FOR THE DWELLER IN THE COUNTRY

CULTIVATION OF GROWING CROPS REQUIRES REASONABLE CARE

Roots Should Not be Disturbed—Use of a Depth Guide is Recommended.

The cultivation of crops requires reasonable care. There is seldom gain from deep cultivation after the crop has been planted. Such cultivation is necessary in preparing the soil for all hoed crops, but if not done then, later cultivation will not make up for the neglect. Summer cultivation should be shallow; sufficient to destroy weeds and produce a fine surface milch one to two inches deep.

It may be possible and is then advisable, to narrow the cultivator and cultivate deeply the space between the rows not occupied by growing roots. It should be remembered however, that these roots penetrate the soil towards the centre of the row very rapidly and frequent observations are necessary to determine whether the feeding roots are being disturbed or destroyed by cultivation, as so very often happens. The moist soil below the loose surface soil covering is where soil basteria are most active, and consequently where the most plant food is being liberated, as a result of which roots will be found in this soil area in greater abundance than anywhere else.

Root Pruning Not Good.

Although there seems to be no good reason for using care in selection of seed, preparation of soil and fertilizing to grow a good plant—only to destroy the roots as soon as they have grown—yet this is what is very often done. Root pruning has so far never been shown to be desirable and, as the root development is a big factor in crop yields, the better chance they have for development without being disturbed the better use they can make of the plant food the soil contains. The object at this time is to point out the desirability of surface tillage by shallow surface cultivation and warn against deep culture in the area occupied by the growing plant.

Another reason why roots should not be disturbed more than possible is because injured roots may not be able to take up the full moisture required and wilting may result bringing about premature maturity; particularly is this the case if the weather is hot and accompanied by drying winds.

Use a Depth Guide.

A depth guide should be used on the cultivator to avoid too deep cultivation and as the plants grow toward the centre between the rows the cultivator should be narrowed. The advent of the horse hoe or hiller has marked the greatest advance in economic potato culture of any implement on the farm. This implement has made it possible to distribute around the potato hill a fine earth mulch sufficient to kill the weeds, if done when the weeds are young, and not in any way disturb the growing roots in the hill. The tooth cultivator should follow the horse hoe, setting it as close as possible, to loosen the hard centre between the rows in order to protect the land from drying out, form a loose soil to quickly absorb rains that may fall and give fine soil for subsequent hilling.

In potato culture the point above mentioned indicates the necessity for reasonable distance between the rows in order to grow this crop with the least amount of hand hoeing for, if the rows are narrow, there is not the space from which to draw the soil for hilling purposes and the row cannot be cultivated without doing damage to the feeding roots as there is not space enough for the cultivator to work without doing such damage. Thirty-three inches apart seems to be the distance most suitable. Tests made at Kentville covering a period of five years including 16 tests show that rows thirty inches apart yielded an average of °65.6 bushels and those thirty-six inches apart 293.1 bushels, the potatoes being spaced twelve inches apart in the row. The system of cultivation outlined above having been followed.

W. S. BLAIR,
Experimental Station.
Kentville, N. S.

GROUND YOUR WIRE FENCE.

In the summer time when the thunder caps appear in the sky and the storm sweeps down on the farm, the farmer thinks less of his safety than he does of his live stock.

When the stock is in the field during the storm it may happen that the animals drift against the wire fence, which may be heavily charged with electricty, and are shocked to death.

The ordinary fence built on wooden posts should be grounded every sixth post by means of a wire six or eight feet long twisted around all of the line wires of the fence and then secured in a hole in the ground. The hole should be dug deep enough so that the wire comes in contact with moist earth. A fence so grounded offers no danger to live stock during the thunderstorm.

The wire fence built on galvanized steel fence posts is already grounded at every post and no thunderstorm with its discharge of lightning can injure the cattle enclosed by such a fence.

KEEP ROOTS DAMP.

Every precaution should be taken to prevent the roots of fruit trees becoming dry between the time they are received and when they are planted.

POULTRY NOTES.

