



Cooperative Extension Service

User's Guide for Machine Cost Calculator

For questions and comments related to the University of Arkansas Crop Enterprise Budget Program contact Archie Flanders at 870-526-2199 ext. 108 or aflanders@uaex.edu.

Entering Data

The worksheet "Prices" has alternative equipment sizes and prices for application in the "Machine" worksheet.

Go to "Machine" worksheet. Numbers of trips through the field are in the first column of white cells. Entries in the white cells for new purchase price, width, ground speed, drive type, and horsepower are based on a typical situation with 12-row equipment. These can be changed for alternative machinery selections. An entry of 1 in cell B14 signifies one field trip with a paratill. Cell C14 represents a new unit with a purchase price of \$18,640. Cell D14 indicates the paratill makes a pass through the field that is 19 feet wide. Calculations are based on a ground speed of 4.0 mph in cell E14. The paratill is pulled by a 225 hp tractor with a new purchase price of \$151,000. Tractor hp is in cell H14 and tractor purchase price is in cell F14. Wheel drive for the tractor is in cell G14. Other implements and power units are entered similarly to the paratill example. Prices for machinery should represent new purchases expressed in current dollars. Users should revise data to reflect circumstances of their operation.

For building levees, each round-trip represents a field trip. If three round-trips are made to build a rice levee, the entry for levee pull should be 3 in cell B44 or cell B45. If one round-trip is made to build a soybean levy, each time levees are constructed is a field trip. If soybean levees are constructed four times during the season, the entry next to levy pull should be 4 in cell B44. For installing levee gates, field trips should be set equal to the number of times levees are constructed during the season. Rice entries for these activities will always be 1 in cell B47. Soybean entries will vary based on the number of times levees are constructed during the season.

Reports of Machine Cost

The worksheet "AcreCost" is a summary of all costs related to machinery activities entered in the "Machine" worksheet. Cell F4 in the "AcreCost" worksheet indicates the total costs of one field trip with a paratill is \$11.67. Capital recovery in cell B4 is \$4.91, an allowance for repairs in cell C4 is \$1.35, fuel and lube in cell D4 is \$4.05, and labor is \$1.36 in cell E4. Costs items include implement and power unit for the field activity.

The worksheet "MachineCopy" can be copy and pasted for printed documents.



University of Arkansas, United States Department of Agriculture and County Governments Cooperating.

The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.