

Introduction

This manual was developed to assist in the standardization of data collection and entry for Farm Business Management Annual Analysis Reporting. Consistency in the data entry is the key to creating a usable set of benchmarks for producers.

Text <u>underlined in blue</u> is hyperlinked to the corresponding analysis section or an outside resource for further detail.

Acknowledgements

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Section I: HELPFUL RESOURCES

IMPORTANT LINKS

Farmers:

https://www.farmers.gov/

Financial Resources for Farmers and Ranchers:

https://www.usda.gov/farming-and-ranching/financial-resources-farmers-and-ranchers

The Farm Financial Management Database:

https://finbin.umn.edu/

FINPACK Benchmarking:

https://z.umn.edu/benchmarking

UMN Center for Farm Financial Management:

https://www.cffm.umn.edu/

FINPACK ICONS

Icon	Name	Description
	Loan Calculator	Assists in calculating loans. Pasting the information will fill out the loan data.
Output Preview View the output from the file. Can check for any warnings he		View the output from the file. Can check for any warnings here.
•••	Detail	Allows for more detail to be entered in the cell.
	Check	View Cash Flow & Crop/Feed Check
•	Toggle	When green, this allows you to toggle back and forth from distributions to dollar amounts.
	Select from detail	Allows the selection of previously entered detail for capital purchases and sales, enterprise income selection, and enterprise expense selection as examples.

Note: these are icons that are frequently referenced in the text. There are many more icons in FINPACK. The FINPACK Shortcut Icons whitepaper includes details on all icons in the program.

Section II: 2025 OVERVIEW

What's New?

GOVERNMENT PROGRAM PAYMENTS

Specific payments received in 2025 -----

American Relief Act of 2025. Emergency Commodity Assistance Program (ECAP)

- Analysis Treatment
 - 1. Balance Sheet: Remove Account Receivable from Jan. 1, 2026 (year-end) balance sheet.
 - 2. FINAN Whole Farm: Include payments received as **Other Government Payment** income. The income will be accrual-adjusted out of 2025, since it was included previously in the 2024 analysis.
 - 3. FINAN Crop Enterprise: do not include, related to 2024 crop year.

Marketing Assistance for Specialty Crops (MASC)

- Analysis Treatment:
 - 1. Whole Farm Other Government Payment income
 - 2. Crop Enterprise Analysis do not include, not related to 2025 crop year.

Supplemental Disaster Relief Program (SDRP)

- Analysis Treatment:
 - 1. Whole Farm Other Government Payment income
 - 2. Crop Enterprise Analysis do not include, related to 2023 and 2024 crop years.

Farmer Bridge Assistance (FBA)

- Analysis Treatment:
 - 1. Balance Sheet: Include as estimated Accounts Receivable on Jan. 1, 2026 (year-end) balance sheet. This will accrual-adjust the payment into the 20205 analysis.
 - 2. FINAN Whole Farm: Do not include (no cash received)
 - 3. FINAN Crop Enterprise: allocate to applicable 2025 crop acres as Crop Government Payment.

General guidelines for handling government payments in the FINAN Financial Analysis -----

Whole Farm

- o **Crop Government Payment Income:** used for Farm Bill Title I related crop commodity payments. This will generally only include ARC and PLC payments.
- o **Livestock Government Payment Income:** used for any livestock related government payment income, whether an ad hoc payment or ongoing program.
- Other Government Payment Income: used for ad hoc payments for disaster programs, commodity assistance, or other one-time, special payments.

- o **Conservation Government Payment Income:** used for conservation related program payments like EQIP, CSP, or SHIPP payments.
- Crop Insurance Income: used for crop insurance indemnity and prevented plant payments.
- Livestock Insurance Income: used for livestock insurance programs like LGM, LRP, or DRP.

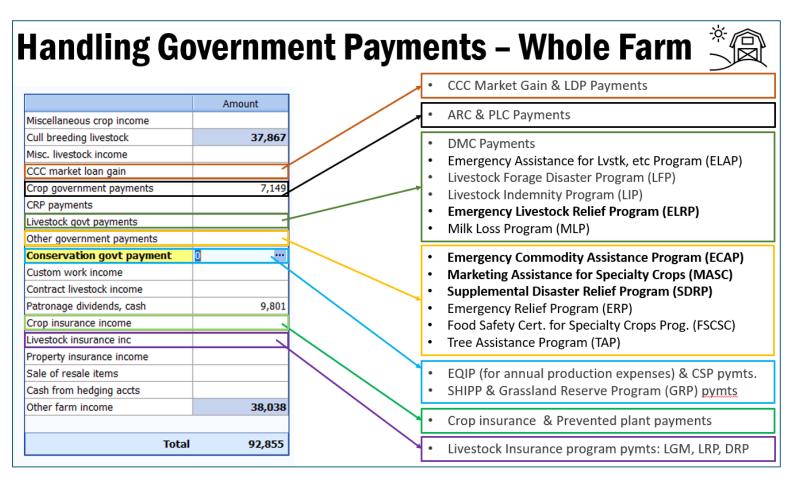
• Crop Enterprise Analysis

- Crop Government Payments: used for all Title I and ad hoc payments allocated to commodity crop enterprises for the year. Payments related to the current year's crop production, exception is ARC and PLC payments, which are included in the analysis of the year they are received.
- Other Income: used for EQIP, CSP, and other payments that reimburse annual production expenses.

• Livestock Enterprise Analysis

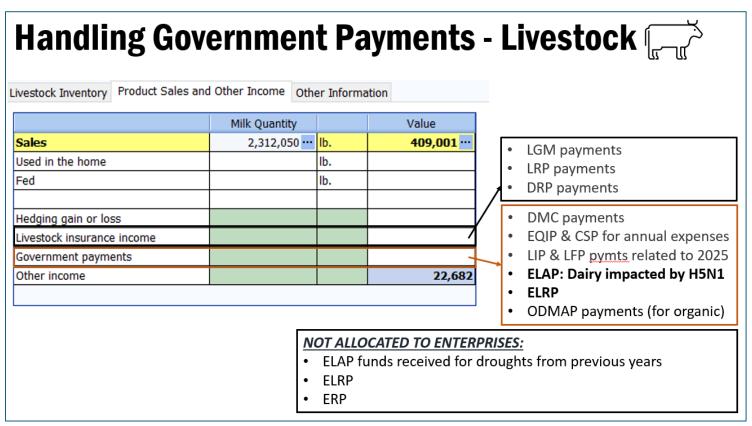
O Government Payments: all livestock related government payments are included here for the production year.

Directions for inclusion of various government program payments in FINAN financial analysis ----



Handling Government Payments – Crops NOT ALLOCATED TO ENTERPRISES: Crop **ECAP** SDRP MASC Description Type SHIPP, CRP - treat as a crop Acres owned Acres cash rented Crop insurance payments Acres share rented Prevent plant payments Your Share (%) Total production (your share) CCC Market Gain Value per unit Total product value LDP Payments Hedging gain or loss ARC and PLC payments Crop insurance income FBA payments for eligible crops LDP income Crop government payments FSCSC for specialty crops** Other income TAP payments (specialty crop) ** FSCSC may be added to market channel sales if not analyzing specific crops Combine with ent, number

EQIP & CSP for annual expenses



FINPACK UPDATES

General FINPACK Updates -----

- Desktop shortcut icon will read "FINPACK 2026" after installing the annual update.
- Added a setting in Tools + Options to show or hide the "Prepared by" footer on all reports.
- Fixed issue in some data entry areas where pasting a value from a calculator did not work.

Detailed Balance Sheet Specific Update -----

• Increased length of the Description field to 40 characters for detail in breeding livestock, land, and several personal asset accounts.

Balance Sheet Trend Reports Specific Update -----

• Added line for 'change in working capital' to several of the standard reports.

FINPACK Financial Analysis (FINAN) Specific Updates ------

- Chart of Account Updates:
 - Whole Farm
 - Agritourism income
 - Agritourism expense
 - There is now a whole farm and market channel expense for this.
 - o Crop Chemical Updates
 - The chart of accounts is expanded to allow further breaking down Crop Chemical expense. Including:
 - Herbicide
 - Insecticide
 - Fungicide
 - The general crop chemical expense will remain, allowing users to break expenses down or enter a single value for chemicals.
 - Chemical expenses will function like repairs in Crop Summary Reports and be lumped into a single Crop Chemical expense. Use "show all expenses" to view the detailed breakdown in summary reports.
- Crop Addition:
 - o **Quinoa**: Unit = pounds
- Beef cow-calf enterprise analysis
 - Other information now states "Number of cows calving"

STATE DATABASE THRESHOLDS

*Note, many of these items can be reviewed using the RankEm Error Check Report

Whole Farm Analysis -----

- Cash check discrepancy should be < 1% of gross income and < \$5,000.
- Liabilities check discrepancy should be < \$300.
- Net worth discrepancies should be <1% of gross income and <\$5,000.
- All farms, except pass-through entities, must include deferred liabilities. If a farm has negative deferred liabilities, enter zero and include a Unique Situation report to your database reviewer.
- All farms must include both cost and market balance sheets.
- Total machinery and building depreciation should be <= \$0. See Capital Sales and Purchases for handling gain on the sale of capital assets.
- All farms <u>must</u> include estimated labor hours. This is <u>not optional</u> for FBM programs.
- Personal property taxes should not be entered for Minnesota farms.
- Average Hired Labor Rate per Hour should be between \$5 and \$75.

Crop Enterprises -----

- Nurse crops for hay establishment (i.e. oats) should not be coded with Double Crop type.
- Irrigation expense should not be allocated to non-irrigated crops.
- For hay crops, seed expense should only be entered on hay establishment enterprises. If needed limited re-establishment costs can be included on normal production hay enterprises.
- Rent expense should be > \$0 on cash rented crops. If legitimate, enter as share rental with 100% share AND delete the enterprise from the database.
- Real estate taxes should be > \$0 on owned land.
- Seed expense should be > \$0 on corn, soybeans, and other common commodity crops.
- Seed expense can be \$0 for canning crops (peas & sweet corn) when provided by company.
- Drying & Storage should=\$0 on forage & silage crops. Enter preservatives as Misc. Crop Expense.
- Hauling, Trucking & Marketing should=\$0 on forage & silage crops. Use Custom Hire if needed.
- All direct and overhead expenses should be >= \$0. Negative overhead expenses are caused by over-allocating direct expenses for labor, leases, utilities, and custom hire.

Livestock Enterprises ------

- Beef calves from a cow-calf enterprise should be sold at normal calf selling weight or transferred to a grow/finish enterprise. Enterprises with an average sales weight greater than 800 pounds will be deleted unless the "Cow-calf with backgrounding" special sort is selected.
- Carefully review Other Information results, such as Calving Percentage, Feed Conversion, etc.
- Enter feed quantities in the proper unit, e.g., do not enter Protein in pounds.

Section III: POINTS OF EMPHASIS

WHOLE FARM INFORMATION

- Total Acres Owned: Ensure the acreage entered in Summary Information is accurate.
- Operators:
 - o List all operators with Year Born and Year Started Farming.
 - Operator #1 should be the primary operator. Update with a generational transfer.
- Major Unpaid Resources (labor, machinery, land use, etc.): Use either approach here:
 - 1. Charge the estimated value and offset with Gifts & Inheritances income.
 - 2. Enter an Accounts Payable Forgiven amount under Accrual Adjustments (affects allocation, not cash).
- Family Living: Enter detailed family living expenses whenever available.
- Labor Hours: Include all paid and unpaid labor. Ensure unpaid family labor hours are accurate.
- **Special Sorts:** Identify operations that are Organic, Organic Transition, Specialty Crop, Beginning Farmer, Socially Disadvantaged/Limited Resource, Veteran, or MN Water Quality Certified (MAWQCP).
- Non-Typical Enterprises: Do not submit for database benchmarking.
- **Net Worth Discrepancies:** Must be <1% of gross revenue. Correct causes such as cash or liability entry errors or land cost value changes.
- Enterprise Analysis: Complete crop and livestock enterprise analysis wherever possible.

CROP ENTERPRISE INFORMATION

- **Custom Hired Operations:** Adjust machinery allocation appropriately. If custom harvested, consider reducing allocation by ~50%.
- Custom Work Enterprises:
 - o If analyzed as a crop enterprise, enter acres as rented acres; no real estate taxes or long-term interest allocation.
 - o Alternatively, analyze as a Value-Added enterprise.
- **Review:** Ensure correct tillage system, previous crop, and production practice entries.
- Cover Crop Analysis:
 - o The Grown After Cover Crop (corn, soybeans, wheat, corn silage) should be marked **Normal**, not Cover Crop or Establish.
 - Cover crop enterprises should have limited labor and machinery costs (recommendation: ≤ \$30/acre).
 - o No land-related costs (land rent, RE taxes, LT interest) are allocated to cover crop.
 - o Allocate all land costs to the Grown After Cover Crop crop.
 - o Assign a unique FIELD ID for tracking over time.
 - o Income related to cover crop practices should be entered as Other Income.

• Government Payments:

- o Allocate by crop (for commodity crops) as Crop Government Payments.
- o EQUIP and CSP annual-expense payments are be handled separately.
- Prevented Plant: Treat as a normal crop. Include both crop insurance income and expense.

• Perennial & Establishment Crops:

• Establishment years = Establish crop type; Production years = Normal crop type.

• Hay & Forage:

- o Seed expenses appear only on establishment enterprises unless re-seeding occurred.
- o Hay enterprises used as cover crops are not allowed.

• Silage Crops:

- o Enter production in wet tons.
- Bagging/storage expenses for high-moisture corn go under Storage, not Packaging & Supplies. Preservatives/inoculants go under Misc. Crop Expense.
- o Silage hauling is recorded under Custom Hire.
- **Straw/Stover:** Preferably analyze as a secondary product. If a separate enterprise, must be Double Crop type.
- **Double Cropped Acres:** Do not allocate full land rent, RE taxes, or long-term interest. Crop enterprises that are **99–100% share rented should be deleted**; cash rented crops must show land rent > \$0.

LIVESTOCK ENTERPRISE INFORMATION

- Enter **both quantity and value** of all feed fed. Value homegrown feed using market value, not cost of production.
- Enter required **Other Information** (average head, normal total gain, offspring production) to ensure correct efficiency calculations.

• Grow/Finish Enterprises:

o Enter Total Normal Gain as total pounds gained per cycle, not average daily gain.

• Dairy:

- o Combine Dairy and Dairy Replacements if appropriate (ensures report inclusion).
- o Milk hauling is Hauling & Trucking; marketing costs are a Marketing Expense.
- o Enter SCC as a whole number (e.g., 100,000).
- o Enter total pounds of protein and fat sold (required to calculate ECM).

• Contract Grower Enterprises:

- o Do not use Contract Grower Expense unless analyzing the contractor.
- o Enter actual expenses under their correct categories.
- o Contract income goes into Contract Income

Section IV: BALANCE SHEET INSTRUCTIONS

ENTERING DATA IN THE FINPACK BALANCE SHEET

Valuation Method - Select "Both" during entry; you can still choose to print only the Market Value or Cost Value by selecting these later when you print.

Asset Valuation Method
○ Market value ○ Cost value
● Both

ASSETS

Current Farm Assets ----

Cash and Checking Balance - Includes all farm accounts, like savings, checking, Certificates of Deposit, money market accounts, etc. Use **Detail** to make a detailed list.

Prepaid Expense and Supplies - Include paid fuel, fertilizer, and chemical in tanks, fall applied fertilizer and/or chemicals, lime fertilizer, prepaid accounts at elevators, co-ops, companies, etc. The expense should then be allocated to the respective field/crop for a subsequent number of crop years, per the operator's discretion. Use **Detail** to select the expense category to help identify the total expense incurred in the FINAN enterprise analysis.