The chickens should always be waiting and ready when the next feeding time comes.

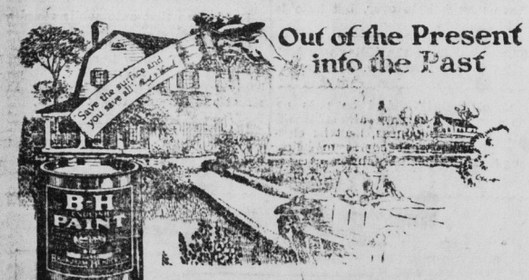
Probably the greatest drawback to the improvement of farm flocks today is the fact that mongrel and cross-bred birds will pay some profit.

Denmark, Canada, Egypt and the United States were the chief sources of Great Britain's supply of eggs during the past year.

There are always some crippled chicks from the hatches. These should be killed rather than permitted to live to be picked on by the remainder of the flock. Healthy animals have no use for cripples and it is only cruel to permit the deformed stock to live.

Of the many varieties of Wyandotte, the white is by far the most largely represented in Canada and the United States, and it is with the white variety that greatest progress has been made in developing egg laying strains.

Stock turned into orchards are not liable to injure trees if provided with an ample supply of water. If they do bother the trees, however, provide protectors or remove the animals from the area.



Out of the Present into the Past

IT is interesting to note the excellent preservation of some old family residences. So well do they "fit into the picture" that except for their architecture one might almost imagine them the product of the present age, yet in reality they stand as silent tributes to the wise precaution against decay and deterioration on the part of a former generation.

Any house that is worth building should also be worthy of preservation by means of paint. The maximum of protection is found in

B-H "ENGLISH" PAINT

The formula (70% Brandram's Genuine B.B. White Lead and 30% Pure White Zinc) produces a paint with a fine, smooth surface that does not crack, chip or peel and a surface protecting film that will defy the elements.

Investigate B-H "English" paint—you'll find most Canadians use it because of its economy and lasting qualities. A trial will make you a convinced adherent to this brand that goes so far and lasts so long.

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Bees Will Swarm Early This Year

Control Necessary to Ensure Maximum Honey Crop.

Many, who have bees, find the question of swarm control and the securing of a maximum crop of honey, without undue manipulation a very serious problem.

This season there will be an excess of early swarms, owing to the fact that the bees in many locations are approximately a month in advance in condition, unless the beekeepers complete the following manipulations. This means with many that swarms will be common during the latter part of fruit bloom and dandelion blossoming period. If, however, the following directions are carried out (and they require very little time), then the beekeepers will have stronger colonies when the main honey flow begins, besides which one can make his increase or artificial swarm at the time the beekeeper wishes to, rather than at the time the bees would like to do this themselves.

Directly fruit trees blossom or dandelion flowers are plentiful give each reasonably strong colony a second hive-body, containing drawn combs or full sheets of foundation. If the colony is very strong and the weather fine, one week after the second broodchamber was given, place an excluder on top of this and add a third hive-body as a super. Leave the colony either in the 2 or 3 hive-bodies until the clover flow begins in June. Directly it is noticed that clover is yielding, manipulate as follows: If the colony has two brood-chambers and a super, remove the super and then fill the second or top chamber with combs containing eggs and youngest brood. Place the remaining combs and queen in the first or lowest broodchamber and place a queen-excluder over the single broodchamber which now contains the queen and the surplus brood which would not go in the second or upper brood-chamber. On top of the queen-excluder place an empty super containing drawn combs or comb foundation. If a super has been used on the double brood-chamber, place this on the empty super and on top of either the one or two supers, as the case may be, place the second broodchamber, now containing the eggs and youngest brood. Leave the colony this way until the morning of the tenth day. If increase is wanted, this top broodchamber can be removed, placed on a bottom board in a new location and its entrance reduced so that only a few bees can enter and leave at one time. All the worker brood will be sealed and there will be ripe queen-cells in this broodchamber, unless the honey flow ceased while the brood was on top. This increase should be examined in from two or three weeks to be sure the young queen is mated and laying. If no signs of a queen are found, a queen-cell or young queen must be given and another examination made to be sure queen is laying. If no increase is desired, destroy all queen-cells in top broodchamber, not later than the morning of the tenth day or before the seventh day and then leave this broodchamber in place, on top of the supers, and when the brood has emerged the bees will use it as a super.

