

## **Setting up Expense and Revenue Accounts in QuickBooksPro™ for Cow-Calf and Retained Ownership Ranches to Generate Accrual Adjusted Financial Statements**

The Ranch business accounting system first must provide the data for compliance reporting following the expense accounts in the Internal Revenue (IRS) “Tax Profit or Loss from Farming” Schedule F. when reporting on a cash basis. The challenge is to first meet IRS compliance needs but also to report the business financial statements and use the Farm Financial Standards Council (FFSC) criteria and measures for financial performance evaluation (See Appendix A.) It’s necessary to make data and adjustments from the tax code compliance to report ranch business profitability for financial management. The following is a list are some of the areas addressed. See Appendix B for explanations.

- a. Cash IRS accounting with added data is converted to accrual adjusted for reporting.
- b. Accelerated IRS depreciation overstates depreciation. Alternatives can address this.
- c. For IRS raised breeding stock are expensed in the year they enter the herd. They have a zero-cost basis so when sold they create an IRS capital gains tax.
- d. Lack of accrual income and expenses adjustments prevents reporting profitability.
- e. IRS does not deal with debt payment necessary to calculate business repayment capacity.
- f. No balance sheet is required to complete the IRS Schedule F. A key report for managers and lenders.

Spreadsheets are provided to facilitate the recording of data and calculating values to address these areas to provide financial statements reports including income statement, statement of cash flow and balance sheet and calculate performance values.

The purpose of this guideline is to facilitate setting up Intuit’s QuickBooksPro™ (QB) accounting software to accomplish the goal of meeting IRS compliance and also provide accrual adjusted financial statements the meet management needs. Using the QB class feature for different production activities facilitates cost accounting for reporting expense and revenue data by cow-calf and cattle retained ownership production activities.

### **QuickBooksPro™ Implementation**

1. Ranch bookkeeping and reporting needs can be accomplished using (QB) software when it is set up with the proper chart of accounts. This requires:
  - Communicate with CPA in set up and implementation to ensure compliance with tax reporting needs spelled out by the CPA.
  - Define a chart of accounts using subaccounts that provides more detail on revenue and expense items than required by IRS reporting.
  - Identify costs and revenue by activity in QB for cost analysis using classes in QB.
  - QB is widely used in agriculture and small businesses for accounting and payroll.

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2. Bookkeeping activities to accomplish (See appendix A for job description):
  - Payment of all bills, record revenue in timely manner.
  - Reconcile bank statements monthly.
  - Ensure payroll compliance and reporting to employees.
  - Provide cash P&L statements monthly to the owners.
  - Combine the P&L with other financial and production reports using Excel.
  - Coordinate preparation of monthly and quarterly cash reports with CPA.
  - Facilitate annual tax reporting and managerial financial statement preparation.
  
3. Outside of QuickBooks Pro™ (see later section for supporting Spreadsheets):
  - Need an annual capital expenditure plan and maintain depreciation schedule.
  - Provide the annual budget and monitoring reports and comply with the lenders reporting requirement.
  - A production and marketing plan that supports a cash flow budget that can be maintained in QB.
  - Use class reports to provide data for cost accounting reporting.
  - Complete accrual adjusted financial statements annually.

Follow the IRS Schedule F “Profit or Loss From Farming” required select accounts for reporting to IRS. Sub accounts can be added to address management needs. Aim to limit added sub accounts. Good definition of what is recorded in each account is important.

**Exporting QB P&L reports to Excel is great for analysis while not “messing up” revenue and expense accounts and subaccounts transactions.**

**It’s critical for the business CPA to be involved** in setting up or modifying QB to ensure IRS reporting needs are met in addition to the detail recommended here for cost and management data.

Listed below are the IRS expense accounts and examples of classes for a cattle ranch. Selected details or sub-accounts are added under IRS cost items such as depreciation, repairs and hired labor and management to facilitate monitoring cost and reporting. The IRS Schedule F does not require sales data by category cattle that are necessary for cost and management accounting. Suggested income cattle accounts will add this detail.

**Chart of Accounts Additions for Cattle sales in the IRS Schedule F “Profit or Loss From Farming”**

IRS lumps all sales and adjustments into three accounts. Add details are required in chart of accounts categories of cattle. This is essential data for calculating costs and margins for retained ownership and also shows the importance of having an inventory for both purchased for resale and raised cattle.

