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16. © Biology, ecology, and conservation of Navasota ladies' tresses (*Spiranthes parksii* Correll), an endangered terrestrial orchid of Texas. Wonkka, C. L., Rogers, W. E., Smeins, F. E., and Hammons, J. R. Native Plants Journal 13(3):237-243. 2012.

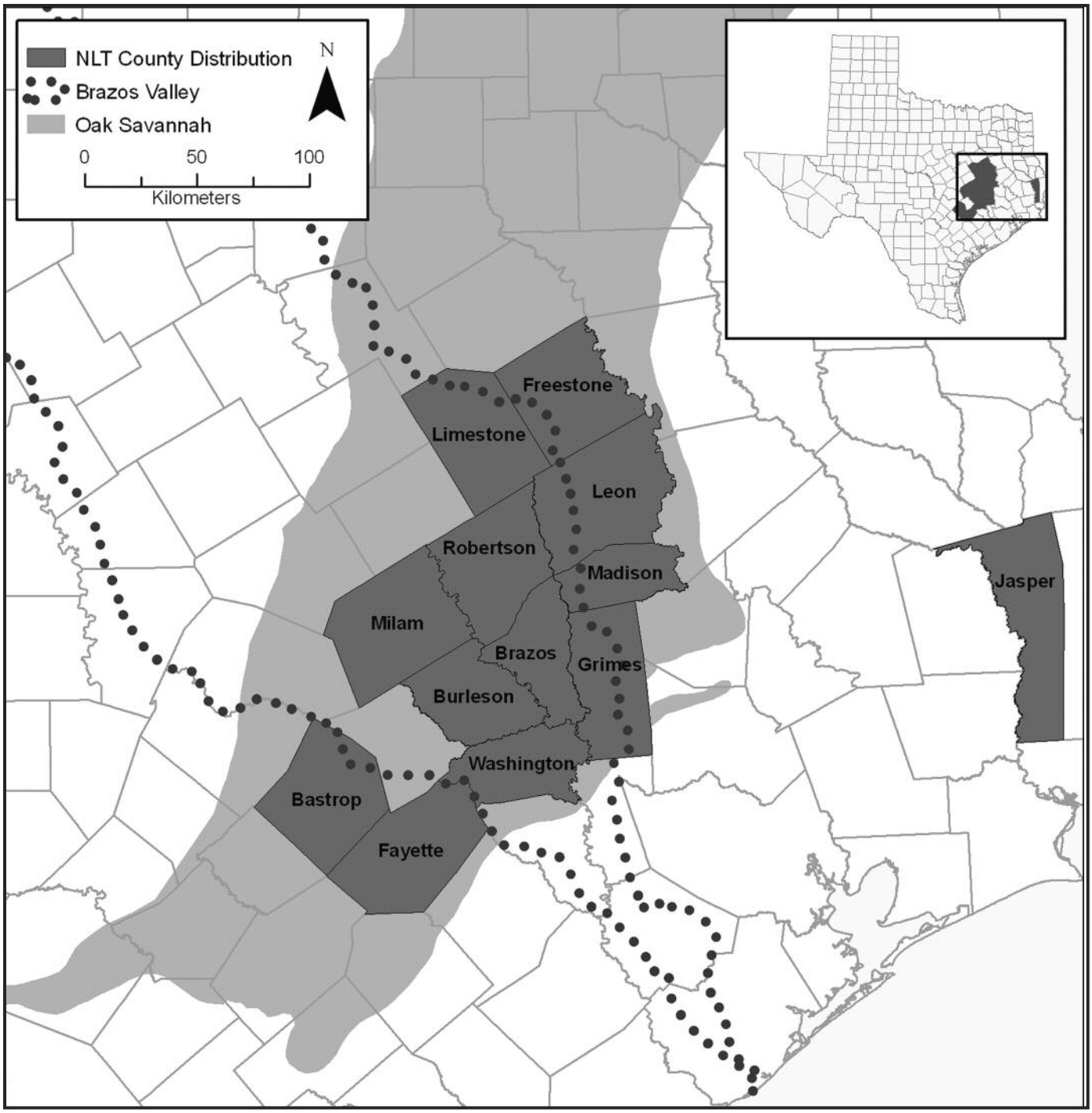

Figure 1. Distribution of *Spiranthes parksii* populations.

BIOLOGY, ECOLOGY, AND CONSERVATION OF

Navasota ladies' tresses

(*Spiranthes parksii* Correll)

AN ENDANGERED TERRESTRIAL ORCHID OF TEXAS

Carissa L Wonkka, William E Rogers, Fred E Smeins, J Ryan Hammons, Sarah J Haller, and Martha C Ariza

ABSTRACT

Navasota ladies' tresses (*Spiranthes parksii* Correll [Orchidaceae]) is a federally and state-listed endangered orchid of east-central Texas. Habitat loss and degradation related to urban and industrial development are major threats to *S. parksii* populations. To ensure recovery, a complete understanding of the population dynamics, ecology, and biology of an endangered species is necessary to foster effective conservation that is compatible with human population growth and continued development. Here we provide an overview of the known aspects of *Spiranthes parksii* ecology and biology and highlight factors with implications for species conservation. Our intention is to provide a framework for development of future *S. parksii* related studies and background for those interested in *S. parksii* conservation and management.

Wonkka CL, Rogers WE, Smeins FE, Hammons JR, Haller SJ, Ariza MC. 2012. Biology, ecology, and conservation of Navasota ladies' tresses (*Spiranthes parksii* Correll), an endangered terrestrial orchid of Texas. Native Plants Journal 13(3):236–243.

KEY WORDS
Orchidaceae, natural history, habitat management

NOMENCLATURE
USDA NRCS (2012)

CONVERSIONS
1 mm = 0.04 in
1 cm = 0.4 in
1 m = 3.3 ft
(°C * 1.8) + 32 = °F