

Reproductive Ecology of White-tailed Jackrabbits in Central Iowa

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Duration: June 2010 to May 2013

Funding Source(s): Iowa Department of Natural Resources, Wildlife Diversity Small Grants Program

Goals and Objectives:

- To identify number and timing of births of litters in white-tailed jackrabbits in central Iowa
 - To determine number of offspring born per litter
 - To assess habitat use by females and young offspring
 - To estimate survival of young jackrabbits
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Progress:

Although we captured, opportunistically, three young jackrabbits the year before this study began, all from different nests, we were unable to find any young in 2010, despite radio-tracking collared females and conducting intense searches in fields of their home ranges. We have continued to track radio-collared male and female jackrabbits to supplement the sample size from a previous study, for estimating survival rates. In an attempt to provide useable information as an outcome of this grant, we are gathering information on the occurrence of jackrabbits across the state of Iowa to characterize, using GIS, the types of landscapes in which remnant populations still exist.

Future Plans:

We met with DNR and other biologists to pool data on jackrabbit locations in the state. These locations come from the annual deer spotlighting data, August roadside surveys, road-killed jackrabbits obtained for a previous population genetic study, and biologist and citizen reports of remnant jackrabbit populations and sightings. We are attempting to convert the data into GIS locations (points or areas, depending on the precision of the location data), and evaluate the likelihood that the locations represent incidental or dispersing individuals vs. potential remnant populations. We expect the result to be a map of Iowa indicating likely locations of remnant populations, which may be used to characterize associated landscape features. We expect the resulting information to assist in focusing efforts to locate and monitor remaining populations of this declining species in the state.