



Rocky Mountain Husbandman

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The ROCKY MOUNTAIN HUSBANDMAN is designed to be, as the name indicates, a husbandman in every sense of the term, embracing in its columns every department of Agriculture, Stock-raising, Horticulture, Social and Domestic Economy.

ADVERTISING RATES.

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	30th					
1 week	8	7	6	5	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
2 weeks	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
1 month	30	28	26	24	22	20	18	16	14	12	10	8	6	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
3 months	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
6 months	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	5	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
1 year	250	240	230	220	210	200	190	180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	5	3	2	1	1	1	1	1	1	1

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Agricultural.

APPLY your mulching without delay.
It is advantageous to apply mulching on top of a light fall of snow.

TURNIPS will soon get pithy if the temperature of your root house is above 50 degrees.

Do not put too many potatoes in one bin without providing air channels to ventilate them sufficiently.

EVERY farmer should have a thermometer in his root house. A common mercury thermometer that costs only fifty cents is good enough for this purpose.

AN Eastern exchange says: What, with late spring, early summer floods, cold July and August, late summer drouth and early September frost, the corn had a hard row to hoe this year.

BURNING straw is a bad and wasteful practice, but burning old trash, rubbish and weeds is often a most useful practice, as the seeds of weeds and eggs of insects are thereby destroyed.

TOMATOES, not many years ago, were known as love apples and considered poisonous. Last fall there were 52,322,982 cans of tomatoes put up by the canning establishments of the United States.

ALEXANDER HERON, Secretary of the Indiana State Board of Agriculture, has trained a potato plant by cutting off all but one stem at the top until that single stem is now as thick as one's wrist and rises to a height of nine feet and five inches.

ONE of the finest crops of wheat raised in Howard county, Mo., one of the finest wheat-producing sections of the States, says the *Journal of Agriculture*, was raised by Long & Darby. From 125 acres they threshed 3,200 bushels, or an average of 25 1/2 bushels per acre. The entire crop of Montana for the past season averaged 23 1/2 bushels, yet some of our people claim that Montana cannot compete with the States in grain-growing.

RINGING grape vines is a process to increase size and earliness. It is done by cutting a circle around the old wood, preventing the return of sap to the root. If the crop is entirely cut through an enlargement of the vine will occur on the side next the new growth. The vine is not injured by this process, for only the parts to be cut away in the fall pruning are subjected to the process of ringing. The grapes, however,

are not as good in quality as when ripened naturally. It is a trick of fruit-growers to make the fruit look better than it really is.

The *Journal of Agriculture* says: "John Lewis, two miles east of Glasgow, Howard county, Mo., raised 3,150 bushels of wheat on 90 acres, or an average of 35 bushels to the acre. Hon. Thomas Shackelford, two and a half miles east of Glasgow, raised 1,120 bushels of wheat on 30 acres, or an average of 37 1/2 bushels to the acre." This is no doubt considered a big yield for the States, but in Montana, owing to our superior facilities for farming, it would be quite small. The average of the crop of the entire Territory is estimated at 24 for the season just past. This average, it will be remembered, is taken from the statistics of each county, and is as near correct as is possible to be obtained. Our Montana farmers will be surprised to know that the general average of grain here is much above what is considered the big yields of the States. On Sun River valley the entire wheat crop is estimated at 40 bushels per acre, while the wheat yield of Yellowstone county is placed at 45 bushels. This county also estimates its oat crop at an average of 60 bushels per acre. Single fields can be found that go much above these figures.

DIGGING AND STORING POTATOES.

As a rule, we do not believe in allowing potatoes to remain in the ground longer after they are ripe. They are more liable to rot, while those near the surface are exposed to the air become green and bitter, and unfit for use. The dying of the stalk indicates that the tubers are ready for the harvest, and they should be dug when the soil is dry; they are then clean and bright and ready either for the market or to be put away under cover. If dug in rainy weather or when the soil is very heavy, the dirt will adhere to them, they are much more liable to rot and not nearly as marketable. Go into the vegetable market, and you will notice that the smooth, dry and clean potatoes will always be selected first.

Dug in fair weather, potatoes will soon become dry, and when they are so, they cannot be gathered up and put into the shade too quickly. Exposure to the sunlight very soon produces a chemical change which renders the tuber unfit for use. The starch is changed to grape sugar, the tuber becomes green, loses its crispness, and when cooked is neither mealy nor agreeable to the taste. If dug early, it may not be best to store them in the cellar at once, lest they gather moisture and rot. They may be spread in a cool shed or barn, and covered with straw until the weather becomes cool enough to put them in the cellar with safety. The shrinkage of potatoes between the time of digging and the following spring, amounts to from ten to twenty per cent., and this should be taken into account in marketing them. Freshly dug potatoes are three-fourths water, but evaporation slowly takes place during the winter and spring, reducing the watery portion, and rendering the tuber of great relative value as food. The old method of storing potatoes in pits is nearly abandoned, though it may still be practiced in newly settled portions of the country. We can well remember when the "potato hole" was an institution on almost every farm, and it was regarded as a good method of keeping them through the winter. If well stored, they always came out nice in the spring, but the days of the potato rot, and the days when they might not prove as satisfactory.

