Pasture Primer: The ABC's of Good Pasture: Extension Circular 0-31-2

Follow this and additional works at: http://digitalcommons.unl.edu/a4hhistory

Part of the Service Learning Commons

http://digitalcommons.unl.edu/a4hhistory/38

This Article is brought to you for free and open access by the 4-H Youth Development at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska 4-H Clubs: Historical Materials and Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
**Pasture Primer**

**The ABC's of Good Pasture**

Pastures are Economical

A. Good pasture can be our most profitable crop.

B. One seeding may last several years, whereas most other crops require seedbed preparation and seeding each year.

C. Pastures do not require cultivation. Cultivation of other crops requires much expensive power and equipment.

D. Pastures are harvested by livestock. Harvest of most other crops is expensive.

E. Pastures are much less severely damaged by hail, floods, frost, insects, and diseases than other common crops.

Pasture Grasses Protect the Soil from Erosion

A. Pasture grasses tend to give a crumb-like structure to the soil. This increases the rate of water absorption and reduces run-off and erosion. When raindrops fall on bare land they tend to puddle the soil. This reduces the rate of water absorption and increases run-off and erosion. When raindrops fall on grass they are shattered into very small droplets. These enter the soil quickly, thus reducing run-off.

Kinds of Pasture

A. Native grass pastures, such as those in the sandhills in northern Nebraska and on other lands that are not well suited to the production of cultivated crops.

B. Semi-permanent pasture such as bromegrass and intermediate wheatgrass are often planted on tillable land and used for pasture for a few years. The sod may then be broken and the land returned to cultivated crops.

C. Temporary pastures, such as winter rye, sudan, sweetclover, small grains, etc. These are planted on cultivated land and may be grazed separately or in combinations. Beef gains on some of these may be from 50 to 60 pounds per acre.

Kinds of Grass

A. There are thousands of different grasses. They can be divided into two general groups, namely: cool season grasses and warm season grasses.

The cool season grasses start growth early in the season and give their best grazing in the spring and fall months. Bromegrass and the wheat grasses are good examples.

The warm season grasses start growth somewhat later in the spring. They give their best grazing in the summer months. The grama grasses and buffalo grass are examples.

B. Grasses may also be divided into two other groups according to their method of growth, namely 'bunch grasses' and 'spreading grasses'. Among the bunch grasses are: crested wheat, the blue stems, and the grama grasses. The spreading grasses may be further divided into two classes--those that spread beneath the surface of the ground, such as western wheatgrass, intermediate wheatgrass and bluegrass; and those that spread above the ground as buffalo grass.
Management of Pastures or Range

A. Sandhill range

The sandhill range is made up almost entirely of native grasses, of both the warm season and cool season types. Early grazing of warm season grasses must be avoided if these grasses are to make maximum development. Grazing prior to early summer should be confined, as far as possible, to those areas where the cool season grasses predominate.

The primary problem in sandhill grazing is to avoid over-grazing. Close grazing is especially dangerous in the sandhills since this may allow the sand to blow. Extensive sand dunes or 'blow-outs' can be seen in many parts of the sandhills. In general, however, the sandhills have been well-managed, except on the outer borders where much of the land is broken or over-grazed.

Some of the blow-outs and dunes have been due to cattle congregating at watering and salting places. These must be separated and must be well distributed. Harvesting seed of the native grasses and reseeding the bare areas is a good practice. Seeding red clover in the wet meadows provides nitrogen for the grass and improves the feeding value of the grass.

B. Hard land permanent pastures

There is much of this kind of pasture in Nebraska, particularly in the northcentral and northeastern areas. Over-grazing and grazing too early are the chief problems. Reserve feeds in the form of hay and silage help to overcome this problem which is especially acute in dry years. Rotation grazing also helps. This means dividing the pasture or range into three or four parts which are grazed alternately. Delayed spring grazing is also important to protect the warm season grasses. Mowing to control weeds is often advisable.

C. Semi-permanent tame pastures

These are mostly bromegrass pastures in eastern Nebraska. In the west crested wheatgrass is important. Some are a mixture of bromegrass and alfalfa or other legumes. These are more productive because the legume provides nitrogen for the bromegrass.

When nitrogen is not abundant in the soil, the grass becomes stunted in growth and less nutritious.

