Preconditioning Facilities or Grow Yard Cost Calculator

Facilities cost are seldom known or calculated at the cow-calf level to calculate preconditioning cost. This spreadsheet facilitates the organization of data and does the calculated cost based on the use level of facilities. This decision aid can be used to calculate cost of an existing facility based on replacement cost or calculating a new facility.

Facilities Cost are organized into categories of costs: 1. Ownership cost (depreciation, repair and maintenance and insurance) and 2. Operation cost of facilities, machinery. Operating costs including labor and management are recorded to calculate full cost of facilities (see appendix A).

Spreadsheet Operation
All variables are in blue for users to input their data. The example is only for illustration purpose. It is advisable to save the user prepared alternatives with a name and date when revised.

Depreciation Cost

The most difficult but important cost to deal with is depreciation because the IRS depreciation is increasingly useless information. This spreadsheets provides and alternative that will provide a better guide to the cost of owning and operating a preconditioning or grow yard facility.

Depreciation is the accounting procedure used to allocate a capital investment to the annual use cost of the capital asset. Capital assets are purchases that have a productive life of more than one year. The number of years the cost on an asset is allocated each year depends on the "productive or economic life" of the asset less the **salvage value** or what the asset is worth after the **economic life** is over.

The capital assets include vehicles, machinery, equipment, improvements and purchased breeding stock. Depreciation is one of the top five costs in ranch beef cattle production. Cost of replacing these assets is a major annual cash flow requirement. Not replacing these assets is referred to as living on depreciation.

Internal Revenue Service (IRS) Depreciation is the procedure that IRS requires a business to follow to calculate tax-deductible depreciation. It should be clear that the rules followed to calculate IRS depreciation **are not good estimates** of depreciation for production cost calculation. Using zero purchased breeding cattle salvage values distorts actual costs for breeding stock replacement. Accelerated depreciation using Section 179 and zero salvage value for IRS depreciation distorts year to year depreciation cost when calculating **Total Unit Cost (TUC).**

Recall that when using cash methods of accounting for IRS purpose raised replacement costs are expensed. It is best to keep this raised cattle asset information separate from purchased information, as it will minimize depreciation calculation and balance sheet preparation.

There two alternatives to more effectively calculate depreciation to properly measure the use of assets over time including book depreciation and capital asset recovery.

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Book Depreciation is an option in most capital asset software used by the ranch CPA to calculate IRS depreciation will provide for calculation of "Book Depreciation". The user defines the economic life and salvage value. The tax CPA must be provided the economic lives and salvage values to report book depreciation. However, the asset values used are based on historical cost and most **likely underestimate replacement cost.** The CPA can set up a separate depreciation that adjusts for use of Section 179 used to prepare the IRS schedule and report.

Capital asset recovery is a method of calculation cost of using capital asset over time (depreciation) to replace IRS annual reported depreciation to more closely reflect the cost of depreciable assets for cost calculation. Capital assets are valued at **current replacement cost**. Capital recovery is calculated using straight line with an expected ranch level salvage value and economic life.

Operating Costs

The ranch accounting system should be set up to generate operating cost. Quick Books™ is a very good system to record and report operating cost. A portion of costs then can to allocated the preconditioning or grow yard activity. Where this is a major activity a class can be set up to record the cost to assign to the facility. In any case one must always to practical as cost allocation is not an "exact science".

Appendix A: Facilities Cost Outline

Preconditioning or Grow Yard Facilities and Ownership and Operating Costs

Ownership Costs
Machinery, Vehicle & Equipment
Depreciation - Asset Recovery
Repair and Maintenance

Facilities and Improvements
Depreciation - Asset Recovery
Repair and Maintenance
Insurance Cost
Other
Subtotal Ownership Cost
Operating cost
Fuel
Utilities
Other
Labor and Management
Permanent Labor
Temporary Labor
Other
Permanent Management
Other
Subtotal Operating Cost

Total Costs
Annual Use of Facilities – Head
Number of head days run through facilities