

Corn for Forage or Ensilage*

J. H. Grisdale, *Agriculturist, C. E. P.*
 Corn for forage or ensilage can be grown to advantage in almost all parts of Canada at present occupied by farmers or stockmen. Results have not been satisfactory in every case where efforts have been made to grow it, but this has very often been due to unsuitable varieties grown, rather than to adverse peculiarities.

The reasons for growing or making an attempt to grow this forage crop among live stock are kept in any numbers are numerous and cogent. A few of them follow:

1. As a plant capable of yielding a large amount of valuable forage under a great variety of soil and climatic conditions, without an equal.

2. When properly preserved, whether as ensilage or dried, it can be used as material to render other less palatable roughage more acceptable to farm animals.

3. It is the best plant or crop for ensiling that can be grown to advantage in Canada. It is practically a perfect crop for this purpose, hence it helps to solve the great problem of how to furnish an abundant and cheap supply of succulent food for winter or summer feeding of dairy or beef cattle.

4. When properly grown and well preserved as ensilage, it is the equal or superior to roots in feeding value and palatability. It can, however, generally speaking, be more cheaply grown and more easily preserved than roots.

5. The labour of growing an acre of corn is of a character much more agreeable to perform and much less arduous than that of growing an acre of roots of any description.

6. Corn being a cultivated or hood crop, serves well to clean the land; that is, free it from weeds, so fitting it for grain growing, and putting it into shape to seed down to grass or hay.

7. Corn is a gross feeder and may be depended upon to make good use of a never so abundant supply of plant food. It is, for this reason, particularly well adapted to occupy that place in the rotation where humifying vegetable matter and a fairly liberal supply of large quantities of plant food suitable for root, leaf and stem growth rather than for seed production.

8. The growing of corn on a fair proportion of the area devoted to the farm will permit of keeping more cattle and so increase the revenue as well as augment the manure supply so essential to the maintenance of soil fertility.

9. Corn when preserved as ensilage can be stored much more cheaply in much less space than any other roughage. In addition, when stored in this way it will keep indefinitely and is always ready to feed.

10. In 30 years' experience in farming in the Ottawa valley, the writer has seen all kinds of grain crops suffer failures, he has seen hay and clover not pay for the making, and roots and potatoes practically nil, but in all the time he has never seen a failure in the corn crop. There has always been a fairly profitable return from the fields in corn.

WHERE TO GROW IT.

Corn will grow in any kind of soil, provided always that there is good drainage. Under draining is not absolutely necessary, although advisable here as with most other farm crops. On low-lying or level lands, ditches should be in good working condition and water furrows kept open all summer. If a choice of land may be made, then warm-bottomed light loamy soil may be expected to prove the most satisfactory under most weather conditions.

*Extract from Bulletin No. 65 of the C. E. P. Ottawa, entitled "Growing and Using Corn for Ensilage or Fodder Crop."

In the rotation, corn should follow clover hay, pasture or meadow. Stubble land as well as lands that have just been in hood crops are not suitable since the supply of humus or humifying material is likely to be small, and since corn needs much food such as these substances provide, it would probably fall short of a good crop on account of the lack thereof. Corn might advantageously come after grain or even follow a hood crop, provided the land were very fertile or a very heavy dressing of manure were applied.

A Home-Made Bag Truck

Much labor is saved on any farm where considerable quantities of grain are grown, by a well constructed bag truck. These little labor savers can be purchased at a very reasonable price, but any man of a mechanical

**A Home Made Bag Truck**

Anyone of a mechanical turn need not do without a bag truck. The one illustrated is owned by Mr. Will Smith, Durham Co., Ont., and is entirely home made.

—Photo by an editor of Farm and Dairy.

turn can make a bag truck equally as good or better than can be bought. The truck herewith illustrated is entirely home-made. Mr. Will Smith, Durham Co., Ont., put it together in spare time. Even the irons on it were shaped at home.

How to Build a Stave Silo

I would like if you would give me full instructions how to build a stave silo. The timber is cheap in this section, and I think it would be the cheapest if I had it as good. How long would it last? I would want it for six or eight cows.—H. L. Coe Hill, Ont.

A stave silo for six or eight cows should be large enough to hold about 40 tons of ensilage. Usually the building of a silo on the farm leads to the keeping of more cattle, hence I would suggest that your correspondent build a silo capable of holding 60 or 70 tons of ensilage. Such a silo should be about 12 feet in diameter and about 27 feet high.

The material necessary for such a silo would be about as follows:

- One yard flat stone.
- One yard sand.
- One barrel Portland cement.
- 120 pieces of red pine or spruce or extra good quality hemlock lumber 15 ft. long, 6 in. wide and 2 in. thick.
- 12 pieces same wood 15 ft. long, 4 in. wide and 2 in. thick.
- 32 pieces round $\frac{5}{8}$ iron 11 ft. long, threaded 6 in. each end, 2 nuts each end.
- 8 pieces flat iron 2 in. wide, $\frac{1}{2}$ in. thick, 9 ft. long. Threaded round pieces, one foot long on each end.
- 60 3-in. washers $\frac{1}{2}$ in. thick, $\frac{1}{2}$ in. bore to go on rods, 2 for each rod.