Description	Expense Category (Optional)	Quantity	Value Per Unit	Value
Vitamin Premix	Purchased feed	9	438.90	3,950
Corn Gluten	Purchased feed	32	117.50	3,760
Seed	Seed			52,200
Fertilizer	Fertilizer			33,720
Chemicals	Crop chemicals			20,808

Growing Crops - Example: Winter Wheat (cost of inputs). Also, expenses related to planting cover crops for sale or feed use should be considered a growing crop. Use **Detail** to select the expense category.

Accounts Receivable - Examples: Insurance payments, money owed from others (LDP's), estimated Disaster payments.

- <u>Dairy</u> The beginning balance sheet should include the gross value of December milk received in January. The ending balance sheet should include the December check received in the following January.
- <u>Crops</u> Deferred crop sales can be included in Accounts Receivable or as crop inventory. Use **Detail** in the entry box to enter a detailed list.
- Projected ARC or PLC payments <u>should not</u> be included until Marketing Year Price has been established.

Hedging Accounts - Enter the amount of equity that could be withdrawn if the position were settled on the statement date. Some brokerage statements list this as "**Net Liquidity**".

Other Current Assets - Enter any item not fitting in the other categories listed in the Current Assets section of the Balance Sheet.

Crops - Always enter the Quantity, Value/Unit and Value. Enter crops under CCC loan as normal crop inventory, valued at market value or loan rate, whichever is higher. If the market price is below the loan rate and an LDP has not been claimed, value the crop at local loan rate. If the inventory is "priced" or under contract, use the contract price less estimated expenses for storage and delivery.

- For year-end advances on crops sold for the following year, convert the dollars received on the advance to units of crop based on the percentage of the sale received. Reduce the grain inventory by this number of units. Price used in the calculation for determining bushels should be the underlying contract price.
- Organic crops are designated by selecting the checkbox after the crop list. The organic designation will flow to other parts of FINPACK.

Crop	Organic	Description	Quantity	N.	/alue Per Unit	Value
Corn	V	contracted Feb	10,000 bu	u.	11.00	110,000

Market Livestock - Include feeder animals intended for eventual sale. Youngstock intended to eventually enter the breeding herd should be included in Breeding Livestock.

Intermediate Farm Assets -----

Breeding Livestock - Include all breeding females and males including youngstock and replacements. To-be-culled breeding animals remain as intermediate livestock until sold. Cost value for raised livestock should be set initially as the estimated cost of production (base value) and should remain the same throughout the animal's life. Purchased animals should be separated from raised if they represent over 10% of the herd with cost value of the purchase cost less depreciation down to the base value.

Farm Machinery and Equipment - Enter both Market and Cost Value. For cost valuation, use an economic depreciation method that reflects the estimated actual useful life of the asset (subtract 10 to 15% each year). New machinery starts at full purchase cost for both cost and market value, then depreciates based on usage. For new students, establish the cost value by estimating the purchase cost less economic depreciation on each item. If this is unworkable, begin with market value and apply economic depreciation in future years. Use **Detail** to enter a detailed list. Use the "%" feature to take a percent depreciation on the detail list (see below).

Depred	iation perc	ent 10.00	Adjust market va					
	Adjust?		Description	Cost Value	Adjusted Cost Value	Market Value	Adjusted Market Value	^
	V	Flatbed t	railer	782	704	1,116	1,116	
	✓	Grinder		425	382	837	837	
	✓	IH 966		4,251	3,826	7,440	7,440	
	✓	Feed wage	on	612	551	1,023	1,023	

Suggested Depreciatio	n Rates
Category	Dep. Rate (%)
Livestock Equipment	15 to 20
Crop Machinery	7 to 15
Buildings and Bins	5
Augers and Movable Equip.	10
Vehicles	15
Office Equipment	30

Suggested Depreciation Percentages Based on Asset Useful Life			
Useful Life (Yrs.)	Depreciation (%)		
2	50		
3	33		
4	25		
5	20		
6	17		
7	14		
8	12		
9	11		
10	10		
11	9		
12	8		
15	7		
20	5		
25	4		

Titled Vehicles - If desired, separate titled vehicles from farm machinery.

Other Intermediate Assets - Example: Cooperative Stock, (this is not to be confused with co-op patronage equities which are long term assets), Beet Stock, Farm Credit Services Stock, Wheat Growers Stock. Enter the retained value for each cooperative separately. For the market column, value stock at market value with recognition of changes if significant changes in valuation have occurred since the beginning of the year. Also, include the remaining value yet to be expensed on investments in perennial crops. Use **Detail** to enter detailed list.

Long Term Farm Assets ------

Farmland - Use **Detail** to enter Acres, Value/Acre, Cost Value and Market Value. Do not change Market Value unless a significant change occurs. *DO NOT CHANGE THE COST VALUE OF LAND*.

Farm Buildings and Improvements - Enter both Cost Value and Market Value. Depreciate the original cost over the life of the asset for the cost value. Enter *new buildings, building fixtures, or improvements* at original purchase cost for both cost and market value, proceed to depreciate based on use during the year. Use the **Detail** to enter a detailed list. *Note*: For the same farm, you can separate land and buildings on the "Cost" Balance Sheet yet lump them together on the "Market" Balance Sheet.

Other Long Term Farm Assets - Enter any long-term asset not already categorized above. Enter both the Cost and Market Value. Example: Co-op equities.

Capital Purchases and Capital Sales - Details regarding the purchase and sales of Breeding Livestock; Machinery and Equipment; Titled Vehicles; Land; Buildings and Improvements; Other Intermediate Assets and Other Long-Term Assets can be recorded on the Balance Sheet. Use **Detail** to enter this information. *Note*: The recommended entry of traded assets can be found under the 'FINAN (Financial Analysis) Instructions' section.



Personal Assets -----

Personal Assets – these should be detailed as well. Enter the personal house in this category.

Equity -----

Contributed Capital – enter any applicable contributed capital in this area. Use detail as needed.

LIABILITIES

Current Farm Liabilities -----

Farm Accounts Payable and Other Accrued Expenses - Usually includes accounts payable; charge accounts such as feed, fertilizer owed to local businesses, real estate taxes owed but not paid. Include any government payments received before the beginning balance sheet date but belonging to next year's crop. Do not include credit card or FarmPlan balances if expenses are included in outflows—include in current notes instead. Use detail to list each account and the Expense Category.

Current Farm Loans - List loans due in less than 1 year. If expenses financed by credit cards or FarmPlan are included as cash outflows in FINAN, list balance as Current Loan here. If not, include in Accounts Payable.

Intermediate Farm Liabilities -----

Intermediate Farm Loans - List loans owed on equipment and livestock; usually ten years or less. P&I payment is required for calculation of Term Debt Coverage. Principal due is amount due in the next 12-month period. (FSA set-aside payments should be listed as separate loans without accrued interest or payments, 0% interest.)

Farm Leases – Both *Finance* and *Operating* leases with terms greater than 12 months are now to be reported on the balance sheet per FASB and FFSC Accounting Standards. This includes all leases, with limited exceptions. The main exception in agriculture is land rental arrangements. These can be treated as operating expense rather than balance sheet assets. Proceed to the end of this section for more detail. For even more information see <u>z.umn.edu/leases</u>.

Long Term Farm Liabilities ------

Long-Term Farm Liabilities - List loans with original term of longer than ten years ~ usually real estate (land or buildings). P&I payment is required for calculation of Term Debt Coverage. (FSA set-aside payments should be listed as separate loans without accrued interest, or payments, 0% interest.)

Personal Liabilities -----

Income and Self-Employment Taxes Payable - should be estimated and included as personal income taxes payable. Be sure to enter on both beginning and ending Balance Sheets. List credit cards as accounts payable if they are not included as cash outflows in FINAN.

Current Personal Loans - Short-term loans due 12 months or less. Include credit card balances if included in cash outflows in FINAN.

Intermediate Personal Loans - Car loans, boats, furniture, and other personal items.

Long Term Personal Loans - Real estate, house, cabin, trailer house.

Note: The loan should follow the purpose of the loan not necessarily the collateral. A loan for farming with the house as collateral would be a farm loan.

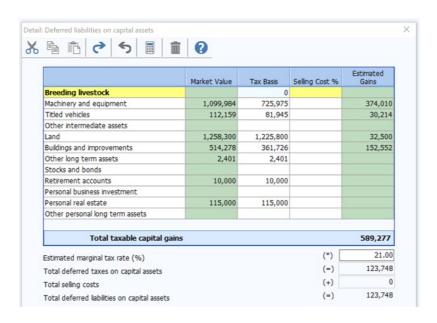
Deferred Liabilities -----

Deferred liabilities must be included for all farms except "pass-through entities," LLCs and S Corporations for which income is passed through to owner for tax purposes. Use the detail feature to calculate deferred liabilities on the Market Balance Sheet.

	Amount
Deferred taxes on current inventories	349705
Deferred liabilities on capital assets	123,748

Deferred Liabilities include:

- 1. Taxes due on **current inventories** (grain, market livestock, etc.) include both income and selfemployment taxes. Enter the cost basis of purchased feeder as well as the amount of CCC loans treated as income and already taxed.
- 2. Estimated taxes due on gain from **capital assets WHEN** sold (land, stock, machinery, etc.) includes capital gains tax calculated on the difference between market value and tax basis value. In accordance with the Farm Financial Standards, selling costs should have already been subtracted from the market value of assets and therefore should not be included here.
- 3. FINPACK defaults the cost values from the balance sheet into the tax basis column. To be accurate, you should enter the actual tax basis for each asset category. FINPACK will automatically update the tax basis using the cost values until you change them, so they do not match. After you change the tax basis, you must continue to update it from year to year.



4. The chart on the following pages should be used in determining the appropriate tax rate.

Approximate Average Deferred Tax Rates **MINNESOTA**

	Current Deferred	Non-Current Deferred
Total Deferred	Income	Income
Income	Federal ^a and State	Federal ^b and State
\$15,000	15%	0%
\$20,000	15%	0%
\$30,000	15%	0%
\$40,000	17%	0%
\$50,000	20%	1%
\$60,000	21%	2%
\$70,000	22%	2%
\$80,000	23%	3%
\$90,000	24%	6%
\$100,000	25%	7%
\$110,000	26%	9%
\$120,000	26%	10%
\$140,000	26%	11%
\$160,000	26%	13%
\$180,000	26%	14%
\$200,000	26%	15%
\$250,000	26%	16%
\$300,000	26%	17%
\$350,000	27%	18%
\$400,000	35%	19%
\$450,000	35%	20%
\$500,000	35%	21%
\$1,000,000	41%	25%
\$2,000,000 and over	44%	28%

a. Includes Federal Income Tax, Social Security Tax and State Income Tax.

b. Excludes Social Security Tax.

Approximate Average Deferred Tax Rates **NORTH DAKOTA**

	Current Deferred	Non-Current Deferred
Total Deferred	Income	Income
Income	Federal ^a and State	Federal ^b and State
\$15,000	15%	0%
\$20,000	15%	0%
\$30,000	15%	0%
\$40,000	17%	0%
\$50,000	18%	0%
\$60,000	20%	0%
\$70,000	20%	0%
\$80,000	21%	1%
\$90,000	22%	2%
\$100,000	22%	4%
\$110,000	22%	5%
\$120,000	22%	6%
\$140,000	22%	7%
\$160,000	22%	8%
\$180,000	22%	9%
\$200,000	22%	10%
\$250,000	22%	11%
\$300,000	22%	12%
\$350,000	22%	13%
\$400,000	29%	13%
\$450,000	29%	13%
\$500,000	30%	14%
\$1,000,000	34%	18%
\$2,000,000 and over	37%	20%

a. Includes Federal Income Tax, Social Security Tax and State Income Tax.

b. Excludes Social Security Tax.

ENTERING LEASES ON THE BALANCE SHEET

There are two types of leases: 1) **Operating leases**, which generally have a shorter life than the asset being leased, and 2) **Finance leases**, sometimes called capital leases, which often span a substantial part of the life of the asset. In agriculture, land rental arrangements are the most common type of operating lease. While accounting standards suggest that some operating leases should be listed on the balance sheet, the <u>Farm Financial Standards Council's (FFSC) Financial Guidelines for Agriculture</u> recommend that land leases be treated as operating expenses rather than balance sheet assets.

A **finance lease** is often used as a direct substitute for purchasing and financing the asset with borrowed money. Therefore, they should be included on the Balance Sheet according to current accounting guidelines. The major criteria for determining if a lease is a finance lease are:

- 1. The lease transfers ownership of the property to the lessee at the end of the lease term, or
- 2. The lessee has an option to purchase the asset that is reasonably certain to be executed, or
- 3. The lease term covers the major part of the remaining economic life of the asset.

*Refer to Appendix G of the Financial Guidelines for Agriculture for more information on finance lease criteria.

Lease Value and Liability on the Balance Sheet: The leased asset value should be the present value of the stream of lease payments. The lease liability is determined by amortizing the lease at the stated interest rate. If an interest rate is not stated in the contract, it is suggested that the current rate for traditional loans for similar asset types be used. FINPACK has a Loan Calculator to help with this step.

Entering Finance and Capital Leases on the Balance Sheet:

- 1. Report the asset value in the appropriate asset category and depreciate on cost balance sheet as discussed in this section.
- 2. Report the lease as a liability with interest and a payment separated by principal and interest.
- 3. Use the example at the end of this section to help in the calculation of principal and interest.

Example: This is the same example illustrated in the Farm Financial Standards Guidelines except we have converted it to January 1 payments for simplicity.

- 5 annual payments of \$11,991 with the first payment paid in advance;
- Interest rate of 10%
- Lease commences on January 1, 2022

Asset Valuation: Use the loan calculator to find the present value of the 4 remaining payments:

- First payment date: December 31, 2022
- Payment frequency: Annual
- Loan Period: 4 years
- Scheduled Payment: \$11,991

• Solve for present value of future payments by clicking "equal" on Amount Borrowed. \$38,009.

New or Existing Loan?	New			
First Payment Date		12/31/2022		
Payment Frequency	Annual			
Loan Period in Years		4		
Amount Borrowed	38,009.86	=		
Interest Rate		10.000		
Scheduled Payment	11,991.00			
Annual Payment	11,991.00			

The final step is to add the initial payment. The initial balance sheet value of the leased asset is \$11,991 plus \$38,009 = \$50,000.

The recommendation is to amortize or depreciate this value using a straight-line approach over the term of the lease. The important thing is that the <u>asset value should be zero at the end of the lease</u>.

Lease Liability: The initial lease liability is the present value of the remaining payments, \$38,009 from the previous loan calculator example.

It may be helpful to print the 'Payment Schedule' from the loan calculator to determine the principal, interest expense, and the principal balance after each lease payment. Alternatively, the loan calculator can be used each year to calculate the present value of the remaining payments.

Payment Schedule					
Date	Payment	Principal Portion	Interest Portion	PrincipalBalance	
12/31/2022 🔻	11,991.00	8,137.22	3,853.78	29,872.64	
12/31/2023	11,991.00	8,962.25	3,028.75	20,910.39	
12/31/2024	11,991.00	9,870.92	2,120.08	11,039.47	
12/31/2025	12,158.75	11,039.47	1,119.28	0.00	

Financial Analysis and Cash Flow: Once recorded on the balance sheet, lease expenses must not be double counted. For finance leases, only depreciation and interest are valid expenses. Producers often mistakenly include lease payments as operating expenses, but these are not expenses and should be excluded from financial analyses (e.g., Schedule F Cash to Accrual, FINAN) and cash flow projections. Depreciation is based on the change in asset value, while interest expense must be added manually if not in records—either from the repayment schedule or calculated from the interest portion of payments based on principal reduction. For example, for year 1:

^{*} The Financial Guidelines for Agriculture are published by the Farm Financial Standards Council and can be accessed at https://ffsc.org/.

