

Silos on Manitoulin Island

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LIVE stock production on Manitoulin Island is limited only by the amount of feed which can be raised to keep the stock over winter since there is plenty of cheap pasture for the stock in the summer. The one crop which can be depended on to give the most feed to the acre is corn.

To be sure a good many people have raised the point as to whether corn can be successfully grown here or not, but the results of two years' work with our acre profit competition shows that in all parts of the island corn can be successfully grown and will return profits in nearly all cases as high as the total value of any other crop that can be raised.

While in many cases corn has been successfully raised on Manitoulin Island, yet in only very few cases has the corn been fed to advantage. In order to make the best use of corn it must be put in the silo as there is considerable waste by any other method of feeding it. A number of types of silos have now been built here, and I have endeavored to get full information as to the cost of constructing these. I have endeavored to figure costs that would have to be put on the farmer's own materials, which he has in his own bush, rather than to give that material the price it would be really worth if he went to the mill to buy it. In the cases given, I have placed the cost of sawing and dressing lumber for instance, rather than the market value of that lumber, against the silos. In the case of the Runnalls' silos, however, the materials were all bought, and therefore were charged at market prices. Labor, which in most cases was simply estimated on a basis of man labor, is a large part of the silo's cost and in most cases the builder could perform the labor himself.

The kind of silo that I would advise building would be of the type of Letts' and Donaldson's silos. They are very durable silos, and have the advantage of having a hollow wall so that the silage will not freeze.

An Octagonal Silo

The first silo was built by Mr. Wm. Clarke, of Silver Water, it being octagonal (or eight sided) in shape and 10 ft. by 24 ft. in size. It was built some years ago when material was cheaper than at present, and was constructed by simply lying scantline on top of each other—putting first the scantling, then leaving a space the size of the scantling, then laying another scantling and so on right up. It was then boarded on each side with rough lumber and shingled on the outside. The cost would be about as follows:

2400 ft. of 2x4 scantling at \$10 a M.	\$24.00
2000 ft. of rough lumber at \$7 a M.	14.00
6000 shingles at \$2.50 a M.	15.00
10 days' labor at \$2 a day	20.00

Total 73.00

This silo has no roof and no chute but is inside of barn.

The next silo was built by Mr. Geo. Griffith, of Poplar, it being subsequently taken down and moved to Mr. Donald Griffith's, of Barrie Island. It is a stave silo, 12 ft. by 24 ft. and cost about as follows:

2000 ft. 2 inch pine lumber at \$7 a M.	\$14.56
9 large band iron staves with rod points	20.00
12 bars of cement base at \$60	6.00
10 days' labor at \$2 a day	20.00

Total 60.56

This silo has no roof and no chute. A similar silo has been built by Mr. Andrew Robertson, Ice Lake, 10 feet by 30 feet, using about the same amount of materials.

Other silos have been built of more durable construction, having solid walls of cement. The first was built

by Mr. Love and the other by Mr. Wm. Vincor—both of Mindemoya. These silos were practically the same size and cost about the same, Mr. Vincor's costs being given below. This silo is 10½ feet by 32 feet.

315 bags of cement at \$20	\$63.00
400 ft. of lumber for chute and roof at \$7 a M.	2.80
200 shingles for chute and roof at \$2.50 a M.	5.00
25 lbs. nails for chute and roof at 40	.40
53 days' labor at \$2 a day	106.00

Total \$176.00

Last summer Messrs. W. O. Runnalls and A. Runnalls of Barrie Island built modified forms of stave silos, consisting of two layers of inch hemlock, with elm staves around at varying distances for the hoops. These silos are 12 feet by 35 feet, and the costs were approximately the same, Mr. W. O. Runnalls' costs being given below:

2000 ft. hemlock at \$15 a M.	\$30.00
150 ft. of elm staves at \$7 a M.	10.50
125 lbs. of 2 in. and 1 in. nails at 30	3.75
7 ft. cement wall at base	25.00
34 days' labor at \$2 a day	68.00

Total \$137.25

The cost includes chute, but no roof.

Cement Plastered Silo

Mr. Peter Donaldson of Gore Bay built a cement plastered silo 13 feet by 34 feet this past summer. First a concrete foundation that would come up through the ground was built and a ring of scantling was bedded into the cement top; 2 by 4 scantling was spiked to this to extend upright to the height of the silo, the distance apart being 12 inches from centre to centre. These were then lathed inside and out with elm lath and plastered with a mixture of lime, mortar, and cement. The elm lath were made by taking the green elm logs to the mill and having them first sawed into plank. These plank were then sawed on the narrow side to make half-inch lath. The essential feature of this is that the lath must be green when applied or else given a thorough wetting in a creek or a trough. Details of costs were as follows:

1000 ft. of 2x4 scantling at \$10 a M.	\$10.00
2000 ft. of ½ inch lath at \$4 a M.	8.00
300 ft. lumber for chute and roof at \$8 a M.	2.40
200 shingles for chute and roof at \$2.50 a M.	5.00
2 keps of nails at \$3 a keg	6.00
6 bbls. of lime at \$1.50	9.00
53 lbs. hair	3.50
83 bags cement at \$50	41.50
60 days' labor at \$2 a day	120.00

Total \$207.50

Another Plastered Silo

Mr. O. E. Letts of Barrie Island put up a silo last summer very similar to Mr. Donaldson's, the difference being that he used a large number of braces, being simply inch stuff running at a slant from one stud to the next, and nailed flat on the outside of the studding and only long enough to run from one stud to the next and also having tongued and grooved inch sheathing on the outside instead of lath and plaster. There were also elm hoops put around the studs to strengthen the structure and to provide something to which to nail the sheathing. He used lath and cement plaster on the inside. The silo is 12½ feet by 34 feet, and the following materials were used:

10 bags cement for foundation and plastering at \$10	\$10.00
7 planks, 2x4 for sill and plate, 200 ft. at \$10 a M.	2.00
97 pieces, 2x4 scantling, at \$10 per M.	22.50
1500 ft. of lath	6.00
200 ft. of braces at \$7 a M.	1.40
1500 ft. of sheathing at \$18 a M.	27.00
300 ft. of lumber for chute at \$8 a M.	2.40
150 lbs. of nails at \$3.50 a keg	5.25
Steel roof to cost	40.00
2 ½ days' plastering cement at \$3 a day	7.50
30 days' labor at \$2 a day	60.00

Total \$156.13

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