## Part I Farm Income – Cash Method – IRS Schedule F Accounts

### 1a. Sales of Livestock and other resale items

- b. Cost or other basis of other items or other items reported in line 1a.
- c. Subtract line 1b from line 1a

Under 1a record sales and b. record the cost of the purchased for resale.

### 2. Sales of livestock, produce, grains, and other products you raise

All raised cattle including breeding cattle. Having details in the chart of accounts category is valuable information for cost calculation and projections.

## Sales Accounts for commercial cattle categories – Needs to define purchased versus raised cattle. These are sales sub-accounts possibilities to choose from to set up in QB.

### Raised Cattle

- Replacement Heifers
- Weaned Steers or Heifers
- Feeder Steers & Heifers
- Finished Steers & Heifers

### Purchased Breeding Stock -From the depreciation schedule

- Cull Bulls
- Cull Cows or Heifers

### Raised Breeding Stock

- Cull Cows
- Breeding Heifers or Cows
- Cull Repl. Heifers

### Purchased Cattle for Resale

- Replacement Heifer
- Feeder Steers & Heifers
- Finished Steers & Heifers

### Futures or Options (+/-) Risk Mgmt.

Crops and raised feed (add name detail as needed)

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\*\*Always use net payweight sales value out after marketing cost.

When using QB avoid using **cost of sales accounts** as cost information is lost in the P&L report expense list. IRS requires matching cattle purchases for resale value with their original cost.

When setting up assets, liability and equity accounts **be sure to get the business CPA involved.**

The lender can also be helpful. Explain to the accountant that management information is needed in addition to IRS compliance. The business CPA will assist in making entries to maintain these accounts and maintain the depreciation schedule.

QB reports can be exported the Excel™ for calculation of costs and net income by activity without changing accounting transactions or compliance with IRS rules. QB software is available to address payroll accounting requirements.

This is expenses chart of accounts using IRS Tax “Profit or Loss from Farming”, Schedule F for a ranch with cow-calf, ranch retained ownership, custom finished and crops production activities are as follows:

**IRS Expenses Accounts and Sub-accounts Account Numbers are from the IRS Schedule F.**

- 10 Car and Truck Expense
- 11 Chemicals
- 12 Conservation Expense
- 13 Custom Hire (machine work)
- 14 Depreciation
- 15 Employee Benefits Programs
- 16 Feed Purchase
  - Roughage
  - Complete Feed or Concentrate
  - Mineral & Salt
  - Protein Supplement
- 17 Fertilizer & Lime
- 18 Freight & Trucking
- 19 Gasoline, Fuel, & Oil
- 20 Insurance
- 21 Interest Expense
  - a. Mortgage - Real Estate Interest
  - b. Other Interest - Non-Real Estate
- 22 Hired Labor & Management – (sub accounts are added detail)
  - Salary
  - Payroll Expenses
  - Contract Labor
- 23 Pension & Profit-sharing Plans
- 24 Rents or Leases
  - Vehicles, Machinery, & Equipment
  - Land - (Cash Lease)
- 25 Repairs & Maintenance (sub-accounts are added to give more detail on expenses)
  - Vehicles
  - Machinery & Equipment
  - Buildings & Improvements
- 26 Seed & Plants
- 27 Storage and Warehousing
- 28 Supplies Purchased
- 29 Taxes (non-IRS)
- 30 Utilities

- 31 Veterinary & Medicine
  - Breeding
  - Herd Health & Vet
  - Processing
  - Treatment
- 32 Other Cash Expenses Specify see list below
  - a. Professional Fees
  - b. Professional Fees
  - c. Office (user defined subcategory details)
    - Supplies
    - Utilities
    - Administrative Wages & Payroll
  - d. Other (user defined)
  - e. Other (user defined)
  - f. Other (user defined)

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- a) Second level is a **sub-account** to add detail useful for management cost accounting.
  - b) Purchased calves, stocker or feeders for Resale – includes freight cost and other marketing costs. Can set up for retained raised ownership or purchased cattle as classes by year started and then make inactive when cattle are sold. A nice feature of QB is you can run a P&L by class for the relevant months.

