MAKE PASTURES PAY

CASH IN WITH BETTER PASTURES

Prepared by
J.P. Carter
and
W.C. Whitman
North Dakota Agricultural Experiment Station
with assistance of
Irvine T. Dietrich
and
Virgil Weiser
North Dakota Agricultural Extension Service

EXTENSION SERVICE
NORTH DAKOTA AGRICULTURAL COLLEGE AND U.S. DEPARTMENT OF
AGRICULTURE COOPERATING
E.J. Haslerud, Director, Fargo, North Dakota
MAKE PASTURES PAY

Use of grasses and legumes for pasture, hay and seed production on some of the land you take out of wheat and other "surplus" crops looks like good business from the long range viewpoint.

There is need for an increased acreage of high quality grass and legume pastures and haylands. Now is a good time to do something about it.

Points to keep in mind as you make your plans for using the acreage you take out of wheat production have been outlined here for your consideration.

1. More and better pastures are needed on most farms to support the livestock enterprise. Higher quality grass and legume pasture provide an excellent use for your "diverted" acres.

2. Needed feed reserves can be stored on your farm in the form of hay and silage made from various forage crops, including grasses and legumes.

3. High quality, productive pastures and haylands can produce the basic feeds for finishing cattle for market.

4. There is profit in grasses and legumes. One acre of bromegrass pasture in eastern North Dakota has produced 95 percent of the feed needed for 1 year for 3 ewes and their lambs, or for comparable livestock units. Piper sudangrass pasture has produced $80 to $90 worth of digestible protein per acre each year at Fargo for the years 1951 to 1953, inclusive; equal in value to about 1 ton of soybean meal.

5. You can get cash income from grass and legume seed production. Using the right methods you can grow profitable crops of bromegrass, crested wheatgrass, sweetclover, or other grasses and legumes. Cash income per acre from forage seed production can equal or exceed that from grain crops, as shown by recent experiments at Fargo and Mandan.

6. Grasses and legumes add organic matter to your soil. They improve the physical structure of soil, make soil more workable and help soils resist erosion. Legumes like alfalfa and clover also can provide valuable soil nitrogen.
TAKE CARE OF THAT PASTURE

Most perennial grass stands in North Dakota cannot and should not be used for pasture the same year they are seeded. Grazing usually can begin the second season. Do not start grazing too early or stock a pasture too heavily in any season.

GRAZING PRACTICES THAT PAY

A single pasture usually will not provide enough good quality forage to maintain grazing animals in top condition for the entire pasture season. The use of pastures containing different forages at different times during the season will provide high quality forage for a longer period of time, extend the grazing season, and maintain all pastures in good condition. Pastures for use at different times during the season are suggested below:

**SPRING:** Crested wheatgrass, bromegrass, or other cool season grasses. Rye.


**FALL:** Regrowth of bromegrass, crested wheatgrass or Russian wildrye, etc. Native grass. Stubble fields. Corn fields. Fall rye.

A combination especially suited to western North Dakota conditions is early spring tame grass pasture, such as crested wheatgrass or bromegrass, plus native grass for summer and fall grazing. Farmers having only native grass available can expect substantial increases in carrying capacity by providing early tame grass pasture for the spring period.

Adequate watering facilities in the pasture are essential. Greater uniformity of grazing in large pastures may be obtained by placing salt away from the water. Tame grass pastures can be improved by mowing old, rough growth such as ungrazed seedstalks.

Grass and alfalfa mixtures require more careful grazing management than do pure grass pastures to reduce the hazards of bloat. A stack of grass hay or straw in the pasture where stock can get at it easily, or mowing random strips throughout the
pasture to make dry forage easy to get tends to reduce the blight hazard. Special care should be taken when first placing animals in a pasture containing alfalfa or other legumes. Alfalfa and other legumes are such highly nutritious and productive pasture crops that safe systems of management should be found for their use.

CUT HAY EARLY FOR HIGH QUALITY

High quality hay first depends on a good stand of high quality forages available for harvest. Cut legumes at 1/4 to 1/2 bloom. Cut grasses at early bloom. The stage of growth of the legume should determine the cutting date of grass-legume mixtures. Minimum exposure to sun and rain will result in maximum conservation of nutrients and quality. The leaves of forages contain most of the nutrients. Therefore, avoid excessive handling of very dry forages to save the leaves.

MAKE SOME SILAGE

You can preserve high quality forages and carry valuable feed reserves as silage made from corn, forage sorghums, or grass and legumes.

Eleven Good Reasons To Have Plenty Of Silage

- Silage provides high quality, tasty feed, any time, at low cost.
- It's the nearest thing to grass you can feed in winter—or summer—when no pasture is available.
- You lose less feed value in harvesting and storing.
- Waste in feeding silage is less.
- You can make silage when weather is not suited to curing hay and fodder.
- Weedy or stemmy crops make poor hay but make fair silage.
- You can store more feed in less space, in the silo.
- No fire danger with silage.
- Silo is fine storage for long-time feed reserves.
- Sweetclover and alfalfa silage has enough protein to meet the needs of beef cattle and sheep.
- Silage destroys weed seeds.

(See Extension Circular A-159 and A-209 for further details)