

# Estimating Farm Machinery Costs

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This publication provides a guide for estimating the cost of owning and operating farm machinery. The data in Table 1 represents the cost per hour of owning and operating tractors but does not include labor cost. Table 2 presents both a total cost per hour and a cost per acre for performing the specified operations including labor cost. The implement width, tractor horsepower and performance rate are given for each operation. Tractors are designated as typical rear wheel drive (2WD), mechanical front wheel drive (MFWD), four wheel drive (4WD) or on tracks (TRACK). It is assumed that equipment is fully utilized.

**Operating costs** for field operations in Table 2 include repairs and maintenance, fuel, oil, lube and labor. Tractor costs in Table 1 do not include labor. Since the tractor costs are already presented in dollars per hour, the user can easily add a specific hourly wage to the costs. Operating interest is not included in either table. Specific costs include diesel, \$2.00/gallon, and labor, \$13.40/hour. Lube cost is estimated to be 15 percent of the fuel cost. Repairs are estimated as a percent of purchase price based on American Society of Agricultural and Biological Engineers standards.

**Ownership costs** include depreciation and interest. These costs have been derived by the capital recovery method which determines the amount of money that should be set aside each year to replace the value

of equipment used in production. Various financing arrangements and tax depreciation methods can produce costs that vary significantly from these estimates in a given year. The interest rate applied for capital recovery estimation in this publication is 5 percent.

Items such as taxes and insurance are left out of these calculations. These specific costs vary widely among farms so as to make routine calculation for representative situations impractical. These items should, however, be considered by the individual producer and factored into final budgets. Representative purchase prices for equipment are based on numerous sources of information including average U.S. prices and industry list prices.

This information may also be used in comparing or estimating custom rates. Farmers often perform custom work in order to spread out their ownership costs. Although custom rates do not always cover total operating and ownership costs, farmers should charge enough to cover all operating expenses and at least some ownership costs. Otherwise, performing custom work only wears out equipment without spreading out costs. In cases where custom operations are intended to be a form of income, adding 10 to 15 percent to the estimated total cost is customary as the operator's profit; however, custom operators should evaluate the costs based upon their annual usage and other specific parameters from their operation.

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**Table 1. Estimated Tractor Costs Per Hour**

| Tractor                 | Horsepower (PTO) | Annual Hours Use | Diesel Fuel Use (gallons per hour) | \$ Per Hour        |                         |              |             |             |
|-------------------------|------------------|------------------|------------------------------------|--------------------|-------------------------|--------------|-------------|-------------|
|                         |                  |                  |                                    | Fuel, Oil and Lube | Repairs and Maintenance | Total Direct | Fixed Costs | Total Costs |
| Tractor (20-39 hp) CB   | MFWD 30          | 600              | 1.54                               | \$3.54             | \$0.96                  | \$4.50       | \$5.82      | \$10.32     |
| Tractor (20-39 hp) RB   | MFWD 30          | 600              | 1.54                               | \$3.54             | \$0.62                  | \$4.16       | \$3.74      | \$7.90      |
| Tractor (40-59 hp) CB   | 2WD 50           | 600              | 2.57                               | \$5.91             | \$0.97                  | \$6.88       | \$5.84      | \$12.72     |
| Tractor (40-59 hp) CB   | MFWD 50          | 600              | 2.57                               | \$5.91             | \$1.19                  | \$7.10       | \$7.16      | \$14.26     |
| Tractor (40-59 hp) RB   | 2WD 50           | 600              | 2.57                               | \$5.91             | \$0.57                  | \$6.48       | \$3.47      | \$9.95      |
| Tractor (40-59 hp) RB   | MFWD 50          | 600              | 2.57                               | \$5.91             | \$0.73                  | \$6.64       | \$4.43      | \$11.07     |
| Tractor (60-89 hp) CB   | 2WD 75           | 600              | 3.86                               | \$8.88             | \$1.49                  | \$10.37      | \$8.97      | \$19.34     |
| Tractor (60-89 hp) CB   | MFWD 75          | 600              | 3.86                               | \$8.88             | \$1.54                  | \$10.42      | \$9.27      | \$19.69     |
| Tractor (60-89 hp) RB   | 2WD 75           | 600              | 3.86                               | \$8.88             | \$1.15                  | \$10.03      | \$6.95      | \$16.98     |
| Tractor (60-89 hp) RB   | MFWD 75          | 600              | 3.86                               | \$8.88             | \$1.18                  | \$10.06      | \$7.10      | \$17.16     |
| Tractor (90-119 hp) CB  | 2WD 105          | 600              | 5.40                               | \$12.42            | \$2.04                  | \$14.46      | \$12.28     | \$26.74     |
| Tractor (90-119 hp) CB  | MFWD 105         | 600              | 5.40                               | \$12.42            | \$2.44                  | \$14.86      | \$14.72     | \$29.58     |
| Tractor (90-119 hp) RB  | 2WD 105          | 600              | 5.40                               | \$12.42            | \$1.87                  | \$14.29      | \$11.26     | \$25.55     |
| Tractor (90-119 hp) RB  | MFWD 105         | 600              | 5.40                               | \$12.42            | \$1.88                  | \$14.30      | \$11.33     | \$25.63     |
| Tractor (120-139 hp) CB | 2WD 130          | 600              | 6.69                               | \$15.39            | \$3.00                  | \$18.39      | \$18.10     | \$36.49     |
| Tractor (120-139 hp) CB | MFWD 130         | 600              | 6.69                               | \$15.39            | \$3.62                  | \$19.01      | \$21.81     | \$40.82     |
| Tractor (140-159 hp) CB | 2WD 150          | 600              | 7.72                               | \$17.76            | \$3.37                  | \$21.13      | \$20.30     | \$41.43     |
| Tractor (140-159 hp) CB | MFWD 150         | 600              | 7.72                               | \$17.76            | \$4.65                  | \$22.41      | \$28.02     | \$50.43     |
| Tractor (160-179 hp) CB | MFWD 170         | 600              | 8.75                               | \$20.13            | \$5.18                  | \$25.31      | \$32.66     | \$57.97     |
| Tractor (180-199 hp) CB | MFWD 190         | 600              | 9.77                               | \$22.47            | \$5.62                  | \$28.09      | \$35.42     | \$63.51     |
| Tractor (200-249 hp) CB | MFWD 225         | 600              | 11.58                              | \$26.63            | \$7.12                  | \$33.75      | \$44.86     | \$78.61     |
| Tractor (200-249 hp) CB | Track 225        | 600              | 11.58                              | \$26.63            | \$8.65                  | \$35.28      | \$54.50     | \$89.78     |
| Tractor (250-349 hp) CB | 4WD 300          | 600              | 15.44                              | \$35.51            | \$8.81                  | \$44.32      | \$55.49     | \$99.81     |
| Tractor (250-349 hp) CB | MFWD 300         | 600              | 15.44                              | \$35.51            | \$8.96                  | \$44.47      | \$56.47     | \$100.94    |
| Tractor (250-349 hp) CB | Track 300        | 600              | 15.44                              | \$35.51            | \$9.03                  | \$44.54      | \$56.86     | \$101.40    |
| Tractor (350-449 hp) CB | 4WD 400          | 600              | 20.58                              | \$47.33            | \$10.65                 | \$57.98      | \$67.10     | \$125.08    |
| Tractor (350-449 hp) CB | Track 400        | 600              | 20.58                              | \$47.33            | \$11.37                 | \$58.70      | \$71.62     | \$130.32    |
| Tractor (450-550 hp) CB | 4WD 500          | 600              | 25.73                              | \$59.18            | \$11.96                 | \$71.14      | \$75.36     | \$146.50    |
| Tractor (450-550 hp) CB | Track 500        | 600              | 25.73                              | \$59.18            | \$13.21                 | \$72.39      | \$83.23     | \$155.62    |