**Suggested Ranch's Classes in QB - Modify to fit the Individual Ranch\*\*\***

- Cow-calf
- Replacement Heifers - if marketed as replacements otherwise just keep with cow-calf

Retained Ownership

- Background or grow yard if owned
- Stocker or yearling grazing
- Custom finish in feed yard

Raised Feed and Crops

- Raised Feed – define by crop
- Grazing – especially where are annual forages are produced
- Hay production
- Crops – define by crop

Indirect Cost or Overhead

\*\*\* Can set up for cattle by year started or lot and then make the class inactive when cattle are sold.

**Indirect expenses class that** will be allocated to production activities to get total unit cost.

**Suggested accounts to record in the Indirect Expenses Class**

Car and Truck Expense (seldom used as operating costs are recorded)  
 Gasoline, Fuel, & Oil  
 Employee Benefits Programs  
 Hired Labor & Management

Salary  
Payroll Expenses  
Contract Labor (it can't be allocated directly to production activity)  
Pension & Profit-sharing Plans  
Rents or Leases  
Vehicles, Machinery, & Equipment  
Land - (Cash Lease) – (use subaccounts to identify with a production activity).  
Repairs & Maintenance (subcategory added)  
Vehicles  
Machinery & Equipment  
Buildings & Improvements  
Taxes (non-IRS)  
Owner Operator Compensation (or withdrawals is not an IRS deductible expense).  
Conservation Expense  
Insurance  
Utilities  
Professional Fees  
Office Supplies  
Administrative Wages & Payroll

Any of these accounts can also be used to allocate as direct costs to a production activity. For example, repair and maintenance of haying machinery could be charged directly to the class for the hay production activity.

### **Cost and Profit Report Organization**

When thinking about cost accounting always keep the final content in the report in mind. Cost reporting in the beef cattle sector is often incomplete. Reporting only cash cost leaving off depreciation and owner compensation two of the most significant cost is wrong and misleading. Costs are organized for activity, cow-calf or retained ownership cost accounting to report total costs, net income and profit as follows:

### **Revenue or Income and Net Income or Profit Center - P&L by class in QB**

Revenue or Income - Production times **net price** – net of all marketing costs

- a) Gross Revenue or Income
- b) Total Direct Costs
- c) Total Indirect Costs
- d) Total Operating Costs (b + c)
- e) Finance Cost
- f) Total Cost or Total Unit Cost (TUC) (d + e)

**Net Income or Profit (a-f)**

Of course, invoices and receipts organized in a consistent and standard way are very desirable. Getting the chart of accounts defined is the starting point. Accurate expense labeling and allocation of costs between different activities or classes is critical and time consuming by the

bookkeeper. Clarity in definitions of costs helps for all involved from data collecting to reading reports.

In QB class P&L reports are exported to Excel™ to add indirect and finance costs to calculate total unit cost (TUC) and profit. Divide costs by units of production to calculate **Total Unit Cost**. It's always useful to express individual costs as a percent of TUC to get costs into proper perspective.

For feeder or stocker cattle its valuable to calculate cost of weight gain (**COG**). This can be compared to value of weight of gain (**VOG**) when evaluating potential cattle purchasing and marketing or pricing options.

### **Indirect Cost Allocation**

There is no set allocation procedure to follow. For ranches with a combination of cow-calf and retained ownership using head days is a simple approach when the head days are generated in a reconciled monthly inventory by category of cattle. There may be some logic to allocate more costs than to head days to the cow-calf during the calving season. Make notes on allocation procedures followed and be consistent from year to year. When budgeting knowing indirect costs per head ensure costs include those indirect costs that must be covered. Break-evens are calculated based on total cost. Indirect costs are reported in the QB class report and this number is divided by total head days to calculate costs per day.

### **Bookkeeper, Data Collectors and Report Providers**

**Reward your bookkeeper** and all the data collectors as they help you and your CPA avoid IRS auditors and keep a focus on the business performance. Monitor and use memorized revenue and expense reports information at least monthly will lead to cost savings and more informed decision making.

QB's profit and loss (P&L) reports can be memorized so requesting reports is on call. Meet with the business tax accountant no later than October in a calendar fiscal year for tax planning.

Increased complexity of tax and regulation reporting compliance requires a greater amount of time. In this volatile decision environment knowing cost and net income by activity have never been more important. Financial sustainability is a challenge in ranching. Timely use of accounting data in decision making **is a cost-effective activity**.

### **Measuring Ranch Profit Requires an Accrual Adjusted Income Statement**

Using the IRS Schedule F "Profit or Loss From Farming" to measure and report cash and depreciation costs of production and ranch business profitability is possible with some **serious adjustment**. Just always keep in mind what the IRS labels as "Net farm profit or (loss) is **not a good measure of profitability** or change in business equity.