Section V: FINAN INTRUCTIONS

INPUT INSTRUCTIONS FOR A NEW FINAN

Creating a New FINAN -----

In all areas where you wish to detail, use the Details button, or double click in the entry box. Black numbers indicate no detail; bolded black numbers indicate detail.

Data File Name – Use a unique file name. Remember, when a member of the database review team calls with a data problem you need to be able to identify the farm by this name.

The analysis name must be entered - recommendation: '2xxx Analysis' it can be changed later.



If possible, copy a previous year's analysis. When copying a previous analysis, it is suggested to check "Clear out general data and prepare for another year." Additionally, determine if special sort selections for whole farm, crop, and livestock enterprises should be removed.

During the copying process, clearing the general data will delete all data except:

- General Information and Summary Information pages remain unchanged. The Balance Sheets from last year remain selected; you need to select the appropriate Balance Sheets for this year.
- All detail values are deleted but the descriptions remain.
- Value of Labor and Management remains (Other Information page).
- Labor hours remain.
- Related Operating Expense Allocations to Crops, Livestock, and Other Enterprises remain.
- Crop names, descriptions, and acres stay in the Crop Enterprise Analysis.
- The Default Allocations stay in the Allocated Crop Expenses. Changes for interest allocation for sugar beet stock also remain and need to be changed.
- Livestock names and descriptions remain.
- Individual feed items remain, but quantities and dollars are cleared.
- The Default Allocations stay in the Allocated Livestock Expenses.
- Other Livestock Information such as: average number of head, normal total gain per head, barn capacity, or number of litters remains.

General Information -----

In the general information portion enter the following information:

- Enter analysis year. Select the beginning and ending balance sheet for the analysis year.
- Select Enterprise Analysis types to include.
 - Options include: Crop, Livestock, Market Channel, and Value Added/Nonfarm.
 - Only those enterprise types selected here will be available for related operating expense allocation purposes and enterprise analysis data entry.
- Check "Show group summary information"
- When you have completed the analysis, check "Analysis complete, include in RankEm."

Summary Information -----

- 1. Select proper type of business organization.
- 2. Enter the producer's unique Farm ID. Once established, the ID for a specific farm should not be changed. **Exception:** When the next generation takes over an existing farm and the senior generation mostly exits management of the farm, a new farm ID should be assigned. If you do not know the correct ID system for your location, contact your database leader.
- 3. State and County Enter State and County name from pick lists.
- 4. An operator is generally defined as one family relying on the farm for family income and receives income in the form of farm earnings or owner wages (for corporations). A spousal unit are generally considered one operator. Additional family members or partners are operators if they are not paid as hired labor. It is possible to enter decimals for part-time operators but unless the producer spends less than 50% of their time on the farm, there should be at least one operator.
- 5. **All data is required by RankEm**. Be sure to enter Acres Owned, Number of Operators to the tenth, and All Operators' Year of Birth and Years Farming.
- 6. Special Sorts: Whole farm special sorts should reflect the Primary Operator in the analysis. Identify organic farms, farms in organic transition, specialty crop farms, and those that are MN Water Quality Certified.
- 7. Analyst Name: Enter your name as the FINPACK user who prepared this analysis. Be consistent in the name you use. Analyst Name is displayed in RankEm to identify the analyst if questions or outliers exist that need correction. Analyst name is deleted before data is uploaded to FINBIN.
- 8. Summary Group: Select the regional report group for this farm, MN State College & University North, South, Red River Valley, or Southwest Minnesota Farm Business Management Association.

WHOLE FARM DATA ENTRY

Capital Purchases and Sales -----

- 1. **Beginning Values and Ending Values** are displayed from the Balance Sheets. Enter capital purchase and sales.
- 2. Enter Capital Purchases and Capital Sales. For capital sales, always use Detail to enter Balance Sheet Value of asset sold. With this, FINAN will calculate the gain or loss on the sale.
 - Use icon on toolbar in Sales and Purchase detail. This allows you to bring purchases and sales entered on Balance Sheet into FINAN.
 - a. To select items from the Balance Sheet to include in FINAN, the user must be in the correct capital asset cell in the table to bring in purchases or sales of that asset type. By checking "Include", the assets will automatically be brought into detailed entry.



- 3. Enter any assets re-possessed under Capital Sales detail.
- 4. **Breeding Livestock** Be careful that you do not double count capital sales. Enter sales here OR in Cull Breeding under "Other Income." Recommendation: Enter whole herd liquidations and major herd reductions here and enter normal cull sales under "Other Income".
- 5. Other Intermediate Assets Include sugar beet and corn processing stock purchases and sales. Be sure to include changes in PCA or FCS Stock as a purchase or sale as appropriate. Include sugar beet unit retains (both sold and purchased). Enter any change in positive livestock ledger accounts from beginning to the end of the year as a purchase or sale. Ledger "purchases" should also be added to livestock sales. Ledger "sales" should also be subtracted from livestock sales.
- 6. **Buildings and Improvements** Include Buildings, Building Fixtures, Tile, and other Land Improvements.
- 7. Other Long-Term Assets Include Patronage, stock redemption, or retirement as a sale.
- 8. **Personal Capital Purchases and Sales** All purchases and sales of nonfarm capital assets should be listed in the proper category. Premiums on whole life insurance policies should be included in non-farm capital purchases.
- 9. Recommended procedure for trade-ins
 - a. The capital purchase will equal cash (boot) paid plus the sale value received for asset traded. This value is entered as the cost value of newly acquired asset.

- b. The sale amount entered on the Balance Sheet and in FINAN will equal the value received for the traded asset from the dealership or other purchaser.
- c. In FINAN, the amount entered as the "balance sheet value" is the cost value of the traded asset. If using "Select from Balance Sheet items" feature, FINPACK will automatically enter the cost value coming from the balance sheet for the traded asset.
- d. Market value of the newly acquired asset equals the estimated current market value.
- e. If sales details are entered on Balance Sheet for traded asset, the item can remain on the balance sheet. Entering sales this way removes traded/sold item from printed asset list & the value of traded/sold asset is removed from total cost and market value of asset group.

10. Recommended procedure for property insurance indemnity claims – total loss situations:

a. On the Balance Sheet

i. The "totaled" asset is marked as sold on balance sheet, thus removing the value. Enter Year Sold/Traded and Sale Price in detailed entry for the capital asset lost. The Sale Price entered equals the insurance indemnity amount received.

b. In the Financial Analysis (FINAN)

- i. The insurance indemnity payment received is entered as a capital sale for the appropriate asset category in FINAN. Insurance funds received are entered as the Sale Amount. The cost value of the asset is entered as the Balance Sheet Value in capital sale detailed entry.
- c. If a replacement asset is purchased, this new asset is entered on the balance sheet and in FINAN like any other asset purchase.
- d. If a "totaled out" asset is repurchased enter as explained above. The repurchased asset is entered on the balance sheet as a newly purchased asset.

11. Recommended procedure for property insurance indemnity claims – partial loss situations:

a. On the Balance Sheet

- i. The damaged property's cost value should be reduced by the amount of the insurance indemnity received. Presumably, the market valuation will be reduced similarly. Note using the "sales" feature on the balance sheet will not work in this case.
- ii. If improvements were made to fix the damaged asset, include these as a capital purchase on the balance sheet. Enter the improvement amount on its own line, with purchase price and cost valuation being equal (before annual depreciation). The improvement's market value will presumably be valued similarly.

b. In the Financial Analysis (FINAN)

- i. The property insurance indemnity received for the partial loss is to be entered as a building and improvement (or appropriate asset category) capital sale.
- ii. A capital purchase is entered for the dollar value of improvements made.
- 12. **Lump sum easement payments** (including those for pipelines, wind turbines, and conservation easements) treat the lump sum payment received for easements of any kind as a

capital sale on the impacted parcel. This sale will reduce the cost value of the parcel and may or may not impact the market value.

Liabilities -----

- 1. Beginning and Ending Principal Balances are displayed from Balance sheets.
- 2. Enter Money Borrowed and Principal Paid for each loan.
- 3. Enter **Principal Forgiven** under Principal Paid Detail.
- 4. Enter **Accounts Payable Forgiven** under Accounts Payable Principal Paid Detail. <u>This is the only entry allowed for Accounts Payable.</u>
- 5. **Ledger Contracts.** Beginning and ending balances should be listed from the balance sheet if the balance is negative. Enter increases as money borrowed and decrease livestock income by the same amount. Enter decreases as principal paid and increase livestock income by same amount.
- 6. New Loans. Enter loans taken this year as money borrowed.
- 7. Under each loan type or by individual loan, check liability balances as follows:

Beginning Balance + Amount Borrowed - Principal Paid = Ending Balance

Crop Sales ---

Enter per crop; gross quantity of crop sold, & gross income received. Enter gross proceeds here and enter expenses deducted from the sale as farm expenses. **Exception**: Do not enter a quantity for sugar beets. For organic crops, select the 'Organic' checkbox next to the selected crop to indicate the crop is organic.

Include gross sales of crops that were under CCC loan. Do not include money borrowed on CCC loans and treated as income for tax purposes. Include the funds received for yearend grain advances as a grain sale in the year received. Sale quantities equate to the number of units the balance sheet inventory was reduced by. All year-end grain advances should be treated as a crop sale and not as other income. Price used in the calculation for determining bushels should be the underlying contract price.

Livestock Sales -----

Animal Sales: Enter number sold, total <u>live weight</u> pounds sold (convert from carcass weight to live weight if necessary), and gross income received of market livestock. Enter gross proceeds here and enter expenses deducted from the sale as farm expenses. Record Cull Livestock in Cull Livestock section, not here. For <u>livestock sold on ledger contracts</u>, increase, or decrease cash sales by the change in ledger balance. Show offsetting capital purchases, capital sales, borrowings or principal paid to balance cash flow.

Livestock Products: Enter gross quantity and gross income received.

Other Farm Income -----

Miscellaneous Crop Income: Enter any miscellaneous crop income. At this time, include carbon related payment income from non-government sources (like Indigo Ag) as miscellaneous crop income.

Cull Breeding Stock: Enter income received from Cull Breeding Stock sales. Breeding stock sales should be entered as capital sales only when liquidating a herd or doing a major downsizing. Use Detail to allow Selecting the data into the Enterprise Analysis.

Miscellaneous Livestock Income: Enter any miscellaneous livestock income.

CCC Market Loan Gain: Include all LDP payments and CCC loan market gains received during the analysis year (accounts now combined).

Crop Government Payments: Record ARC and PLC payments as income in the year received due to uncertainty in payment amounts until marketing year end.

CRP Payments: Enter all cash CRP payments received during the analysis period.

Livestock Government Payments: Include all livestock-related payments such as DMC, ELAP, LFP, LIP, and ELRP.

Conservation Government Payment: Enter payments for conservation programs such as SHIPP, EQIP, and CSP. Include annual cost-share payments related to conservation practices. <u>See below for more details on EQIP and other cost-share payments.</u>

Other Government Payments: Record other government or disaster payments including ECAP, MASC, and SDRP.

Custom Work: Enter all cash income from custom farm work.

Contract Livestock Income: Record all cash income from contract livestock production. Complete a Livestock Enterprise analysis for these operations.

Renewable Energy Income: Include all farm-related solar and wind energy income.

Farm Rental Income: Enter all rental income received by the farm.

Patronage Dividends: Record all cash patronage dividends and unit retains. Additional stock should appear on the balance sheet.

Livestock Insurance Income: Include LGM, LRP, DRP, and any business interruption insurance payments.

Cash Withdrawn from Hedging Accounts: Enter all cash withdrawals from hedging accounts.

Other Farm Income: Enter any other cash farm income not listed above.

• Small property insurance indemnities (\$20,000 or less) belong here.

Special Note: EQIP, MN AGRI & Other Cost-Share Payments

- Capital Investments: Treat cost-share income as a capital sale and use funds to purchase the asset. The ending cost value should reflect the total cost minus the cost-share and depreciation.
 - Example: \$100,000 feedlot with \$48,000 EQIP cost-share \rightarrow enter \$100,000 capital purchase and \$48,000 capital sale. Ending balance sheet cost value is \$49,400 (\$100,000 \$48,000= \$52,000 *95% to depreciate over 20 years).
- **Annual Conservation Expenses**: Treat as income in the whole-farm analysis and allocate to relevant enterprises (Other Income for crops; Government Payment Income for livestock).

Farm Expenses -----

Crop Expenses / Livestock Expenses / Related Operating Expenses: Enter all actual <u>cash</u> farm expenses paid during the calendar year.

- **Negative Expenses**: If an expense is negative (refunds, etc.), submit a Unique Situation report with justification. Unexplained negative expenses will result in deletion.
- Unpaid Family Resources: If major unpaid resources (labor, machinery, land rent, etc.) are provided, record a charge for their estimated value with an offsetting personal income entry, or use Accounts Payable Forgiven under Accrual Adjustments.
- Expenses Deducted from Sales: If expenses were deducted from sales, report gross sales as income and include related trucking, commission, dues, and marketing fees here

Specific expense categories:

- **Seed treatments**: include in Seed expense
- Free seed, chemicals, etc.: enter the value received as Seed/Chemical/etc. expense, with offsetting Other Farm Income
- Fertilizer and chemical application: include as Custom Hire expense
- Micronutrients and biologicals used for crops: include as Fertilizer expense
- Soil testing and grid sampling: include as Fertilizer expense
- Organic Crop Protection: replaces Non-chemical crop protection expense
- Employee benefits: include as Hired Labor expense
- Worker's Compensation Insurance: include as Hired Labor expense
- Silage bags for Silage Crops: include as Packaging and Supplies expense
- Silage bags for High Moisture Corn: included as Storage expense
- Precision farming expenses: if they do not fit elsewhere, include as Misc. Crop Expense
- **CSP related expenses:** enter in the appropriate expense category. Soil testing and grid sampling should be included in fertilizer. Cover crops are analyzed as their own enterprise and should include all cover crop related expenses in the applicable expense category.
- **DHIA:** DHIA is in the expense chart of accounts if you have the FINPACK set up files installed.

- Cash salaries, wages, and benefits to operators: Enter in Owner Wages and Benefits expense and reduce Value of Operator Labor and Management
- Feed additives and supplements: include as Purchased Feed expense
- Livestock implants: include as Veterinary expense
- Livestock rendering: include as Custom Hire expense
- Manure handling: include as Custom Hire expense, if hired
- **Hoof trimming:** include as Custom Hire expense
- **Milk hauling:** include as Trucking and Hauling expense. For the dairy enterprise analysis, trucking and hauling expense should only include milk hauling expenses.
- Milk marketing, cull cow hauling, cull cow marketing: include as Marketing expense
- Truck Expenses:
 - o **Farm trucks**: split out expenses related to repairs, fuel, and vehicle tabs (included these as a misc. expense) accordingly. If this is not possible, use judgement and include the farm truck expenses as repair or miscellaneous expenses.
 - o Semi/Grain trucks: fuel, repairs, etc. are considered Hauling & Trucking expenses.
 - Non-farm/over the road trucking: income and expenses related to non-farm trucking operations should not be included in the farm analysis. These are personal business income & expenses. If desired, include a Value-Added enterprise.

Purchases Feed: Use detailed entry for Purchased Feed to specify the feed commodities purchased which will then contribute to the Amount Available for feed in the Livestock Enterprise Analysis.

Interest: Use Detail to list interest paid on individual loans. This will automatically transfer to the interest breakdown on the enterprise analysis based on the loan's balance sheet entry.

