



# Deer Research Project

## *Survival, Recruitment and Movements*

### What is it?

The Missouri Department of Conservation and the University of Missouri are working together to evaluate white-tailed deer survival, reproduction, and movement patterns within two contrasting Missouri habitats. The findings will influence deer management in Missouri for decades and will be applied to deer population models, disease management protocols, and localized deer management efforts.

### Why is the project occurring?

In the late 1980s and early 1990s, the Department studied deer survival in Missouri. However, since then significant, large-scale changes have occurred resulting in unknown impacts to deer populations. These changes include shifts in habitat conditions, hunter goals, deer densities, and harvest vulnerability. If estimates do not reflect current conditions, then the accuracy of the Department's population models and effectiveness of management efforts could be affected.

### Where will the research take place?

This research is occurring in four Ozark counties (Douglas, Howell, Texas and Wright) and four Northwest counties (Andrew, DeKalb, Gentry and Nodaway).

These are contrasting areas with regards to the amount of public land, habitat cover (ex: forest, agriculture, pasture), and harvest regulations, which can impact deer survival and movement. Two different study areas reflect the need to represent the diverse habitats in Missouri.



Biologist secure a deer as they draw blood and outfit it with a GPS collar.

## How will the research be conducted?

The study, which began in January 2015, will be conducted for five years. To monitor deer survival and movements, deer of all age and sex groups will be captured and fitted with a GPS collar. We will annually replenish the sample of collared deer due to natural and hunting mortalities, as well as deer maturing to older age classes. Adult deer will be captured from January through March using traps and nets. Fawn capture will occur late April through June using various methods.

## What You Can Expect?

Research staff are permanently located in the study areas to capture and monitor deer, so there is a year-round Department and University presence in these areas. However, we will only access properties for which the landowner has provided permission.

During the study, you may notice deer with collars or small metal ear tags; we will be monitoring the locations of deer remotely and do not need reports of deer sightings. However, if you harvest a marked deer or find a dead deer with a collar or ear tag, please contact the number on the collar or tag as soon as possible.

## How Can You Help?

One of the most important ways to assist with this project is to *NOT* let the presence of a collar impact your decision to harvest a deer. It is critical for research purposes that collars do not bias hunter decisions. Therefore, if you would normally harvest a deer that happens to be collared, do so and please contact the number listed on the tag/collar as soon as possible. Likewise, if you would normally not harvest that deer, then do not let the presence of a collar impact your decision.

Since this project is truly a collective effort by the Department, University of Missouri, and most importantly local landowners and hunters, there are other ways to assist. We hope to gain access to properties for project activities such as trapping adult deer, locating fawns, and investigating mortalities.

## Questions?

If you have questions or are interested in allowing deer trapping on your property, contact project leader Jon McRoberts at [mcrobertsj@missouri.edu](mailto:mcrobertsj@missouri.edu) or 573-881-1978.

For questions regarding deer management in Missouri, contact Missouri Department of Conservation Deer Biologist Emily Flinn at [emily.flinn@mdc.mo.gov](mailto:emily.flinn@mdc.mo.gov) or 573-815-7901, ext. 3619.



*We are excited to have the opportunity to conduct one of the largest white-tailed deer research projects in the nation, with the assistance of Federal Aid in Wildlife Restoration Funds.*

