

Department of Natural Resources SCI-MIC Supported Research Projects 2016 Progress Reports

Predator Prey Project

This cooperative study with Mississippi State University investigating the role of predators, winter weather, and habitat on deer fawn survival in the Upper Peninsula is one of the best-documented research projects conducted by the Michigan DNR. You can find progress reports and links to technical publications from this research project on the project's website:

<http://www.fwrc.msstate.edu/carnivore/predatorprey/index.asp>

There is also a link to the website on the SCI MIC website:

<http://www.scimic.org/projects.html>

The project also maintains a Facebook page that is updated with current activities and interesting observations from the field. Follow the link below to keep up with the latest news:

<https://www.facebook.com/MIpredprey>

This past year, we completed fieldwork in the mid-snowfall zone study area (Project Phase II). The graduate students are currently analyzing data from the past 3 years and beginning to make comparisons with our findings from the low-snowfall zone study area. In addition, we began preliminary work in the high-snowfall zone. We established our field housing, captured and collared black bears, established hair snare sites for bobcats and bears, and conducted surveys for white-tailed deer, coyotes, and beavers. Deer trapping will begin in early January.

The Department has already incorporated project's findings into the deer management program. For example, the large decline of the deer herd we documented in the winters of 2013 and 2014 provided important information when developing deer harvest recommendations. In addition, because the study demonstrated the importance of fawn survival to deer population growth, we have implemented a spring fawn to total deer count to index fawn recruitment. Continued use of this monitoring program will help us better understand the effects of winter on survival and fawn recruitment. We have identified that each winter can affect the deer population in different ways, not just lower survival, but a hard winter can also leave many deer in poor condition that influences survival of their fawns and also result in lag effects the following year, even when the following winter is milder.

Department of Natural Resources SCI-MIC Supported Research Projects 2016 Progress Reports

To date, the project has produced 16 peer-reviewed scientific papers, and over the course of the study, project staff have disseminated research results to various stakeholders/user groups every 13 days, on average.

Partners: Safari Club International-MIC; Safari Club International Foundation; Northwoods Chapter Safari Club International; U.P. Whitetails Association, Inc., Menominee County Chapter; Wildlife Unlimited of Delta County; and Mississippi State University

Time Line and Budget: The full course of this project is anticipated to be conducted in three snowfall zones in the UP with a total duration of approximately twelve years. Total project costs could exceed \$3,000,000.