Livestock 101
Recordkeeping & Marketing
Donna R. Coffin, Professor
University of Maine Cooperative Extension
Objectives

- Improve understanding and use of production and financial record keeping systems
- Increase awareness and expansion of marketing options
- More successful farming operations
Question

- Do you keep adequate records for your farm or household?
Question

How are your records kept?

1. Paper
2. Computer
3. Memory
## Farm Use of Computers - 2004

<table>
<thead>
<tr>
<th>How computers are used</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Records</td>
<td>89%</td>
</tr>
<tr>
<td>Production Records</td>
<td>76%</td>
</tr>
<tr>
<td>General Information Search</td>
<td>73%</td>
</tr>
<tr>
<td>Price Tracking</td>
<td>55%</td>
</tr>
<tr>
<td>Internet Marketing of Farm Products</td>
<td>13%</td>
</tr>
</tbody>
</table>

| All Farms                                     | 44% |
| Over $500,000 sales                          | 72% |

Source: Farm Management Update, Ohio State University Extension, Winter 2003-2004
Records
Financial Vs. Production

- **Production**
  - *Farm Resources*
    - Land
    - Equipment
  - *Quantities of Inputs*
    - Breedings
    - Crops Planted
  - *Production Measures*
    - Live Calves
    - Hay yield

- **Financial**
  - Income Transactions
  - Expense Transactions
  - Capital
Physical Resources Inventory

- Land
  - Tillable land
  - Pasture
  - Woodlot
- Water
- Buildings
- Machinery / Equipment
Site and Soil Resources

Example: A soil containing 13% clay, 41% silt, and 46% sand would have loam texture.


http://websoilsurvey.nrcs.usda.gov/app/

and county NRCS office
Crop Production Records

- Field Records
  - Soil Tests
  - Fertilizer Applications
  - Pesticide Applications
  - Seeding
  - Crops Grown
    - Crop Yields
  - Rotations
Livestock Production Records Start with Identifying Your Animals

- Individuals Identified
  - Ear tag
  - Tattoo
  - Microchip
  - Physical Characteristics
Livestock Production Records

- Individual History
  - Farm Bred
  - Birth Info, Sire, Dam
  - Purchased
  - Source, date, price

- Reproduction
  - Breeding / services
  - Offspring info
    - Sex, rates of gain

- Health
  - Vaccinations
  - Treatments
  - Body condition score
Daily Events (Farm Diary)

- Pocket Note Pad 😊
- Field Note Book 😊
- Pocket Calendar 😊
- Cell Phone Application 😊
- Clip board & paper 😞
- Memory 😞
<table>
<thead>
<tr>
<th>Name</th>
<th>Betsy</th>
<th>Born</th>
<th>3/1/03</th>
<th>Reg. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sire</td>
<td>Clyde</td>
<td>Date</td>
<td>Vac. 3/5/03</td>
<td>Ear Tag No. 231</td>
</tr>
<tr>
<td>Dam</td>
<td>Phebie</td>
<td>Vac. By: Farmer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yr.</td>
<td>Service Date</td>
<td>Sire Name</td>
<td>Checked Preg.</td>
<td>Date Due</td>
</tr>
<tr>
<td>2005</td>
<td>Aug. 10</td>
<td>Pete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>July 4</td>
<td>Sam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>July 15</td>
<td>Arthur</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Start January</td>
<td>Born</td>
<td>Purchase</td>
<td>Sold</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------</td>
<td>------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Calves - heifer</td>
<td></td>
<td>5</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Heifers</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1 yr Heifers</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 yr Heifers</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 yr Cows</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 yr Cows</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 4 yr Cows</td>
<td>5</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total Females</td>
<td>16</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Calves - male</td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 yr Steers</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2 yr Steers</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 yr Steer</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bulls 1 year</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Production Record Analysis

- Pregnancy Percent
- Live Birth Percent
- Weaning Percent
- Weanling Rate of Gain
- Days at Weaning
- Yearling Rate of Gain
- Sex Ratio
Cattle Health Appraisal Performance

- Maine Dept. of Agriculture (Cindy Kilgore) (comes to your farm)
  - Weighing of weanlings & yearlings
  - Reproductive information
  - Receive herd performance analysis
Financial Records
Recordkeeping Vs. Record Analysis

- Recordkeeping
  - Maintaining Information
    - Money In
    - Money Out
    - Capital

- Record Analysis
  - Summarizing records to make decisions
    - net income per animal or acre
    - compare expenses to income
Records
Tax Management Vs. Farm-Financial Management

- **Tax Management**
  - Records are required for tax purposes
  - Ensure you pay only the taxes you owe