Plow Orchard Soon To Save Moisture

Early Cultivation Favorable to a Good Set of Fruit.

If a clover crop has been left over the winter in an orchard, it should not, as a rule, be allowed to grow in the spring until there is a good crop to plough under, especially in districts where droughts occur, but the land should be ploughed as soon as it is dry enough to work, not waiting for the plants to grow up; thus, much moisture which would otherwise be transpired by the leaves of the plants will be saved, and the chance of suffering from drought lessened.

A good setting of fruit depends very much on an ample supply of moisture in the ground at blooming and setting time, and if there should be a drought after a heavy crop of clover or vetch has been ploughed under late in the spring, conditions will not be at all favorable.

After the land has been ploughed, it should be kept well harrowed during the early part of the season to conserve the moisture, as it has been found that there is a rapid decrease of moisture unless the surface soil is kept close. Early cultivation is desirable, also, because it is important to get the soil warmed up as soon as possible by letting the air in, and so making conditions favorable for growth early in the season. The greater activity in growth there is in the early part of the season, the more likely is there to be a good set of fruit, especially on rather old trees, where the flow of sap through the fruit spurs is not as free as in younger trees, and, if there are drying winds and a drought, there may not be sufficient moisture to hold the fruit on the trees. An application of nitrogen on some soils has been found very useful in promoting greater activity of growth in the early part of the season, and so better ensuring a setting of fruit.—W. T. Macoun, Dominion Horticulturist.

COOL MILK TO KEEP.

The warmer the weather, the greater care must be taken in handling milk from the cooling standpoint. Immediately after the milk comes from the cows, cool it to 45 or 50 degrees, and keep it below the latter temperature until sold.

TIME TO PLAN FOR FILLING OF THE SILO

Plant Enough Corn and Build New Storage Right Size for Herd.

DIAMETER MUST BE FIGURED ON

Silage Must be Fed Fast Enough to Prevent it Spoiling.

Provided weather conditions are suitable, next week will probably see more corn planted in Canada than any other week of the season. In earlier days or before the ten-hour day and holidays became so generally recognized on farms, the 24th of May was corn-planting day wherever soil and sun allowed of the performance. More lately, however, the development of early maturing varieties of corn for ensilage has resulted in putting off the date of planting until early in June in many cases and the seasons for the past few years have not been any too favorable to early planting.

Planting season is the time when the stock farmer should arrange to have sufficient land in crop suited for filling his silo and this in most cases means providing sufficient corn acreage. If there is any doubt as to the acreage needed, it is best to allow a margin for safety, remembering that the season may cut down the yield of crop. If there is too much corn to go into the silo, the excess can be cut for dry fodder, or, if the excess is recognized early some of the corn may be used for solling at the time when pastures are failing. The amount of silage that may be obtained from an acre of land varies from 4 to 20 tons, and a fair allowance on ordinary land is 8 tons per acre.

If the silo already on the farm is of the right dimensions to hold feed for the herd, figuring out the necessary corn acreage is an easy matter, but if additional silo space is needed, it is as well to have the new silo of just the right size, especially as regards diameter. The proper diameter of the silo depends on the quantity of silage to be fed daily. The silage should be fed out fast enough to remove it from the top of the silo at the rate of from 1 1-2 to 3 inches a day. The warmer the weather the more silage must be removed from the surface daily to prevent it from spoiling. For the winter feeding season it is safer to figure on removing 2 inches daily than any smaller amount.

A common error in building is to make the diameter too large for the size of the herd. The weight of a cubic foot of silage varies according to the pressure to which it is subjected, but in a silo 30 feet high the weight per cubic foot, averages about 40 pounds. So, by knowing the quantity of silage to be fed daily, it is possible to estimate what the diameter of the silo should be to permit the removal of a certain number of inches each day.