Nitrogen is provided less expensively through the use of a legume than by the use of commercial nitrogen. Experiments show, however, that commercial nitrogen can be used profitably for this purpose.

When bromegrass-alfalfa pastures are used, it is important that the pasture be divided into about three or four equal parts, and these grazed in rotation. This provides more grazing and preserves the legume. Continuous grazing destroys the legume.

In mid-summer bromegrass tends to be dormant. At this time, if alfalfa is the legume used, the cattle may be getting more than the normal amount. Under these conditions there may be some danger of bloat. It is wise, therefore, to use precautions. Experience has shown that bloat can be largely eliminated by following these practices:

1. Never turn cattle on alfalfa when they are hungry.

2. Give the animals access to dry feed at all times.
3. Salt and water must be easily available continuously.

4. Mow the alfalfa for hay and feed it in the pasture.

D. No pasture program is a good one unless provisions are made for supplemental feed in case dry weather should reduce the pasturage. Experience has shown that silage is a complete substitute for grass whether made from sorghums, corn, alfalfa, sweetclover or similar materials. (See Extension Circular 173 for a discussion of silage making methods.) Where silage is not available, use temporary pastures of sudan or oats and sweetclover.

Harvesting Grass Seed

A. There is a great need for more seed of both the native and tame grasses.

B. Grass seed production can be a very profitable business.

C. Make a study of grass seed production methods.

D. Grass seed harvesting methods may be obtained from: The Department of Agronomy, College of Agriculture, Lincoln, Nebraska.

Good Livestock Management

A. A well managed cow herd is profitable on any farm.

B. Good breeding is important.

C. Never let the growing animals lose weight.

D. Provide an abundance of silage as a substitute for grass in the winter months or in the summer when pastures may be short.

Establishing New Pastures

A. Choose seed of adapted grasses and legumes. Bromegrass and intermediate wheatgrass are well adapted to eastern and central Nebraska. Crested wheatgrass is adapted to central and western Nebraska. Bromegrass is adapted also to western Nebraska on irrigated land. Tall wheatgrass is adapted to wet seepy land. Red clover and alsike clover do well also in low meadows. Alfalfa is adapted best to well-drained land.

B. Prepare a firm, mellow seedbed with a sub-tiller, leaving a stubble mulch on the surface. This mulch helps to save water and reduces runoff and evaporation. Thus it also protects the soil and the seedlings and this tends to ensure good stands.

C. Plant the seed with a drill or broadcast it and press it into the soil with a treader. Where sub-tillers and treaders are not available, a disk may be used for seedbed preparation, leaving as much crop residue on the surface as possible. After the seed is planted, the land should be thoroughly packed. This is a very essential item if a good stand is to be obtained.

The grasses mentioned above are cool season grasses. They should be seeded very early in the spring or in late August or early September. Warm season grasses should be sown in May or early June.

The rate of seeding grasses should be determined by the percentage of good seed in the lot used. Germination and purity tests can be obtained by sending samples to the State Seed Analyst, Capitol Building, Lincoln, Nebraska.
When seed of the above mentioned grasses has a good germination, the seeding rate is usually about 15 pounds per acre. When alfalfa or clover is seeded with the grasses, they are usually seeded at the rate of about three pounds per acre.

Irrigated Pastures

A. Well managed irrigated pasture can be expected to give more net returns per acre than any of the common crops. At the North Platte Experiment Station irrigated bromegrass-alfalfa pasture has given a gross return of over $200 per acre, which is comparable to a corn yield of over 100 bushels per acre.

B. On land that is to be irrigated by gravity the field should be prepared as for non-irrigated fields. It should then be 'bordered' in order that it may be irrigated uniformly. Consult your County Agricultural Agent or your Soil Conservation Service for assistance in laying out borders.

If the land is not suitable for gravity irrigation, a sprinkler system might be considered for distributing irrigation water.

C. It is well to keep in mind that bromegrass-alfalfa pasture tends to improve the soil. It is often wise therefore to include pasture land in a rotation with other crops.

Establishing Pastures On Steep Eroded Land

A. Seed the land to sweetclover.

B. Harvest a clover seed crop in the second year.

C. Use the sweetclover stems for crop residue and plant the grass seed under this residue. This method will ensure a good stand of grass along with volunteer sweetclover.