



Northern Red-Bellied Cooter Conservation

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NORTHERN RED-BELLIED COOTER



RESTORERS

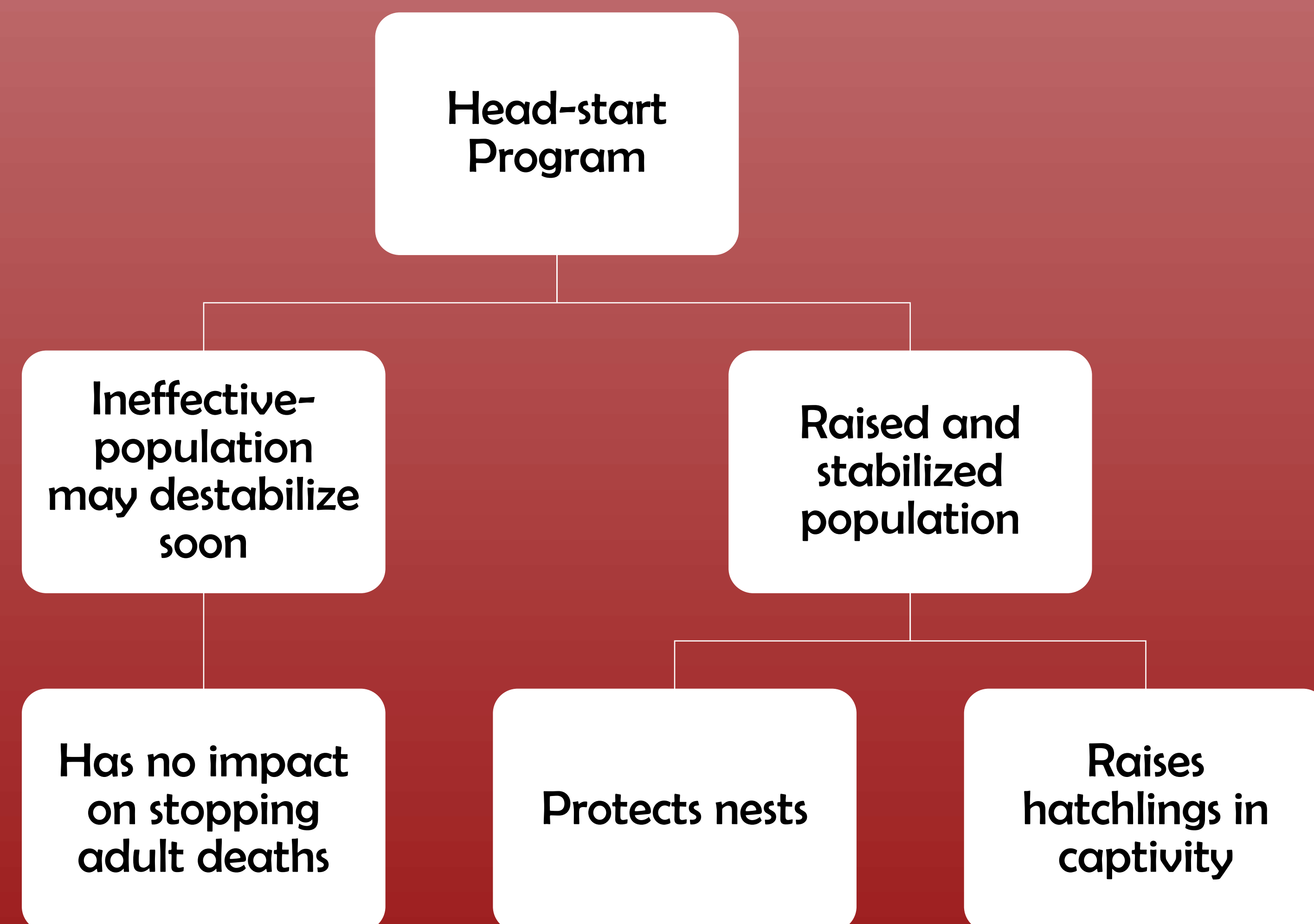
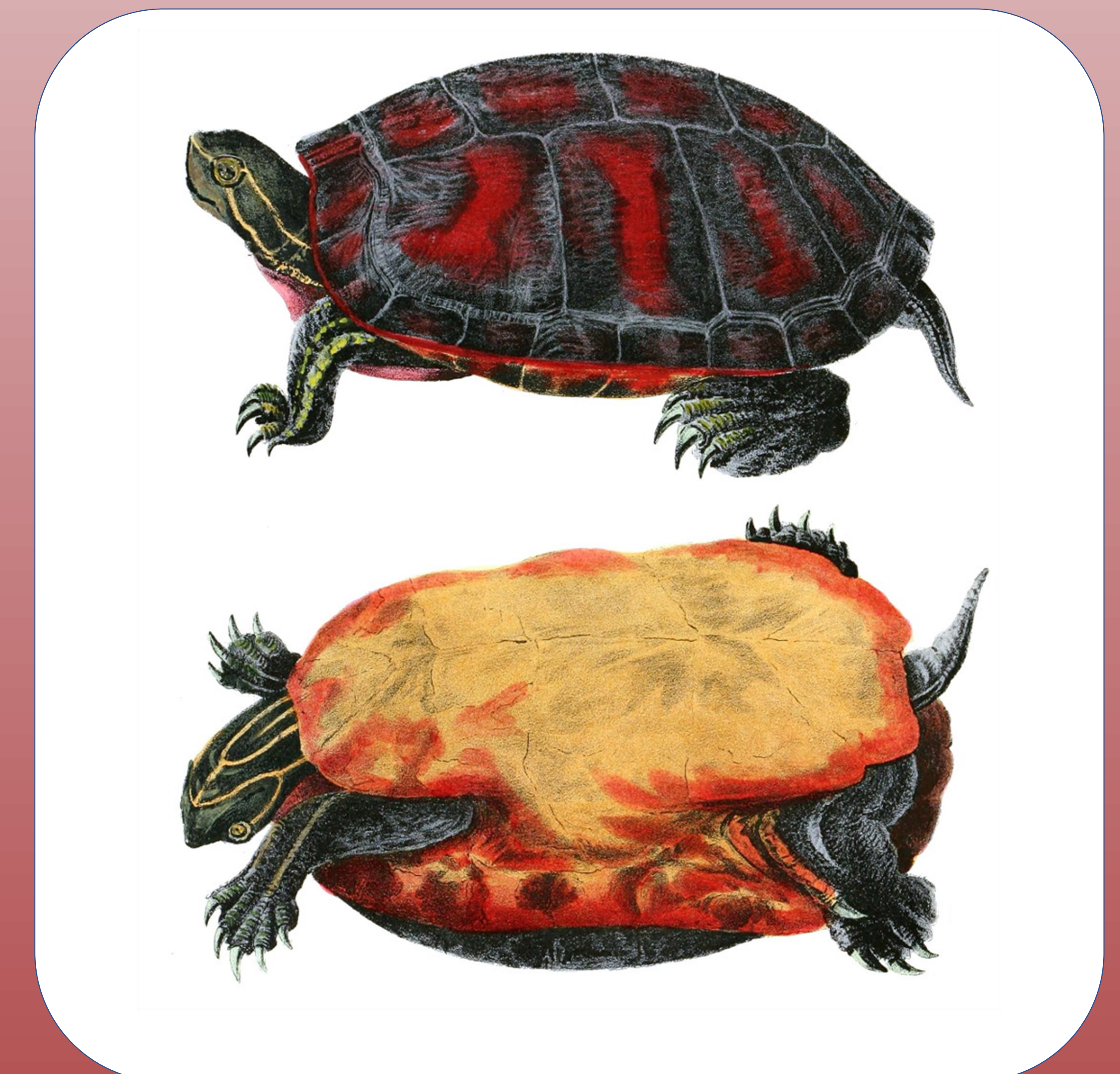
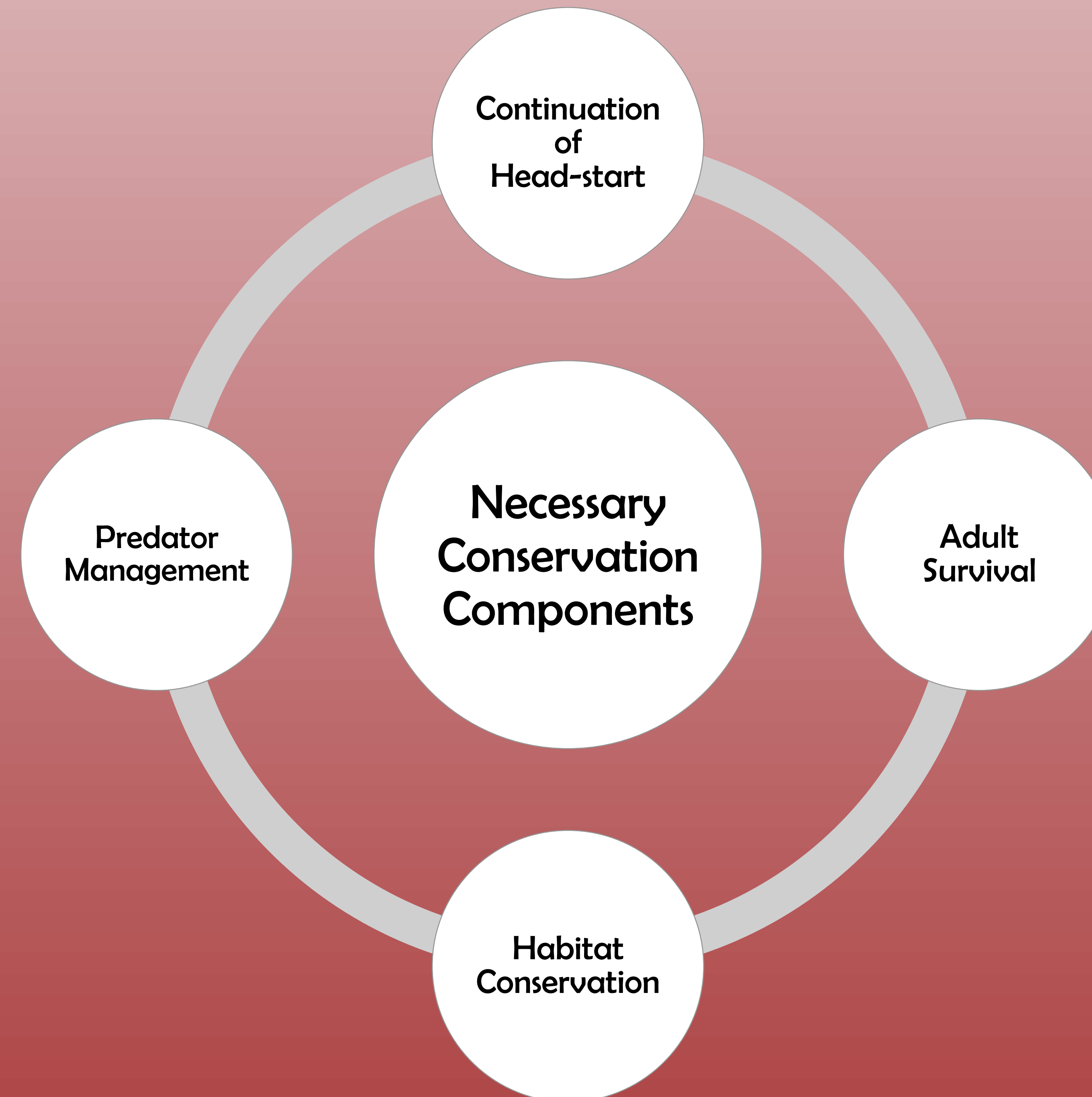
Problem Statement and Goal