**Notes:** Per hour tractor cost estimates do not include labor.

2WD = Rear-Wheel Drive

MFWD = Mechanical Front-Wheel Drive

4WD = Four-Wheel Drive

Track = Equipment Track Driven

RB = Roll Bar

CB = Tractor Cab

**Table 2. Estimated Farm Machinery Costs Per Acre**

| Operation                | Size <sup>1</sup> | Horsepower (PTO) | Performance Rate (acres per hour) | Total Machinery Cost Per Hour (\$ per hour) | Operating Cost                        |                                  |                     | Ownership Cost (\$ per acre) | Total Specified Cost Per Acre (\$ per acre) |
|--------------------------|-------------------|------------------|-----------------------------------|---|---------------------------------------|----------------------------------|---------------------|------------------------------|---|
|                          |                   |                  |                                   |   | Repairs and Maintenance (\$ per acre) | Fuel, Oil and Lube (\$ per acre) | Labor (\$ per acre) |                              |   |
| <b>TILLAGE EQUIPMENT</b> |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Bed/Lister-Roll-Fold     | 8R-38             | MFWD 190         | 13.51                             | \$98.86                                     | \$0.86                                | \$1.66                           | \$0.99              | \$3.81                       | \$7.32                                      |
| Bed/Lister-Roll-Fold     | 12R-30            | MFWD 225         | 16.13                             | \$119.45                                    | \$0.90                                | \$1.66                           | \$0.83              | \$4.02                       | \$7.41                                      |
| Bed/Lister-Roll-Fold     | 12R-38            | MFWD 225         | 20.41                             | \$123.29                                    | \$0.76                                | \$1.31                           | \$0.66              | \$3.31                       | \$6.04                                      |
| Bed/Lister-Roll-Fold     | 16R-30            | MFWD 225         | 21.74                             | \$125.04                                    | \$0.73                                | \$1.24                           | \$0.62              | \$3.16                       | \$5.75                                      |
| Chisel Plow-Folding      | 24'               | MFWD 190         | 13.16                             | \$114.91                                    | \$1.48                                | \$1.71                           | \$1.02              | \$4.52                       | \$8.73                                      |
| Chisel Plow-Folding      | 32'               | MFWD 225         | 17.54                             | \$141.92                                    | \$1.43                                | \$1.53                           | \$0.77              | \$4.36                       | \$8.09                                      |
| Chisel Plow-Folding      | 42'               | MFWD 225         | 22.73                             | \$146.17                                    | \$1.19                                | \$1.16                           | \$0.58              | \$3.50                       | \$6.43                                      |

