Department of Natural Resources SCI-MIC Supported Research Projects 2013 Progress Reports

Southern Michigan Black Bear Project

We initiated this project in March 2010 when MDNR radio-collared one female and one male bear in dens in Oceana County. We collard an additional 4 bears (1 female, 3 males) in 2011, and 2 bears (1 female, 1 male) in 2012. The primary study area has focused on Newaygo and Oceana Counties, however; bears have been collared as far south as Merrill and Whitehall, MI.

Low capture success and failure of some GPS collars contributed to a re-evaluation of trapping efforts for 2013. With funds provided by SCI-MIC and UP Bear Houndsmen, we purchased 7 new GPS collars in spring 2013. MDNR also provided funds to MSU for supporting two undergraduate students to assist with summer bear trapping. In summer 2013, we captured and collared 10 bears (5 females, 5 males). One female was free-darted with equipment originally purchased for this project by SCI-MIC. An additional adult female that was originally captured in March 2010, but later slipped her radio-collar, was recaptured on June 1, 2013. All 5 females collared in summer 2013 were of breeding age and 3 were suspected of having cubs.

We conducted preliminary analyses of GPS locations collected from 7 bears and presented results at the 2013 Wildlife Society Conference in Milwaukee, WI. Our analyses indicated that bears selected for wetlands and forested habitats while avoiding agriculture. Preliminary results suggest that range expansion by bears into southern Michigan may be unlikely, however; additional data is needed to provide confidence in these findings. Additional findings continue to confirm that bears in Michigan have home-ranges that exceed most other eastern black bears by up to 5X. Adult male home-ranges are typically 100s of square miles in area.

Seven of the 10 bears collared in summer 2013 are still being monitored (2 males were legally harvested and the collar was removed from an additional yearling male that was accidentally captured in a trap set for raccoons). Using a lap top computer purchased with funds provided by SCI-MIC, we will download data stored on the GPS collars of 7 bears during den visits in winter 2014. We will also replace the batteries in GPS collars so that we can collect additional data in 2014. In anticipation of accessing 5-7 yearling bears in dens with collared adult females, we purchased 7 yearling bear GPS-collars with funds provided by SCI-MIC and MBHA. After winter den visits we anticipate having 12-14 bears equipped with GPS collars for monitoring in 2014.