

---

## **\*\*UNDERSTANDING HOW CHARACTERISTICS OF THE NEST SITE AFFECT NEST SUCCESS OF WILD TURKEYS (POSTER)**

Thomas A. Sutton\*, Ecology Department, Montana State University, Bozeman  
Michael J. Yarnall, Ecology Department, Montana State University, Bozeman  
Andrea R. Litt, Ecology Department, Montana State University, Bozeman

Wild turkeys (*Meleagris gallapavo*) are a highly-desirable game species throughout the United States, but harvest records in the northern Black Hills, South Dakota suggest that this population is declining. We wondered whether vegetation characteristics at the nest site would affect nest fate (success/failure). We monitored 40 nests during summer 2016 to determine nest fate and 27 were successful ( $\geq 1$  egg hatched). At the actual or expected hatch date, we quantified characteristics of the understory vegetation at the nest bowl, namely total cover, shrub cover, woody debris, and the degree of visual obstruction. We compared these characteristics between successful and unsuccessful nests. Successful nests had slightly less woody debris and total cover than unsuccessful nests. We did not detect differences in shrub cover or the degree of visual obstruction. Our results suggest that there may be some optimal amount of total cover and woody debris at the nest bowl that contributes to a higher chance of nest success. We recommend additional research that focuses on how vegetation characteristics found at nest sites compares to what is available. This information in conjunction with our findings could provide guidance for managers regarding vegetation characteristics that may be optimal for nest success. Although these data may help manage turkey populations, nesting represents only one part of the life cycle of a wild turkey. We recommend that managers strive for a mosaic of vegetation characteristics to accommodate the needs of turkey populations throughout their life history.