Oregon StateUniversity

## RECORD KEEPING FOR FARM BUSINESS DECISION-MAKING

Center for Small Farms \& Community Food Systems

Small Farm School, December 3rd, 2020
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## KEY RECORDS FOR BUSINESS DECISION-MAKING

- Sales Records/CSA Distribution Records
- Yield Records
- Labor Records

How much of each product did you sell through each of your different market channels?

## How are sales records useful?

- Deciding what to produce based on historical sales
- Deciding on what to put into CSA share
- Use for estimating yield

Ideas for record keeping...

- Direct to Restaurant/Retail Sales + Wholesale Sales
- Use invoicing systems
- CSA
- Record weekly share amounts
- Farmers Market and Farm Stand
- POS systems?
- Starting inventory, ending inventory


## Sales by Item Summary

## Using QuickBooks for Sales Records

January 1 through August 26, 2013


Using QuickBooks Reports for Sales Records


Sales by Customer Detail
September 6, 2013

## Using QuickBooks for Sales Records

Report Based on Invoiced Items

| Date | Share Item | Quantity per Share | Unit |
| :---: | :---: | :---: | :---: |
| Oct 26th | Lettuce | 2 | heads |
| Oct 26th | Radish, Daikon | 1 | lbs |
| Oct 26th | Onions | 1.5 | lbs |
| Oct 26th | Kale, Lacinato | 1.5 | lbs |
| Oct 26th | Beets | 2 | lbs |
| Oct 26th | Broccoli | 4 | lbs |
| Oct 26th | Pumpkins | 8 | lbs |
| Nov 2nd | Escarole | 2 | heads |
| Nov 2nd | Potatoes | 3 | lbs |
| Nov 2nd | Leeks | 2 | lbs |
| Nov 2nd | Chard | 1.5 | lbs |
| Nov 2nd | Carrots | 1.5 | lbs |
| Nov 2nd | Kohlrabi | 2 | lbs |
| Nov 2nd | Winter Squash, Delica | 5 | lbs |
| Nov 9th | Radicchio | 2 | heads |
| Nov 9th | Fennel | 2 | lbs |
| Nov 9th | Onions | 1.5 | lbs |
| Nov 9th | Collards | 1.5 | lbs |
| Nov 9th | Beets | 2 | lbs |
| Nov 9th | Rutabaga | 3 | lbs |
| Nov 9th | Winter Squash, Acorn | 4 | lbs |
| Nov 16th | Escarole | 2 | heads |
| Nov 16th | Turnips, Hakurei | 1.5 | lbs |
| Nov 16th | Leeks | 2 | lbs |
| Nov 16th | Kale | 1.25 | lbs |
| Nov 16th | Carrrots | 1.5 | lbs |
| Nov 16th | Celeriac | 3 | lbs |
| Nov 16th | Winter Squash, Delica | 5 | lbs |

## Pay Attention To:

- Consistent Product Names
- Name, Description
- Unit = Pounds


## Total CSA Crop Amounts

| Date | Share Item | Quantity per Share | Unit | Monday Shares | Thursday Shares | Weekly Total | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct 26th | Beets | 2 | lbs | 54 | 36 | 180 | lbs |
| Nov 9th | Beets | 2 | lbs | 55 | 36 | 182 | lbs |
| Oct 26th | Broccoli | 4 | lbs | 54 | 36 | 360 | lbs |
| Nov 2nd | Carrots | 1.5 | lbs | 53 | 37 | 135 | lbs |
| Nov 16th | Carrrots | 1.5 | lbs | 54 | 36 | 135 | lbs |
| Nov 16th | Celeriac | 3 | lbs | 54 | 36 | 270 | lbs |
| Nov 2nd | Chard | 1.5 | lbs | 53 | 37 | 135 | lbs |
| Nov 9th | Collards | 1.5 | lbs | 55 | 36 | 136.5 | lbs |
| Nov 2nd | Escarole | 2 | heads | 53 | 37 | 180 | heads |
| Nov 16th | Escarole | 2 | heads | 54 | 36 | 180 | heads |
| Nov 9th | Fennel | 2 | lbs | 55 | 36 | 182 | lbs |
| Nov 16th | Kale | 1.25 | lbs | 54 | 36 | 112.5 | lbs |
| Oct 26th | Kale, Lacinato | 1.5 | lbs | 54 | 36 | 135 | lbs |
| Nov 2nd | Kohlrabi | 2 | lbs | 53 | 37 | 180 | lbs |
| Nov 2nd | Leeks | 2 | lbs | 53 | 37 | 180 | lbs |
| Nov 16th | Leeks | 2 | lbs | 54 | 36 | 180 | lbs |
| Oct 26th | Lettuce | 2 | heads | 54 | 36 | 180 | heads |
| Oct 26th | Onions | 1.5 | lbs | 54 | 36 | 135 | lbs |
| Nov 9th | Onions | 1.5 | lbs | 55 | 36 | 136.5 | lbs |
| Nov 2nd | Potatoes | 3 | lbs | 53 | 37 | 270 | lbs |
| Oct 26th | Pumpkins | 8 | lbs | 54 | 36 | 720 | lbs |
| Nov 9th | Radicchio | 2 | heads | 55 | 36 | 182 | heads |
| Oct 26th | Radish, Daikon | 1 | lbs | 54 | 36 | 90 | lbs |
| Nov 9th | Rutabaga | 3 | lbs | 55 | 36 | 273 | lbs |
| Nov 16th | Turnips, Hakurei |  |  | 54 | 36 | 135 | lbs |
| Nov 9th | Winter Squash, Acorn | 4 | lbs | 55 | 36 | 364 | lbs |
| Nov 2nd | Winter Squash, Delicata | 5 | lbs | 53 | 37 | 450 | lbs |
| Nov 16th | Winter Squash, Delicata | 5 | lbs | 54 | 36 | 450 | lbs |