Special Note for ethanol plant and other entity investments: Income or expenses from ethanol plants or similar investments may significantly affect some years. The producer and instructor decide if transactions are farm or non-farm income, but treatment must be consistent yearly and with balance sheet classification.

- Payments for pledged bushels: Enter as farm income and include as Other Income in the Crop Enterprise Analysis.
- Dividends unrelated to bushels: Exclude from Crop Analysis; include in a Value Added/Non-Farm Enterprise Analysis to assess investment profitability.

Special Note on <u>hedging transactions:</u> If detailed cash records aren't available, calculate net deposits/withdrawals using Form 1099:

Box 12 + Beginning Balance (Box 10) – Ending Balance (Box 11).

- Positive result: Enter as cash withdrawn from hedging accounts.
- Negative result: Enter as hedging account deposits.

Special note on <u>Ditch/Tile Assessments:</u> If ditch assessments are included in real estate taxes, remove them from Real Estate Tax expense and record as a Building and Improvement purchase on both the Balance Sheet and FINAN.

Personal Income -----

Enter all cash **non-farm** income received during the analysis period. If personal business income, enter the net value. If desired use detailed entry to list gross business revenues and the appropriate expenses to arrive at the net value. Do not double count dividends, tax refunds that may have been farm income such as gas tax refunds, property tax refunds, etc.

Other Information -----

Gifts and Inheritances: Enter cash gifts and cash inheritances received. For non-cash items, enter the value as a capital purchase or input expense and offset the purchase by also entering the value here.

Family Living Expense: Enter all cash family living expenses, including personal utilities, insurance, and taxes. Track total expenditures for each operation.

- If detailed expenses are entered, include number of family members.
- Owner wages \rightarrow record as farm expenses, not family living.
- For partnerships, enter either detailed family expenses or total under partnership withdrawals, not both.

Income and Social Security Tax Paid: Enter all cash income and personal self-employment taxes paid during the calendar year.

Cash Gifts Given: Enter all cash gifts given.

Estimated Value of Labor and Management: Represents the opportunity cost of unpaid operator labor and management, used in calculating Return on Assets and Return on Equity. Combined with Owner Wages and Benefits in enterprise and RankEm reports for comparability.

• Guideline (sole proprietors & partnerships): \$30,000 per full-time operator + 5% of Value of Farm Production. Adjust for farm size.

Other Adjustments:

- Entities: If owner pay is in Owner Wages & Benefits, enter zero or adjust to align total Owner Labor & Management with similar farms.
- Sole Proprietors/Partnerships: If compensation is in Owner Wages & Benefits, reduce the Value of Labor & Management by that amount.
- Family Wages: Pay to children or family (not owners/spouses) with no capital stake → record as hired labor expense; no adjustment needed.

View Cash Flow Check and Crop & Feed Check -----

At any time, click the check-mark icon on the toolbar to view the cash flow check or the crop and feed check. The dialogue box that appears has two tabs, providing the ability to look at either check.



Labor Hours

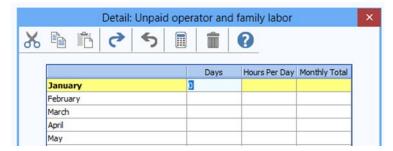
Use labor records or estimate the total hours of labor employed by the farm for the year. Hours of labor guideline for unpaid operator and family labor:

Operator:

Crop Farm Only = 2,000 Hours
Diversified Crop/Livestock = 2,500 Hours
Intensive Livestock = 3,000 Hours

Labor Adjustments:

- Adjust for part-time situations and include spouse/other family labor. Allocate hours accurately between crop and livestock enterprises.
- Entities: If Owner Wages & Benefits is included, count owner/operator hours in Full Time Hourly Labor (critical for enterprise analysis).
- **Dairy guide:** 1 FTE \approx 2400 hours, \sim 1.2 million lbs milk or 50 cows per FTE.
- Farm labor types: Unpaid operator/family, Salaried/Management, Full Time Hourly, Seasonal Hourly.
- Use detailed data entry to help estimate labor hours.



^{*} These are guidelines, adjust to fit the operation. These suggestions assume only on-farm work. Adjust if operators are employed off the farm as well.

^{*} **Note** – this section is noted as Optional. Labor hours are NOT optional in an FBM FINAN.

Accrual Adjustment to Related Operating Expenses ------

This section adjusts the cash expenses to arrive at the amount actually incurred for the analysis year. Recommendation: Enter detailed expense categories for prepaid expenses, growing crops, accounts payable, and accrued interest on balance sheets to automatically complete this page.

Farm Interest Breakdown ------

Enter interest accrued during the calendar year. When detail is used for farm interest expense input, the amounts automatically move to this location, therefore, you do not have to input them here.

Cash Interest Paid + Ending Accrued Interest - Beginning Accrued Interest = Interest on Debt Interest on Debt needs to be allocated to operating, intermediate and long term.

Related Operating Expense Allocations ------

Enter the proportion of the total for each allocated expense to the appropriate enterprise analysis activated in the analysis, including crop, livestock, market channel and value added enterprises. Toggle to enter dollars instead of percentages.

Note: Attempt to be consistent from year to year unless there are major changes to the farming operation. The average for power and machinery is 75% - 80% to crops, for building and fences is 30% - 35% crops.

Crop Share Rental Arrangements -----

Select whether the operation being analyzed is the Renter or Landlord. Then enter their share of the production and expenses.

<u>Note for Zero Cash Rental Arrangements:</u> If a producer rents land for zero cash rent, enter as 100% share arrangement with the renter paying 100% of expenses. **Delete** this enterprise before submitting.

CROP ENTERPRISE ANALYSIS

Helpful Crop Definitions for Crop Enterprise Analysis ------

Cover Crop: a crop seeded in the fall to cover the soil over winter and provide agronomic benefits. The purpose of the fall seeded crop drives the definition. Fall seeded crops planted for production purposes (winter wheat, winter rye) are not considered cover crops.

Base Crop: the crop planted following a cover crop.

Nurse Crop: a spring planted crop that protects a more vulnerable crop as it emerges. Example: nurse crops are often planted with alfalfa hay and sugar beets. Nurse crops are not considered cover crops.

Crop Return Data Entry -----

Crop Name: Pick from the list of crops. If the crop needed is not listed, contact your database leader. User added crops, those not in the master list, won't be included in summary reports.

- **Hay enterprises:** Use one of the recommended hay crop enterprises (Hay, alfalfa; Hay, mixed; Hay, clover; Hay, grass).
 - **'Hay'** should NOT be the crop type used in enterprise analysis. This designation is only acceptable on the balance sheet and cash flow projections.
 - Within FINAN Crop and Feed Check, all hays are combined. Exception: Hay, Small Grain, this analyzes small grain & hay crops as one. Crop type is 'Normal'.
 - o For haylage, baleage, and other wet forages (excluding corn silage), it is preferred that the dry hay equivalence is used (equation can be found under Total Production).
- Wheat, Kernza: is a perennial crop, therefore <u>year 1</u> production is designated as <u>established</u>.
- Organic Transition Crops: list as conventional crops until organically certified.
- Organic: All crops can be designated as organic by checking the 'Organic' check box.
- **Specialty crops:** if these crops are grown using organic practices, but are not certified organic. Consider the crop Organic Transition by designating it in the Other Crop Information data entry.

Description: Use this to further describe the crop, but remember to be consistent. It can be used to select specific fields in historical database reports. For 'small grain hay' identify it with barley, oats, or mixed.

Field ID: Use this to identify fields over time to monitor impact of cover crops. The same ID should be used across the farm. Confider using the FSA farm number.

Type: Only if applicable, the default is 'Normal'

- **Hay Establishment:** Enter separately from full-production hay and code as Establishment. If seeded with a nurse crop (e.g., oats), record alfalfa separately and code as Establishment/Double Crop (nurse crop = Normal).
 - o Allocate seed, fertilizer, and direct costs between enterprises using judgment.
 - Suggested overhead: $\geq 2/3$ of normal to nurse crop, $\frac{1}{2}$ to hay. Example: Normal factors 30 (oats) & 60 (alfalfa) \rightarrow enter 20 (oats) and 30 (alfalfa).
 - \circ Fixed per-acre items (e.g., taxes) \rightarrow reduce to 0.5 across affected enterprises.
- Irrigation: Code irrigated crops separately; do not combine with dryland.
- Straw/Stover: Analyze as Secondary Product of small grain, corn, or soybeans. If separate, code as Double Crop—Normal type straw/stover enterprises will be deleted.

Acres Owned: Either total crop or each field owned

Acres Cash Rented: Either total crop or each field cash rented. Custom hire enterprise acres should be entered on rented acres or as Value-Added Enterprise. These acres should not have a real estate tax or

long-term interest expense allocation. Custom hire enterprise acres are excluded from Total Crop Acres.

Your Share: Choose % production from crop share rental arrangements. (100% if owned or cash rent.)

Total Production:

- **Haylage to Hay DM Conversion:** Formula, (% DM of wet crop ÷ % DM of hay) × wet production.
 - o Example: $(0.35 \div 0.85) \times 100 \text{ tons} = 41.2 \text{ tons}.$
 - Use the Excel tool at https://z.umn.edu/DryMatterEquivalentsCalculator for conversions.

• High-Moisture Corn / Earlage:

- o Convert to dry corn equivalent.
- \circ Snaplage/earlage value = (bushels per ton \times corn price); guide = 36.6 bu/ton.
- Peas, Field: Use bushels as production unit; convert lbs./cwts. to bushels if needed.
- Edible Beans: Use hundredweights (cwt.) as production unit.
- **Baling Pastures:** If baled for feed, record production as a Secondary Product in the pasture enterprise. Do not create a double crop hay enterprise.
- SHIPP, CRP, Custom Work, Prevented Planting, Rented Out: Enter dollars received as crop insurance income, other income, or as total production (\$ value) with \$1.00/unit.
 - o Note: Summary and FINBIN show gross revenue only.

• Prevented Plant (PP):

- Use Prevented Planting crop type in analysis.
- o PP acres must include both crop insurance income (gross) and expense—not just net.
- o If forage/other crop harvested, include as a second harvested product (detailed entry) and convert to dry equivalents.
- Alternatives: enter as a separate double crop enterprise or record value as Other Income in PP enterprise.
- Pasture Production: Estimate in AUMs using animal units:
 - o Cow/Calf: (1000 lb.: <u>1.00</u>) or (1100 lb.: <u>1.07</u>) or (1200 lb.: <u>1.13</u>)
 - o Mature bull: 1.30
 - o Calf: 0.30
 - o Weaned calf: 0.60
 - o Yearling (600–800 lbs.): 0.75
 - o 2-year-old: 0.85
 - o Dairy cow: 1.30
 - o Ewe/lamb pair: 0.20
 - o Horse: 1.50

Example: $100 \text{ cows} \times 1.07 \times 6 \text{ months} = 642 \text{ AUMs}$; enter as pasture feed expense in the beef enterprise.

<u>If pastures are baled</u>, include as a second harvested product (detailed entry) on pasture acres.

Value Per Unit: For sold or contracted crops, enter the actual sale/contract price. For inventory crops, use the ending inventory value (at least the loan rate for program crops). For crops fed, use a conservative sales value and apply the same value in the Livestock Enterprise.

If production includes a mix (sold, contracted, unpriced, or fed), calculate a weighted average value per unit. Use the Average Value per Unit Calculator (download via File > Download > Excel at https://z.umn.edu/AverageCropValueCalculator).

• Forage values should reflect Relative Feed Value (RFV) and be based on estimated sales value, not purchase price. Actual RFV-based auction prices are available from Stearns DHIA Laboratories: www.stearnsdhialab.com/Auct-Hay.htm.

Other Income: Allocate hedging gains or losses, crop insurance income, LDP payments for this year's production, crop government payments (ARC and PLC), and any other crop related income. *Examples* are straw sales, crop specific disaster payments, and hauling allowance. Enter detail to document what was included.

Use the "Select from..." icon in detailed entry to select income amounts entered in Other Farm Income detail in the whole farm analysis. This applies to the following income categories: crop insurance, CCC market loan gains, LDP payment, crop government payment, other government payment, conservation government payment, and miscellaneous crop income. See **Section I** for how other crop income maps from other farm income detailed entry in the whole farm analysis.

Cash patronage dividends: received in a year should be allocated to the appropriate enterprise. (Any equity redemption received in a year is a capital sale and would not be treated as income in the whole farm or any applicable enterprise.)

• Include **Guaranteed Payments** received for canning crop enterprises (sweetcorn or peas) as Other Income in the crop enterprise analysis. In this case there will be no production income for the canning crop experiencing failure for the production year.

<u>Special Notes:</u> **ARC/PLC Payments:** Due to uncertainty, record Crop Government Payments in the year received, not the production year.

- Allocation:
 - o ARC/PLC payments appear as a "below the line" adjustment (added to net return).
 - Allocate over all tillable acres except crops not tied to base acres (e.g., edible beans, vegetables).
 - o Allocate by farm unit if possible.
- CSP Payments & Expenses:
 - \circ Income tied to crop acres \rightarrow record as Other Income; allocate to applicable acres.

- o Related expenses (e.g., soil testing, grid sampling, cover crops) → include under fertilizer, seed, or other expense.
- For livestock operations, record CSP funds as Government Payment income and related costs under Direct Livestock Expenses.

Direct Crop Expenses -----

Enter the accrual adjusted expense amount for each crop in dollars. For like enterprises, enter the total cost in one column. You can then assign it equally to the other fields using a "-X" in the other enterprise(s), where X refers to the column in which the total was entered. *For example*, enter the first corn enterprise in column number 2. Enter the total seed cost for all corn in this column. For each succeeding corn enterprise, enter -2 for the seed expenses to distribute the total equally (per acre) to all corn enterprises. (Crops do not have to be listed side-by-side for this to function properly.)

Seed: in addition to seed cost, include:

- Seed treatment expense
- Assign an expense for home-grown seed
- For canning crop enterprises, include the actual seed cost paid by farmer.
- For hays, seed expense should appear only on establishment enterprises (unless reestablishment occurs, but make sure to note this in FINAN).

Fertilizer: or purchased manure. If custom applied, include product cost only (include custom expense in custom hire). Also include:

- Soil testing and grid sampling
- Micronutrients and biologicals for crop production
- <u>Custom manure application</u> costs should be split equally between livestock and crop enterprises. For cropping enterprises, this expense is a fertilizer expense.
- <u>Lime fertilizer</u> expense should be accumulated on the balance sheet as a prepaid expense. The expense should then be allocated to the respective field/crop for a subsequent number of crop years, per the operator's discretion. If lime is spread in the spring, for the current crop, then a portion of the initial cost would be treated as a prepaid expense on the next Jan. 1 balance sheet (again, per the operator's recommendation). If lime is prepaid in the fall, the entire cost is treated as a prepaid expense and allocation begins the following crop year.
- Corn fertilizer allocation to soybeans: If no fertilizer was applied to soybeans, but fertilizer was applied to corn to supply nutrients for next year's soybean crop, a portion of the corn fertilizer should be allocated to soybeans. The recommended allocation is 50% of the corn P & K expense OR 25% of total corn fertilizer expense if P&K cannot be broken out.
- <u>Prevented planting:</u> Acceptable approaches for fertilizer applied to Prevent Plant acres:
 - 1. If the producer plans to reduce phosphorus and potash applications in the following year to use up these nutrients, accumulate these amounts in prepaid expense on the ending balance sheet to be allocated in the following year's analysis. **OR**

2. If not, charge all fertilizer applied to prevent plant acres to the Prevented Planting crop.

Crop Chemicals: Chemical expenses. If custom applied, include product cost only and include application expense in custom hire.

Crop Insurance: Hail and other crop insurance. Include gross premium, with any income listed as "Crop insurance income."