A good potato cellar should be dry, capable of being made perfectly dark and of being quickly and thoroughly ventilated. If the cellar is thoroughly dry, the tubers might be stored upon the floor, but this is not generally the case, and it is usually best to construct bins whose floor is raised somewhat above the cellar bottom. Board partitions may be used to separate varieties; there is much less danger of rot in this arrangement and a greater opportunity is given to pick them over in case rotting should begin. Temperature is one of the factors in keeping a potato. The germinating power of a potato is injured, if not destroyed, when exposed to a temperature be-

low thirty degrees, and it commences to grow at a temperature above fifty degrees. Then a cellar that could be kept within this range, or better still, from thirty-two to forty degrees, ought to furnish sound potatoes until spring, and that would sprout freely. A light sprinkling of lime upon potatoes when stored is a preventive against potato rot. Potato rot is a parasitic fungus, and the lime destroys the germ.—*Maine Farmer*.

EXPERIMENTS IN PLOWING.

Deep vs. Shallow.

Mr. Knox, the veteran plough maker of the Ames Plow Co., has called our attention to the effect of deep plowing of some soils to offset the danger from lack of rains in dry seasons. Some years ago an experiment was made by a western Massachusetts farmer in plowing portions of a large field at varying depths. One part was turned over seven inches deep, another ten inches, and a third, after being plowed ten inches, was sub-soiled to the depth of ten inches more, making a soil comparatively loose to the depth of twenty inches. The next year, which was a dry one during the summer, corn was grown upon the whole field, which was treated in a uniform manner throughout, and the yield of the three divisions carefully measured. The seven-inch plowing yielded as well as the ordinary fields in the vicinity. That part plowed ten inches deep was greener all through the season, and gave a decidedly better yield, but that which was plowed ten inches and subsoiled ten inches in addition, produced just about one-third more corn than that part plowed in the usual way, seven inches deep. The next year the whole field was, by agreement, sowed to oats, as a continuation of the experiment, the season proving even drier than the preceding one, when corn was grown. When the oats were about ready to cut, Mr. Knox, being in the neighborhood, called to see them. Before reaching the farm, the field came in view from the car windows, and Mr. Knox, who was on the lookout, said to a companion, that the gentleman had not done as he had agreed, for he could see that he had sown different kinds of grain upon different plots, the size and color of the growth both marking the lines, dividing the lands plowed at the three different depths. But on arriving at the field he found nothing but oats, and as stated by the owner, all sown upon the same day, and treated precisely alike in every respect.

On the shallow plowed section the growth was short and the straw yellow; on the ten inch plowing the oats were taller and less yellow, while on the subsoiled portion they were green and very heavy. The final tests showed fully one-third more grain on the sub-soiled part than on that which was plowed only seven inches deep.

Now, it will not do for farmers to calculate that deeply stirring every kind of soil would alone add fifty per cent. to the yield of crops grown upon them the following two years, for they would doubtless be disappointed in very many cases. Yet, as a rule, a deep, mellow soil from which surplus water can readily settle without making the land into mortar, and through which the same moisture can again freely rise by capillary attraction, other things being equal, will always bring a farmer the better results.

There are soils which naturally are never too wet, and rarely too dry; and it will usually be found on examination, that they are not in the best mechanical condition for a considerable depth—say two feet or more, that one likes to see is surface soil light, friable and containing the due proportion of vegetable matter. They will also be found to contain sand and clay in about the right proportions, keep the soil in a mellow and moist through the varying climatic conditions. Deep plowing of stiff clays is often dangerous at first, but a good, dry soil suits all kinds of crops in all kinds of weather. Deep plowing tends to make such a soil, but this alone will not always be sufficient. Draining and manuring must accompany deep plowing.—*New England Farmer*.

The Poultry Yard.

HENRY STEWART SAYS: "There is no doubt that a well-kept flock of poultry is the most profitable of all farm stock. But a little flock well kept, like a little farm well tilled, brings the most profit to the farmer. Just so many as can be kept without crowding and with ease and convenience, will be the most profitable. Poultry will not bear crowding any more than sheep or pigs or people, and it is well known that when any of these are too closely kept disease appears and works mischief. It is a necessity of the case, because cleanliness must be sacrificed to necessity."

BEST BREEDING AGE OF FOWLS.

It has been an open question to many a breeder with regard to the mating of fowls—how and in what manner they should be mated and at what age between the sexes to make the breeding a success. Our experience between the sexes would lead us to say that all fowls, as a general rule, breed better in their second and third years than at any other time. For this reason a difference of age between cock and hen is always desirable—an old cock and young hens or a young cock and old hens. Some of the best prize birds we have ever seen were bred from pullets—that is, from birds one year old—though we are aware that this is against the general opinion of breeders, but in our own case it has proved different. Still, we have only adopted this plan occasionally, and not followed it out as a general rule.