- **Farm-Financial Management**
  - Records are needed to make decisions for future farm activities
  - Verify invoice payments
  - Determine charges for your products and services
Requirements of a Good Record Keeping System

- Simple
- Understandable
- Reliable
- Accurate
- Efficient
Keeping Financial Records

- Start with Checkbook
- Shoe Box for receipts – **NOT RECOMMENDED**
- Record book and files for receipts
- Electronic and files for receipts
Single Entry Bookkeeping System

New England Farm Account Book

- Available free from Cooperative Extension or online
Receipts (Income)

- **Sales of crops**
  - Hay
  - Firewood

- **Sales of animals**
  - Purchased
  - Raised

- **Services**
  - Breeding
  - Custom Machine Hire
  - Composted manure
  - Etc.
## Expenses (Costs)

- Feed (Hay, grain)
- Soil Nutrients
- Crop Protectants
- Hired Labor
- Fuel
- Breeding Fees
- Repairs
- Veterinary Medicine
- Etc.
Electronic Farm Financial Recordkeeping

- Based on a Checkbook
  - Start with an opening balance
  - Use basic transactions
    - Checks
    - Deposits
### Check - Expense Transactions

<table>
<thead>
<tr>
<th>DATE</th>
<th>NUM</th>
<th>PAYEE</th>
<th>PAYMENT</th>
<th>DEPOSIT</th>
<th>BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-Sep</td>
<td>1002</td>
<td>Power Company</td>
<td>200</td>
<td>2,500.00</td>
<td>2,022.15</td>
</tr>
<tr>
<td>1-Oct</td>
<td>1003</td>
<td>Farm Supply</td>
<td>477.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shady Acres Farm

1003

DATE 10-1-10

PAY TO THE ORDER OF Farm Supply $477.85

Four hundred seventy-seven and 85/100 DOLLARS

National Bank of Maine

Feed, Fertilizer, Drugs

I.M. Farmer

00210066 770 964076 2121
## Detailed Transactions

<table>
<thead>
<tr>
<th>DATE</th>
<th>NUM</th>
<th>PAYEE</th>
<th>PAYMENT</th>
<th>DEPOSIT</th>
<th>BALANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Oct</td>
<td>1003</td>
<td>Shady Acres Farm</td>
<td>$477.85</td>
<td>2,022.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farm Supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feed for Cows</td>
<td>$105</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feed for Calves</td>
<td>$ 45</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fertilizer for Pasture</td>
<td>$320</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drugs for cows</td>
<td>$ 7.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shady Acres Farm  
1003  
DATE 10-1-10  

PAY TO THE ORDER OF Farm Supply $477.85  
Four hundred seventy-seven and 85/100 DOLLARS  
National Bank of Maine  

Feed, Fertilizer, Drugs I.M. Farmer  
00210066 770 964076 2121
Farmers Tax Guide

Accounting Methods

- **Accrual** – Most businesses
  - Record income in the year earned
  - Record expenses in the year debt is incurred
  - Inventory must be included

- **Cash** – Farm businesses
  - Record income in the year received
  - Record expenses in the year debt is paid
Business Analysis

Knowing where your business is!

Directing where you want it to go!
Business Analysis

- Types of Financial Analysis
  - Comparative
  - Projected
## Cash Flow

<table>
<thead>
<tr>
<th></th>
<th>January</th>
<th>February</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle Sales</td>
<td></td>
<td></td>
<td>$3,500</td>
</tr>
<tr>
<td>Meat Sales</td>
<td>$1,000</td>
<td></td>
<td>$500</td>
</tr>
<tr>
<td>Manure</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,100</td>
<td>$100</td>
<td>$4,100</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed</td>
<td>$100</td>
<td>$400</td>
<td>$400</td>
</tr>
<tr>
<td>Hired Labor</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
</tr>
<tr>
<td>Vet/ Medicine</td>
<td>$100</td>
<td></td>
<td>$50</td>
</tr>
<tr>
<td>Repairs</td>
<td>$25</td>
<td>$50</td>
<td>$75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$425</td>
<td>$650</td>
<td>$725</td>
</tr>
<tr>
<td><strong>Income - Expenses</strong></td>
<td>$675</td>
<td>-$550</td>
<td>$3,375</td>
</tr>
</tbody>
</table>
Farm Finance Scorecard

- Liquidity
- Solvency
- Profitability
- Repayment Capacity
- Financial Efficiency
If you don’t keep records...

