Capital Asset Recovery to Replace IRS Depreciation for Cost Calculation

The purpose of this spreadsheet is to calculate capital asset recovery cost to replace IRS annual reported depreciation to more closely reflect the cost of depreciable assets for cost calculation.
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.

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.

Capital Gains or loss is charged when the asset is sold. This is reported IRS form 4797.

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.

For replacement assets are valued at current replacement cost. Capital recovery is calculated using straight line with an expected ranch level salvage value and economic life.

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.

Book Depreciation

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 as is done in this spreadsheet. 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.

Spreadsheet Operation
Assets to include are recorded in the business depreciation schedule. Values of assets will have to be updated to reflect current replacement costs. All cells in **blue** are unprotected cells for data entry.
The added assets in the fiscal year are information that should be reported to the ranch tax CPA.

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Appendix A: Key Depreciation Definition

Capitalized Value is an alternative method of accounting for raised replacement heifers. The cost of production is recorded in the accounting system. The accumulated cost is the valuation of the replacement. This value is then depreciated over the life of the replacement. This method provides the most accurate measure of replacement cost. However, the method does require measuring replacement cost and a separate raised replacement schedule when cash-based IRS tax reporting is used. Capitalizing cost reduces cost rather than increasing revenue as done when the base value method is used.

Salvage value

When an asset reaches the end of its useful life frequently there it can be sold and the amount received is the salvage value. Purchased herd bulls is an example. After 3 or 4 years of use bulls are sold for 35-45% of their original cost.

Internal Revenue Service – IRS Depreciation

It is important to understand a few rules of the IRS depreciation calculation to understand why the tax depreciation frequently has limited use if management is calculating business profits or total unit costs of production.

Accelerated depreciation, using the 150% balance method means that more depreciation is taken early in the life of the asset and less in the later years.

Book depreciation is a depreciation method that depreciate assets over the useful life of assets and reemploys salvage value. The historical original cost in and increasing cost or depreciable asset replacement cost and use of trade ins and section 179 does limit the usefulness of book depreciation as a measure of the cost of the use asset over their useful life. The business CPA can run both the IRS and book depreciation with the same software.

Depreciable Basis or Acquisition Cost

This is the total cost of the asset placed in service. It's important to check IRS rules on a trade in as trade in will reduce the cost basis of depreciable assets and annual depreciation.

Expensing option - Section 179

IRS rules allow write off or expensing asset purchases in the year they are purchased. Using section 179 can really distort depreciation for management purpose. Many ranches can write off all capital replacements in the year purchased overstating depreciation expense and under reports management profitability. This may be prudent "tax management" if there are taxable income to offset the depreciation.

IRS Depreciation

IRS depreciation rules define recovery period (life) and the calculation method but the methods have little to with economic or management useful life of assets or the rate the assets are really used. Most produces are using 150% declining balance. Short recovery period (useful life) with no salvage value means current year depreciation can be overstated for the purpose of development management financial statements and estimating total unit cost.

IRS Recovery Period

Recovery period for trucks, trailers, computers, tractors, machinery, equipment and breeding stock is 5 years and fences its 7 years. Over time depreciation over statement is reconciled as total depreciation cannot be greater than the acquisition cost or basis, and when assets are sold there are **depreciation recapture provisions.**

Always involve the business CPA when addressing the IRS compliance issues.