

Grasses and Forage Plants.

Uncertainty in the Seeding of Grass Lands.

There appears no settled rule in regard to the seeding of grass lands. Farmer A has sown in the spring and had excellent success, while farmer B failed of a stand; and so it is for all seasons of the year, failures and success lie along the pathway. To the practical farmer the success is plain, for then the conditions of moisture and warmth were favorable, and, on the other hand, unfavorable. In this part of the country, the best time for seeding is after the ground has been frozen and a light snow has fallen. The snow is useful as showing how the seed has been distributed, and the first thaw carries the seed to the moist earth, and it becomes imbedded into it, and, on the approach of warm weather, is sure to grow. In short, I have never known a failure when thus sown. For this purpose, the land should be prepared in the fall, harrowed and rolled. At all other seasons there is more or less of risk, as the season may not be so favorable. During a wet summer we may sow at any time, and I have known many instances of success in sowing on the stubble in July and August; but it is many years since such a venture would have been a success. Some argue that any time during the winter will do equally well; but such is not the fact, and the better time is early in the season, along with the first light falls of snow. As regards clover, the same rule holds good. We cannot always meet this requirement, for various reasons. Last spring I sowed clover as late as the 1st of May; but although I put in an extra amount of seed, the stand was not good. The seeding was a sort of necessity, as the land was so dry the preceding fall that it could not be put in order, and the spring's rains had to be waited for. The same condition is now present, and I wish to prepare a large amount of land for seeding; but that is out of the question, unless we have a good soaking rain to make ploughing possible. Some little of this can be prepared with the harrow and roller; but I fear that the story of last spring will have to be repeated, and the chances taken on a wet spring. No set of fixed rules can be adhered to, for things must be taken as they are; yet we must select the best time, and take advantage of it when possible to do so. It is this that makes the difference in results. Then, again, the proper time and good preparation make a difference in the quantity of seed sown, and this accounts for the difference in practice—one man sowing 6 quarts and another 16 to the acre; and both are right, and generally have about the same stand of plants. The one, depending on the better preparation and more proper time, requires less seed; and sometimes the use of a roller makes all of this difference. More than one-half of the grass and clover seed is thrown away on bad management. This is a great waste, and often useless, though we must not forget that occasionally we are compelled to sow out of the best season, and must take the risk. The weather is beyond our control, and all we can do is to so arrange our plans as to meet ordinary conditions.

Leveling Meadows.

The following suggestions by G. E. Blake, L.F.E., in the *Ohio Farmer*, are timely and useful:

Thousands of farmers in every State throughout the country find themselves annually perplexed and hindered in gathering the hay crop by the unevenness of their meadows, and perhaps annually make resolutions to put the mowing land into better condition after the harvest is over, but when the crop is garnered the resolution is forgotten until the mowing machine is brought out again, and then it is too late to apply the remedy, of course. The fall is the best time of the year for the work of leveling meadows, for the reason first, that at that time all of the products have been gathered for the season, and secondly, because where cutting and grading is done, the newly exposed soil has sufficient exposure to the atmosphere to put it into a condition of productiveness by spring, when it may be stocked down. Besides the above reasons, the soil is in better condition to handle in fall than in spring, and in most cases the farmer has more time to attend to the work.

Large knolls or mounds such as were caused by the upturning of trees, &c., should be ploughed and shoveled into a lower place or removed by the use of a road scraper to some hollow in the meadow which needs leveling up. To cut away ant heaps and prominences of that sort, a very good implement may be made by getting a stout iron knife blade long enough to reach from one runner of a sled to the other and

bolting the same, edge forward, on to the bottom of the runners. The knife should be let in just its own thickness, so that it will run along the surface. Make the knife sharp, and by drawing the sled over the field with the farm team all the bogs, ant heaps, &c., will be sliced off level with the earth. An old, worn-out wood shod sled may be put to good use in this way. If the sled is not heavy enough to do the work well, put on some boards or a waggon seat and let the driver ride.

Another very good implement is made by bolting a saw-mill plate to a stick of timber and hauling this over the surface. Obtain a stick of timber say six inches thick by fourteen or fifteen inches wide and as long as the saw plate to be used; frame into the center of the board side a crocheted pole for tongue, then bevil off the bottom edge of the timber so that it will set square upon the earth when the pole is elevated at the front end to the height of the neck-yoke, and bolt on the saw plate to front side, back down, so that the edge comes even with the lower surface of the timber, and the scraper is ready for operation.

Pasturing Winter Grain.

