

**Small Ruminant Biological Control of Amur Honeysuckle and Common Buckthorn: Is it a Viable Option?** Allen Casey<sup>1</sup>, Charlotte A. Clifford-Rathert<sup>2</sup>, Michael Schulte<sup>2</sup>, Luke Wilbers<sup>2</sup>, Cody Cave<sup>2</sup>, James Caldwell<sup>2</sup>, Ron Cordsiemon<sup>1</sup>, Jerry Kaiser<sup>1</sup>, Nick Adams<sup>1</sup>, Mark Kennedy<sup>3</sup>, and John Turner<sup>4</sup>. 1/ USDA, NRCS Plant Materials Center, Elsberry, MO 63343, (573) 898-2012, [allen.casey@mo.usda.gov](mailto:allen.casey@mo.usda.gov). 2/ Lincoln University, Cooperative Extension and Research, Jefferson City, MO. 3/USDA, NRCS, Houston, MO. 4/USDA, NRCS, Retired.

Amur honeysuckle (AH; *Lonicera maackii* Herder) and common buckthorn (CB; *Rhamnus cathartica* L.) are tall shrubs that are common invaders in forested lands across central and eastern United States. These shrubs grow readily in many soil types, climatic environments, and are often so prolific that they form dense understory thickets, that restrict native plant growth and tree seedling establishment. Mechanical and chemical control can be effective methods for controlling these species but are expensive, and generally require many follow-up treatments to be successful. If good economic returns can be demonstrated by grazing AH and CB with small ruminants, then this control method may be appealing to producers. During the 2011 grazing season (May – Aug.), mature Katahdin ewe hair sheep (n = 49) with lambs, grazed four paddocks of AH and CB to a height of 4.5 ft in Lincoln County, Missouri. Ewes had an average daily gain (ADG) of -0.37 lbs, total gain of -12.5 lbs, mean body condition score of 3, and mean FAMACHA<sup>®</sup> scores of 2. Fecal nematode counts were conducted approximately every 21 days and counts increased on average by 485 over the course of the grazing season, whereas coccidia counts decreased (-648 mean). Lambs had a mean birth weight of 13.4 lbs, mean end weight of 30.3 lbs, mean ADG of 0.4 lbs, and a mean total gain of 16.8 lbs. Grazing AH and CB to a height of 4.5 ft (1.4 m) may alter ewe performance but may not negatively impact lamb performance.