The Northern Red-Bellied Cooter, has been on the Endangered Species list for over 30 years. The cooter has little to no known impact on the environment, however if it were to go extinct, we might then see the ecological impact. There are already several programs in place to help with conservation, however those are stopgaps. Our goal is to raise awareness and help fill in the gaps where other plans may fail.

Northern Red-Bellied Cooter
Pseudemys rubriventris
 Federal Status: endangered
 State Status: endangered

- High mortality rate for hatchlings
- High predation
- Habitat fragmentation
- Small range in Massachusetts

Range
 Plymouth and Bristol County



Outlook if Implemented

- Taken off the endangered species list
- Better environment for turtles
- Implemented with other species

Conclusion

The most effective means of conserving the red-bellied cooter would be the continuation of the head-start program, and addition of predator and habitat management to assure adult survival.

References

Hamer, A.J., Harrison, L.J. & Stokeld, D. Urban Ecosystem (2017). <https://doi.org/10.1007/s11252-017-0708-8>

Haskell, A., Graham, T., Griffin, C., & Hestbeck, J. (1996). Size Related Survival of Headstarted Redbelly Turtles (*Pseudemys rubriventris*) in Massachusetts. *Journal of Herpetology*, 30(4), 524-527. doi:10.2307/1565695

Heppell, S. S., Crowder, L. B., & Crouse, D. T. (1996). Models to Evaluate Headstarting as a Management Tool for Long-Lived Turtles. *Ecological Applications*, 6(2), 556-565. doi:10.2307/2269391

Spencer, R.-J., Van Dyke, J.U. and Thompson, M. B. (2017). Critically evaluating best management practices for preventing freshwater turtle extinctions. *Conservation Biology*, 31: 1340-1349. doi: 10.1111/cobi.12930

Suckling, K. F. 2007. Measuring the Success of the Endangered Species Act: Recovery Trend in the Northeastern United States. Tucson, AZ: Center for Biological Diversity.

Seigel, R. A., Anderson, K., Durkin, B., & Richards-Dimitrie, T. (2015). *Effectiveness of Nest Site Restoration for the Endangered Northern Map Turtles – Phase I* (Rep.). MD. Retrieved November 30, 2017 from http://www.roads.maryland.gov/OPR_Research/MD-15-SHA-TU-1-1_Effectiveness-of-Nest-Site-Restoration-for-EndangeredNMP_Report.pdf

U.S. Fish & Wildlife Service (2007, October 9). Plymouth redbelly Turtle (*Pseudemys rubriventris* bangsi). Retrieved October 08, 2017. Retrieved from: <https://ecos.fws.gov/ecp0/profile/speciesProfile?sid=451>

Acknowledgements

Thank you to our Professors, for all the help and feedback on this project. We would like to thank Jon Regosin for giving his time to talk with us and for all the information he gave us. We would also like to thank Brian Bastarache for giving us more insight into how the HeadStart program works. Also a special thanks to Emma Saunders for helping design our logo.