**Table 2. Estimated Farm Machinery Costs Per Acre [cont.]**

| Operation                        | Size <sup>1</sup> | Horsepower (PTO) | Performance Rate (acres per hour) | Total Machinery Cost Per Hour (\$ per hour) | Operating Cost                        |                                  |                     | Ownership Cost (\$ per acre) | Total Specified Cost Per Acre (\$ per acre) |
|----------------------------------|-------------------|------------------|-----------------------------------|---|---------------------------------------|----------------------------------|---------------------|------------------------------|---|
|                                  |                   |                  |                                   |   | Repairs and Maintenance (\$ per acre) | Fuel, Oil and Lube (\$ per acre) | Labor (\$ per acre) |                              |   |
| <b>TILLAGE EQUIPMENT (cont.)</b> |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Chisel Plow-Rigid                | 20'               | MFWD 225         | 9.80                              | \$105.64                                    | \$1.22                                | \$2.73                           | \$1.37              | \$5.46                       | \$10.78                                     |
| Chisel Plow-Rigid                | 24'               | MFWD 190         | 12.99                             | \$89.55                                     | \$0.79                                | \$1.73                           | \$1.03              | \$3.35                       | \$6.90                                      |
| Cultivate and Post               | 8R-30             | MFWD 190         | 9.09                              | \$106.30                                    | \$1.36                                | \$2.47                           | \$1.97              | \$5.89                       | \$11.69                                     |
| Cultivate and Post               | 8R-38             | MFWD 190         | 11.63                             | \$108.08                                    | \$1.09                                | \$1.96                           | \$1.55              | \$4.70                       | \$9.30                                      |
| Cultivate and Post               | 10R-30            | MFWD 225         | 11.36                             | \$126.53                                    | \$1.35                                | \$2.33                           | \$1.57              | \$5.88                       | \$11.13                                     |
| Cultivate and Post               | 12R-30            | MFWD 225         | 13.70                             | \$136.35                                    | \$1.31                                | \$1.94                           | \$1.31              | \$5.39                       | \$9.95                                      |
| Cultivate and Post               | 12R-38            | MFWD 225         | 17.54                             | \$141.77                                    | \$1.10                                | \$1.54                           | \$1.03              | \$4.41                       | \$8.08                                      |
| Cultivate and Post               | 16R-30            | MFWD 225         | 18.18                             | \$148.74                                    | \$1.18                                | \$1.46                           | \$0.98              | \$4.56                       | \$8.18                                      |
| Disk and Incorporate             | 24'               | MFWD 190         | 11.49                             | \$118.46                                    | \$1.65                                | \$1.96                           | \$1.56              | \$5.14                       | \$10.31                                     |
| Disk and Incorporate             | 28'               | MFWD 225         | 13.51                             | \$143.51                                    | \$1.76                                | \$1.99                           | \$1.34              | \$5.53                       | \$10.62                                     |
| Disk and Incorporate             | 32'               | MFWD 225         | 15.38                             | \$145.79                                    | \$1.61                                | \$1.74                           | \$1.17              | \$4.96                       | \$9.48                                      |
| Bed-Rip/Disk Fold                | 8R-38             | MFWD 190         | 13.70                             | \$87.03                                     | \$0.54                                | \$1.63                           | \$0.97              | \$3.21                       | \$6.35                                      |
| Bed-Rip/Disk Fold                | 12R-30            | MFWD 225         | 16.39                             | \$108.08                                    | \$0.59                                | \$1.63                           | \$0.82              | \$3.55                       | \$6.59                                      |
| Bed-Rip/Disk Fold                | 12R-38            | MFWD 225         | 21.74                             | \$107.40                                    | \$0.44                                | \$1.23                           | \$0.61              | \$2.66                       | \$4.94                                      |
| Bed/Disk (Hipper)                | 8R-30             | MFWD 190         | 10.75                             | \$93.96                                     | \$0.94                                | \$2.11                           | \$1.25              | \$4.44                       | \$8.74                                      |
| Bed/Disk (Hipper)                | 8R-38             | MFWD 190         | 13.51                             | \$94.81                                     | \$0.78                                | \$1.66                           | \$0.99              | \$3.59                       | \$7.02                                      |
| Bed/Disk (Hipper)                | 12R-30            | MFWD 225         | 16.13                             | \$120.90                                    | \$0.92                                | \$1.66                           | \$0.83              | \$4.09                       | \$7.50                                      |
| Bed/Disk (Hipper)                | 12R-38            | MFWD 225         | 20.41                             | \$123.69                                    | \$0.77                                | \$1.31                           | \$0.66              | \$3.32                       | \$6.06                                      |
| Bed/Disk With Roller             | 12R-30            | MFWD 225         | 16.13                             | \$135.01                                    | \$1.16                                | \$1.66                           | \$0.83              | \$4.72                       | \$8.37                                      |
| Bed/Disk With Roller             | 8R-38             | MFWD 190         | 13.51                             | \$102.54                                    | \$0.93                                | \$1.66                           | \$0.99              | \$4.01                       | \$7.59                                      |
| Disk Harrow                      | 28'               | MFWD 225         | 14.29                             | \$135.04                                    | \$1.46                                | \$1.86                           | \$0.94              | \$5.19                       | \$9.45                                      |
