



THE PROGRESSIVE FARMER



VOL. XXXVII. No. 35

SATURDAY, SEPTEMBER 2, 1922

\$1 a Year; 3 Years, \$2



Livestock and Dairy Problems

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LIVESTOCK SUGGESTIONS FOR SEPTEMBER

I.—Supplying Winter Grazing

SEEDING the crops that are to supply any green feed the livestock will have during the late fall, winter, and early spring, and the saving of the feeds on which the livestock will be fed are the lines of work of chief interest to the livestock grower during the next two months.

The problem of supplying green grazing during the winter is a variable one, varying in its difficulties, opportunities, and methods of solution in different sections, according to soils, moisture, and numerous other conditions. Some one has said that "the only reliable winter pasture is a silo." That is quite largely true and yet the livestock producer should, whenever practicable, provide green grazing as largely as conditions will permit. In many sections fall-sowed crops are economical and justified for no other reasons than as winter cover to the land and for soil improvement, and when to these reasons may be added the furnishing of green grazing for the livestock, the problem becomes one of general interest, even though the difficulties of its solution may be considerable.

In some sections a lack of moisture will make the problem very difficult of solution, in others the heavy winter rainfall will make grazing impracticable for much of the time where the lands are heavy or stiff, and in other sections of the Cotton Belt unusually cold weather may interfere with the growing of fall-sowed crops and their grazing.

II.—Preparation of the Seedbed Important

SUCCESS in obtaining late fall, winter, and early spring grazing from fall-seeded crops depends most largely on the preparation of the seedbed and the time and methods of seeding.

In the mind of most farmers the greatest obstacle to obtaining fall and winter grazing is the lack of moisture which is common during the fall months in most sections of the South. So far as I know there is only one way to overcome this difficulty, which it must be admitted is often a real difficulty. This is to prepare the land early, a month to six weeks before seeding time. If this is done and the soil is harrowed every 10 days or two weeks to keep down weeds and save moisture, there will usually be enough moisture caught and held in the soil to germinate the seed and give a fair growth. It is rare that such a method will fail to give a stand of these fall-seeded pasture and cover crops, but without it, failure for lack of moisture is common. When the preparation of the land is delayed until seeding time, then the fall and winter grazing is very largely dependent on the rainfall.

Grazing is also sometimes obtained by sowing rape, crimson clover, or the small grains, or a combination of these in the cotton middles. When these are clean, and the cultivation has been fairly level, good results are often obtained, but it must be admitted that with this method of seeding fall and winter grazing is very much less certain. While early seeding, for the location, is desirable, or necessary, the character of the soil not only largely determines the amount of growth, but also the number of days the crops may be grazed during the winter. On the sandy soils of the Lower South constant grazing may be possible, but on the stiff or

clay lands the frequent rains common in winter may make grazing impracticable. The cold weather of our most severe winters may also interfere both with the growth of the crops and the grazing of them. But perhaps the most common cause of insufficient fall and winter grazing is an insufficient acreage. Where fall-seeded oats, wheat, and rye are largely grown for seed crops, winter grazing is often provided in ample acreage, but when fall crops are seeded for winter cover and pasturage only the acreage is usually too small for the number of animals, and too close grazing still further lessens the amount of feed which should be obtained. No matter what the acreage, or the number of animals, it does not pay to graze these crops too closely, or when the soil is too wet, except on sandy land.

III.—Small Grains for Winter Grazing

BECAUSE most certain to produce some sort of a crop, rye is probably the best crop to sow for winter cover and grazing on the average lands of the South—barley, wheat, and oats, in the order named, make more growth during the fall and are better relished by the livestock, but rye stands winter freezing better, is better adapted to poor lands and makes more growth in cool weather and in the early spring. While rye stands cold better it does not stand the hot, dry weather better and may fail if sowed too early in the fall. It will stand later seeding than the others, but not earlier, but of course, none will furnish much fall or winter grazing unless sowed early enough to make considerable growth before severe winter freezes come.

Next to rye, oats are probably best adapted to the soils of the South. Oats are not as particular as to the type of soil or as to a rich soil as either wheat or barley. Of course, oats and rye both do best on rich soils, but they will probably do better on sandy soils and soils low in fertility than either wheat or barley. Wheat and barley demand a well-drained rich loam soil. They will withstand the severe freezing weather of the northern part of the Cotton Belt better than oats, unless the winter turf or grazing oat is used. As to the variety of rye to use the Abruzzi is beyond doubt the best where it does well, but it is not so certain in all sections and under all conditions as the common Southern rye. If the common rye is used, one should be certain that it is the common Southern rye. Much of the rye seed sold is grown farther north and is not as satisfactory for grazing as the Southern-grown seed. The Northern varieties hug the ground closely and are not as satisfactory for grazing. The only objections to Abruzzi rye are that it has not seemed to do well in some sections toward the northern limits of the Cotton Belt, and the high cost of seed. Perhaps the first objection is not real, or is exceptional, while the high cost of seed may be overcome by the farmer growing his own seed. That is always a protection which the farmer has against too high prices for farm seeds he can grow them himself.

For the greater part of the Cotton Belt, all except the northern portions, the red rust proof varieties of fall oats are best for fall seeding for fall and winter grazing. For the northern border of the Cotton Belt and areas a little further north probably the turf oat, or Virginia gray, or winter grazing oat is the best for these sections, where the red rust proof varieties are likely to winter-kill.