Drying Fuel: Amount of drying fuel for the crop. Edible beans and other specialty crops may have small amounts of drying expense. Silages should not include drying expenses.

Custom Hire: Fertilizer, chemical and aerial applications. Sugar beet freight charges. Hauling, trucking, and marketing expenses for forages and silages. Cost of product applied (i.e. fertilizer) be separated from custom hire application expenses.

Note: Hauling & trucking expenses for silage crops are a custom hire expense

Hired Labor: All hired labor expense for non-salaried workers who do not have management responsibility should be allocated as a direct expense between the applicable enterprises.

Land Rent: Cash rent amount total for this crop or field.

Machinery Leases: True leases specific to this crop or field.

Marketing: Commodity marketing consultants, hedge, or option expense. <u>Silages</u> should not include any marketing expenses.

Storage: Cost of storage for cash crops. Bags for **high moisture corn ARE** considered a storage expense for enterprise consistency purposes in the corn enterprise analysis.

Packaging and Supplies: The cost of bags, etc. for silage is a Packaging and Supply expense. Silages should not include a storage expense.

Precision farming expenses: if these expenses do not fit elsewhere, include as Misc. Crop Expense. Expenses in this category should be kept to a minimum.

Preservatives and Inoculants: preservatives and inoculants used for forages and silages should be entered as a Misc. Crop Expense. <u>DO NOT</u> use the Drying or Storage expense categories for these expenses on forage and silage crops.

Organic Certification Fees: organic crops MUST include organic certification fees. Conventional crops should not include this expense.

Truck Expenses: the type of truck expense dictates how the expense is handled in the analysis.

• <u>Farm Trucks:</u> split out expenses related to repairs, fuel, and tabs (included as a miscellaneous expense) accordingly, if possible. If this is not possible, use judgment and include the farm truck expenses as repair or miscellaneous expenses.

- Semi/Grain Trucks: fuel, repairs, etc. are considered Hauling and Trucking expenses.
- Non-Farm/Over the Road Trucking: income and expenses related to non-farm trucking operations shouldn't be included in the farm analysis. Include a Value-Added enterprise if desired

Allocated Crop Expenses ------

Enter allocation factors that weigh the expense portion allocated to each crop on a per acre basis. Toggle to view in Dollars (\$). Entries must be made as allocation factors. If you see references to percentages versus allocation factors you do not have a uniform benchmarking setup file installed. See the 'FINPACK Benchmark Setup File Installation' section for more information.

Default Allocation: The Standard Allocations will automatically appear when a crop is selected, but adjustments can be made to any individual expense line if warranted.

Hay Enterprise Default Allocations

- Hay, Alfalfa; Haylage, Alfalfa; Hay, Mixed; Haylage, Mixed; and Hay crops assume 3 cuttings for the year. Adjust allocation factor if needed, based on the actual number of cuttings for the year.
- Hay, Grass, and Haylage, Grass assume **2 cuttings** for the year. Adjust allocation factor if needed, based on the actual number of cuttings for the production year.

Cover Crop Enterprises Default Allocations

- Change the default allocation factor for single crops used as a cover crop and terminated (for example Rye). Reduce the default factor by 50%. Ex: Rye becomes 15 vs the default of 30.
- If the cover crop is harvested or grazed there is no adjustment made to the allocation factor.

Impact of Custom Hire Operations on Allocation Factors

- For crops using custom hire operations (partial or total), adjust the allocation factor as appropriate. Use judgment based on expense handling (e.g., whether fuel is provided or included). For custom-harvested crops, reduce the default allocation by 50%.
- Custom work enterprises should not have real estate taxes or long-term interest expenses allocated to them. Enter custom work enterprises as rented acres.

Other Crop Information -----

This information will be used to provide additional details in the state database.

Previous Crop: If the entire field was planted to the same crop in the previous year, select the crop from the drop-down list.

Field County: The county will default to the county entered on the Summary Information page. Change if this field is in a different county.

Production Practices: Select the tillage method, row spacing, and other production practices, if consistent practices were used across the entire field. If inconsistent practices were used, leave blank.

Note: It is as important to specify that a specific practice was not used. For example, if no GMO seed was used, be sure to select No for GMO Technology.

Tillage System Options: Select the tillage type employed across the field. Choose from the following:

- Moldboard flip 8-10 inches of soil
- Chisel/Deep Till stir 8-10 inches of soil
- Minimum Till chop and fluff 2-3 inches of soil; method doesn't turn over soil, leaves residue
- No Till no disturbance to soil bed
- Ridge Till planting in ridges built during cultivation of previous year's crop
- Strip Till disturbing on the portion of the soil that is to contain the seed row
- <No Answer> use this when multiple tillage systems are used or no one system can be designated for all acres included in the analysis.

Cover Crop related: identify both the cover crop enterprise and benefitting base/cash crop here.

- Cover Crop: identify any cover crop acres as Yes.
- **Grown After a Cover Crop:** identify base/cash crop planted after cover crop with Yes designation.

Special Sorts: Use special sorts where appropriate. Joint venture is required for rented Beet Stock acres.

Delete from Summary: Use this only to delete an individual enterprise. The rest of the farm data remains in the summary. Do not delete for disaster or loss. If data accuracy is in question or a field was fully or largely replanted, delete from averages.

Handling Special Production Situations in Crop Enterprise Analysis ------

Cover Crop Analysis

- Analyze cover crops separately from the cash/base crop in distinct enterprises. The base crop follows cover crop termination/harvest.
- The Cover Crop is a Double Crop type. Acres and tenure must match with the base/cash crop. Exclude Land Rent, Real Estate Taxes, and Long-Term Interest from the cover crop enterprise.
- Analyze cover crops in the year production is complete.
- Record fall seeding costs as Growing Crop or Prepaid Expense on the ending balance sheet.
- Analyze in the following year when production is complete (harvested, grazed, or terminated).

- Use the appropriate Crop type: single species = individual crop; mixes = best fit (cover crop grazing, cover crop mix \$, or rye mix \$).
- Cover Crop Agronomic is not acceptable and will be deleted.
- Many cover crops have no production, which is normal if not harvested or grazed.
- Enter seed, chemical, machinery costs separately for cover and base crop enterprises; fertilizer is a base crop expense.
- Combine the Cover Crop with the Base Crop in Crop Enterprise Analysis data entry.
- Conservation payments (CSP, EQIP, PCCP \$5/acre) go to the cover crop enterprise as Other Income.
- ARC/PLC payments apply only to the base/cash crop as Crop Government Payments.
- Designate the Cover Crop as "Cover Crop = Yes" and the Base Crop as "Grown After Cover Crop = Yes."
- Base crops marked as "Cover Crop" will be deleted. Base crops are Normal, not Double Crop or Established.
- Consider other metrics or sorts for both cover and base crops.
- Cover Crop expense is not an expense category; enterprises with it will be deleted.

Intercropping Practices

- <u>Definition</u>: the practice of growing multiple crops in the same field at the same time.
- How to Handle in Crop Enterprise Analysis

Option 1: Intercropping a second species for soil health purposes

- o Example: soybeans planted with oats
- o In this example, the second crop is planted with the primary crop for soil health and weed control purposes. This secondary crop is terminated with normal weed spraying during the season.

o Analysis treatment:

- Enter as one crop enterprise analysis where the primary crop includes the expenses of the secondary crop.
- Expenses related to the secondary crop are included in the primary crop expenses. For example, seed cost for oats as a secondary crop are included in the soybean seed cost.
- It is assumed there are no other chemical or machinery costs. If this is not the case, and extra inputs are utilized to terminate the secondary crop, increase the allocation factor for the enterprise and include any additional expenses occurred for the operations.

Option 2: Intercropping 2 crops that are planted and harvested at the same time.

- Example: "Peaola" (peas and canola) or "Soyola" (soybeans and canola) are planted and harvested at the same time. Production is separated after harvest.
- o In this example, both crops have production and are double cropped on the same acres.

- o Analysis treatment:
 - Complete 2 crop enterprise analyses. The crop considered the double crop is the one planted to assist the normal crop. For Peaola, the canola is planted to prevent lodging of peas. Therefore, peas are the normal crop, and canola is the double crop.
 - Each crop enterprise should include production and each enterprise will have their respective expenses allocated. Consider whether allocation factors should be reduced for each crop, given the shared cropping services.

Relay Cropping Practices

- <u>Definition</u>: A multiple cropping system where a second crop is planted into a standing first crop before its harvest; the first crop is harvested earlier in the season while the second crop continues to grow.
- How to Handle in Crop Enterprise Analysis
 - o Example: soybeans and pennycress
 - In this example, both crops will have production and are harvested from the same acres.
 The pennycress are planted first, with soybeans planted into the established crop before it is harvested.
 - Analysis treatment:
 - Complete 2 crop enterprise analyses. The first crop harvested is the 'normal' crop and the second crop harvested on the same acre is the 'double crop'.
 - Each crop enterprise will include production and will have their respective expenses allocated. Consider whether the allocation factor should be reduced for the second crop that is 'relay planted', given shared cropping services.

LIVESTOCK ENTERPRISE ANALYSIS

Livestock Enterprise -----

Use the "drop-down" livestock list. If you want to use a livestock enterprise that is not listed, please call a member of the database review team for your area. Be sure to use the proper enterprise.

Description: Be consistent with input in this cell. This description can be used in the Historic Database to generate trend reports for specific herds or lots of animals.

Gender: This is only active for grow/finish enterprises. Use to specify male or female only enterprises. Leave this entry blank for mixed gender enterprises.

Contract: Use to specify the enterprise is produced under a production contract.

- o **Contractor** is the owner of the livestock.
- o <u>Contract Grower</u> is the producer who is housing livestock for the owner.

Note: Leave this entry blank for enterprises that are not produced under a production contract. Enter contract grower income as Contract Income (not Transferred Out value). Cost of production calculations will be accurately calculated.

Shared: Select Yes if this enterprise is produced on a share rental basis.

Combine with Enterprise Number: Use to combine the lesser enterprise with the primary enterprise. (Ex: If the Dairy Cow Enterprise is in Column 1 and the Dairy Replacements are in Column 2, enter the number "1" in this cell in the Dairy Replacement Enterprise Column.)

Special Sorts: Use appropriate Sorts as identified in Section V. of this Closeout Manual. Be sure to use for Organic enterprises and Dairy Initiatives farms.

Delete from Summary: Use to delete an individual enterprise only. The rest of the "Whole Farm" & Enterprise Information will be included in the summary. Do not delete simply because of a disaster, disease, etc.

Livestock Inventory Tab ------

If detail is listed on the Balance Sheet, you can bring the information into the Livestock Inventory Section. To do so, first click the **Detail** button. Then click the 'Select from ...' icon from the detailed entry toolbar and check the animals that belong to this enterprise (see below).

Include	Description	Number	Total Weight	Total Value	
V	Dairy cows	55		44,000	
	Bred heifers	11		6,600	
	Yearling heifers	15		6,000	

Note: You can also use the 'Select from Sales' icon to select from previous entries for feeder livestock purchases, sales, and cull sales or contract livestock income.

Born: Enter the number of animals born alive. See the specific recommendations per livestock species later in this section.

Sold: Enter number sold, total live weight pounds sold, and gross income received of market livestock. Weights should be entered on a live weight basis.

Cull Sales: Downers should be included with culls, not died.

Transferred Out: Beef Calves from Cow-Calf to Feeders; Dairy heifer calves from Cows to Dairy Replacements; Dairy bull calves to Dairy Steers (if not sold directly from dairy enterprise); Hogs - transferred to Breeding when farrowed - transferred out at weaning from Farrowing to Finishing, if Finishing separate. See the Livestock section for more detail.

Transfer Table

Enterprise Description	Number	Pounds	Value
Beginning and Ending Inventory -	Cows on hand	Exclude for Dairy,	Cost value for breeding;
Breeding Livestock	Bulls	Beef, and Sheep	Market Value on market
	Bred Heifers	breeding stock.	livestock
	Open Heifers kept to breed		
Beginning and Ending Inventory -	All except breeding stock	Total weight (exclude	Market Value
Held for Sale		for dairy)	
Born	Born to dairy		
	Transferred out to		
	Replacement Dairy		
Purchased	Number of Head	Exclude for Dairy,	Amount paid
		Beef, and Sheep	
		breeding stock.	
Transferred in	Head Amount	Exclude for Dairy,	Breeding stock at cost;
(Once a cow, always a cow;		Beef, and Sheep	otherwise Market Value
Calves get born into dairy cow &		breeding stock.	
transferred out)			
Sales (except Culls)	Number of Head including	Weight (except dairy)	Cash Receipts
	sales for breeding stock		
Culls	Cull cows, dairy, beef,	Exclude for Dairy,	Cash Receipts
	hogs, etc.	Beef, and Sheep	
		breeding stock.	
Butchered	X	X	X
Died – Breeding Stock	(Same as Beginning Inventory – Breeding Livestock)		
Died – Held for Sale	(Same as Beginning Inventory - Held for Sale)		

Product Sales and Other Income Tab -----

Sales: The quantity and value should be the livestock products produced and sold during the analysis year. Use detailed entry and then the "Select from ..." icon to select from whole farm entries.

These sales are specific to the livestock enterprise type. Use the chart below as a guide.

Livestock Enterprise	Livestock Product Sales	Quantity	Value
Dairy	Milk	Pounds	\$
Sheep	Wool	Pounds	\$
Bees	Honey	Pounds	\$
Chickens	Eggs	Dozen	\$

Fed: This entry is specific to dairy analysis. Report the quantity and value of milk fed to calves here.

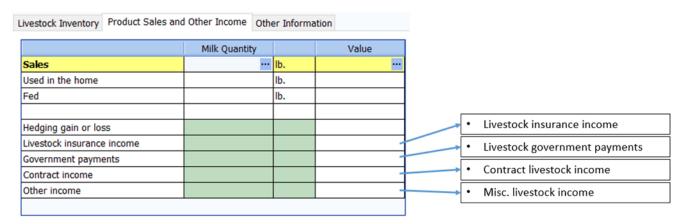
Hedging Gain or Loss: include livestock specific hedging gains/losses. (For losses, enter negative value).

Government Payments: Include livestock specific government payments like DMC, GRP, EQIP, and CSP here.

Contract Income: Include income received by contract growers for their livestock production services.

Other Income: Include other income sources for the enterprise here.

Use the "Select from Whole Farm" feature to efficiently bring whole farm income values to the other income for the applicable livestock enterprise analysis. Information entered in Other Farm Income detailed entry can be selected for use as Other Livestock Income in the following manner:



<u>Cash patronage dividends</u> received in a year should be allocated to the appropriate enterprise. (Any equity redemption received in a year is a capital sale and should not be treated as income in the whole farm or any applicable enterprise.)

For <u>Breeding Bulls</u> (leased out) - split out as a separate enterprise and show lease income. Use Detail to document entries.

Other Information Tab ----

Enter enterprise-specific data for each livestock type. This information (avg. head, normal total gain, offspring, etc.) determines efficiency factors and impacts analysis accuracy.

- Avg. head drives per-head values for breeding enterprises.
- Normal total gain drives per-head values for grow-finish enterprises (gross margin = normal total gain).

Review efficiency factors carefully, inaccurate values often lead to deletion. Use <u>FINBIN</u> Benchmark Reports to compare typical efficiency ranges.

Feed Fed -----

Enter the quantity and value of each feed fed. (This information is used in enterprise efficiency factor calculations.) Toggle to enter price per unit instead of total value.

Valuing Home Grown Feed: value all homegrown commodities fed with their opportunity cost (est. avg. market value) & not the farm's cost of production value.

Use 'View Cash flow and Crop & Feed Check' toolbar icon to view crop and feed check any time.

