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Good Pastures : Your Cheapest Feed

R. A. Cave

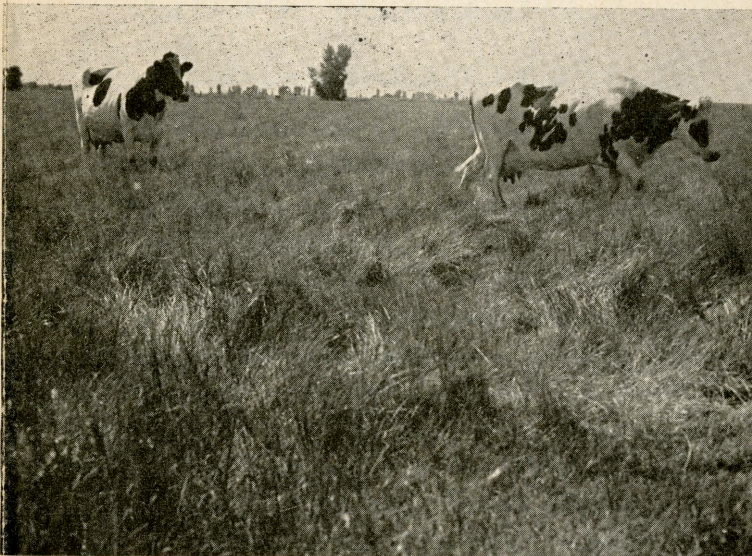
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Good Pastures



Your Cheapest Feed



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The Greatest Single Item of Ex-
pense in Livestock Production is
FEED and the Cheapest Feed
that Can Be Furnished to Live-
stock is GOOD PASTURE.

Leaflet 59

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PASTURES ARE YOUR CHEAPEST FEED

by R. A. CAVE, Extension Dairyman

The economical production of livestock and livestock products is impossible without good pasture.

The greatest single item of expense in livestock production is feed and the cheapest feed that can be furnished to livestock is good pasture.

A survey conducted by the U. S. Department of Agriculture in seven dairy states revealed that the milk cows obtained one-third of their annual feed from pasture at only one-seventh of the annual feed expense. On 400 beef cattle farms in the corn belt the breeding herds obtained one-half of their feed from pasture at one-third of the annual feed bill.

At the annual pasture round up held in Watertown last December, pasture cooperators in counties from the east line of the state nearly to the Missouri river and from the north to the southern boundaries emphasized the importance of good pasture in livestock production and declared that with proper, cautious management successful pastures can be produced in South Dakota even under the not too favorable climatic conditions we have had to contend with in the last few years.

Pasture Planning

Good pasture throughout the entire season requires careful planning in advance. Weather conditions will often upset the plans, the same as with other crops, but neglect in preparing for continuous good pasture is almost sure to result in periods of shortage, thin cattle and disastrous drops in milk production.

Pasture plans will vary on different farms according to soil type, topography, moisture conditions, amount of permanent or native pasture and number of livestock kept.

Combination Most Economical

A combination of temporary and permanent pasture offers the best means of providing continuous grazing throughout the season.

Our wild prairie grasses, blue grass and other perennial grasses, except crested wheat and brome grass, are slow to start in the spring and furnish little grazing in the hot weather of July and August when they become dormant and are dry and unpalatable.

To fill these gaps and make the grazing continuous a well planned pasture program will include temporary pasture crops such as fall rye, small grains, sudan grass and sweet clover.

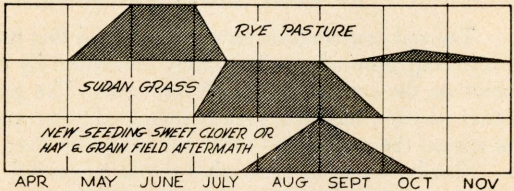
The following charts show several combinations of pasture crops for supplying continuous grazing throughout the year.

Planning Continuous Pastures

Seeding Dates

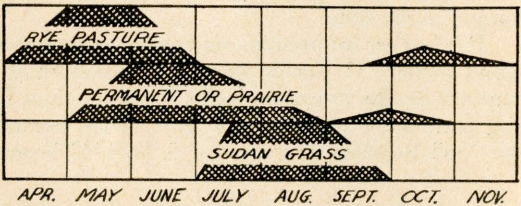
No Fall Sown Rye & No Permanent Grass

early spring
May 20 to June 20
early spring



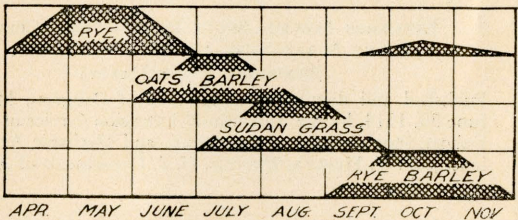
Rye & Sudan Supplement Permanent Grass

previous August
May 20 to June 10



Annual Crops for Full Season Pasture Plan

previous August
early spring
May 20 to June 20
Aug. 1-15



Early Spring Pasture

Rye: Sowing fall rye for late fall and early spring pasture is a sound practice to follow in a pasture program on many farms in the state where crested wheat grass is not available. It should be sown in August on a firm seed bed at the rate of six pecks per acre if moisture conditions are favorable and grasshoppers not too numerous. It should never be stubbled in where grasshoppers are not being controlled.