| Disk Harrow                      | 32'               | MFWD 225         | 16.39                             | \$138.74                                    | \$1.34                                | \$1.63                           | \$0.82              | \$4.67                       | \$8.46                                      |
| Disk Harrow                      | 42'               | FWD 225          | 21.74                             | \$179.39                                    | \$1.60                                | \$1.24                           | \$0.62              | \$4.79                       | \$8.25                                      |
| Ditcher                          |                   | 2WD 130          | 50.00                             | \$52.95                                     | \$0.09                                | \$0.30                           | \$0.26              | \$0.41                       | \$1.06                                      |
| Field Cultivate Fold             | 24'               | MFWD 170         | 16.13                             | \$106.16                                    | \$0.73                                | \$1.24                           | \$0.83              | \$3.78                       | \$6.58                                      |
| Field Cultivate Fold             | 32'               | MFWD 190         | 21.74                             | \$129.27                                    | \$0.71                                | \$1.05                           | \$0.62              | \$3.57                       | \$5.95                                      |
| Field Cultivate Fold             | 42'               | MFWD 225         | 28.57                             | \$166.09                                    | \$0.74                                | \$0.94                           | \$0.47              | \$3.66                       | \$5.81                                      |
| Field Cultivate Fold             | 50'               | MFWD 225         | 34.48                             | \$180.47                                    | \$0.69                                | \$0.79                           | \$0.40              | \$3.35                       | \$5.23                                      |
| Disk Heavy                       | 20'               | MFWD 170         | 10.31                             | \$105.72                                    | \$1.57                                | \$1.96                           | \$1.30              | \$5.43                       | \$10.26                                     |
| Disk Heavy                       | 28'               | MFWD 190         | 13.33                             | \$120.83                                    | \$1.46                                | \$1.70                           | \$1.01              | \$4.89                       | \$9.06                                      |
| Harrow - Folding                 | 30'               | MFWD 190         | 19.61                             | \$90.81                                     | \$0.55                                | \$1.16                           | \$0.69              | \$2.23                       | \$4.63                                      |
| Harrow - Folding                 | 40'               | MFWD 190         | 26.32                             | \$92.96                                     | \$0.44                                | \$0.86                           | \$0.52              | \$1.71                       | \$3.53                                      |
| Harrow - Folding                 | 48'               | MFWD 225         | 31.25                             | \$112.22                                    | \$0.48                                | \$0.85                           | \$0.43              | \$1.83                       | \$3.59                                      |
| Land Plane                       | 50'x16'           | MFWD 190         | 6.62                              | \$87.77                                     | \$1.29                                | \$3.40                           | \$2.03              | \$6.53                       | \$13.25                                     |
| Levee Disk/Seeder                | 8 Blade           | MFWD 170         | 333.33                            | \$86.33                                     | \$0.01                                | \$0.07                           | \$0.04              | \$0.14                       | \$0.26                                      |
| Levee Disk                       | 8 blade           | MFWD 170         | 333.33                            | \$83.00                                     | \$0.01                                | \$0.07                           | \$0.04              | \$0.13                       | \$0.25                                      |
| Levee Splitter                   | 32"               | MFWD 150         | 250.00                            | \$67.25                                     | \$0.01                                | \$0.07                           | \$0.05              | \$0.14                       | \$0.27                                      |
| Roller/Stubble                   | 20'               | 2WD 50           | 13.51                             | \$30.77                                     | \$0.27                                | \$0.44                           | \$1.00              | \$0.57                       | \$2.28                                      |
| Roller/Stubble                   | 32'               | MFWD 225         | 21.74                             | \$105.91                                    | \$0.58                                | \$1.24                           | \$0.62              | \$2.43                       | \$4.87                                      |
| Rotary Cutter-Flex               | 15'               | MFWD 150         | 12.82                             | \$84.63                                     | \$1.30                                | \$1.39                           | \$1.05              | \$2.86                       | \$6.60                                      |
| Rotary Cutter-Flex               | 20'               | MFWD 150         | 17.24                             | \$91.29                                     | \$1.19                                | \$1.04                           | \$0.78              | \$2.29                       | \$5.30                                      |
| Row Conditioner Folding          | 26'               | MFWD 225         | 16.95                             | \$118.08                                    | \$0.70                                | \$1.59                           | \$0.80              | \$3.88                       | \$6.97                                      |
| Row Conditioner Folding          | 38'               | MFWD 225         | 25.00                             | \$126.03                                    | \$0.54                                | \$1.08                           | \$0.54              | \$2.88                       | \$5.04                                      |
| Stalk Shredder-Flail             | 20'               | MFWD 150         | 12.20                             | \$102.45                                    | \$2.35                                | \$1.46                           | \$1.10              | \$3.49                       | \$8.40                                      |