- It is preferred to enter haylage and other wet forages in dry matter (DM) equivalents and not their "as fed" form. This includes high moisture corn and baleage.
 - Formula for converting to dry equiv. = (% DM wet crop ÷ % DM dry crop) * wet production
 - \circ Example for converting 100 tons of haylage at 65% moisture to dry equivalents: (.35 dry matter haylage \div .85 dry matter hay) * 100 = 41.2 tons
 - Download (File > Download > Microsoft Excel) the spreadsheet at z.umn.edu/DryMatterEquivalentsCalculator as a useful conversion tool.
- See previous AUM discussion related to pasture. Use same value for AUM production & feeding.

Common Feedstuffs	Unit
Beet pulp	Ton
Complete ration	Ton
Corn gluten	Ton
Cottonseed	Ton
Creep/starter	Ton
DDGS, dry	Ton
DDGS, wet	Ton
Milk	Lbs.
Milk replacer	Lbs.
Pasture	AUMs
Protein, vitamins, and minerals	Ton
Stover	Ton
Straw	Ton
Whey (dry)	Ton
Whey (liquid)	Gallon

Direct Livestock Expenses ---

Enter the total accrual adjusted dollar amount of each expense listed.

Breeding: Embryo transfer costs are breeding expenses.

Veterinary: include all veterinary related expenses here. This includes expenses associated with dairy genomics. Accumulate here and allocate between the enterprise being tested (Dairy vs Repl Heifers).

DHIA: DHIA costs of a Dairy Cow enterprise should be entered using the DHIA expense category.

Silage Bags: should be considered a Direct Crop Expense & included using those recommendations.

Marketing Expenses: Include only livestock marketing costs such as brokerage fees, advertising, state/national deductions, and marketing tool fees. Exclude milk hauling (except cull cow hauling, which is included).

Do not include hedging gains or losses—enter those under <u>Product Sales and Other Income</u>. Only brokerage fees belong here.

Hauling and Trucking: charges related to hauling and pickup of livestock and livestock products. For dairy enterprises, this category should be used exclusively (only) for milk hauling.

Manure Application: Custom application costs should be split equally (50/50) between the livestock and cropping enterprises. The livestock portion of these expenses should be allocated as a custom hire expense.

Hired Labor: All non-salaried labor should be allocated as a direct expense. Salaried workers, especially those with management responsibility, should be entered as overhead expense and allocated between crops and livestock.

Livestock Rendering: include all expenses related to livestock rendering as Custom Hire.

Livestock Contract Grower Enterprises: Any livestock enterprise identified as Contract Grower SHOULD NOT include Contract Grower Expenses. Include expenses incurred in the ACTUAL expense category.

Miscellaneous Expense: categories should have limited values entered in them, especially in the enterprise analysis.

Allocated Livestock Expenses -----

This section allocates expenses between livestock enterprises when exact amounts are hard to determine, based on enterprise intensity. For example, a dairy cow (factor 85) requires far more management than a laying hen (factor 0.43).

Check the top of the data entry to see whether entries are Percentages or Allocation Factors. If "Percentages" appears, the standard benchmarking setup file is missing (see Section VIII).

Note: Benchmark Setup Files include allocation factors, which can be turned on/off under Tools > Options. For Percentages, enter each enterprise's share of total expenses. For Allocation Factors, entries are weighted by enterprise head count.

Default Allocations apply automatically when standard factors are used but can be overridden per enterprise or expense.

Use the toggle icon to view resulting dollar expenses (view only—changes must be made in allocation mode).

SPECIFIC LIVESTOCK ENTERPRISE ANALYSIS RECOMMENDATIONS

Special Notes for Dairy and Dairy Replacement Enterprises -----

General Notes:

• The dairy enterprise must be split between dairy and dairy replacements. The table below displays how dairy replacements should be included depending on whether the farm being analyzed is the dairy producer or the heifer raiser. Calves are born in the dairy enterprise and transferred out to the dairy replacement and/or dairy steer enterprises.

Activity	Dairy Producer	Heifer Raiser
Raised replacements	Dairy replacements	
	With raised repl special sort	
Buy / sell	Dairy replacements	Dairy replacements
	With buy/sell special sort	With buy/sell special sort
	Avg head includes farmed out	
Per head per day	Dairy replacement	Dairy replacements
	With per head/per day sort	With special sort
	Contract raising cost goes here	

• Be sure to combine the Dairy Replacement Heifer enterprise with the Dairy enterprise to enable the "Dairy Combined" report in the output. Do so in the enterprise selection table:

2 - Dairy Replacement Heifers	
Enterprise name	Dairy Replacement Heifers
Description	
Gender	
Contract	
Shared	No
Combine with ent. number	1

Note: When dairy and dairy replacement enterprises are combined, the cost of the entire dairy replacement enterprise, net of revenue adjustments, is charged to the dairy enterprise in the Gross Margin calculation. This cost is labeled **Dairy Replacement Cost**. Using this approach, the dairy herd is charged the true cost of replacements instead of an arbitrary transfer price.

• List all heifers as breeding stock and cull cows will remain in the Dairy enterprise.

- Calves are born in the primary dairy enterprise. Those sold are sold directly from the dairy herd. All others are transferred, females to dairy replacement enterprise and males to dairy finishing enterprise at market value (suggested value \$100.00/head).
- Milk Base/Quota for Cooperatives
 - o Milk base/quota purchases are capital purchases under Other Long-Term Assets; cost and market values are the same due to limited marketability.
 - o Milk base/quota allocated by a cooperative is not valued on the balance sheet.
 - O Sales of milk base/quota back to the cooperative are capital sales in the year sold.
 - o If reduced by the cooperative for underproduction, record as a **loss of asset value** in that year.
 - Price impacts from production over base/quota are reflected as a lower milk price for the period(s).
- Unique situations within the dairy enterprise (like embryo sales, bull royalties, milk bottling) should be separated from the "normal" dairy enterprise. For these situations, include a Value-Added enterprise to analyze that piece of the operation. Income from unique situations can be included in the whole farm analysis but segregate from the dairy enterprise analysis.
- Special Sorts: Related to Dairy Margin Coverage Program include:

DMC: 1 year sign-upDMC: 5 year sign-up

Product Sales and Other Income: Milk price used in the analysis should be **gross dollars.** The milk check deductions should be entered in the appropriate expense category, namely **marketing.** The net milk check should not be entered as the milk revenue.

Other Information:

- **Required fields:** Average Number of Cows, Total pounds of protein sold, Total pounds of fat sold, Number of milking units.
- Energy Corrected Milk (ECM) will now be included in the dairy enterprise analysis output.
 - \circ Formula: **ECM** = (0.323 x milk lbs) + (12.82 x fat lbs) + (7.13 x protein lbs).
- Barn Capacity will only be included in the Historical Database for the farm.
- All other entries (average SCC, Average DIM, etc.) are to be entered **if known**. It is better to leave these values blank if unknown than estimate the values.
 - o All of these "Other Information" entries will be included in the farm's Historical Database, RankEm Summary, and FINBIN output, if a value is included.
 - Somatic Cell Count (SCC) should be entered as a whole number, do not enter in thousands. Example: Enter 100,000 not 100.
- Cows per milking unit: Milking unit is one milking machine or one robotic milker. Output displays "Cows per milking unit". Replaces barn capacity metric in FINBIN summary & benchmark reports.

Direct Livestock Expenses:

- **Breeding:** If the amount spent to breed replacements is known, allocate the specific dollar amount to the replacement enterprise. Otherwise, use a split of 2/3 breeding expense to dairy (or main livestock enterprise) and 1/3 to replacements.
- **DHIA:** DHIA costs of a Dairy cow enterprise should be entered using the DHIA expense category.
- **Hauling and Trucking:** charges related to hauling and pickup of livestock and livestock products. For dairy enterprises, this category should be used exclusively (only) for milk hauling.
- Marketing: Only include expenses related to milk marketing, such as checkoffs and deductions. DO NOT include milk hauling expenses here. (The exception is cull cow hauling, enter that here.)
- **Contract Grower Expenses:** Any livestock enterprise identified as Contract Grower should not include Contract Grower expenses. Include the actual expense category. Example, Lvstk Supplies.
- **Hoof Trimming:** include as Custom Hire expense.
- Labor: allocate all labor as a direct expense in order for easiest benchmark comparison.

Allocation Livestock Expenses:

• **Utilities:** allocate all utilities as an overhead expense. (Do not enter a direct expense distribution.)

Feed Fed

- Milk replacer should be included in the Dairy Replacement enterprise, not the Dairy.
- Limit types of feed fed to the following for Dairy & Dairy Replacement enterprises:
 - o Hay, Alfalfa or Hay, Grass (both on a dry hay basis)
 - o Corn Silage
 - o Corn (convert high moisture corn and earlage to dry equivalent)
 - o PVM or Complete Ration this includes Corn Gluten, Soybean Meal, Canola, etc.

Labor Hour Guide: The guide below is useful in determining if the Labor data entry information is accurate in whole farm data entry. *Note:* one FTE (Full Time Equivalent) = 2,080 hours per year.

- Robotic Herds typically have 1.7 to 2.2 million pounds of milk production per FTE
- **Conventional Herds** typically have under 2 million pounds of milk production per FTE. A general guide is 500,000 to 1.7 million pounds per FTE

Special Notes for Beef Enterprises ------

• Calves carried beyond weaning should be transferred to a backgrounding enterprise to maintain accurate state data. If backgrounders remain in the cow-calf enterprise, use the "Cow-calf with backgrounding" special sort.

- When transferring calves to a Beef Background or Beef Feeder Enterprise, apply a 3% shrink to the Cow-calf enterprise by reducing the transfer-out value by 3%. This ensures retained ownership enterprises reflect accurate analysis.
- In Other Information data entry, carefully review Pregnancy, Calving, and Weaning details in the output. Errors here are common sources of livestock enterprise inaccuracies.

Special Notes for Hog Enterprises --

General Notes:

- **Born** for pig production enterprises, enter the number born alive.
- <u>Live to carcass weight conversion factor</u> will default to 75% if left blank.

Special Notes for Grow/Finish Enterprises ------

- When entering sales: Enter number sold, total live weight pounds sold, and gross income received. Weights should be entered on a live weight basis. If sold on carcass weight and the yield is unknown, convert live weight based on a 75% yield for pigs and 63% yield for cattle.
- Average Number of Head and Total Normal Gain are required entries in the third tab of the Livestock Inventory table. Total normal gain should be entered as total pounds gained, not an average daily gain value.
- Feed additives and supplements are a **Purchased** Feed expense.
- Livestock implants are included as a **Veterinary** expense.
- Use the following as a guide for grow/finish livestock enterprise types:

BEEF	
Beef Cow/Calf / Calf Sales	Up to 650 lbs
Backgrounding	650 to 1,000 lbs
Finishing	Over 1,000 lbs

HOGS	
Wean Pigs	Less than 15 lbs
Feeder Pigs	35 to 60 lbs
Finish Pigs	Over 200 lbs

DAIRY AND DAIRY/BEEF CROSS STEERS		
Feeders	Less than 500 lbs	
Backgrounding	500 to 1,000 lbs	
Finishing	Over 1,000 lbs	

SHEEP	
Feeder Lambs	Less than 60 lbs
Market Lambs	Over 100 lbs

Note: If animals are sold at abnormal sale weights, delete the enterprise from the database.

Calculations of Livestock Cost of Production with Revenue Adjustments -----

Livestock Cost of Production Revenue Adjustments

	Breeding Lvst Product Sale (Dairy)	Breeding Lvst Sale by Wgt (Beef Cow-Calf)	Breeding Lvst Sale by Carcass (Farrow to Finish)
	Cost of Prod Per Cwt. of Milk Prod	Cost of Prod Per Cwt. Produced	Cost of Prod Per Cwt Carc Sold
Total cost			
Beg inv br lvstk	Plus	Plus	Plus
Beg inv lvst hld			
sale	Plus		
Purchases	Plus	Plus	Plus
Trans in	Plus	Plus	Plus
Sales	Minus		
Cull sales	Minus	Minus	Minus
Butchered	Minus		
Trans out	Minus		
End inv br lvstk	Minus	Minus	Minus
End inv hld sale	Minus		
Divide by	Prod + Used + Fed	Cwt Produced	Cwt Carcass Sold
	Breeding Lvst Sale per Head (Farrow to Wean)	Finishing Lvst Sale by Wgt (Beef Finishing)	Finishing Lvst Sale Per Head (Dairy Replace.)
	Sale per Head (Farrow to Wean) Cost of Prod	Sale by Wgt	Sale Per Head
	Sale per Head (Farrow to Wean)	Sale by Wgt (Beef Finishing)	Sale Per Head (Dairy Replace.)
Total cost Beg inv br lvstk Beg inv lvst hld	Sale per Head (Farrow to Wean) Cost of Prod Per Hd	Sale by Wgt (Beef Finishing) Cost of Prod	Sale Per Head (Dairy Replace.) Cost of Prod
Beg inv br lvstk	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans
Beg inv br lvstk Beg inv lvst hld	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus
Beg inv br lvstk Beg inv lvst hld sale	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus Plus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus Plus
Beg inv br lvstk Beg inv lvst hld sale Purchases	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans Plus	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus Plus Plus Plus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus
Beg inv br lvstk Beg inv lvst hld sale Purchases Trans in	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans Plus	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus Plus Plus Plus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus
Beg inv br lvstk Beg inv lvst hld sale Purchases Trans in Sales	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus Plus Plus Plus Plus Plus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus Plus Plus
Beg inv br lvstk Beg inv lvst hld sale Purchases Trans in Sales Cull sales	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus Plus Plus Plus Plus Plus Minus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus Plus Plus Minus
Beg inv br lvstk Beg inv lvst hld sale Purchases Trans in Sales Cull sales Butchered	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus Plus Plus Plus Plus Plus Minus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus Plus Plus Minus
Beg inv br lvstk Beg inv lvst hld sale Purchases Trans in Sales Cull sales Butchered Trans out	Sale per Head (Farrow to Wean) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Minus	Sale by Wgt (Beef Finishing) Cost of Prod Per Cwt. Produced Plus Plus Plus Plus Plus Minus Minus Minus	Sale Per Head (Dairy Replace.) Cost of Prod Per Hd Sold/Trans Plus Plus Plus Plus Plus Minus Minus Minus

MARKET CHANNEL ENTERPRISES

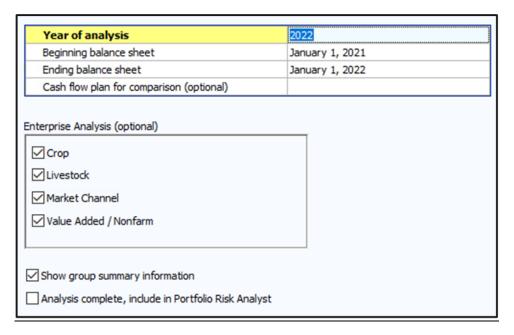
A thorough manual dedicated to Market Channel Analysis has been developed and is available on <u>CFFM's FINPACK Benchmarking for Educators</u> webpage.

AQUACULTURE ENTERPRISES

See the <u>Aquaculture specific closeout manual</u> for details on analyzing these types of enterprises.

VALUE ADDED/NON-FARM ENTERPRISES

Use the Value Added/Non-farm Enterprise Analysis to analyze value added co-op investments, custom work, and nonfarm enterprises such as trucking and seed sales. The Value Added/Non-farm enterprise analysis option can be initiated **General Information** data entry for FINAN.



Enterprise: The first step in Value Added/Non-farm analysis is to select the enterprise type from the drop-down list. Select the enterprise that most closely describes this activity. "Other" is available if none of the available enterprises describe the activity to be analyzed.