A 900-pound cow ordinarily consumes 30 pounds of silage a day, and a 1,200-pound one about 40 pounds. Yearlings eat about one-half as much as mature animals; fattening cattle, 25 to 35 pounds for each 1,000 pounds live weight.

Crop Conditions Good In The West

Acreage About the Same as Last Year — Wheat Well Above Ground.

Winnipeg, May 17.—Reports from 239 points in the Prairie Provinces indicate that crop report conditions on the whole are very satisfactory, though the season is generally rather later than last year, according to the crop report for Manitoba Free Press.

The acreage in wheat is, contrary to expectations, little if any less than last year when the acreage seeded was a little over sixteen million.

By province it would seem that Manitoba is practically unchanged; Saskatchewan slightly less, and Alberta with an increase sufficient to outset the shrinkage in Saskatchewan.

The winds which were reported to be doing such havoc in Saskatchewan have evidently been exaggerated and the amount of re-seeding to be done is relatively small. The supply of moisture is abundant, only 3 or 4 points reporting that they would be better for rain.

Fully 95 per cent of the wheat crop is in good moist bed and generally well cultivated. About 50 per cent—taking the West as a whole—of the wheat is well above ground. Not more than 40 per cent of the coarse grains are seeded and there will be a material falling off in acreage of oats and very heavy reduction in flax, with a corresponding increase in shrinkage.

There is little sign of dread grasshopper in any of the provinces, and the cold weather and frosts of the past few days that have retarded growth, have also retarded the 'hopper.'

Labor is reported abundant and the wage for the three provinces will average about $55, a marked improvement on last year.

To sum up, the Free Press says: The season is a little late, but the seed bed is the best in years. Wheat has been put in well and while a few districts report the early sown wheat a little scorched with frost, the general outlook is the best for some years past.

Glimpse At Canada's Agricultural Wealth

Report of Dominion Minister of Agriculture Shows Progress Made by Farmers.

A table given in the report of the Dominion Minister of Agriculture for the year ending March 31, 1920, places the value of all the field crops in that year at $1,812,915,500, and the value of dairy products at $247,531,352. The number of horses in the country is given as 3,667,369, the number of milch cows as 3,548,437, other cattle as 6,536,574, sheep as 3,421,968, and swine as 3,040,070. Except in swine these numbers are slightly in advance of those given in the previous year and swine are quoted as more numerous than in 1915, 1916, and 1917. A noteworthy statement is that in three years of the war the Imperial War Office was supplied under the supervision of the Dairy branch of the Department with hay, oats and flour to the value of $98,631,568, representing 481,250 tons of hay, 76,495,221 bushels of oats, and 984,782,550 pounds of flour, for which approximately 24,000,000 bushels of wheat were required.

Another statement of special interest is that the live stock that came under the supervision of the officers of the Markets and Intelligence division of the Live Stock Branch, during the year was in excess of 2,800,000 head, valued at over $200,000,000. During the year, 3,788,138 pounds of wool were graded by the branch for farmers' co-operative organizations. The dairy business is shown to have developed greatly, especially in the Prairie Provinces, where the output of creamery butter has increased in a decade from 5,478,304 lbs. to 25,356,711 lbs. The number of publications issued during the year by the Publication Branch of the Department was 2,400,000, including 200,000 market reports. A vast variety of information is given in the departmental report, which details in a comprehensive, well digested way, the operation during the year of all the experimental farms and stations and all the branches and divisions.

New Sweet Clover Emergency Crop

Annual Variety Useful for Filling Gaps in Standard Hay Acreage.

It has been determined that sweet clover, which grows luxuriantly along the roadsides and out-of-the way places, and which is grown in some sections as a forage crop, has one strain which is annual. The annual sweet clover occasionally appears in patches of the more common biennial form, either as single specimens or in small groups. Seed of the annual has been separated and in recent years it has been propagated.

