

## CONSERVATION OF *SILPHIUM ALBIFLORUM* (ASTERACEAE), A NORTH CENTRAL TEXAS ENDEMIC PLANT

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White Rosinweed (*Silphium albiflorum* A.Gray ([Asteraceae]) is a North Central Texas endemic plant species occurring in the East Cross Timbers and Fort Worth Prairie vegetation zones. As with many endemic species, White Rosinweed has a narrow habitat requirements, restricted geographic range and small population sizes. We have documented key demographic characteristics of the populations occurring in Tandy Hills Natural Area in the city of Fort Worth, the only substantial populations under management. Field and laboratory research geo-referenced 55 meta-populations, characterized survivorship, fecundity and determined reproductive value ( $R_0$ ), generation time and, intrinsic ( $r$ ) and finite ( $\lambda$ ) rates of increase to model population viability. Modeling meta-population dynamics permit prediction of equilibrium patch occupancy and extinction threat. Genetic fingerprinting provides a glimpse at relatedness among meta-populations and a basis for inferring rates of inbreeding.