Enterprise types: the intent is for the enterprise types in Value added/Non-farm analysis to be self-explanatory. The exception is "Other". Use this enterprise type as needed for unique enterprises that do not fit the enterprises in the drop-down list.

Note: <u>Contract Livestock</u> is no longer a value-added enterprise option (is should be evaluated as a Livestock Enterprise). Previous contract livestock enterprises analyzed as a value-added enterprise have been converted to "Other".

Unit and Quantity: The Unit entered is the custom divisor for column 1 of the report output. The quantity entered is the divisor for the report. (The number of custom units entered.) The Unit title entered will be used in the column heading. *Examples:* miles for trucking or shares for co-op investments.

Gross Revenue: Enter the total gross revenue received for the value added/non-farm enterprise.

Cost of Goods Sold: Use only if the enterprise has a clear cost of goods sold (as on Schedule C) or to transfer production costs from crop or livestock analyses. *Example:* a milk bottling enterprise includes bottled milk sales and transfers milk production costs from the livestock analysis.

Total Investment: Used to calculate the Rate of Return on Assets. If farm equipment is used, allocate asset value based on reasonable estimates. *Example:* proportion of hours used for farm vs. value-added or non-farm enterprises.

Enterprise	Crop custom work	
Description	Custom Harvesting	
Unit	Acres	
Quantity		20
Gross Revenue		10,00
Cost of goods sold		
Total investment		25,00

*Here is an example of a Crop Custom Harvesting operation, paid on a per acre basis.

Direct Expense: This is the IRS Schedule C expense list. Enter all expenses except the cost of goods sold and those allocated from the farm expenses to Value Added in Related Operating Expense Allocation data entry.

Allocated Expenses: Enter the percentage of the Value Added/Nonfarm allocated expenses from whole farm data entry applicable to each enterprise. This will include the allocated portion of labor and management charge, as well as labor hours for the value-added enterprise.

Value Added/Non-Farm Enterprise Analysis Output: The analysis output information will have 3 columns of information, including the per unit divisor entered for the enterprise, per \$100 gross revenue, and enterprise total. The per \$100 gross revenue values are what will be utilized for benchmarking purposes.

Value Added/Non-Farm Enterprise Analysis -- Crop custom work, Custom Harvesting

	Per Acres	Per \$100 Gross	Enterprise Total
Acres	1.00	2.00	200
Revenue			
Gross revenue	50.00	100.00	10,000
Cost of goods sold	-	-	-
Gross margin	50.00	100.00	10,000
Expenses			
Insurance	6.00	12.00	1,200
Supplies	8.23	16.45	1,645
Other expenses	1.34	2.68	268
Fuel & oil	15.95	31.89	3,189
Repairs	11.63	23.27	2,327
Machinery depreciation	4.06	8.11	811
Total expenses	47.20	94.40	9,440
Netincome	2.80	5.60	560
Unpaid labor & management charge	2.50	5.00	500
Net return over labor & management	0.30	0.60	60
Estimated labor hours	0.50	1.00	100
Totalinvestment	125.00	250.00	25,000
Rate of return on assets	0.2 %	0.2 %	0.2 %

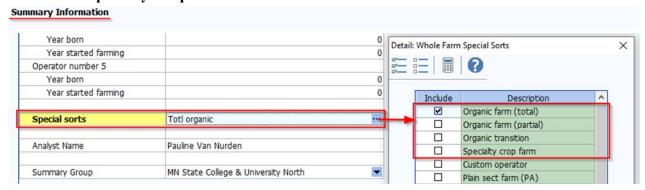
Section VI: ORGANIC & SPECIALITY CROP FARM ANALYSIS

BALANCE SHEET CONSIDERATIONS

For producers who are establishing new orchards or perennial crops, accumulate the establishment costs in Other Intermediate Assets and depreciate over a conservative economic life of the plants.

WHOLE FARM SPECIAL SORTS IN THE ANALYSIS

If all enterprises are certified organic, select **Organic Farm (total)**; if only some, select **Organic Farm (partial)**. Use **Organic Transition** for farms shifting from conventional to organic. Choose only one whole farm sort. Farms adding more organic acres remain **Organic Farm.** For uncertified farms using organic practices, select **Organic Transition**. Farms producing fruits/vegetables for fresh markets are **Specialty Crop** Farms.



WHOLE FARM ANALYSIS

Crop Sales: All crops can now be designated as **organic.** Select the 'Organic' check box for organic crops being analyzed in the Crop Enterprise Analysis.

For specialty crops grown using organic practices, but are not certified organic, consider the crop in Organic Transition by designating Organic Transition as "yes" in Other Crop Information data entry.

Livestock Sales: There is no organic designation for Animal or Product sales.

Direct Crop Expense:

- Use **Organic Crop Protection** for all organic pest control costs; do not use Crop Chemical for organic crops.
- Fallow: Record direct fallow expenses as Growing Crop on the ending balance sheet, then assign them to production crops the next year. Enter fallow acres as enterprises but allocate overhead to production crops.

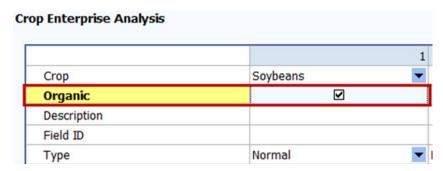
Direct Livestock Expense: Purchased Feed. Use the organic commodity type option if the operation purchases commodity feedstuffs for livestock. Ex: Hay, alfalfa with the organic box checked.



Related Operating Expense: Organic Certification: Organic enterprises must include this expense.

CROP ENTERPRISE ANALYSIS

Organic Enterprise Identification: Identify the organic crop to be analyzed using the Organic checkbox in Crop Enterprise Analysis data entry. Any crop can be designated as an organic crop with this update.



Crop Value: Value per unit used should follow the same guidelines as suggested for conventional crops in the Closeout Manual; the sale value for products already sold and the ending inventory value for products held in ending inventory.

Production: If multiple products are produced from the same acreage, follow these guidelines:

- If the multiple products result from harvesting the same product in different forms, use detail for Total Production to identify the production of each product. This would be common for taking hay and pasture from the same acreage.
- If different products are produced under two separate production activities, enter the activities as separate enterprises, and identify second, third enterprises as double crops.
- If some crop was left in the field because of lack of markets, report the quantity sold.

Specialty Crop Enterprise Identification:

- Vegetables (assorted): Use this crop for multiple products produced on a small acreage, making it impractical to analyze each enterprise individually. Enter the value of the total production of these crops as the Production.
- Vegetables (high tunnel): Use this crop for vegetables produced in high tunnel facilities, again entering the total value of production as the Production.

Direct Crop Expenses: Organic crop production should use the following expense in the organic enterprise analysis:

- Seed and Plants. If the farm is using home grown seed, a realistic price should be included as a seed expense. This includes market price plus cleaning, hauling, etc. Seed expense should not be \$0 for organic acres.
- Organic Crop Protection. Organic acres should have this expense if crop protection products were used. Acres with Crop Chemical expense will be deleted!
- Organic Certification. Organic crops should have a portion of this annual fee allocated to them.

Overhead Expense Allocation: If organic and conventional production occurred on the same farm, use your and your student's knowledge of the production system to allocate overhead expenses to the various enterprises.

Other Crop Information:

- **GMO Technology** should have the 'No' radio button selected.
- **Organic Transition.** Certified organic acres should list 'No', like convention acres. See below for instruction on acres in organic transition.
- Manure. Select the proper manure use for the acres.
- **Special Sorts.** Remember to review the other available special sorts. Pay particular attention to the following: Cover crop; Grown with cover crop; CSP/EQIP/Conservation; Type of fertilizer used (if commercial used); Amount of fertilizer used.
- **Delete from summary.** Refrain from using this option on organic acres. The goal is to have as many organic acres in the database as possible.

Special Note for Crop Acres Transitioning to Organic

- If crop acres are in the process of transitioning to organic use the conventional crop type, not the organic option. For example, use "corn" not "corn, organic" until acres are certified organic.
- Acres in organic transition should utilize **Organic Crop Protection** *not* Crop Chemical expense.
- In Other Crop Information data entry, select "Yes" for acres in Organic Transition.

LIVESTOCK ENTERPRISE ANALYSIS

Enterprise Identification: Identify certified organic enterprises as Organic using the Special Sorts. If transitioning to certified organic production, select the Organic Transition special sort.

Delete from summary: Refrain from using this option on organic livestock enterprises. The goal is to have as many organic enterprises in the database as possible.

Livestock and Product Sales: Income received should reflect the actual income received for organic livestock sales.

Feed Fed

- Home produced organic feed should be valued at estimated market value for organic feed of the same quality.
- All organic livestock enterprises should have 'Pasture, Organic' or 'Pasture, Intensive Organic' as a Feed Fed. Pasture aum's for feed are produced in the Crop Enterprise Analysis.



Direct Livestock Expenses: Organic Certification: Organic enterprises must include a portion of this annual fee allocated to them.

Section VII: COVER CROP ANALYSIS

In this section you will find information specific to entering cover crop information in the crop enterprise analysis. In general, follow the same guidelines as suggested throughout the Closeout Manual.

Note: The cover crop is **ALWAYS** analyzed as its own crop enterprise.

BALANCE SHEET CONSIDERATIONS

Accumulate expenses related to fall seeding of cover crops on the ending balance sheet in one of two ways – either as a **Prepaid Expense** or as a **Growing Crop.**

Prepaid Expense and Supplies: Accumulate all expenses related to planting cover crops using the individual expense categories needed (for example seed). The expense should then be allocated to the respective field/crop the following year. Use **Detail** to select the expense category to help identify the total expense incurred in the FINAN enterprise analysis.

Growing Crops: Another option is to include expenses related to planting cover crops as a growing crop. In data entry, **Quantity** equals the number of acres and **Value per Unit** is the cost of inputs. Use **Detail** to select the expense category.

WHOLE FARM SPECIAL SORTS IN THE ANALYSIS

Consider the following special sorts that apply to the farming operation: MN Water Quality Certified and 3rd Party Nutrient Management Plan.

WHOLE FARM ANALYSIS

Crop Sales -----

If a cover crop is produced and sold, record it like any other commodity—enter the total quantity sold, gross income received, and gross proceeds here, with related sale expenses listed as farm expenses.

Other Farm Income -----

Conservation Government Payment: Many cover crop acres qualify for additional funds. Remember to enter government payments related to conservation efforts in the whole farm analysis.

- Enter SHIPP, EQIP, CSP, PCCP, and other cost-share payments for conservation practices here.
- If funds are received as annual payments for conservation-related production practices:
 - o Treat them as income in the whole farm analysis to offset operating expenses.
 - Record as **Conservation government payments** under Other Farm Income in the whole farm analysis.
 - Allocate payments to the appropriate **cover crop** enterprise(s) as **Other Income** in the crop enterprise analysis for the analysis year.

o *Note:* Payments may be received in the fall when seeding occurs—record as income when received in the whole farm analysis and allocate to the cover crop enterprise the following year (use FINPACK Notes for tracking if desired).

Farm Expenses -----

Direct Crop Expenses: Enter all actual cash farm expenses paid during the calendar year.

COVER CROP - CROP ENTERPRISE ANALYSIS

All cover crops are treated as <u>separate crop enterprises</u>, whether used for feed, sale, grazing, or soil improvement. They are analyzed in the year production is completed. Expenses for fall-seeded cover crops are recorded as Growing Crop or Prepaid Expense on the balance sheet and analyzed the following year.

Crop Data Entry -----

- **Crop:** Select the crop type from the pick list that best matches the cover crop. Choose the individual crop for single species or, for mixes, use cover crop grazing (AUM), cover crop mix (\$), or cover crop rye mix (\$).
- **Field ID:** Enter a Field ID for both the cover crop and the crop grown after it. Keep this ID consistent across years to track long-term cover crop impacts.
- Type: Identify the cover crop enterprise as Double Crop.
- Acres and Tenure: Ensure acres and tenure type (rented, owned, or share rented) match for the cover and base/cash crop analyzed together.
- **Production:** If harvested or grazed, record production. If used only for soil or agronomic purposes and terminated in spring, record no production—this is acceptable.
- Other Income: Record conservation payments related to cover crops as Other Income, even if received the prior year.
- **Combine with enterprise number:** Combine the cover crop with the base/cash crop that follows; analyze the base/cash crop separately as its own enterprise.

Direct Crop Expenses -----

• Seed, chemical, machinery costs, land rent, etc. are to be entered as individual expense items for the cover crop being analyzed.

Allocated Crop Expenses ------

- Review the allocation factor used and adjust if needed.
- Real estate taxes and long-term interest should not be included on owned acres for the cover crop enterprise. These should be allocated to <u>base crops only</u>.

Other Crop Information -----

• Cover Crop: select 'Yes' for the cover crop enterprise

- Other Crop Information: review the other crop information being collected and enter the appropriate data for the enterprise.
- Special Sorts: consider any special sorts needed for the enterprise.

GROWN AFTER CROP OR BASE (CASH) CROP - CROP ENTERPRISE ANALYSIS

Analyze the base crop/cash crop enterprise as normal. The crop to be analyzed with the cover crop is the one that **follows** the cover crop termination.

Crop Data Entry -----

- Crop: Select the base or cash crop from the pick list.
- **Field ID:** Enter a Field ID for both the cover and following crop; keep it consistent across years to track long-term cover crop impacts.
- **Type:** Identify the base/cash crop enterprise as Normal.
- **Acres and Tenure:** Ensure acres and tenure type (rented, owned, or share rented) match for both crops analyzed together.
- Crop Government Payments: Assign traditional payments (e.g., ARC/PLC) to the base/cash crop.
- Combine with enterprise number: Combine the cover crop with the base/cash crop; no additional data entry is needed for the base/cash crop.

Allocated Crop Expenses ------

- Review and adjust the allocation factor as needed. <u>If using a single cover crop</u>, reduce the default by 50% (e.g., rye = 15 vs. 30). No change needed for cover crop mixes.
- Decide whether to include real estate taxes and long-term interest on owned acres; if included, split costs between cover crop and base crop enterprises.

Other Crop Information -----

- Grown After a Cover Crop: select 'Yes' for the base crop enterprise
- Other Crop Information: review the other crop information being collected and enter the appropriate data for the enterprise.
- Special Sorts: consider any special sorts needed for the enterprise.

Other Crop Information Crop Cover crop mix Corn Description Cover crop acres Grown w/ Cover Crop John's 40 Field ID John's 40 Type Double Crop Normal Total acres 40 40 Previous Crop None Selected Soybeans Field County O Moldboard O Moldboard O Chisel/deep till O Chisel/deep till Minimum till Minimum till Tillage system O No till O No till O Ridge till O Ridge till O Strip till O Strip till O < No Answer> O < No Answer> 0 < 10 0<10 010-18 010 - 18 O 19 - 25 O 19 - 25 Row width 026 - 32 **⊙** 26 - 32 0 > 32O > 32 O < No Answer> OYes ⊙ Yes **GMO Technology** ⊙ No O No O < No Answer> O < No Answer> O Yes O Yes Organic transition ⊙ No ⊙ No O < No Answer> O < No Answer> O Manure only O Manure only Manure and commercial Manure and commercial Manure O No manure O No manure O <No Answer> O < No Answer>) Yes Yes ONC Cover crop O No O < No Answer> No Answer> Yes O Yes O No O No Grown after a cover crop No Answer> O <No Answer> Special sorts CSP/EQIP/Con CSP/EQIP/Con, Spot tile, 10: ...

