Brush Management

**What**
Brush management attempts to restore balance to the natural plant community by manipulating brush in order to meet the specific needs of the livestock producer.

**Why**
Brush plants use three to five times more water than native grasses for each pound of leaf growth. Reducing the amount of plants that use a lot of water while increasing the number of water-efficient plants will result in more quality forage for livestock, and will allow more water to infiltrate the soil, recharging underground aquifers.

Brush management also reduces the competition of desirable plants for sunlight and nutrients, which increases forage yields.

As brush management improves the condition of grassland, the healthier and thicker grass slows runoff, allowing more moisture to soak into the soil, and reducing soil erosion by water and wind.

Thinning dense brush in an area also creates diverse wildlife habitat—places for wildlife to find cover, nesting areas, and food. Many livestock producers find that the improved habitat attracts game for hunting. By leasing hunting rights, they can increase income from their farms.

**How**
Unwanted brush can be managed by chemical or mechanical methods, fire, or improved grazing management. The applicable method depends on economics, soil, the type of brush on the land, the topography, and the type of farm operation. Most successful efforts usually involve a combination of methods.

Chemical methods involve applying herbicides to the soil or the plant. Because many brush species are tolerant to some herbicides, results vary. Success depends on applying the right herbicide at the correct rate when weather conditions are favorable and when the species to be controlled is weakest.

Mechanical methods of brush management include mowing, axing, root plowing and bulldozing. These methods have proven to be effective but are often costly.

In order to manage undesirable woody plants, many livestock producers are utilizing prescribed burning. Historically, nature's most effective brush management tool was fire. Deciding factors for use include sufficient fuel for the fire, favorable weather conditions, and safety.
Proper grazing management prevents overgrazing and assures healthy, vigorous forage. In a healthy grass ecosystem, brush problems are reduced.

To be effective, any option used to manage brush on hay land and pasture must be preceded and followed by proper harvesting management. Forage yields will improve after the desirable grasses have had a chance to recover and plant succession has begun. On grassland where brush has been removed, the pasture should be rested, and grazing time should be limited during the first growing season after treatment; allowing for the desirable species to establish themselves. Reseeding these areas may be necessary if a natural seed source or remnant plants of desirable forage species are not available. Grazing management must be a continuous process. Uncontrolled grazing probably contributed to the brush problem. Treating the problem without addressing the cause is only a short-term solution.

Most hay and pasture improvement practices take time to show changes. Do not be discouraged if drastic changes are not noticed immediately. With careful planning and management of the practices, grassland will improve.

**Where to Get Help**

For more information on hay and pasture management, contact your local office of the USDA Natural Resources Conservation Service, listed in the telephone directory under “U.S. Government,” or the University of Illinois Extension.