**Table 2. Estimated Farm Machinery Costs Per Acre [cont.]**

| Operation                                  | Size <sup>1</sup> | Horsepower (PTO) | Performance Rate (acres per hour) | Total Machinery Cost Per Hour (\$ per hour) | Operating Cost                        |                                  |                     | Ownership Cost (\$ per acre) | Total Specified Cost Per Acre (\$ per acre) |
|--|-------------------|------------------|-----------------------------------|---|---------------------------------------|----------------------------------|---------------------|------------------------------|---|
|  |                   |                  |                                   |   | Repairs and Maintenance (\$ per acre) | Fuel, Oil and Lube (\$ per acre) | Labor (\$ per acre) |                              |   |
| <b>TILLAGE EQUIPMENT (cont.)</b>           |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Stalk Shredder-Flail                       | 25'               | MFWD 150         | 15.15                             | \$117.45                                    | \$2.53                                | \$1.16                           | \$0.88              | \$3.18                       | \$7.75                                      |
| Subsoiler                                  | 5 shank           | MFWD 225         | 8.20                              | \$108.07                                    | \$1.43                                | \$3.25                           | \$1.63              | \$6.87                       | \$13.18                                     |
| Subsoiler Low-Till                         | 6 shank           | MFWD 225         | 9.80                              | \$111.02                                    | \$1.28                                | \$2.71                           | \$1.36              | \$5.97                       | \$11.32                                     |
| <b>PLANTING EQUIPMENT</b>                  |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Grain Drill                                | 20'               | MFWD 170         | 10.64                             | \$122.74                                    | \$1.84                                | \$1.90                           | \$2.11              | \$5.69                       | \$11.54                                     |
| Grain Drill                                | 24'               | MFWD 190         | 12.82                             | \$154.74                                    | \$2.27                                | \$1.76                           | \$1.76              | \$6.28                       | \$12.07                                     |
| Grain Drill                                | 30'               | MFWD 225         | 16.13                             | \$179.80                                    | \$2.09                                | \$1.67                           | \$1.41              | \$5.98                       | \$11.15                                     |
| Grain Drill                                | 35'               | MFWD 225         | 18.87                             | \$198.60                                    | \$2.13                                | \$1.43                           | \$1.21              | \$5.76                       | \$10.53                                     |
| NT Grain Drill                             | 20'               | MFWD 170         | 10.20                             | \$151.60                                    | \$2.90                                | \$1.97                           | \$2.20              | \$7.79                       | \$14.86                                     |
| NT Grain Drill                             | 24'               | MFWD 190         | 12.35                             | \$177.41                                    | \$2.98                                | \$1.84                           | \$1.83              | \$7.72                       | \$14.37                                     |
| NT Grain Drill                             | 30'               | MFWD 225         | 15.38                             | \$205.02                                    | \$2.77                                | \$1.74                           | \$1.47              | \$7.35                       | \$13.33                                     |
| Peanut Plant and Pre Folding               | 12R-38            | MFWD 190         | 12.50                             | \$172.57                                    | \$2.82                                | \$1.81                           | \$1.80              | \$7.38                       | \$13.81                                     |
| Plant and Pre-Twin Row                     | 12R-30/40         | MFWD 225         | 18.87                             | \$246.69                                    | \$3.02                                | \$1.41                           | \$1.20              | \$7.44                       | \$13.07                                     |
| Plant and Pre-Twin Row                     | 8R-30/40          | MFWD 225         | 12.50                             | \$228.22                                    | \$4.06                                | \$2.13                           | \$1.80              | \$10.27                      | \$18.26                                     |
| Plant and Pre-Folding                      | 8R-38             | MFWD 170         | 12.50                             | \$133.00                                    | \$1.85                                | \$1.61                           | \$1.80              | \$5.38                       | \$10.64                                     |
| Plant and Pre-Folding                      | 12R-20            | MFWD 190         | 9.90                              | \$160.47                                    | \$3.14                                | \$2.28                           | \$2.28              | \$8.51                       | \$16.21                                     |
| Plant and Pre-Folding                      | 12R-30            | MFWD 190         | 14.93                             | \$164.30                                    | \$2.16                                | \$1.52                           | \$1.52              | \$5.81                       | \$11.01                                     |
| Plant and Pre-Folding                      | 12R-38            | MFWD 190         | 18.87                             | \$173.13                                    | \$1.87                                | \$1.20                           | \$1.20              | \$4.91                       | \$9.18                                      |
| Plant and Pre-Folding                      | 16R-30            | MFWD 190         | 20.00                             | \$192.37                                    | \$2.09                                | \$1.14                           | \$1.14              | \$5.25                       | \$9.62                                      |