There is no doubt in our minds that a cock is in his greatest vigor at from eighteen to thirty months of age. After thirty months we would recommend giving him pullets or hens younger than himself, but up to that time it does not matter whether his hens are old or young. A Hardy race of fowls may be selected from his get in the brood.

A few words in regard to the classification of other lewis may not, in this connection seem out of place, as the general readers of the Monthly may find therein hints profitable to themselves.

TURKEY BREEDING AND MATING.
Most breeders prefer early hatched hen turkeys, and seldom want to keep them after the second or third year. Young cock turkeys are preferred, especially if the hens are old ones, but there is little objection to using a three year old bird, we do not advise an older one.

GESE BREEDING AND MATING.
Breeders may use very old geese, but they will want fresh and young ganders. We have known a goose doing good duty at eight years of age, and we have been told of some that were positively patriarchal.

DUCK BREEDING AND MATING.
We do not advise the keeping of Aylesbury ducks after the second year—that is after breeding from them two seasons. None of the non-sitters will last so long as those that become broody. We advise the Toulouse as the best breeding geese, but, as they do not sit, we say of them and of the Aylesbury ducks, renew your stock frequently, and your yards will prove the gainers thereby.—*Corr. Poultry Monthly*.

POULTRY YARD ERRORS.

Many errors are liable to occur with beginners at poultry-raising for even the veterans are not free from mistakes at times. In selecting the breed a large majority pay greater regard to color and shape than to more desirable qualities. It is well known that the characteristics of the breeds should be understood if no mistakes are to occur. But, after a breeder has become perfectly familiar with all that pertains to his choice of fowls, the common routine of the poultry yard next requires attention. The times of feeding should be regular, certain hours being fixed upon for that purpose, but there are very few who thus systematically feed their fowls. Water should be kept in the presence of poultry at all times, and it should not only be clean and pure, but fresh and yet this important matter is overlook-

ed by many. Warmth in winter is very essential to laying, being as important as a full supply of feed, but every fowl house is not warm and comfortable. The prevention of dampness in the house avoids roup, which is a terrible scourge in a flock, but the small leaks here and there are not regarded as dangerous matters by the average breeders. Even the heights of the roosts and construction of the nests have more or less tendency to affect the profits from poultry than many may suppose, for high roosts cause deformed feet, and poor nests will not be occupied by the hens if they can get better places in which to lay. These things are seemingly small matters, which are usually overlooked, but they are important to success. Why poultry should be expected to prove profitable without care more than other stock is what we do not understand, and the fact that a profit is often derived from a flock that has been overlooked, is strong proof that poultry raising can be made to pay well when conducted by thoughtful, attentive persons. It is the small matters that should receive the most careful attention, as the observance of method and system is sure to prove beneficial at all times.—*Farm and Garden*.

LICE—LEG SCURVY.

When the writer was a small lad, living in the country, it fell to his lot to assist in picking chickens for market; and this was always done in a dry way, and I can assure you it was a dreaded job; not that I disliked the work, but, oh! the lice! from which I groaned to be delivered. Ever since I have felt a sympathy for the feathered tribe, when handling poultry. I have always made it a rule to go over my stock once a month, at some stated time, and give them a dusting with Scotch snuff and sulphur in the proportion of two parts of the former to one of the latter, and applying it with a small tin pepper box, which will be found a very easy way of delivering it. If poultry men would apply the anti-lice remedy, it being cheap and very destructive, they certainly would be acting the part of the good Samaritan towards their stock.

In connection with the above I will suggest a first-class remedy for leg scurvy, which never fails and quickly cleans off the legs, leaving them bright and smooth. The ingredients can be purchased of your druggist, and will consist of one ounce of citric ointment and a half pint of fish oil.

Place them in a wide-mouthed bottle and set on back of kitchen stove, and warm gently, with an occasional stirring, until dissolved; apply warm to legs with a mop made on the end of a small stick, with a piece of old cloth or muslin. Two applications will clean off the worse case that can be found.—*Corr. Fancier's Gazette*.

The Household.

Minced Meat.—Four pounds of beef boiled tender, one pound of suet, two pounds of raisins, two pounds of currants, one pound of citron cut fine, six pounds of apples, one pound sugar, grated rind of four lemons and the juice added; cloves, cinnamon and nutmeg to taste, with cider to moisten them. Some use brandy to flavor, but I prefer it without, as it is an article I use only as a medicine.

Mock Mince Pie.—Four cups bread crumbs or apples, three eggs, half pound raisins, half pound currants, cup of vinegar, cup of sugar, cup of molasses, teaspoonful of soda, four cups of water and spice to taste. Try it.

Pressed Beef.—Boil beef of any good kind till the bones fall out; pick it over carefully removing all gristle, chop fine, season with salt and such herbs as taste suggests, press in a pan with a heavy weight. When cold cut in slices and serve.

Potato Puff.—Dress three cupfuls of well-boiled and mashed potatoes with salt, butter and cream, making them moist. Beat well with an egg whisk, and when light and smooth, add three eggs well beaten separately. Beat again thoroughly, pile high in a dish, and color in a quick oven.

Thoughtful husbands made the culinary duties of the household easy by providing it well with supplies and conveniences.