

RESULTS SECURED WITH SUGAR BEET HARVESTERS IN THE
EASTERN AREA IN 1946

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Sugar beet harvesters were first made commercially available to farmers in the Eastern sugar beet growing area in the fall of 1943. Marked improvements have been made in these harvesters during the four-year period they have been in operation. Farmer acceptance of these harvesters has been far ahead of the ability of the manufacturers to build them.

Farmers who have owned and operated these harvesters are, with one or two exceptions, very well pleased with their performance. The general reaction has been amazement that the harvesters perform so well. One of the common statements made by growers who have used a harvester is, "I never realized there were sugar beet harvesters on the market that would harvest beets so satisfactorily."

Our experience and data show that the purchase of a sugar beet combine is good, sound business, providing the farmer has a desire to harvest his beets mechanically and providing he is willing to do custom work if he does not have sufficient acreage of beets on his own farm to keep the machine busy.

Table I gives a summary of harvester performance in the Eastern area by factory districts and harvester make.

Table II gives the cost of harvesting beets mechanically with the Scott-Urschel Sugar Beet Combine and the International HM-1 under varying conditions, according to data secured from this past season's operations in this area.

The data presented in tables I and II show the relationship of labor requirements, acreage capacity, and original cost for the various harvesters and the effect these items have upon the cost of harvesting a given acreage of beets mechanically. These items are of particular importance in this Eastern sugar beet growing area because of the low tonnage yields per acre.

Table I

HARVESTER RECORD

By Make Machine:

SCOTT-URSCHEL HARVESTERS

| COMPANY | NUMBER OF MACHINES | TOTAL ACRES | ACRES PER MACHINE |
|--|-----------------------|----------------|----------------------|
| Buckeye Sugar Company | 1 | 95 | 95.0 |
| F. & M. Beet Sugar Association | 1 | 85 | 85.0 |
| Franklin County Sugar Company | 11 | 795 | 72.3 |
| Great Lakes Sugar Company | 9 | 678.6 | 75.4 |
| Isabella Sugar Company | 2 | 232 | 116. |
| Lake Shore Sugar Company - Holland | 8 | 581 | 72.6 |
| Lake Shore Sugar Company - St. Louis | 11 | 697.1 | 63.4 |
| Menominee Sugar Company (Green Bay, Wisc.) | 8 | 581 | 72.6 |
| Michigan Sugar Company | 59 | 3973 | 67.34 |
| Monitor Sugar Company | 11 | 772 | 70.18 |
| Superior Sugar Refining Company | 4 | 317.8 | 79.45 |
| Total | 125 | 8807.5 | 70.46 |

INTERNATIONAL HARVESTERS

| | | | |
|------------------------------------|---|-------|------|
| F. & M. Beet Sugar Association | 1 | 35 | 35 |
| Great Lakes Sugar Company | 3 | 113.5 | 37.8 |
| Lake Shore Sugar Company - Holland | 1 | 40 | 40 |
| Menominee Sugar Company | 1 | 12 | 12 |
| Total | 6 | 200.5 | 33.4 |

JOHN DEERE HARVESTERS

| | | | |
|------------------------------------|---|----|------|
| Lake Shore Sugar Company - Holland | 2 | 45 | 22.5 |
| Michigan Sugar Company - Sebawaing | 1 | 45 | 45 |
| Total | 3 | 90 | 22.5 |

MARBEEET JUNIOR HARVESTER

| | | | |
|--------------------------------|-----|------|-------|
| F. & M. Beet Sugar Association | 1 | 72 | 72 |
| Total | 135 | 9170 | 67.93 |

Table II

SCOTT-URSCHEL SUGAR BEET COMBINE

| | 25 acres | 50 acres | 75 acres | 100 acres |
|---|-----------|------------|------------|-----------|
| Depreciation \$2,000 - 8 year life | \$ 250.00 | \$ 250.00 | \$ 250.00 | \$ 250.00 |
| Interest 5% on \$1,000 (Average Investment) | 50.00 | 50.00 | 50.00 | 50.00 |
| Capacity 4 acres 8 hr./day | | | | |
| 8 hr. days required to harvest | 6.25 days | 12.50 days | 18.75 days | 25 days |
| Labor Costs - 2 men at \$.75/hr. | \$ 75.00 | \$ 150.00 | \$ 225.00 | \$ 300.00 |
| Tractor Cost - \$.75/hr. | 37.50 | 75.00 | 112.50 | 150.00 |
| Repairs, housing, etc., \$1.00/acre | 25.00 | 50.00 | 75.00 | 100.00 |
| Total Cost | \$ 437.50 | \$ 575.00 | \$ 712.50 | \$ 850.00 |
| Credit for lifting \$2.50/acre | 62.50 | 125.00 | 187.50 | 250.00 |
| Net Cost | \$ 365.00 | \$ 450.00 | \$ 525.00 | \$ 600.00 |
| Cost per acre | \$ 14.60 | \$ 9.00 | \$ 7.00 | \$ 6.00 |
| Hand Labor Cost per acre 10 ton yield | 15.60 | 15.60 | 15.60 | 15.60 |

INTERNATIONAL HM-1

| | 25 acres | 50 acres | 75 acres | 100 acres |
|---|-----------|-----------|------------|------------|
| Depreciation \$2,400 - 8 year life | \$ 300.00 | \$ 300.00 | \$ 300.00 | \$ 300.00 |
| Interest 5% on \$1,200 (Average Investment) | 60.00 | 60.00 | 60.00 | 60.00 |
| Capacity 2.5 acres 8 hr./day | | | | |
| 8 hr. days required to harvest | 10 days | 20 days | 30 days | 40 days |
| Labor Costs - 3 men at \$.75/hr. | \$ 225.00 | \$ 450.00 | \$ 675.00 | \$ 900.00 |
| Tractor Cost - \$.75/hr. | 60.00 | 120.00 | 180.00 | 240.00 |
| Repair, housing, etc. \$1.00/acre | 25.00 | 50.00 | 75.00 | 100.00 |
| Total Cost | \$ 670.00 | \$ 980.00 | \$1,295.00 | \$1,600.00 |
| Credit for lifting \$2.50/acre | 62.50 | 125.00 | 187.50 | 250.00 |
| Net Cost | \$ 607.50 | \$ 855.00 | \$1,107.50 | \$1,350.00 |
| Cost per acre with sorting belt | \$ 24.30 | \$ 17.10 | \$ 14.77 | \$ 13.50 |
| Cost per acre without sorting belt | 18.30 | 11.10 | 9.77 | 7.50 |
| Hand Labor Costs per acre 10 ton yield | 15.60 | 15.60 | 15.60 | 15.60 |