| Plant and Pre-Folding                      | 24R-15            | MFWD 225         | 14.93                             | \$247.37                                    | \$3.83                                | \$1.79                           | \$1.52              | \$9.43                       | \$16.57                                     |
| Plant and Pre-Folding                      | 24R-20            | MFWD 190         | 20.00                             | \$249.77                                    | \$3.07                                | \$1.14                           | \$1.14              | \$7.14                       | \$12.49                                     |
| Plant and Pre-Folding                      | 24R-30            | MFWD 190         | 30.30                             | \$283.61                                    | \$2.41                                | \$0.76                           | \$0.76              | \$5.43                       | \$9.36                                      |
| Plant and Pre-Folding                      | 32R-15            | MFWD 225         | 20.00                             | \$279.51                                    | \$3.40                                | \$1.35                           | \$1.14              | \$8.09                       | \$13.98                                     |
| <b>SPRAYERS / FERTILIZER SPREADERS</b>     |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Fertilizer Applicator (Liquid)             | 8R-30             | MFWD 190         | 10.20                             | \$98.76                                     | \$1.34                                | \$2.21                           | \$1.76              | \$4.37                       | \$9.68                                      |
| Fertilizer Applicator (Liquid)             | 8R-38             | MFWD 190         | 12.99                             | \$103.20                                    | \$1.20                                | \$1.74                           | \$1.39              | \$3.62                       | \$7.95                                      |
| Fertilizer Applicator (Liquid)             | 12R-30            | MFWD 225         | 12.82                             | \$122.20                                    | \$1.48                                | \$2.08                           | \$1.40              | \$4.57                       | \$9.53                                      |
| Fertilizer Applicator (Liquid)             | 12R-38            | MFWD 225         | 19.61                             | \$122.32                                    | \$0.96                                | \$1.37                           | \$0.92              | \$2.99                       | \$6.24                                      |
| Spin Spreader                              | 5 ton             | MFWD 190         | 23.81                             | \$106.02                                    | \$0.51                                | \$0.94                           | \$0.94              | \$2.06                       | \$4.45                                      |
| Spray (Broadcast)                          | 27'               | MFWD 170         | 16.13                             | \$81.78                                     | \$0.47                                | \$1.25                           | \$1.12              | \$2.23                       | \$5.07                                      |
| Spray (Broadcast)                          | 40'               | MFWD 170         | 23.81                             | \$83.81                                     | \$0.36                                | \$0.85                           | \$0.75              | \$1.56                       | \$3.52                                      |
| Spray (Broadcast)                          | 50'               | MFWD 170         | 30.30                             | \$84.23                                     | \$0.27                                | \$0.69                           | \$0.60              | \$1.22                       | \$2.78                                      |
| Spray (Broadcast)                          | 60'               | MFWD 170         | 35.71                             | \$94.27                                     | \$0.38                                | \$0.56                           | \$0.49              | \$1.21                       | \$2.64                                      |
| Spray (Broadcast Hood)                     | 40'               | MFWD 170         | 23.81                             | \$90.48                                     | \$0.62                                | \$0.85                           | \$0.75              | \$1.58                       | \$3.80                                      |
| Spray (Direct Hood)                        | 8R-30             | MFWD 170         | 11.90                             | \$94.79                                     | \$1.14                                | \$1.70                           | \$1.51              | \$3.61                       | \$7.96                                      |
| Spray (Direct Hood)                        | 8R-38             | MFWD 170         | 15.15                             | \$102.51                                    | \$1.12                                | \$1.35                           | \$1.19              | \$3.11                       | \$6.77                                      |
| Spray (Direct Hood)                        | 12R-30            | MFWD 170         | 17.86                             | \$103.34                                    | \$0.98                                | \$1.13                           | \$1.01              | \$2.67                       | \$5.79                                      |
| Spray (Direct Hood)                        | 12R-38            | MFWD 170         | 22.73                             | \$103.76                                    | \$0.78                                | \$0.89                           | \$0.79              | \$2.11                       | \$4.57                                      |
| Sprayer SP <sup>1</sup><br>600-750 gallons | 60'               | 175 hp           | 58.82                             | \$112.35                                    | \$0.16                                | \$0.36                           | \$0.31              | \$1.08                       | \$1.91                                      |
| Sprayer SP <sup>1</sup><br>600-825 gallons | 80'               | 175 hp           | 76.92                             | \$118.19                                    | \$0.12                                | \$0.36                           | \$0.23              | \$0.83                       | \$1.54                                      |

