



# FORAGE FACTS

*Publication Series*

## GRAZING AND HAYING CONSERVATION RESERVE PROGRAM LAND

### INTRODUCTION

Conservation Reserve Program (CRP) Land contracts began expiring October 1, 1997, and interest in managing these lands for grazing and haying has increased. Based on research in Kansas and surrounding states, converting CRP land to cropland can be expensive. The potential to graze or hay the land can be an alternative when managed properly.

#### BACKGROUND

CRP grass stands, both native and cool-season, were established and allowed to grow for 8 to 10 years, often without any management (mowing or burning). As a result, the stands have limited ground cover, large amounts of standing dead material and possibly litter layers. Large spacing between grass plants is common, resulting in poor plant vigor and low forage production. These characteristics prevent the grass plants from growing and developing normally. Research and experience have shown the need to develop the production potential while utilizing the plants. The primary needs of the stand are to remove standing dead growth, recycle the plant nutrients in the material and increase plant density. Initial stocking rates must be low in order to develop the grass plant's ability to produce forage and be grazed.

#### RESEARCH RESULTS

When CRP stands of mixed native species come out of the contract period, they are not in condition for full grazing pressure. Based on Kansas research and demonstrations from 1993 to 1996 and research in surrounding states, there is a need to bring the stands into full production through a management strategy covering 2 to 4 years. CRP stands need to be managed to reach their full productive potential. Several alternatives are possible based on the long-term goals for the land.

Research and experience have shown that developing the full forage potential of the stand is necessary in order to obtain optimum animal performance or hay production. Under the research program, stocking rates were reduced in succeeding years when heavy grazing occurred the first season. By reducing the stocking rate the first year or two, greater long-term production is realized.

The considerations necessary to develop the full potential of CRP grass stands is based on the need to condition the plants to use. After 5 or more years of little or no harvest (removal of old growth by any means), the plants are at a low vigor state and probably have a limited root system. The first requirement is to develop the vigor and root system of the existing plants and to enhance the number of species and plants.

**Native Grass Stands.** The following guidelines should be considered:

1. The stand should be mowed during March or April or prescribed burned in April to:
  - a. Remove standing dead material (for burning, and excessive surface mulch).
  - b. Recycle plant nutrients tied up in old growth.
  - c. Allow sunlight to reach plant crowns.

2. Management and use the first year should be to improve the vigor and productivity of the stand.
  - a. If possible, hay the stand the first year (early July preferred).
  - b. If grazing, use a light stocking rate (see suggested rates in Table 1). Stock to leave an average of 3 to 4 inches of stubble for tall grass stands and 2 to 3 inches of stubble for mid-grass stands at the end of grazing season.
  - c. Use half-season grazing if possible (double stocking from May 1 to July 15).
3. Management after the first year.
  - a. Do not burn unless heavy growth remains. Annual prescribed burning should be avoided until the stand is completely developed (2 to 4 years). Always burn only in spring when soil moisture will ensure good plant growth following the burn. Dry spring burns should be avoided.
  - b. Adjust stocking rate according to stand development. Stocking rates after the first year should be based on the amount of forage left from the previous season. A sustainable stocking rate may require 2 to 4 years to reach.

**Cool-season Grass Stands.** The following guidelines should be considered:

1. Unless local CRP guidelines prohibit, the following steps are suggested:
  - a. Take soil tests in July or August.
  - b. Apply all required phosphorus and lime, plus 30 pounds of nitrogen per acre, in late August to early September **if** good soil moisture is available. (If soil moisture is lacking or local CRP guidelines prohibit, apply all fertilizer in late November or early December. Do not apply fertilizer to frozen soil.)

**Table 1.** Suggested stocking rates based on remaining top soil for native CRP stands. Rates are in pounds of live animal per acre at start of season.

Amount of top soil remaining	east	central	west
	stocking rate (pounds/acre)		
no top soil loss	100	80	60
little top soil left	90	70	50
subsoil only	80	60	40

- c. In late November or early December, apply an additional 30 pounds of nitrogen. Do not apply fertilizer to frozen soil.
- d. If soil moisture is adequate for growth in late February to early March, a prescribed burn can be used to remove accumulated dead plant material.
- e. If grazing, use a light stocking rate (approximately 65 percent of stocking on comparable pastures). Stock to leave an average of 4 to 5 inches of stubble at the end of grazing season.
- f. Prescribed burning should be used only as needed to reduce heavy accumulations of dead materials.
- g. Adjust stocking rate according to stand development. Stocking rates after the first year should be based on the amount of forage left from the previous season. A sustainable stocking rate may require up to 4 years to reach.

#### MANAGEMENT FOR HAY PRODUCTION

**Cool-season grasses (brome and fescue).** Management should follow the same criteria as non-CRP stands. (See Smooth Brome and Tall Fescue fact sheets in FORAGE FACTS notebook.)

**Native grass mixtures.** See Native Hay Meadow Management fact sheet in FORAGE FACTS notebook.

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