



Lincoln University

College of Agriculture, Environmental and Human Sciences

# Evaluating Goats for Biological Vegetation Control



*In Missouri, the demand for goat meat is increasing. In 2012, Missouri ranked third nationally in inventory and sales of goats (USDA-Census of Agriculture 2012). Even farmers with few resources can use goats to control weeds, which will open up areas to grow crops. This works well in Missouri, where*

*farmland is about 16 percent wooded and 25 percent pasture. Silvopasture is the term used to describe the combination of livestock, timber and forage on one patch of land. It helps the environment and is cost-effective. It can also reduce the carbon imprint and soil erosion. Also, silvopasture has been shown to improve soil fertility and water retention.*

## Research Methodology, Results and Impacts

The research team consisted of Extension specialists from Lincoln University Cooperative Extension (LUCE), Langston University, Crowder College and the United States Natural Resources Conservation Service (USDA-NRCS). The team evaluated the behavior of goats, their patterns of movement, plant selection, parasite burden, weight gain, and impact on vegetation and soil fertility. The goal was to develop best management practices for small farm goat producers using woodlands.





Over the course of four years, this project compared four breeds of goat to discover which breed best controls brush and weeds. The goal was to kill or control invasive plant species such as honeysuckle, multiflora rose, poison ivy, blackberry, wild grape, buckthorn and kudzu. This allows native plants to thrive. The impact on the invasive species differed based on location and browsing duration. Grazing from May through October showed the most impact on the targeted invasive plants.

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[http://www.agcensus.usda.gov/Publications/2012/Full\\_Report/Census\\_by\\_State/](http://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/)

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