**Table 2. Estimated Farm Machinery Costs Per Acre [cont.]**

| Operation   | Size <sup>1</sup> | Horsepower (PTO) | Performance Rate (acres per hour) | Total Machinery Cost Per Hour (\$ per hour) | Operating Cost                        |                                  |                     | Ownership Cost (\$ per acre) | Total Specified Cost Per Acre (\$ per acre) |
|---|-------------------|------------------|-----------------------------------|---|---------------------------------------|----------------------------------|---------------------|------------------------------|---|
|   |                   |                  |                                   |   | Repairs and Maintenance (\$ per acre) | Fuel, Oil and Lube (\$ per acre) | Labor (\$ per acre) |                              |   |
| <b>SPRAYERS / FERTILIZER SPREADERS (cont.)</b>                              |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Sprayer SP <sup>1</sup><br>600-825 gallons                                  | 90'               | 250 hp           | 90.91                             | \$159.41                                    | \$0.16                                | \$0.33                           | \$0.21              | \$1.05                       | \$1.75                                      |
| Sprayer SP <sup>1</sup><br>800 gallons                                      | 100'              | 250 hp           | 100.00                            | \$160.35                                    | \$0.14                                | \$0.33                           | \$0.18              | \$0.95                       | \$1.60                                      |
| Sprayer SP <sup>1</sup><br>800 gallons                                      | 80'               | 250 hp           | 76.92                             | \$134.69                                    | \$0.15                                | \$0.39                           | \$0.23              | \$0.98                       | \$1.75                                      |
| Sprayer SP <sup>1</sup><br>1000-1400 gallons                                | 90'               | 275 hp           | 100.00                            | \$177.35                                    | \$0.16                                | \$0.33                           | \$0.18              | \$1.10                       | \$1.77                                      |
| Sprayer SP <sup>1</sup><br>1000 gallons                                     | 100'              | 300 hp           | 100.00                            | \$183.80                                    | \$0.17                                | \$0.37                           | \$0.18              | \$1.12                       | \$1.84                                      |
| Sprayer SP <sup>1</sup><br>1200+ gallons                                    | 1200'             | 300 hp           | 125.00                            | \$206.31                                    | \$0.15                                | \$0.31                           | \$0.15              | \$1.04                       | \$1.65                                      |
| <b>COMBINES, COTTON AND PEANUT HARVESTERS</b>                               |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Cotton Picker <sup>2</sup>  | 4R-38"            | 250 hp           | 3.89                              | \$240.99                                    | \$9.81                                | \$7.62                           | \$5.78              | \$38.72                      | \$61.93                                     |
| Cotton Picker <sup>2</sup>  | 4R-38"            | 350 hp           | 3.89                              | \$311.33                                    | \$12.85                               | \$10.67                          | \$5.78              | \$50.71                      | \$80.01                                     |
| Cotton Picker <sup>2</sup>  | 6R-38"            | 355 hp           | 6.67                              | \$393.04                                    | \$9.95                                | \$6.34                           | \$3.38              | \$39.29                      | \$58.96                                     |
| Cotton Picker OBMB  | 6R-38"            | 365 hp           | 7.04                              | \$448.82                                    | \$10.87                               | \$6.76                           | \$3.20              | \$42.90                      | \$63.73                                     |
| Cotton Picker OBMB<br><sup>1</sup> Repairs/Maintenance includes module wrap | 6R-38"            | 560hp            | 9.71                              | \$807.19                                    | \$32.35                               | \$6.14                           | \$2.33              | \$42.32                      | \$83.14                                     |
| Boll Buggy  | 4R-38<br>(250)    | MFWD 190         | 3.90                              | \$97.94                                     | \$3.24                                | \$5.80                           | \$3.45              | \$12.76                      | \$25.25                                     |
| Boll Buggy  | 4R-38<br>(350)    | MFWD 190         | 3.90                              | \$97.94                                     | \$3.24                                | \$5.80                           | \$3.45              | \$12.76                      | \$25.25                                     |
| Boll Buggy  | 6R-38<br>(355)    | MFWD 190         | 6.60                              | \$97.98                                     | \$1.89                                | \$3.39                           | \$2.02              | \$7.47                       | \$14.77                                     |
| Module Builder  | 4R-38<br>(250)    | MFWD 190         | 3.90                              | \$109.88                                    | \$3.48                                | \$5.80                           | \$5.79              | \$13.26                      | \$28.33                                     |
| Module Builder  | 4R-38<br>(350)    | MFWD 190         | 3.90                              | \$109.88                                    | \$3.48                                | \$5.80                           | \$5.79              | \$13.26                      | \$28.33                                     |
| Module Builder  | 6R-38<br>(355)    | MFWD 190         | 6.60                              | \$109.99                                    | \$2.04                                | \$3.39                           | \$3.39              | \$7.76                       | \$16.58                                     |
| Combine - Corn  | 6R-30             | 265 hp           | 5.88                              | \$235.74                                    | \$7.51                                | \$5.34                           | \$2.28              | \$24.95                      | \$40.08                                     |
| Combine - Corn  | 6R-38             | 265 hp           | 7.46                              | \$236.63                                    | \$5.96                                | \$4.21                           | \$1.80              | \$19.74                      | \$31.71                                     |
| Combine - Corn  | 8R-30             | 265 hp           | 7.87                              | \$244.66                                    | \$6.04                                | \$4.00                           | \$1.71              | \$19.32                      | \$31.07                                     |
| Combine - Corn  | 8R-38             | 325 hp           | 10.00                             | \$262.16                                    | \$4.98                                | \$3.88                           | \$1.35              | \$16.01                      | \$26.22                                     |
| Combine - Corn  | 12R-30            | 325 hp           | 11.76                             | \$279.95                                    | \$4.87                                | \$3.27                           | \$1.14              | \$14.52                      | \$23.80                                     |
| Rice - Draper (CL)  | 25' Rigid         | 265 hp           | 4.93                              | \$240.99                                    | \$9.34                                | \$6.37                           | \$2.72              | \$30.49                      | \$48.92                                     |
| Rice - Draper (CL)  | 30' Rigid         | 325 hp           | 5.92                              | \$262.12                                    | \$8.42                                | \$6.51                           | \$2.26              | \$27.11                      | \$44.30                                     |
| Rice - Draper (SL)  | 25' Rigid         | 325 hp           | 5.68                              | \$256.60                                    | \$8.40                                | \$6.76                           | \$2.35              | \$27.65                      | \$45.16                                     |
| Rice - Draper (SL)  | 30' Rigid         | 325 hp           | 6.85                              | \$262.84                                    | \$7.29                                | \$5.64                           | \$1.96              | \$23.49                      | \$38.38                                     |
| Rice - Stripper (SL)  | 24'               | 325 hp           | 5.46                              | \$256.61                                    | \$8.78                                | \$7.05                           | \$2.45              | \$28.68                      | \$46.96                                     |
| Rice - Stripper (SL)  | 32'               | 325 hp           | 7.30                              | \$260.44                                    | \$6.76                                | \$5.29                           | \$1.84              | \$21.79                      | \$35.68                                     |
| Combine - Soybean   | 25' Flex          | 325 hp           | 9.80                              | \$244.52                                    | \$4.40                                | \$3.92                           | \$1.36              | \$15.26                      | \$24.94                                     |
| Combine - Soybean   | 30' Flex          | 325 hp           | 11.76                             | \$242.19                                    | \$3.58                                | \$3.27                           | \$1.14              | \$12.60                      | \$20.59                                     |
| Combine - Soybean   | 35' Flex          | 355 hp           | 13.89                             | \$258.46                                    | \$3.36                                | \$3.06                           | \$0.97              | \$11.22                      | \$18.61                                     |
| Combine - Wheat / Sorghum   | 25' Rigid         | 325 hp           | 9.80                              | \$240.50                                    | \$4.24                                | \$3.92                           | \$1.36              | \$15.01                      | \$24.53                                     |
| Combine - Wheat / Sorghum   | 30' Rigid         | 325 hp           | 11.76                             | \$242.31                                    | \$3.59                                | \$3.27                           | \$1.14              | \$12.60                      | \$20.60                                     |