The nature of the new variety is such as to indicate that it may have important possibilities. Probably its greatest use for hay will be as an emergency crop. When a stand of clover has been Winter killed, or when for any reason a farmer finds that his hay supply will be short, this variety can be seeded during the Spring and, provided lime and the proper bacteria are present, yield a good hay crop. Where rainfall is sufficient, it may be seeded even after wheat harvest. It makes a good growth the first season and experiments have shown that it may be seeded with oats to be harvested after the grain is cut. It grows rapidly, and for this reason will keep ahead of weeds.

The annual has a smaller and more woody root than the biennial form, and crown or resting buds are not formed. The stems, branches, leaves, flowers, pods, and seeds are indistinguishable from those of the biennial form, but during the season of seeding the plant grows more rapidly, blossoms, fruits, and dies. It blooms early and ripens seed in August when seeded early. Seed of the annual form is still very scarce and high-priced and, since it can not be distinguished from seed of the ordinary biennial, should be purchased with caution.

STANDARD BRED IS BEST

Here are five reasons given by specialists for keeping standard-bred poultry:

Standard-bred poultry is more uniform in size, type and color.

Standard-bred poultry is more attractive in appearance and appeals more strongly to purchasers of stock and eggs.

Standard-bred poultry offers a greater combination of practical and useful qualities suitable to the needs of the farmer and poultry keeper.

The products of standard-bred fowls are more uniform in quality, are in greater demand, and bring better prices.

Standard-bred poultry means greater success and better profits.

SOME ADDITIONAL GRASSES.

Orchard grass and meadow fescue are grasses recommended by the Dominion Experimental Farms Department as additions to the "standard and often stereotyped mixture of "clover and timothy," for producing hay crops on Canadian farms. Other grasses that are at present but little appreciated in Canada, but which may be advantageously put in as bottom grasses in hay mixtures and pastured when the hay has been removed, are: Kentucky blue grass, suitable especially for loamy soil; sheep's fescue and the red or creeping fescue, for light land; red top, for wet conditions, and the crested dog's tail, also for wet spots.

BIG PROFITS IN TURKEYS AS A SIDE LINE FOR FARMERS

Free Range However is Essential to Success With Class of Poultry.

When the festive season of the coming Winter arrives, and the price of turkeys is almost beyond the purse of the average individual, one cannot help thinking that more of this type of fowl ought to be produced. The turkey flocks of Canada are not being made to keep pace with the increase of population. This is no doubt due to a great extent to the difficulties encountered in the raising of young turkeys by those to whom this phase of the poultry business is a novelty.

To many people, turkeys have been a great disappointment. Many have failed because they have tried to raise turkeys in yards like those provided for other fowl. Others have killed their birds by overfeeding, and allowing them to become infested with vermin, owing to dirty quarters, or lack of examination and proper care. The mature birds are very hardy, and stand improper conditions very well, but the young poults are very tender and must be treated right, if success is wished for.

Give Poults Free Range.

It is absolutely necessary to give the poults free range, tofeed them well without overdoing it, and to keep them free from vermin. It has been found by experience that to be successful year after year, and to annually enlarge the flock, it is necessary to have almost unlimited range, for in time land that has been used as a range, becomes "turkey sick," and a range of new ground must be provided.

Where turkeys are hatched in the natural way, the usual thing is to keep the hen cooped for four or five weeks. A slatted front coop should be provided, giving the young turkeys a chance to run out, and they will cover a sufficiently wide range for a few weeks. Care must be taken to move the coop to a fresh stand each morning, or dead turkeys will cause discouragement. Nothing is more fatal to young turkeys than roosting over night in befouled places.

The cooping system avoids mortality from dampness, because the young birds will run home to the mother when it begins to rain. The poults will cover a wider range each day, and gradually become accustomed to moving over a larger area, which is in the best interests of the flock. If the weather is pleasant at the end of five weeks, the hen may be let out with them, in which case, the birds may be allowed absolute freedom. Do not shut the turkeys in close ill ventilated pens at night, as this is certain to prove injurious, and will cause great mortality in the flock.

