

Rangeland and Pasture Brush Control

Submitted by: David Kehler, County Extension Director/Agriculture Agent

Brush control is a major problem in eastern Kansas. The main objective of brush control is to obtain an acceptable population of woody plants on rangeland to increase or maintain an optimum amount of area available for livestock grazing. Total removal of all woody plants; however, may not be necessary. Brush and trees around watering areas, in ravines, and other areas where they are difficult and expensive to control can provide shade and winter protection for livestock. Complete removal of plants in that location would have little effect on livestock carrying capacity.

Prescribed burning can oftentimes keep rangeland almost free of unwanted brush. And, it can also be a low-cost way to control many woody species after establishment. Of course, it is most effective when brush and trees are small, and adequate fuel (old grass) is available to generate a hot fire. Seedlings and sprouts will be controlled by fire, whereas large trees probably won't be controlled. Burning in late spring for three or more consecutive years is required to control species that re-sprout. However, sumac can be enhanced by a late spring burn because the plant may be dormant when the prescribed burn occurs. Cool season grass should not be burned except to eliminate red cedar. That prescribed burn should occur in mid-late February. Annual burning will harm brome and fescue.

All chemicals must be applied according to the directions on the label. Be sure to read all label information including rate, timing and safety issues. Most woody plants are susceptible to herbicides when applied properly. After heavy stands are reduced to a manageable level, spot treatment rather than broadcast treatment is best. The application of herbicides can be done by one of several methods. Be sure method of application is approved on herbicide label.

Basal Bark: Some species can be controlled by applying a mixture of diesel and herbicide to the lower 18 to 24 inches of the trunk. Be sure to apply mixture all the way around the trunk.

Cut Stump: Cutting trees and brush at or near ground level will result in re-sprouting with many species, except red cedar. Treating the cut surface with an herbicide after cutting will usually prevent regrowth. Treatment should be applied soon after cutting.

Pellets or Granules: Spot treatments applied by hand or aerial application of pelleted or granular herbicides are effective when used properly. Don't apply on frozen or water saturated soils.

Soil Applied Liquids: Application and action is similar to pellets and granules except that they are for spot treatment only.

As a general rule of thumb, brush is most susceptible to **Foliar applied herbicides** just after the full leaf stage in the spring. Herbicides applied at that time are absorbed and translocated to site of action. Since plants differ among species as to when the full leaf stage occurs, one needs to base application date on species selection. For example, buckbrush is in full leaf by early May or even late April, whereas hedge trees are not in full leaf until early June. Blackberries are most susceptible to herbicide control when sprayed in early to mid-June, well after the full leaf stage. Recommended chemicals, timing, and method of application is available in publications available from our office or web site: the K-State 2016 Chemical Weed Control book and or the Pasture Brush and Weed control publication that you can pick up or get at our web site.