**Table 2. Estimated Farm Machinery Costs Per Acre [cont.]**

| Operation   | Size <sup>1</sup> | Horsepower (PTO) | Performance Rate (acres per hour) | Total Machinery Cost Per Hour (\$ per hour) | Operating Cost                        |                                  |                     | Ownership Cost (\$ per acre) | Total Specified Cost Per Acre (\$ per acre) |
|---|-------------------|------------------|-----------------------------------|---|---------------------------------------|----------------------------------|---------------------|------------------------------|---|
|   |                   |                  |                                   |   | Repairs and Maintenance (\$ per acre) | Fuel, Oil and Lube (\$ per acre) | Labor (\$ per acre) |                              |   |
| <b>COMBINES, COTTON AND PEANUT HARVESTERS (cont.)</b> |                   |                  |                                   |   |                                       |                                  |                     |                              |   |
| Grain Cart Corn                                       | 500 bu            | MFWD 190         | 32.26                             | \$96.23                                     | \$0.37                                | \$0.71                           | \$0.42              | \$1.48                       | \$2.98                                      |
| Grain Cart Corn                                       | 700 bu            | MFWD 190         | 40.00                             | \$102.48                                    | \$0.38                                | \$0.55                           | \$0.33              | \$1.30                       | \$2.56                                      |
| Grain Cart Corn                                       | 1000 bu           | MFWD 225         | 40.00                             | \$126.62                                    | \$0.49                                | \$0.66                           | \$0.33              | \$1.69                       | \$3.17                                      |
| Grain Cart Rice                                       | 500 bu            | MFWD 190         | 16.13                             | \$94.89                                     | \$0.75                                | \$1.40                           | \$0.83              | \$2.90                       | \$5.88                                      |
| Grain Cart Rice                                       | 700 bu            | MFWD 190         | 18.18                             | \$103.28                                    | \$0.84                                | \$1.23                           | \$0.73              | \$2.88                       | \$5.68                                      |
| Grain Cart Rice                                       | 1000 bu           | MFWD 190         | 22.22                             | \$114.30                                    | \$0.85                                | \$1.02                           | \$0.61              | \$2.66                       | \$5.14                                      |
| Grain Cart Soybean                                    | 500 bu            | MFWD 190         | 40.00                             | \$95.34                                     | \$0.30                                | \$0.56                           | \$0.34              | \$1.18                       | \$2.38                                      |
| Grain Cart Soybean                                    | 700 bu            | MFWD 190         | 47.62                             | \$103.88                                    | \$0.32                                | \$0.47                           | \$0.28              | \$1.11                       | \$2.18                                      |
| Grain Cart Soybean                                    | 1000 bu           | MFWD 190         | 47.62                             | \$112.45                                    | \$0.38                                | \$0.47                           | \$0.28              | \$1.23                       | \$2.36                                      |
| Peanut Conditioner and Lifter                         | 6-Row             | MFWD 190         | 10.00                             | \$82.03                                     | \$0.77                                | \$2.24                           | \$1.34              | \$3.85                       | \$8.20                                      |
| Peanut Conditioner                                    | 6-Row             | MFWD 190         | 10.00                             | \$82.93                                     | \$0.85                                | \$2.24                           | \$1.34              | \$3.86                       | \$8.29                                      |
| Peanut Dig/Invertor                                   | 6R-38             | MFWD 190         | 8.06                              | \$96.64                                     | \$1.60                                | \$2.78                           | \$1.66              | \$5.94                       | \$11.98                                     |
| Peanut Dump Cart                                      | 6-Row             | MFWD 190         | 3.23                              | \$90.71                                     | \$2.58                                | \$6.97                           | \$4.15              | \$14.42                      | \$28.12                                     |
| Peanut Harvester                                      | 6R-38             | MFWD 225         | 1.60                              | \$131.38                                    | \$8.76                                | \$16.64                          | \$8.37              | \$48.34                      | \$82.11                                     |
| Peanut Lifter   | 6-Row             | MFWD 225         | 10.00                             | \$94.47                                     | \$0.84                                | \$2.66                           | \$1.34              | \$4.61                       | \$9.45                                      |

**Notes:**

<sup>1</sup> ' = feet, " = inches, R = rows, OBMB = on-board module builder, CL = contour levees, SL = straight levees, SP = self-propelled.

<sup>2</sup> Performance rate or cotton harvesting based upon use of module builder and boll buggy.

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