This is a list of data needed to measure of business profitability that are not included in the Schedule F Cash Schedule F. Accrual adjusted income will be different for IRS cash profit or (Loss) for the following reasons:

1. **Compensation** for owner operators labor and management or family living withdrawals. Recall in a sole proprietorship this **is not a tax-deductible expense**.
2. **Accrual adjustments** are required for changes in revenue from cattle and crops ready for sale, accounts receivable and change in expenses for change in feed inventories or supplies, prepaid expenses, accounts payable and accrued taxes, interest and investment in crops and unfinished cattle.
3. **Capital gains (losses)** for **purchased cattle** sales or capitalized cost of replacements added to the breeding herd or **base value of raised replacements** added and sold from the herd.

**Spreadsheets will be available to facilitate the collection and reporting date for these adjustments** <http://agecoext.tamu.edu/decisionaids/beef>

#### **Appendix A: Copied from the “FFSC Guidelines” 2021**

**What is Measured Financial analysis of a producer encompassing both the “financial position” and “financial performance.”**

*Financial position* refers to the total resources controlled by a producer and total claims against those resources, at a single point in time (a stock concept). Measures of financial position indicate the producer’s financial strength, capacity to withstand risk and provide a benchmark against which to measure the results of future decisions.

*Financial performance* refers to the results of production and financial decisions contributing to financial strength, over one or more periods of time (a flow concept). Measures of financial performance show factors that contribute to profitability and include external effects (i.e., drought, grain embargoes, etc.), and the results of operating and financing decisions made in the ordinary course of business.

**Financial Criteria** **Financial** measures are grouped into five criteria: liquidity, solvency, profitability, repayment capacity, and financial efficiency. All measure either financial position or financial performance.

**Liquidity** measures the ability to meet financial obligations as they come due in the ordinary course of business, without disrupting the normal operations of the business.

**Solvency** measures the amount of borrowed capital (or debt), leasing commitments, and other unpaid expense obligations used by a producer in relation to the amount of owner equity invested



in the business. Debt capital is interest-bearing and/or has a date by which debt must be paid. Therefore, solvency measures provide (a) an indication of the producer's ability to repay all financial obligations if all assets were sold (for the prices indicated), and (b) an indication of the ability to continue operations as a viable business upon experiencing various financial adversities (e.g., drought, market collapse, expense overrun) which typically results in increased debt or reduced equity.

**Profitability** measures the extent to which a producer generates a profit from the use of land, labor, management, and capital.

**Repayment capacity** measures the ability of a borrower to repay term debt from farm and non-farm income. Principal payments on term or non-current debt come from net income (with depreciation added back) after owner withdrawals, income taxes, and Social Security taxes.

**Financial efficiency** measures the intensity with which a producer uses the assets to generate gross revenues and the effectiveness of production, purchasing, pricing, financing, and marketing decisions.

## **Appendix B: Raised Breeding Stock Accounting as an Alternative to IRS Cash Reporting**

Accounting for raised breeding stock presents challenges that must be addressed to meet cost accounting and management informational needs. Under IRS cash tax reporting raised breeding stock costs are expensed in the year incurred. Raised breeding stock have a zero-tax basis when sold or there is death loss. The net sales value of raised breeding sales is capital gains for IRS tax purpose. This approach does not allow for fiscal year matching of revenue and expenses nor valuation on breeding stock inventory that are not included on the balance sheet because their IRS cost basis is zero. You can have a herd of raised breeding stock and a zero value on the IRS based balance sheet. Worthless information for financial performance evaluation!

For purchased breeding stock the "original" purchase cost is the basis for depreciation. Using a straight-line depreciation with salvage value to account for purchased breeding stock would allow for more accurate and less distorted financial statements than following IRA cash accounting compliance methods. "Book value" that can be generated by the CPA accomplish this task.

The Farm Financial Standards Council (FFSC) offers two alternatives to IRS cash tax accounting for raised breeding stock: 1. the base value approach where replacement cost is estimated and 2. The capitalization approach where costs are accumulated or full cost absorption. The Standardized Performance Analysis (SPA) follows the FFSC guidance. The raised breeding stock accounting approaches are described below. The table compares alternatives and IRS reporting.