One gross staples large enough to fasten rods to staves.

PREPARING THE MATERIAL.

The staves should be sized and dressed one side. They might be tongued and grooved, in which case it would be necessary to prepare three more pieces than mentioned above.

Four posts should be constructed by using for each a length and a half of 6 in. by 2 in. stuff to which should be nailed on each side the same lengths of the 4 in. by 2 in. stuff. Break joints. Nail pieces in such a way as to form a uniform surface of 6 in. wide made up of 2 in. wide edges of three pieces making up posts. The in. by 2 in. stuff for the centres or 6 in. of silo wall coming between two staves. There should be 19 or 20 staves between posts.

Dig a circular trench two feet wide for foundation of silo. Construct cement wall in trench wherein to stand silo. When cement is set (three or four days) erect posts at equal distances on the wall. Fill in with staves.

Iron rods should be bent and used as hoops. They should go far enough through posts to allow for washers and nuts being put on without difficulty. Tighten as convenient or necessary.

Holes to receive hoops should have been bored in the posts before erecting. These hoops should be placed about as follows, starting at the bottom: (1) 3 in.; (2) 12 in.; (3) 30 in.; (4) 30 in.; (5) 33 in.; (6) 36 in.; (7) 36 in.; (8) 36 in.; (9) 48 in.; (10) 48 in.

TWO FLAT HOOPS.

Hoops Nos. 5 and 8 should be flat. The holes for the hoops should be bored on the inside, starting about 1 in. from the inside edge of the 4 in. in. piece and ending up about 1½ in. from the outside edge of the other 4 in. piece, against which the washer is to press. The holes should be close together at the crossing points in the centre of the posts.

In placing the staves, start in with an 18 ft. piece, topped by a 9 ft. piece. The next should be a 9 ft. piece topped by an 18 ft. Thus joints will be broken. The joints in the staves will be opposite the flat hoops.

Doors should be cut between hoops 2 and 3, 4 and 5, 6 and 7, and between 8 and 9. When placing staves, start with 18 ft. piece on level about half through one of the staves to form part of door. Be sure to start top and bottom of each door, or there will be trouble later on.—J. H. G.

I am very much pleased with Farm and Dairy and am sending my renewal for another year. Farm and Dairy is worth a place in every home.—J. G. Lethbridge, Sec. Treas. Dominion Grange, Middlesex Co., Ontario.

NORTHERN ONTARIO

160 acres of land for the settlers in Northern Ontario. Situated south of the G. T. P. Transcontinental Railway, South of Winnipeg, and 800 miles nearer the seaboard. A rich and productive soil, covered with valuable timber. It is rapidly increasing in value.

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 The Director of Colonization
 PARLIAMENT BUILDINGS, TORONTO
 OR TO
HON. J. S. DUFF
 Minister of Agriculture

IMPORTATION OF STOCK

Space in the Association cars will be reserved for all stock coming from the East to B. C., providing the owners, or importers, make application for definite space before April 30th to R. W. Hodson, Live Stock Commissioner, Victoria, B. C.

The B. C. Stock Breeders' and B. C. Dairymen's Associations pay half the transportation expenses.

WESTERN CANADA FARMS FOR SALE**H. F. LINDE'S LIST**

I am in a position to give you the most valuable information regarding Western Canada Lands I have met. I have desirable properties offer at the following prices:
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 160 ACRES—SOUTHERN ALBERTA—5 miles from Lethbridge; 100 acres of good pasture; 20 acres of good meadow, balance prairie; \$1200; 13 cash; balance yearly payments at 6 per cent.

800 ACRES—SASKATCHEWAN—3½ miles from Bladworth on the C. N. Ry.; excellent soil; good settlement; \$10 per acre; \$150 per acre cash; balance 4 yearly payments at 6 per cent. This is a snap.
 320 ACRES—CENTRAL ALBERTA—6 miles from Innisfail, the Central Dominion of western Canada; \$15 per acre; easy terms.

160 ACRES—CENTRAL ALBERTA—Close to Innisfail; has been improved; this is a first class buy; \$12 per acre; 13 cash.
 320 ACRES—SOUTHEASTERN SASKATCHEWAN—7 miles from the prosperous town of TANTALON; 100 acres of good pasture; 10 acres woodland; balance excellent pasture and hay land; 100 acres and outbuildings; 160 acres fenced; this will make an ideal grain and dairy farm; \$12 per acre; \$200 cash; balance yearly payments at 6 per cent.

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In addition to the above I have hundreds of choice selected grain, stock, dairy and poultry farms to offer at rock-bottom prices, on the entire end of terms, throughout Manitoba, Saskatchewan, Alberta and British Columbia. Write me your wants. I can fill the bill and save you money.

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