List of Feeds.

Their is a wide range to choose from in selecting feed. Curds, oatmeal, cornmeal, and cracked wheat are all good. Shorts mixed with warm skim milk has been fed successfully for the first five weeks. Stale bread soaked in warm sweet milk, should be fed the first few days, gradually changing to milk soaked shorts until that forms the whole ration. Mix the shorts moist and crumbly, and do not allow any sour feed to lie around. Keep the feeding troughs clean, and give skimmed milk and buttermilk as well as pure water to drink. About one sixth part of the daily ration should be green food, such as onion tops or dandelions leaves cut up fine and mixed with the shorts.

Cleanliness and care not to overfeed are the main points in feeding. Many young turkeys die as a result of feed being left in their troughs to sour, when they keep pecking at it, causing fatal bowel trouble.

Be very careful in changing feed, and in making any other changes with the birds. Guarding against lice may be accomplished by giving the old hen a thorough dusting with insect powder a day or two before the eggs are hatched, and by dusting the little turkeys from time to time. In dry weather, if dusting places are provided the poults will dust themselves free of vermin. They must, however, be kept free of these pests because the parasites drink the blood of the little turkeys and enfeeble them so that death soon results.

Profit in Turkeys.

Turkeys are very profitable if taken care of properly, but slip-shod methods undoubtedly will result in failure. There is a good market for good birds in the Autumn and Winter, and a very large industry might be the result, if our Canadian farmers would take up the raising of turkeys, if only as a side line. Then too, if there were more birds raised the prices might drop a little, thus pleasing the would be consumer, to whom, during the years dominated by the high cost of living, turkey was an unknown luxury. There is no real reason why turkeys cannot be raised in such numbers as to make for satisfaction all round.—M. McL., Chezzetcooke, N. S.

Calfhood Best Time To Dehorn

Cool Weather Best for Operating on Older Cattle.

The Saskatchewan Department of Agriculture gives Western farmers the following advice when and how to dehorn their commercial cattle:

"All calves should be dehorned at from one day to two weeks old with caustic potash. This operation is simple. When the calf is three to four days old, clip the hair where the rudimentary horns or buttons later appear, and, with a stick of caustic acid, wrapped at one end to protect fingers, rub over the button until the skin becomes a little inflamed. A scab will appear in a few days, and further growth of the horn will cease. It is advisable to rub oil around the button to prevent the caustic acid spreading over too large an area.

"On two-year-olds and over use a dehorning clippers or saw. Be sure and dehorn close to the skull to prevent further growth of the horn, as stubs make cattle look staggy.

"Dehorning should be done in the Spring or Fall, or any time, providing the weather is moderately cool.

"When purchasing feeders on the central market, it will pay you to have them dehorned before leaving the yards."

The circular adds: "Thousands of dollars are lost annually by Saskatchewan stock-raisers alone owing to brused carcasses caused by horned cattle. Dehorned cattle in carload lots sell from fifty cents to one dollar per hundred pounds higher than equally good horned cattle."

USE NITRATE OF SODA.

Nitrate of Soda supplies nitrogen in a readily available form and because of this is one of the most valuable of the nitrogen supplying fertilizers. In the Spring, nitrates in the soil may be very deficient because of their depletion by drainage from the soil, caused by Fall and early Spring rains. Liberation of nitrogen in the humus cannot take place until the soil warms and the nitrifying bacteria become active; hence the suitability of Nitrate of Soda for furnishing available nitrogen early.

THE HUNTER knows the value of MINARD'S

ELLISON Gray, a well known Nova Scotia guide, writes:

"Have used MINARD'S LINIMENT in my home, hunting and lumber camps for years and consider it the best which follows on the market. I find that it gives quick relief to minor ailments, such as Sprains, Bruises and all kinds of wounds. Also it is a great remedy for coughs, colds, etc., which one is liable to catch when log driving and cruising during the winter and spring months. I would not be without MINARD'S LINIMENT and cannot recommend it too highly."

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