Effects of Natural Area Site Characteristics on Resident Gopher Tortoise Populations Taryn Lagor, Dr. Alanna Lecher, PhD & Dr. Wayne Law, PhD INN College of Art and Sciences, Lynn University UNIVERSITY

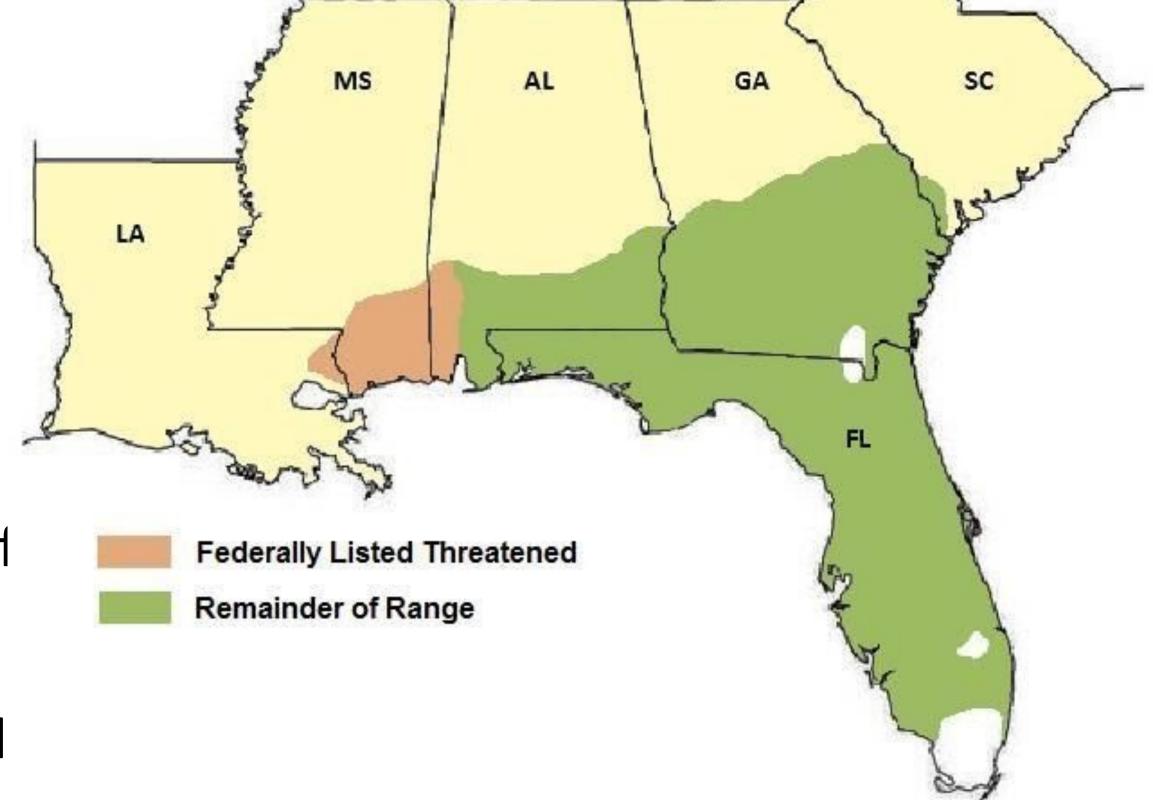
About Me

- South African born with a natural love of wildlife and the environment.
- Work history in equine training, dog/cat veterinary medicine, sea turtle rehabilitation, and zoo keeping of endangered species (parrots, native Florida bird, small monkeys, and antelope).
- Finished B.S. as adult in 2022 at Lynn University. Major in Biology, minor in **Environmental Science & Policy.**
- Upon finishing M.S. will be looking for a career in conservation research.
- In my spare time I enjoy spending time with my 2 small children and husband.