### **Base Value Raised Breeding Stock**

Valuation for raised breeding stock covers the time period from weaning until the heifers are considered bred to enter the breeding cow category. When replacements are held at weaning, they are given a **base value that approximates the cost of production to weaning**. This is recognized in the income statement as a matching of current year expenses. An increase in base value income is recognized when they moved into the breeding herd and then when replacement enter the breeding herd. This recognizes the matching of increase in income matching costs to grow and breed the replacement heifers before the move into the breeding herd. The gain and loss from the raised breeding stock is calculated by **subtracting the base value from the net sales revenue realizes when the breeding stock is sold or dies**.

Annual raised breeding stock depreciation is not recognized when using base value. The base value is shown on the balance sheet and are designated as raised breeding stock to value assets. The base value can be adjusted over time as replacement cost changes.

### **Cost Capitalization for Raised Breeding Stock**

Using the cost capitalization approach, also referred to as the accumulated cost or full cost absorption approach, requires the rancher to capitalize the accumulated cost of raising the replacement animal. In other words, the entire accumulated cost associated with pre-productive expenditures up until breeding stock are placed into service. For example, the accumulated cost of a weaned heifer in the cow-calf phase would be added to the additional cost of maintaining her until she moves into the breeding cow category.

Once the animal enters the breeding herd, the producer can claim an annual depreciation expense based on the capitalized costs, the estimated useful life and the salvage value of the raised breeding stock. When the capitalization approach is used, raised breeding stock accounting is done using the same methodology described for purchased breeding stock.

### **Key Depreciation Definition**

**Capitalized Value** is an IRS 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. This is a very difficult methodology to use in the beef cattle sector. **This is why the FFSC chose the base value option.**

## **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.**

## **Appendix C: Job Description for Farm/Ranch Bookkeeper**

TITLE:	Bookkeeper
CLASSIFICATION:	Full-time or part-time
REPORTS TO:	Owner or Manager

### **SUMMARY OF RESPONSIBILITIES**

Bookkeepers assist management by providing bookkeeping, payroll, accounts payable management and basic analytical work for the owners or managers. Bookkeepers may also be responsible for tracking land leases and landowner relationships.

### **ESSENTIAL FUNCTIONS**

1. Become familiar with the organization's policies and procedures.
2. Perform bookkeeping and basic payroll services for the organization.
3. Manage and maintain accounts payable ledgers always mindful to take advantage of early pay discounts.
4. Prepare and submit accounts payable payments as needed with the approval of owners or managers.
5. Prepare and maintain trial balances, depreciation schedules, and debt amortization schedules. Will work closely with the organization's CPA on this task.
6. Maintain the organization's filing system.
7. Update analytical spreadsheets to assist management in decision making. Will work closely with owners and management on this task.

### **REQUIRED EXPERIENCE**

Individuals at this level normally have a basic understanding of bookkeeping principles, but may not have obtained a college degree that includes a significant concentration of accounting. A basic understanding of QuickBooks Online and Microsoft Excel is crucial.

This job description does not list all the duties of the job. You may be asked to perform other assignments and duties. You will be evaluated in part based on performance of the tasks listed in this job description.

The firm's management has the right to revise this job description at any time. The job description is not a contract for employment, and either you or the firm may terminate employment at any time, for any reason.

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**Reference:**

**Farm Financial Standards Council:** “Financial Guidelines for Agricultural”. Original 1991 revised 2021, Farm Financial Standards Council, website [www.FFSC.org](http://www.FFSC.org).

**Iowa State University** <http://www.extension.iastate.edu/agdm/wholefarm/xls/c3-56comprfinstatement.xlsx>

**University of Minnesota** for Financial Management (CFFM) [FINBIN](http://www.extension.umn.edu) and [FINPACK](http://www.extension.umn.edu)

**Oklahoma State University – Department of Agricultural Economics**  
<http://www.ageco.okstate.edu/livestockbeefextension>

**Kansas State University and Kansas Farm Management Association -**  
[agmanager.info/KFMA](http://agmanager.info/KFMA)

**Texas A&M University – Department of Agricultural Economics Decision Aids Beef**  
<http://agecoext.tamu.edu/resources/decisionaids/beef>

**University of Nebraska - Lincoln UNL Beef Website** <http://beef.unl.edu/>

**Farm Business or Management Associations** have web sites in a number of states including: ND, NE, IA, IL and MN.