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# EFFECTS OF SOURCE POPULATION AND RELEASE STRATEGY ON SURVIVAL AND DISPERSAL OF TRANSLOCATED SCALED QUAIL IN THE ROLLING PLAINS OF TEXAS—A PRELIMINARY REPORT

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## ABSTRACT

Scaled quail (*Callipepla squamata*) have declined 3.5% annually in Texas from 1966-2013, but declines have not been uniform across the state. The Rolling Plains Ecoregion has experienced a 6.8% decrease during this period, while the western Edwards Plateau has remained stable. Habitat loss that has contributed to scaled quail decline also inhibits recolonization. Translocation has become an increasingly popular tool to reestablish populations for recreational or conservational purposes. Overall success rate of translocations is low and has prompted research into factors that contribute to the establishment of a self-sustaining population. Source population and release strategy are two translocation tactics that may influence the success of scaled quail translocation efforts. Best practices for translocation are often species and location specific and, thus, it is critical for translocation techniques to be tested across a variety of species and landscapes. We used radio-tagged quail to estimate survival and dispersal of translocated, wild-caught scaled quail as a function of source ecoregion and a delayed release treatment using multi-state models in Program MARK. Specifically, we compared quail sourced from within the Rolling Plains and from the Edwards Plateau, as well as a delayed release treatment consisting of 4–8 week holding periods on site.

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**Key words:** *Callipepla squamata*, dispersal, reintroduction, scaled quail, survival, translocation.

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