Introduction



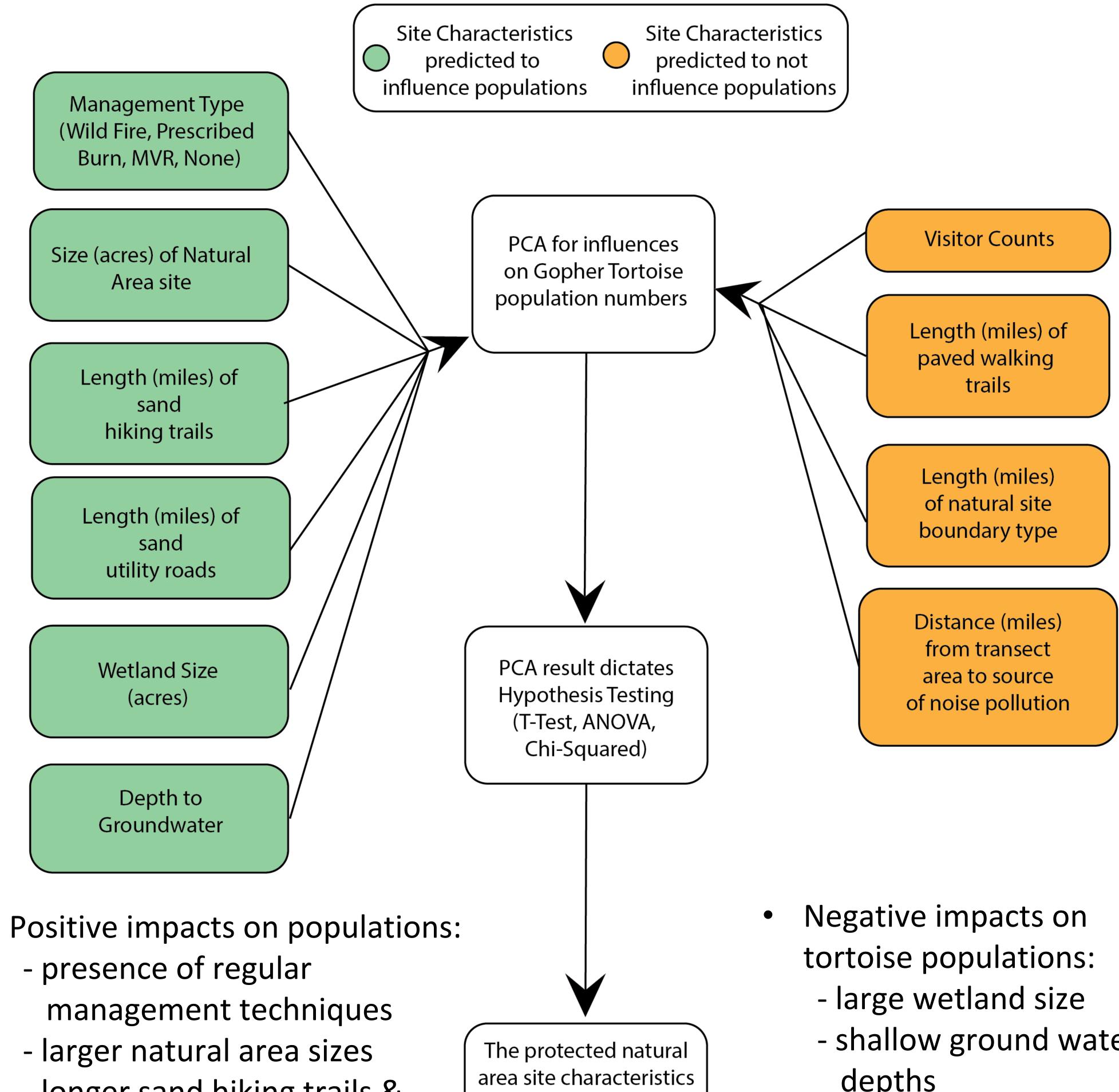
• The gopher tortoise (*Gopherus polyphemus*) is a threatened species native to the Southeast region of the United States.^{1,2,4}



- It is a keystone species, meaning it supports the survival and wellbeing of over 350 other species.⁴
- Dramatic loss of habitat has restricted many gopher tortoise populations to living in protected natural area sites.^{1, 2, 3, 5}
- Protected natural area sites have varying characteristics and are heavily managed by site managers using different management techniques.
- How are these different site characteristics and management techniques effecting the gopher tortoise populations that live within them?

Methods & Predicted Results

Figure 1 (below): Conceptual model shows the research plan along with predicted results.



- longer sand hiking trails & utility roads

that significantly effect Gopher Tortoise population numbers

The results of this study will aid in Gopher Tortoise conservation by informing on characteristics for future acquisition of protected natural area sites and best practices for natural area management.



1. Ashton, R. E., & Ashton, P. S. (2008). The natural history and management of the gopher tortoise. Gopherus polyphemus 2. Baskaran, L. M., Dale, V. H., Efroymson, R. A., & Birkhead, W. (2006). Habitat modeling within a regional context: an example using gopher tortoise. The American Midland Naturalist, 155(2), 335-351. 3. Dziadzio, M. C., & Smith, L. L. (2016). Vertebrate use of gopher tortoise burrows and aprons. Southeastern Naturalist, 15(4), 586-594. 4. Enge, K.M., Berish, J.E., Bolt, R., Dziergowski, A., and Mushinsky H.R. (2006). Biological status report – gopher tortoise. Florida Fish and Wildlife Conservation Commission, Tallahassee, USA 6pp. 5. Howell, H. J., Rothermel, B. B., White, K. N., & Searcy, C. A. (2020). Gopher tortoise demographic responses to a novel disturbance regime. The Journal of Wildlife Management, 84(1), 56-65.

- - shallow ground water depths