

Factors affecting survival in white-tailed deer fawns

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Graduate Student: Patrick McGovern (M.S.)

Collaborators: Iowa DNR, private landowners

Duration: January 2015 to May 2018

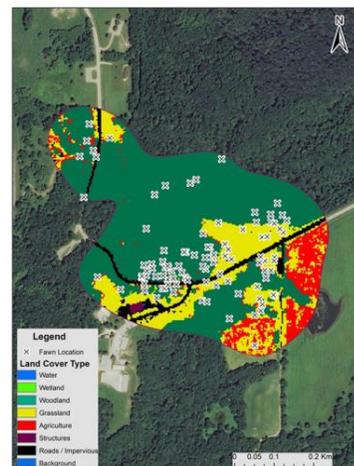
Objectives:

1. Estimate fawn survival rates and compare survival between sexes and habitat characteristics.
2. Identify cause-specific mortality for fawns.
3. Evaluate how home range size impacts fawn survival.

PROGRESS: Identifying factors associated with fawn recruitment is critical to understanding white-tailed deer population dynamics and effectively managing deer populations. Little work has been done in landscapes as agriculturally intensive as Iowa and no recent information exists for deer in Iowa. We are conducting this study in Boone County, Iowa. The study area for 2015, a pilot season, was centered on Ledges State Park. We focused on learning about how does behave with respect to fawn placement and to get a better idea of the effort it takes to capture and track fawns on this landscape. Graduate student, Patrick McGovern, began working on the project in April. He and 2 undergraduate technicians spent the summer capturing and monitoring fawns. Along with volunteers, we searched the landscape in for fawns from mid-May through early June. We captured and placed radio collars on 12 fawns. From capture through mid-August, collared fawns were monitored for survival and located twice a day; once visually and once through telemetry. From August through December, fawns are monitored for survival and located twice a week. When a collar gives a signal indicating that a fawn has likely died, we locate the collar and collect any remains for necropsy. In addition to monitoring fawn locations and survival, we incorporated monitoring to evaluate if and how fawn location varies as a function of time of day. We also collected data to ascertain information about error associated with telemetry data.

IMPACTS: Pat presented a poster at the NREM Graduate Student Organization poster session. We have also created a website that will update interested citizens on the project.

FUTURE PLANS: Pat spent the fall semester analyzing data collected during summer 2015. He has been quantifying fawn home range sizes and characterizing habitat composition and habitat selection within fawn home ranges. Analysis of the 2015 data is helping us to prepare for the subsequent two field seasons where we expect to work across a larger spatial area in Boone County and capture a greater number of fawns.



Example of a fawn home range