...You can’t tell if you are making progress or falling behind in your agriculture enterprise.
Question

- What do you market?
  1. Live animals
  2. Product: Meat, milk, cheese, eggs, etc.
  3. Service / training
  4. Nothing yet
“Knowledge of production without effective marketing usually will not bring rewarding returns.”
Factors That Influence Marketing

- Variable Demand
- Market Knowledge
- Transportation / Handling
- Information
- Market Access
Price Discovery
“Going Price”

- USDA Livestock & Field Crop Reports
  [http://www.ams.usda.gov/AMSv1.0/lsmnpubs](http://www.ams.usda.gov/AMSv1.0/lsmnpubs)
- Organic
  [www.mofga.org](http://www.mofga.org) ➔ Publications ➔ Organic Price reports
- Country Folks. New England Farm Weekly
  [www.countryfolks.com](http://www.countryfolks.com)
- Informal Network

- Species
- Sex
- Grade
- Frame size
- Muscling
- Location
- Time
Types of Markets for Livestock and Livestock Products

**Livestock**
- Farm Sales
- Livestock Dealers
- Slaughter House / Meat Packer
- Auctions
- Cooperatives
- Specialty

**Livestock Products**
- Indirect
  - Wholesale
  - Broker
  - Restaurant
- Direct
  - Farm sales
  - Farmers’ Markets
  - Internet sales
  - CSA – Buying clubs
Marketing Plan

Market Research
- Who
- Price
- Quantity

Evaluate Competition

Marketing Tips
1. Target Market
2. Educate Customers
3. Price Product for Market
4. Market for Quality
5. Practice Good Customer Service
Slaughtering Livestock & Selling Meat

- Can sell live animal without inspection
- Can then be slaughtered at custom-exempt slaughter facilities if for home use only
- AKA - Freezer Trade

- Meat sold in Maine must be from USDA or Maine inspected plants

Poultry
- On-farm slaughter for direct to consumer sales
- Less than 1,000 birds/yr
- Not many options for inspected poultry slaughter
Educating Freezer Trade Customers

- Beef and Pork Whole Animal Buying Guide-PM2076, Iowa State
- Free online at
- https://www.extension.iastate.edu/store

1,200# steer

732# carcass
61% of live weight

491 lbs. Meat
76% of Carcass weight
Eggs

- No license or inspection if less than 3,000 birds
- Regulations
  - Name, address and zipcode
  - Eggs in carton must match labeled grade, size & color
- Encouraged
  - Product liability insurance
- If reusing cartons
  - Obliterate USDA shield and other info that doesn’t match eggs in carton
- Must state that refrigeration is required
  - Must be stored and transported at 45 degrees or less
Value Added Foods

- ME Dept of Ag – Division of Quality Assurance & Regulations
  - Specialty food business (also FDA & USDA)
  - Home Food Manufacturing Sanitary Facilities
    - Potable water
  - Food protection
  - Labeling
  - Mobile vendors license

- UMaine Extension
  - Recipe analysis
  - Processor License
    - HACCP training
  - Recipe to Market

- Northeast Center for Food Entrepreneurship
  [Website](http://www.nysaes.cornell.edu/necfe)
# Reasons Why Customers Buy at Farm Direct Markets

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value for Money</td>
<td>44%</td>
</tr>
<tr>
<td>Locally Grown</td>
<td>77%</td>
</tr>
<tr>
<td>Freshness</td>
<td>77%</td>
</tr>
<tr>
<td>Help Local Farmer</td>
<td>73%</td>
</tr>
<tr>
<td>Quality</td>
<td>73%</td>
</tr>
</tbody>
</table>
## Finding Farm Direct Markets

<table>
<thead>
<tr>
<th></th>
<th>Farmers Market</th>
<th>Farm Stand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>Newspaper</td>
<td>23%</td>
<td>39%</td>
</tr>
<tr>
<td>Roadside Sign</td>
<td>24%</td>
<td>50%</td>
</tr>
<tr>
<td>Word of Mouth</td>
<td>17%</td>
<td>46%</td>
</tr>
<tr>
<td>Radio &amp; TV</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>
“Instead of throwing our product away at the auction and supporting a bunch of middlemen, we’re doing all of those steps ourselves.”

--Lydia Ratcliff
Vermont Quality Meats founder

The Vermont Quality Meats marketing cooperative put $100,000 to $150,000 extra profit into the collective pockets of its member producers in less than a year.

http://www.vtqualitymeats.com/
Direct Sales of Livestock Products

- Good people skills
- Location
- Customers
% Households with Computer & Internet Connections


Oct. 97  Dec-98  Aug-00  Sep-01  Oct-03  Oct-07  Oct-09

Computer  Internet  Broadband
E-Newsletters

- Piscataquis / Penobscot Farming Newsletter - sent monthly
- Statewide Beef Information Newsletter - determining interest
- Farm Scoop – Cumberland/Andro/Sag Counties – sent monthly

Sign-up at:
dana.rickman@maine.edu

Sign-up at:
Please Complete the Evaluation