Rye will usually attain sufficient growth for pasturing by April 15 in the eastern part of the state and enables the herd owner to keep the stock off the permanent pasture until it has made a good growth.

Rye pasture will often cause undesirable flavors and odors in milk but this objection may be largely overcome by removing the cows from the pasture three hours before milking and promptly aerating and cooling the milk as soon as drawn.

Many farmers in the eastern part of the state sow rye in the new seeding of sweet clover either the first fall or the following spring. It furnishes earlier pasture, lessens the danger of bloat and fills spaces where there is a poor stand.

Crested Wheat Grass: Farmers who have had experience with crested wheat grass tell us that it will furnish pasture as early in the spring as rye. Harold Strand of Brown County, one of the two leading pasture cooperators in that county last year, said that from his last spring's experience crested wheat would furnish pasture earlier than rye. If further experience substantiates this statement, this grass will undoubtedly be increasingly used as early pasture in place of rye where a stand can be obtained, since it will not have to be seeded each year, it can be grazed longer before it dries up and it will not impart undesirable odors and flavors to milk.

Small Grain for Early Pasture: Fall rye and spring wheat sown as early as possible will usually make sufficient growth for grazing early in May and furnish the earliest pasture from spring sown crops. They can be grazed until the early part of July. The seeding rate should be one bushel of each to the acre.

Oats, barley and rye make a very palatable pasture. They should not be sown until the latter part of March or early April and will usually be ready for grazing by June 1. A mixture of one and one-half bushels of oats, one-half bushel of barley and one-half bushel of rye has proven very satisfactory.

Summer Pasture

Sudan grass is the outstanding crop for pasture during the hot months of July, August and September. It fits well into the pasture program as it makes its best growth in hot weather when all permanent pasture grasses have ceased growth and become dry and dormant. It is very palatable to all livestock, is not killed by drought, and has large carrying capacity. It should be sown soon after corn planting. In the eastern part of the state it can be drilled at 25 to 30 pounds per acre but farther west it will yield better if planted in rows.

It is not entirely devoid of danger from prussic acid poisoning but so seldom do livestock losses occur that it is rapidly gaining favor as a hot weather pasture crop. The following precautions, however, should be observed: (1) use clean seed with no mixture of sorghum, (2) allow 12 to 15 inches of growth before pasturing, (3) give cows a good fill of other feed before turning on the first time and then leave the gate open so they can pasture at will, (4) if the sudan becomes stunted from drought, try one or two of the least valuable animals on it first before turning in the whole herd.

Legumes for Pasture

In addition to the pasture crops already described we have the legumes, alfalfa and sweet clover. They are much more valuable from the standpoint of conserving and building up soil fertility, preventing erosion and at the same time provide a more abundant supply of high quality pasture over a long period.

They are especially valuable in pasture mixtures with perennial grasses such as crested wheat and brome grass. Their ability to gather nitrogen from the air by means of the nodules on the roots promotes the growth of the other grasses and increases the protein content.

Alfalfa and brome grass as a permanent pasture mixture has been growing in favor in the eastern part of the state. The mixture should be sown not more than one-half inch deep on a firm seed bed as early in the spring as possible. **It should not be grazed the first year and not over-grazed at any time because such management will kill the alfalfa.** Eight pounds of brome and three pounds of alfalfa per acre is about the right amount to sow.

Pasture Management

Many pastures in South Dakota are unprofitable and furnish scanty grazing because they are not properly managed.

Over Grazing: Over grazing and too early grazing are responsible for a large percentage of ruined pastures. Grass plants, the same as other plants, must have an opportunity to make a good top growth if the roots are to be kept alive.

Continually cutting off the top growth of any plant will eventually kill the roots. Perennial grass should be allowed to attain a height of at least four inches before being grazed in the spring. **Close grazing late in the fall is also very harmful to pastures.** Over grazing is indicated by bare spots and increasing weediness.

Rotation Grazing: Dividing the pasture into two or more fields and allowing one to rest and recover while the other is being grazed is a good practice and will usually result in more feed from the same acreage.

Fertilization: Fertilizing permanent pasture with barnyard manure is a good practice because the nitrogen which it furnishes will stimulate a much greater growth of grass with a higher protein content. The addition of 50 pounds of 45 percent super-phosphate to each load of manure may well be considered in the eastern part of the state where rain is more plentiful.

Pasture Restoration: Pastures which have been damaged by drought and over grazing can usually be restored to their original grass and cover by keeping the stock off for one or two seasons and mowing the weeds before they form seed.

Water Conservation

The soil conservation service has found that many pastures on rolling ground can be greatly benefitted by plowing furrows on the contour about 25 feet apart. The grass cover on other pastures has been greatly increased by arranging ditches to spread the spring and other run-off water over flat areas.

Finally, we must remember that a successful pasture program is of the utmost importance in 1942 on every livestock and dairy farm in the state if the "Food for Freedom" goals are to be achieved and that such a program is a challenge to the highest intelligence and skill of every good livestock farmer in the state.

For further information on temporary pastures see Extension Circular 153. For information on establishing permanent pastures see the Extension leaflet for suggestions for establishing permanent pastures. For 1942 AAA pasture payments see "Soil Building Practices for S. D. 1942 Farm Program."

**See your County Extension agent about
the Pasture Program Contest.**

EXTENSION SERVICE, SOUTH DAKOTA STATE COLLEGE
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BROOKINGS, SOUTH DAKOTA

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