## Title:

Intentions of Landowners towards Active Management of Ecosystem in South-central USA for Deer Habitat Management

## Abstract

Active management such as prescribed fire and thinning can restore the savanna and prairie ecosystem to maintain a full suite of ecosystem services and creates a suitable habitat for wildlife such as white-tailed deer (*Odocoileus virginianus*). Active management, however, comes with the cost of management and acceptance of management tools. The south-central transitional ecoregion is increasing in woody plant dominance due to the exclusion of fire and other anthropogenic factors which otherwise was a mixture of forest, savanna, and tallgrass prairie. Deer hunting is a vital source of revenue generation to offset the landowner's management cost in the region. We studied Oklahoma landowners' perceptions regarding active and sustainable management of forest and rangeland for deer habitat using two established theories of reasoned action and planned behavior as well as expanded theories adding moral norms. We analyzed mailed survey data using structural equation modeling. We found that subjective norms and perceived behavior control significantly affected deer hunting intention when moral norms were introduced into the model. Attitudes independently significantly affected intentions of deer hunting but have negative relations with the intentions. The study suggested that landowners have positive social pressure and were interested in active management but associated financial burden and risk could be shaping negative attitudes.

## Keywords:

Theory of Planned Behavior, Theory of Reasoned Action, Moral Norms, Prescribed Fire, White-tailed Deer (*Odocoileus virginianus*)