Wheat is well known as suitable for

late fall and winter grazing on fairly fertile land that is well drained. The value of fall beardless barley needs to be more generally tested. On rich soils it makes a rapid growth, is relished by the livestock and stands the winter freezes well. It should have a more extended use.

The time of seeding these small grains will to some extent depend on whether they are to be harvested for the grain or seed the next summer. If they are, then the time of seeding should be that best suited to that purpose in the section where sowed, but if sowed for fall and winter grazing the earliest seeding practicable will enable them to furnish more grazing. The dates will vary from September 1 to October 1 in the northern part of the Cotton Belt and from October 1 to November 15 farther South.

The amount of seed used should be larger when sowed for grazing than when sowed to produce seed or grain. Not less than one bushel and a half each, of rye or wheat and not less than two and one-half bushels of oats and two bushels of barley should be used. Even slightly heavier seeding will probably produce a better cover crop and more grazing.

IV.—Clovers and Vetch for Early Spring Grazing

TAKING the South as a whole, crimson clover, bur clover, and the vetches are the fall-seeded legumes, which are most useful for furnishing early spring grazing. None of them will furnish much fall or winter grazing. Crimson clover, if sowed early and conditions are favorable, a good growing fall and a mild winter, will furnish some winter grazing, but the vetches and bur clover will furnish practically no grazing until the early spring, when early vegetation begins to make its growth. The growth of all three, crimson clover, vetch and bur clover, especially crimson clover and vetch, is marvelously rapid from March to May, and the amount of grazing supplied by crimson clover will surpass any other grazing plant known to the writer during that season.

All of these legumes have their weak as well as their strong points. The weak point of crimson clover is that owing to the dry, hot weather of fall, it may be killed out, or there may be a failure to get a good stand if planted early. On the other hand, if planted too late, so that it does not get a good root-growth, it may not stand the winter.

The weakness of bur clover is that it requires a large quantity of seed and then, there is not sufficient certainty of a stand at first, or until the soil becomes well filled with seed. And even then a solid or complete stand or cover, over any considerable area, is rare.

With the vetches, seed are high priced and there are difficulties in the way of saving seed, while the crop makes such a small growth during the fall and winter that it affords little grazing and a poor covering for the land.

Crimson clover is sometimes sowed with some one or more of the small grains, but this is of doubtful value where it does well alone and good stands are obtained, except to furnish more fall and winter grazing. Vetch is usually sowed with some of the small grains, which is necessary to give fall and winter grazing, a cover for the land and to hold up the long, slender vetch vines, thereby increasing the growth and the formation of seed.

Bur clover is usually sowed alone and probably this is the preferable method. All of these plants must be inoculated, each one with its own particular bacteria unless these bacteria are already in the soil. If they do well without artificial inoculation it is because the particular bacteria which live on their roots are already in the soil.

Because of this need for inoculation all these crops are more or less uncertain at first. After they have been grown on a farm for a few years, it becomes much easier to obtain good stands and they become reliable or certain crops.

These crops are preferable to rape or the small grains, when they do well, because they are legumes, or gather nitrogen from the air and enrich the soil, but a growth of rye is better than no growth of these legumes, and a full growth of rye may furnish more grazing and a better soil cover than a poor stand or partial crop of any of these legumes. It, therefore, follows that the main reliance for grazing and cover crops should be the small grains for the larger areas and until the legumes have been grown for a few years and the farm soils inoculated. But there should be some of one or all of these legumes sowed on every farm every fall, until the land and the farmer have learned how to grow them. If this is persisted in for a few years there will be no question as to continuing their growth, for they are too valuable to be omitted when one has once learned to grow them successfully.

V.—Rape for Rich Land

WHEN the land is rich, Dwarf Essex rape, sowed between September 1 and October 15, according to location, is one of our best crops for late fall and winter grazing, especially for pigs, calves and sheep. But the land must be rich. It is a waste of time and seed to sow rape on the average lands of the South. We always pick a rich spot for a turnip patch, and rape requires the same sort of land. It will furnish grazing in 50 to 60 days after seeding if soil and moisture conditions are good. This being the case if grazing is to be had by November 1, the rape must be sowed by September 1 to 10. This is too early except in the northern part of the cotton-growing area, unless there is abundant moisture and the weather cooler than normal. The sowing date therefore must be regulated by the location. Rape is a moisture and cool weather loving plant and makes its best growth in October and November from the fall seeding, and in March and April from the spring seeding. Rape may be sowed alone, either in narrow drills or broadcast, or it is sowed in various combinations with small grains and clovers.

When sowed in drills one or two cultivations may be given, but for fall and winter grazing many prefer to sow broadcast. When sowed broadcast and alone more seed should probably be used than is generally recommended. Perhaps 10 to 12 pounds per acre is not too much. When sowed in drills, 4 or 5 pounds is ample and when sowed broadcast with the small grains 6 pounds does very well. For hog pastures, especially on lands well supplied with lime many advise sowing red clover with the rape. If the land is not pastured when wet or grazed too closely the rape furnishes feed during the late fall, winter and early spring and then the clover furnishes good grazing until June.

Crimson clover is also sowed with rape and if care is used in grazing, the rape during the fall and winter, the crimson clover furnishes a large amount of grazing from March to May.

Weight of Dairy Calves at Birth

A READER wants to know the average weight of calves at birth.

The following are the weights given by Henry as determined at the Wisconsin, Missouri, and Connecticut Experiment Stations:

No calves	Breed	Average Weight
119	Jersey	55 pounds
104	Holstein	89 pounds
57	Guernsey	71 pounds
34	Ayrshire	76 pounds