



Depreciation

Purpose: *This guide helps you understand the concept of depreciation and factors that are needed in the calculation. Depreciation is an annual cost allocation to account for non-current assets used to build income. Depreciation is an essential business practice and is essential to correctly manage SAE projects.*

1 – Confusions of Depreciation

1 - *You may think of depreciation as a new truck driven off the lot and decreases by 30%. That is not depreciation, but rather is your lack of ability to sell it because it is now used.*

2 – *Several types of depreciation exists. One is accelerated depreciation, which quickly reduces asset value by a high depreciation expense and is primarily used in tax accounting. Another is Straight-line depreciation, which evenly allocates a depreciation cost over time, and is typically used in farm management records.*

3 – *If the value of the animals increases because the market has risen, then depreciation is not needed? The answer is no, depreciation is an allocation for the cost of the breeding animals and the only way to capture the high market is to sell the breeding animals.*

2 – Depreciation in the Income Statement

Items used to make income should have an associated cost to properly measure profit, which for capital items is called depreciation expense. A similar example is if you raise livestock you will have feed expense. If you have capital items (Non-current), you should have depreciation.

Consider the following example:

Income Statement - No Depreciation

Mature Cow Value \$20,000 (10head)

<p>-----</p> <p>Revenue: \$10,500</p> <p>Expenses:</p> <p style="color: red;">The \$20,000 investment is free?</p> <p style="padding-left: 40px;">Feed \$1,500</p> <p style="padding-left: 40px;">Supplies \$1,000</p> <p style="padding-left: 40px;">Veterinary Med. \$500</p> <p style="border-top: 1px solid black;">Net Income \$7,500</p>
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Your financial management data is not as accurate in this example because there are no allocated costs for purchasing the cows.

Income Statement - Depreciation

Mature Cow Value \$20,000 (10 head)

<p>-----</p> <p>Revenue: \$10,500</p> <p>Expenses:</p> <p style="color: green;">✓ Depreciation \$200</p> <p style="padding-left: 40px;">Feed \$1,500</p> <p style="padding-left: 40px;">Supplies \$1,000</p> <p style="padding-left: 40px;">Veterinary Med. \$500</p> <p style="border-top: 1px solid black;">Net Income \$7,300</p>
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Your financial management data is now complete. You have considered all possible areas of cost such as the feed and supplies AND the value of assets being used for one year.

The value of depreciation is based on several factors that you manage to best represent the business situation. The factors are:

- (1) *Purchase price – shows the cost or transfer-in value of the item (beginning value),*
- (2) *Estimated useful life – years of typical use and is based on the type of item,*
- (3) *Salvage value – potential resale price of the asset once your use is complete.*

3 – Are all Capital Items Depreciable?

The answer is no ~ Raised breeding animals are non-depreciable since their cost to develop have been previously expensed while developing. An example is purchasing a young heifer. The expenses are inventory purchased for resale, feed and veterinary cost. These are typically expensed.

Once the heifer is ready for production as a mature cow, the animal is retained as a non-depreciable breeding animal and listed as a set value, not depreciable.

4 - Depreciation Formulas:

(1) Annual Depreciation Expense = (Beginning Value - Salvage Value) / Useful Life	(2) Annual Asset Book Value (Ending Yr. 2) = Beginning Value less - Yr. 1 Depreciation - Yr. 2 Depreciation
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** Year 1, Year 2 depreciation etc...are identified as accumulated depreciation*

Example: A Show Box that is purchased in year 1 of your project for \$800, has a useful life of 10 years and is estimated to be sold at the end of your use for \$600. In the space below, calculate the annual depreciation and show the book value for year 4 ending.

Annual depreciation =	Book Value Ending Yr. 4
$(\$800 - \$600) / 10 = \$20 \text{ year}$ <i>(Cost - salvage value) / useful life = depreciation</i>	$\$800 - \$20 - \$20 - \$20 - \$20 = \720 <i>(Beginning value - yr1 - yr2 - yr3 - yr4)</i>

Want to try some examples of depreciation? See the depreciation worksheet.