Sample Cover Crop Output -----

Crop Enterprise Analysis

	Cover cp mix		
	Double Crop	Corn	Corn
	Cover crop a	Grown w/ Cov	After CovCp
	John's 40	John's 40	John's 40
	Owned	Owned	Owned
	- mou	0,,,,,,	0111104
Returns			
Acres	40.00	40.00	40.00
Unit	\$	bu.	bu.
Yield per acre	-	192.00	192.00
Share of production (%)	100.00	100.00	100.00
Value per unit	-	5.72	5.72
Total product value	-	1098.24	1098.24
Other crop income	20.00	-	20.00
Gross return per acre	20.00	1098.24	1118.24
Direct Expenses			
Seed and plants	25.00	117.50	142.50
Fertilizer		132.50	145.00
Crop chemicals	7.50	28.75	36.25
Crop insurance	-	18.75	18.75
Drying expense	-	8.75	8.75
Hauling and trucking	-	5.63	5.63
Consultants	-	5.00	5.00
Miscellaneous	-	6.25	6.25
Fuel & oil	4.82	17.68	22.50
Repairs	4.96	18.17	23.12
Operating interest	0.94	3.44	4.38
Total direct expenses	55.71	362.41	418.13
Return over direct expenses	-35.71	735.83	700.12

Cover Crops Seeded and Grazed in the Fall -----

- If a cover crop is seeded and grazed in the fall, include production in the next year's analysis. Total AUMs from fall and spring grazing before termination as described above.
- Fall grazing AUMs should be allocated to the livestock enterprise in the year grazing occurred.
- *Note:* AUMs produced and fed may differ by year, causing Crop and Feed Check discrepancies. Accept these; the goal is accurate cover crop value analysis.
- Manage expenses and logistics as outlined above.

Cover Crop Analysis Resources -----

- The Basics of Cover Crop Analysis
- Keys to Cover Crop Analysis

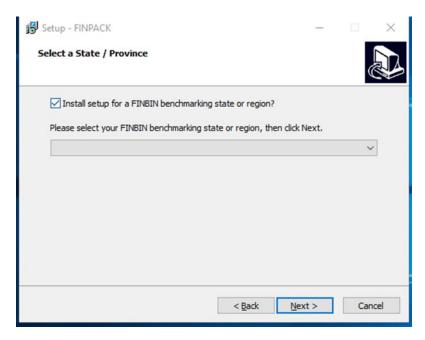
Section VIII: FINPACK BENCHMARK SETUP FILES

INSTALLING THE UNIFORM BENCHMARKING SETUP FILES FOR FINPACK

There is *not* a separate installation step to download the Uniform Setup files for FINPACK.

As a part of the FINPACK Installation, you will be asked if you want to "Install setup for FINBIN benchmarking state or region?".

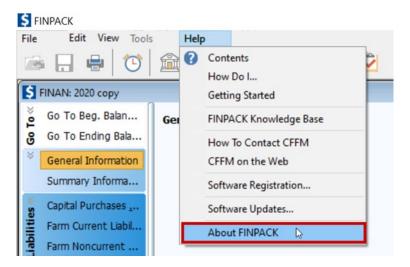
After selecting the checkbox, you will also have to use the dropdown to select the benchmarking state or region you are affiliated with.



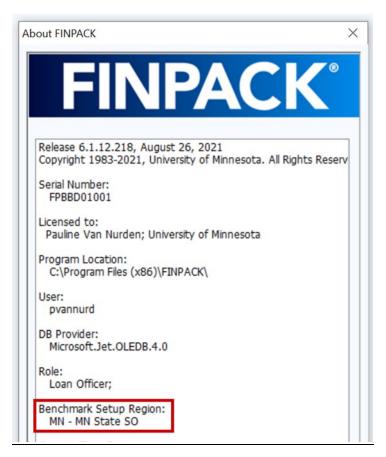
Note: This process replaces the need to download set files from the CFFM website. Furthermore, when you download an update during the year your setup file configuration will remain.

VERIFYING BENCHMARK GROUP SETUP IS INSTALLED IN FINPACK

In FINPACK, go to **Help > About FINPACK** to verify uniform setup files for your FINPACK installation.



In the About FINPACK dialog box, look for "Benchmark Setup Region". If this does not appear in the dialog box information you do not have uniform benchmarking set up files downloaded. <u>If this is the case</u>, you will need to *re-install FINPACK* and follow the steps above.



Section IX: FINPACK VAULT BEST PRACTICES

GETTING STARTED WITH THE FINPACK VAULT

The FINPACK Vault is the secure file backup tool for your FINPACK files. This tool is also used by database leaders to aggregate farm financial data for the database and reports annually. There are several guides and a quick start video found at https://www.cffm.umn.edu/finpack-benchmarking-for-educators/.

Vault Best Practices Include -----

- Back up your FINPACK data file to the Vault regularly and ensure a strong internet connection when doing so.
- Archive inactive FINPACK files in a separate folder outside the default data folder, which should only contain active files.
- When receiving a FINPACK file from another instructor, coordinate with CFFM and database leadership to transfer it via the Vault. Do not use flash drives, email, or other methods to avoid Vault File Conflicts. After transfer, the original instructor must delete their local copy.

Section X: IMPORTING FINAN DATA

EXPORTING FROM ACCOUNTING SOFTWARE

FINPACK interfaces are available for accounting programs like Quicken, EasyFarm, PCMars, and UltraFarm. Each can export cash transactions for import into FINAN. Currently, only cash transactions are included, and most systems export totals by chart of accounts category.

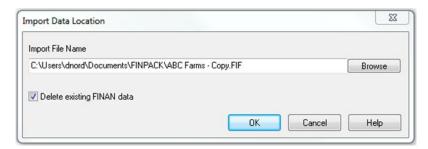
Note: PCMars and FINPACK offer a closer integration that also allows balance sheet data import. See the linked recording for details.

Exported files use the .fif (FINPACK Interface File) extension. If the exported file does not include .fif, rename it to add the extension. Refer to your specific accounting software's documentation for export instructions.

SELECTING THE FINPACK INTERFACE FILE

Begin by creating your FINAN for the period (either a blank FINAN or by copying last year's analysis). On the FINAN General Information page, select the beginning and ending balance sheets (balance sheet data is not imported). Then choose **Edit** \rightarrow **Import Data** from the main menu.

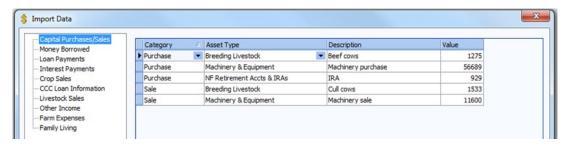
You will be prompted for the file location. If the correct file does not appear, click Browse to locate it.



The default setting is to delete all existing cash transaction data from the FINAN input. If you uncheck this option, imported transactions will be added to existing transactions.

CHECKING AND CORRECTING CHART OF ACCOUNTS MAPPING

When the FINPACK Interface File is selected, the data will display by category and chart of accounts location. You may then review and edit where the imported data will go in FINAN. Scroll through the data entry page titles on the left to check and adjust the data mapping.



Column 1: Category – Shows the FINAN Whole Farm data entry category for each transaction. You may change the category to move data to a different location in FINAN. If the new category is on a different page, the record will move there once you leave the current record.

Column 2: Shows the chart of accounts destination. Use this column to change where the transaction imports in FINAN.

Column 3: Description – The account description from the accounting software.

Column 4: Value – The dollar amount to be imported. You may edit values if needed; changes are temporary and not saved in the .fif file.

After verifying data mapping on each page, click OK. When the import completes, FINAN will close; re-open it to view and edit the data.

IMPORTING ERRORS

If errors are found in the import file, and error message will be displayed, and specific amounts will not be imported. Errors usually indicate that the chart of account being mapped to in FINAN is not active in your copy of FINPACK. You will have to manually enter these amounts in FINAN to correct the problem.

Section XI: ALLOCATION FACTORS

ALLOCATION FACTORS

FINAN enterprise analysis uses allocation factors to distribute expenses that are difficult to assign by exact enterprise. These factors reflect the relative intensity of managing each enterprise. For example, a dairy cow has an allocation factor of 85 per head, while a laying hen is .43. In crops, corn is 55 and corn silage is 70 because silage requires more handling and machine power.

Use these factors as a guide. Adjust them when farm practices differ—if an enterprise requires more or less time, effort, or machinery than typical, modify the allocation factor accordingly.

CROPALLOCATION FACTORS

Crop	Default Allocation	Crop	Default Allocation
Alfalfa Seed	60	Haylage, Grass **	40
Barley	30	Haylage, Mixed *	60
Barley, Malting	30	Haylage, Small Grain w/ Peas	40
Beans, Black Turtle	50	Hulless Oats	30
Beans, Dark Red Kidney	50	Oatlage	35
Beans, Great Northern	50	Oats	30
Beans, Light Red Kidney	50	Pasture	5
Beans, Lupin	50	Pasture, Intensive	20
Beans, Navy	50	Peas Field	30
Beans, Pink	50	Peas, Processing	30
Beans, Pinto	50	Pennycress	30
Beans, Small Red	50	Potatoes	300
Buckwheat	30	Potatoes, Seed	300
Camelina	30	Prevented Planting	20
Canola	30	Pulpwood	30
Cordwood	60	Rented Out	5
Corn Silage	70	Rice, Wild	30
Corn	55	Rye	30
Corn, Ear	55	SHIPP (Establish 20)	5
Corn, Seed	55	Sorghum Silage	55
Corn, White	55	Sorghum, Grain	50
Cover Crop Grazing	15	Soybeans	30
Cover Crop Mix	15	Stover	30

Cover Crop Cereal Rye Mix	15	Straw	10
CRP (Establish 20)	5	Sugar Beets	120
Custom Work	30	Sunflowers	40
Fallow	15	Sunflowers, Confectionary	40
Flax	30	Sweet Corn	35
Grass seed	40	Timber	7
Hay	60	Triticale	30
Hay, Alfalfa*	60	Triticale Silage	35
Hay, Grass **	40	Wheat	30
Hay, Mixed *	60	Wheat, Spring	30
Hay, Small Grain	40	Wheat, Winter	30
Haylage, Alfalfa *	60	Wheat, Kernza	30

Special Notes for Crop Allocation Factors:

- Alfalfa and mixed hay/haylage crops assume 3 cuttings; adjust based on actual cuttings.
- Grass hay/haylage assume 2 cuttings; adjust based on actual cuttings.
- If custom operations are used, adjust the factor. For custom-harvested crops, reduce the default factor by 50%.
- Adjust factors for double crops, cover crops, or similar cases:
- If a cover crop is terminated, reduce the factor by 50% (e.g., rye from 30 to 15).
- If the cover crop is harvested or grazed, do not change the factor.

LIVESTOCK ALLOCATION FACTORS

	Default		Default
Livestock Enterprise	Allocation	Livestock Enterprise	Allocation
Beef, Cow-Calf	18	Dairy Steers, Backgrounding	4.5
Beef, Replacement Heifers	7	Dairy Steers, Finishing	9
Beef, Feeders	4.5	Hogs, Contractor	85
Beef, Background Beef	4.5	Hogs, Farrow to Finish	27
Beef, Custom fed	3	Hogs, Farrow to Weaning	13
Beef, Finish Calves	9	Hogs, Feeder Pig Production	17
Broilers, Contract	8	Hogs, Finish Feeder Pigs	3
Chickens, Egg Production	0.43	Hogs, Weaning to Feeder	1
Dairy	85	Hogs, Weaning to Finish	4
Dairy Replacement Heifers	15	Honey Production	4
Dairy/Beef Cross Steers,			
Feeders	4.5	Horses, Breeding Mares	4

Section XI: Allocation Factors

Dairy/Beef Cross Steers,		Sheep, Feeder Lamb	
Backgrd.	4.5	Production	4.5
Dairy/Beef Cross Steers,			
Finishing	7	Sheep, Lamb Finishing	1.5
		Sheep, Market Lamb	
Dairy Steers, Feeders	4.5	Production	7

Section XII: SPECIAL SORTS

Special sorts are important for the separation of various data and comparing like types of operations with specific variations. Select all special sorts that apply. **Place emphasis on Whole Farm Sorts**.

WHOLE FARM SORTS

- Organic Farm (total)
- Organic Farm (partial)
- Organic Transition
- Specialty Crop
- Custom Operator
- Beginning Farmer
 - o Includes farmers/ranchers that have been in operation 10 years or less.
- Limited Resource/Socially Disadvantaged Producer
 - O Includes producers who have been historically underserved including Minority (Native American, Asian, African American, or Hispanic), Women, and Limited Resource producers. Limited resource producers are those with farm sales are less than \$226,300 in 2023. Use specific Beginning Farmer and Veteran sorts for those producers with those designations.)
- Veteran
- MN Water Quality Certified Farm
- Cover Crop Project (participant)
 - Used with farms participating in cover crop related programs with EDF and/or MN
 MOSH.
- Climate Smart Project (participant)
 - o Used with farms participating in climate smart projects. Climate smart is defined as produced using practices that reduce greenhouse gas emissions or sequester carbon.
- Environmental & Structural Water Quality Controls
- 3rd Party Nutrient Management Plan

CROP ENTERPRISE SORTS

Many crop sorts have been moved to the Production Practices entry of the Crop Enterprise Analysis. Use other special sorts as appropriate.

- Drainage, pattern tile
- Drainage, spot tile
- Drainage, no tile
- Following fallow
- Joint venture (use for sugar beets grown on rented beet base)
- Nitrogen, 28% UAN

- Nitrogen, urea
- Nitrogen, anhydrous
- 0 60 lb. Nitrogen
- 61 100 lb. Nitrogen
- 101 140 lb. Nitrogen
- 141 180 lb. Nitrogen
- 180 lb. Nitrogen
- Side dressed fertilizer
- Auto-steer/Swath control
- Variable rate seed
- Variable rate fertilizer
- Variable rate chemicals
- 2nd yr. continuous crop
- 3+ years continuous crop
- CSP/EQIP/Conservation Practices
- Ethanol corn variety (Ex. Enogen brand)
- Subsurface Nutrient Placement

LIVESTOCK ENTERPRISE SORTS

Use only the marked sorts each type of enterprise. Place special emphasis on the bolded items.

	Dairy	Beef Cow-Calf	Beef Finishing	Hogs	Dairy Replace	Dairy Finishing
Organic	Χ	Χ	Х	Х	Х	Χ
Organic transition	Х	Х	Х	Х	Х	Χ
Dairy initiatives	Х					
3x milking	Χ					
Tie stall Barn	Х					
Free Stall Barn	Х					
Sand bedding	Х					
Compost bedding	Х					
Rotational Grazing	Χ	Χ			Х	
Robotic milking	Х					
DMC – 1-year sign-up	Х					
DMC – 5-year sign-up	Χ					
Raise replacements	Χ				Х	

Per-Head-Per-Day Contract	Х				Χ	
Buy/Sell Replacements	Х				Х	
Calf Auto feeders	Х	Х	Х	Х	Х	Х
Dry lot		Х				
Share lease		Х				
Finish, Females Only			Х			
Finish, Males Only			Х			
Finish, Split Sex			Х	Х		Х
Location, Single Site	+			Х		
Location, Multiple Sites				X		
All-In-All-Out Site				X		
Weaning, 21 Days or Less				X		
Weaning, Over 21 Days				X		
Segregated Early Weaning				X		
Wean to Finish Barn				Х		
Auto-Sort Barn				Х		
Ventilation, natural				Х		
Ventilation, total power				Х		
Ventilation, tunnel				Х		
Ventilation, curtains/minimum power				Х		
Hoop barn				Х		
Large Pens > 80 head				Х		
Small Pens < 30 head				Х		
Feeding DDGs	Х	Х	Х	Х	Х	Х
Grassfed	Х	Х	Х		Х	Х
Embryo Transfer (ET)	Х	Х			Х	
Spring calving		Х				
Summer calving		Х				
Fall calving		Х				
Winter calving		Х				
Cow-calf with backgrounding		Х				
Seedstock production		Х				