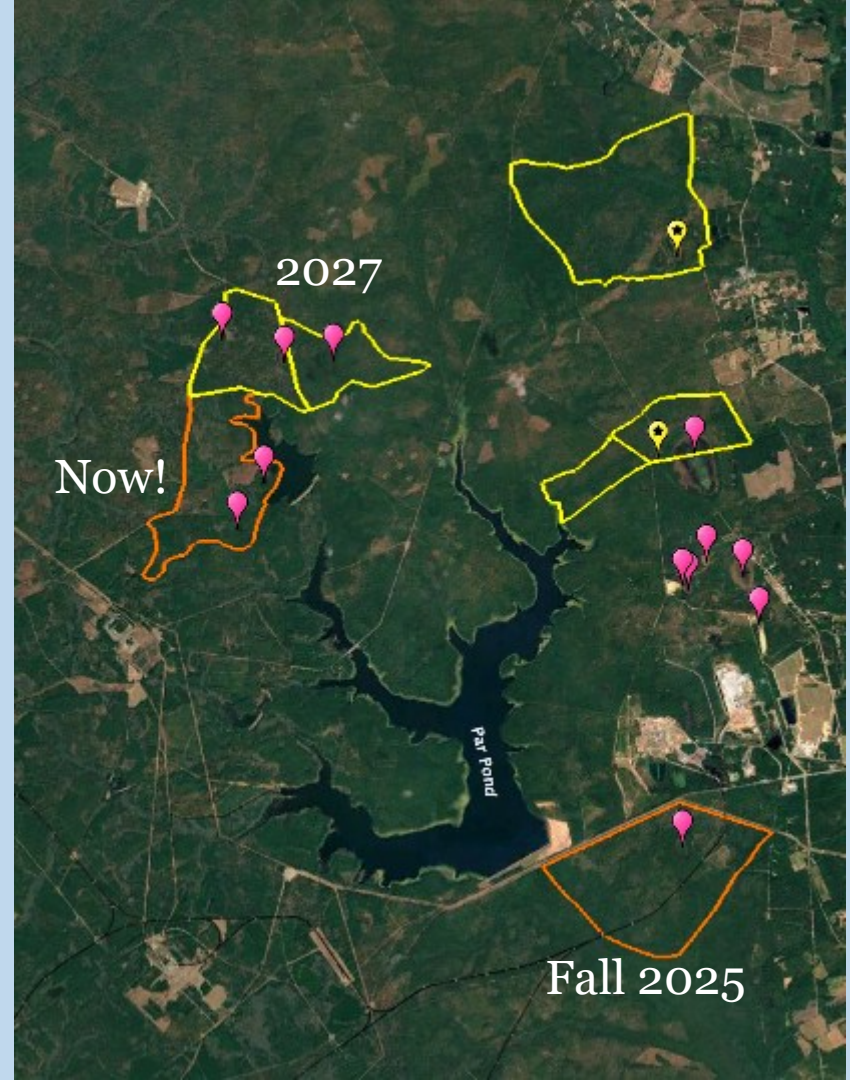


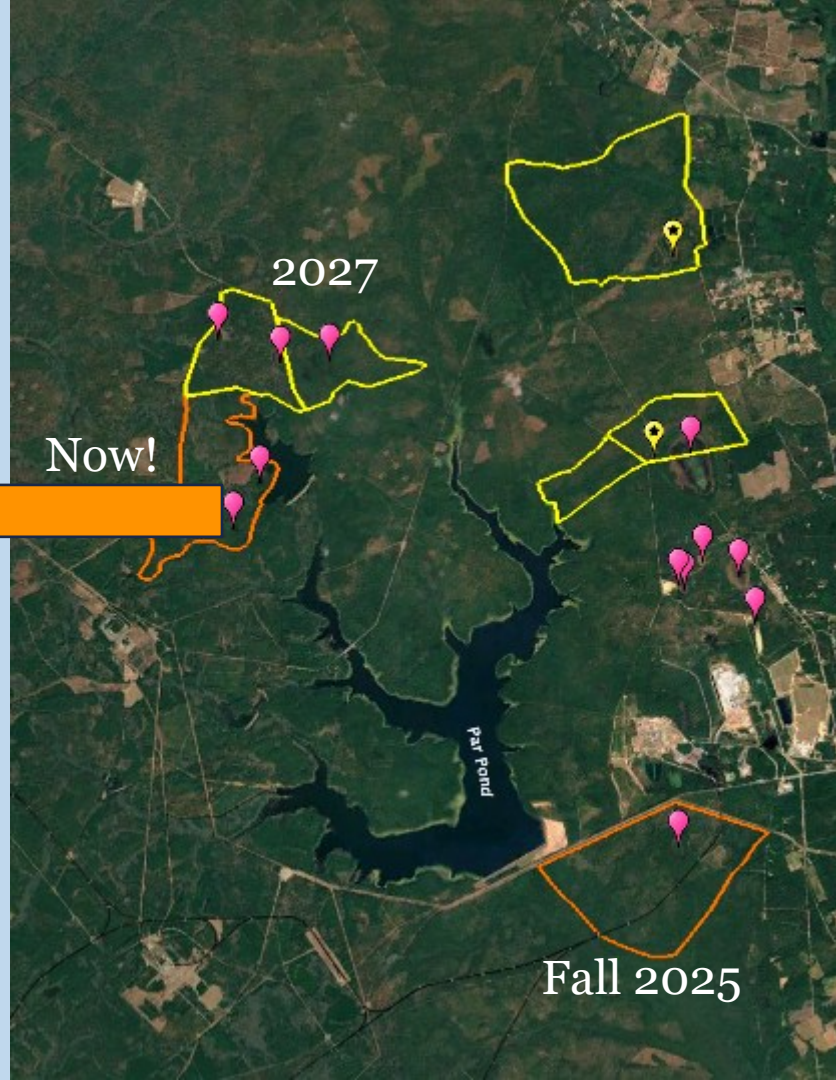
Gopher Frog Habitat Restoration Plan



Carolina Gopher Frog (*Lithobates, capito*), a South Carolina state-endangered-species.

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Crystal Smith, USFS-SR Timber Management Assistant
Kyle Cox, USFS-SR Wildlife Biologist
Tucker Stonecypher, SREL Research Professional





ACKNOWLEDGEMENTS & PARTNERS



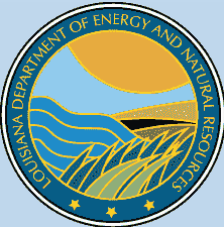
Audubon
Zoo



TANGLED BANK
CONSERVATION™



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THE Orianne
Society





QUESTIONS?