I once told a neighbor that hogs required salt. He acquiesced, and soon after emptied the refuse of a pork barrel in which were several pounds of salt into the pens. His hogs "hungry for salt," "went in," and some that got too much died. I was never forgiven; and to say now to that man that hogs need salt is to run some risk. So when I now say that winter grain may be safely and in some cases advantageously pastured, I do not wish farmers to turn all their stock upon their fields and blame me for their injudicious course. I merely say here what I have done and have seen done, advising those only to do likewise who are able to "lay this and that together" and act for themselves understandingly. When wheat or rye is growing thriftily, as it is now beneath the warm suns of the Indian summer and the moist nights which follow them, I have found it useful to turn a flock of sheep, but especially lambs, upon the field. These crop the plants about half their length, biting here and there a leaf, but do not pull up any of them. Their feet, with their light weight, press into the ground whatever plants they step upon, but they do not smother them. The soft, loose soil is pressed down about the roots wherever they tread, with great benefit. Every plant cropped is made to tiller and spread, the cropping being a sort of pruning, whereby lateral growth is encouraged. But no other animal should be turned upon fall grain. If the growth is too luxurious I would run all other risks but that of putting cows or calves to feed it down. Later, when the frost begins to heave the wheat, the trampling of a flock of sheep is of great service. Thousands of roots are replanted that would otherwise have perished. Some years ago, when in England, I saw a large flock of sheep driven into a wheat field, in the winter time, and made to travel back and forth in a compact body by a boy and dog. The strangeness of the proceeding struck me, but until I saw it often done afterwards in other parts of the country the same winter, I did not inquire the reason for it. When I did I found that it was to trample the wheat plants that had been thrown out by the previous night's frost back into the ground again. This was upon the light soil of the County of Norfolk. My own fields, upon which I have done the same thing, were of moderately strong gravelly loam. Whether this would answer upon heavy, sticky clay lands or not I cannot say, but some others may be able.—*Cor. N. Y. Tribune.*

Seeding Down with Turnips.

A correspondent of the *New England Farmer* writes: I have made it a practice now for some years of sowing flat turnips with my grass seed when I seed down in the fall, and with the best of results. I have now about two acres which were seeded in August, and, notwithstanding the severe dry weather, I have a good catch of grass, and the turnips are doing well. The broad leaves of the turnip protect the young grass from the scorching rays of the sun, without which protection the grass would have before this been entirely dried up; as it is, I shall save my grass and raise a few hundred bushels of turnips, and if as fortunate as I have generally been, next summer I shall cut about four tons of hay. On part of these two acres I had a crop of early potatoes, on the other a crop of oats before I seeded down. Last fall I raised about a thousand bushels of turnips in the same manner. The turnip has a long root which penetrates the soil to a great depth, and what nutriment it takes from the soil is obtained at a

depth to which the grass roots rarely penetrate, and through its broad leaves it obtains a large amount of its sustenance from the atmosphere. Hence, like clover, its tendency is to enrich rather than impoverish the soil.

Curing Hops.

An improvement in the method of curing hops has lately been introduced in England, by a Mr. J. M. Hopkins, a hop-grower near Worcester, which is said to be of great advantage to the grower, especially in seasons like the present when prices are so high from the light crop. The following is a description of this process:

"The hops being gathered, are brought to the kiln to be cured. There are three drying floors of rafters, covered with horse hair so that the heat and air can pass from below through each of them and out at the top, where an exhaust fan is kept in motion by steam supplied from a boiler in the basement floor of the kiln. The hops are first put into the top floor, where they remain about four hours, until the 'reek' is off them, when they are dropped (without handling) to the second, and finally to the lower floor, which is movable, being, in fact, composed of two large trays, which slide in and out of the building. The temperature of the kiln never exceeds 90°; the fan gives the advantage of drying the hops at a lower temperature than by the common process. Thus the aroma and volatile oil which would be driven away at a higher temperature are saved. The fan system has been tried with success in the drying of malt without deteriorating its quality. Under the usual system, the drying process in a malthouse occupies three or four days by the fan system it has been done in twenty-eight hours."

A new Disease in Clover in France.

A Paris correspondent of the *California Farmer* says:—Nearly all our cultivated plants seem doomed to pass through a series of maladies. In their wild state they are not so affected, at least we do not perceive such. Is it that culture, greater well-being in the conditions of their life, leaves them more exposed to the enemies, that the more we care for them the less they appear to depend on their own natural powers of resistance? The latest plant attacked with disease is clover; it sickens where it was formerly robust, or dies off in being cut at the crown, while the tap root remains healthy. The latter disease has been developed at the Grignon Agricultural College; the clover fades, blackens and dies, not in patches so much as by numerous isolated plants, and curiously most markedly on the soil where wheat and potatoes had previously been cultivated. It is at the neck of the plant, a little above the surface of the soil, that the malady appears, resembling in the marks as if it had been gnawed by a wire worm, but produced by a parasitic mushroom which as it grows alters the cells and their contents. When a dead plant is placed in a moist position for a day or a night it becomes covered with down—the same fungi that attacked it when living, and which is believed to be identical with that found on the leaves of a diseased potato plant.

CLOVER does well on a poor soil, if a good catch is secured and plaster used; but it does much better on a rich soil, paying well on the richest of land.

EFFECTS OF FODDER CORN UPON LAND.—It was held in the discussion, at the recent State Fair at Rochester, that corn in orchards was an advantage, owing to the cultivation which the land received; and it was further mentioned in the remarks elicited, that corn sown for fodder, in which case there were no ears to draw substance from the soil, improved rather than depleted the land, by the vegetable matter which the roots furnished the soil. This is on the principle that land improves by grazing. The grass is fed off without going to seed. The cases are parallel, as corn is a grass. It is encouraging to those who grow corn for fodder that this is so. Good crops can thus be realized for feeding green during the summer; or, if not all needed, saved for winter feed, the land remaining the same, or better fitted for other equally good or superior crops. Clover is still more beneficial to land. The two should be more grown, especially for the purpose of feeding in a drouth, or when the grass becomes rank and hard, and also as a feed during the hot days, particularly the hot noons, when cows should be put up or have access to shade, and then fed. Cows giving milk should be thus treated, as exposure to the hot sun begets fever, and the effect is communicated to the milk.—*Country Gentleman.*