Be Sure to Keep Track Of:

- Make-Up Weeks
- Pick-Up Day Switches
- Full Share/Half Share
- Donated Shares
- Products on Rotation


## Weekly CSA Share

 Perceived Value| Date | Share Item | Quantity per Share | Unit | Market Value per Unit |  | Cost per Item |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct 26th | Lettuce | 2 | heads | \$ | \$ 1.75 | \$ | 3.50 |
| Oct 26th | Radish, Daikon | 1 | lbs | \$ | \$ 1.50 | \$ | 1.50 |
| Oct 26th | Onions | 1.5 | lbs | \$ | \$ 1.50 | \$ | 2.25 |
| Oct 26th | Kale, Lacinato | 1.5 | lbs | \$ | \$ 2.00 | \$ | 3.00 |
| Oct 26th | Beets | 2 | lbs | \$ | \$ 1.50 | \$ | 3.00 |
| Oct 26th | Broccoli | 4 | lbs | \$ | \$ 2.75 | \$ | 11.00 |
| Oct 26th | Pumpkins | 8 | lbs | \$ | \$ 1.10 | \$ | 8.80 |
|  |  |  |  |  |  | \$ | 33.05 |
| Nov 2nd | Escarole | 2 | heads | \$ | \$ 2.25 | \$ | 4.50 |
| Nov 2nd | Potatoes | 3 | lbs | \$ | \$ 1.50 | \$ | 4.50 |
| Nov 2nd | Leeks | 2 | lbs | \$ | \$ 2.50 | \$ | 5.00 |
| Nov 2nd | Chard | 1.5 | lbs | \$ | \$ 2.00 | \$ | 3.00 |
| Nov 2nd | Carrots | 1.5 | lbs | \$ | \$ 1.75 | \$ | 2.63 |
| Nov 2nd | Kohlrabi | 2 | lbs | \$ | \$ 1.25 | \$ | 2.50 |
| Nov 2nd | Winter Squash, Delicata | 5 | lbs | \$ | \$ 1.10 | \$ | 5.50 |
|  |  |  |  |  |  | \$ | 27.63 |
| Nov 9th | Radicchio | 2 | heads | \$ | \$ 3.00 | \$ | 6.00 |
| Nov 9th | Fennel | 2 | lbs | \$ | \$ 2.75 | \$ | 5.50 |
| Nov 9th | Onions | 1.5 | lbs | \$ | \$ 1.50 | \$ | 2.25 |
| Nov 9th | Collards | 1.5 | lbs | \$ | \$ 2.00 | \$ | 3.00 |
| Nov 9th | Beets | 2 | lbs | \$ | \$ 1.50 | \$ | 3.00 |
| Nov 9th | Rutabaga | 3 | lbs | \$ | \$ 1.25 | \$ | 3.75 |
| Nov 9th | Winter Squash, Acorn | 4 | lbs | \$ | \$ 1.10 | \$ | 4.40 |
|  |  |  |  |  |  | \$ | 27.90 |
| Nov 16th | Escarole | 2 | heads | \$ | \$ 2.25 | \$ | 4.50 |
| Nov 16th | Turnips, Hakurei | 1.5 | lbs | \$ | \$ 2.50 | \$ | 3.75 |
| Nov 16th | Leeks | 2 | lbs | \$ | \$ 2.50 | \$ | 5.00 |
| Nov 16th | Kale | 1.25 | lbs | \$ | \$ 2.00 | \$ | 2.50 |
| Nov 16th | Carrrots | 1.5 | lbs | \$ | \$ 1.75 | \$ | 2.63 |
| Nov 16th | Celeriac | 3 | lbs | \$ | \$ 2.75 | \$ | 8.25 |
| Nov 16th | Winter Squash, Delicata | 5 | lbs | \$ | \$ 1.10 | \$ | 5.50 |
|  |  |  |  |  |  | \$ | 32.13 |

Keeping Running Tally of Share Value

## Weekly CSA Share Product Cost

| Date | Share Item | Quantity per Share | Unit | Cost per Unit |  | Cost per Item |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oct 26th | Lettuce |  | heads | \$ | 0.92 | \$ | 1.84 |
| Oct 26th | Radish, Daikon |  | lbs | \$ | 1.73 | \$ | 1.73 |
| Oct 26th | Onions | 1.5 | lbs | \$ | 1.45 | \$ | 2.18 |
| Oct 26th | Kale, Lacinato |  | lbs | \$ | 0.97 | \$ | 1.46 |
| Oct 26th | Beets |  | lbs | \$ | 1.24 | \$ | 2.48 |
| Oct 26th | Broccoli |  | lbs | \$ | 2.40 | \$ | 9.60 |
| Oct 26th | Pumpkins |  | lbs | \$ | 0.88 | \$ | 7.04 |
|  |  |  |  |  |  | \$ | 26.32 |
| Nov 2nd | Escarole |  | heads | \$ | 1.01 | \$ | 2.02 |
| Nov 2nd | Potatoes |  | lbs | \$ | 0.78 | \$ | 2.34 |
| Nov 2nd | Leeks |  | lbs | \$ | 0.84 | \$ | 1.68 |
| Nov 2nd | Chard |  | lbs | \$ | 1.09 | \$ | 1.64 |
| Nov 2nd | Carrots |  | lbs | \$ | 1.33 | \$ | 2.00 |
| Nov 2nd | Kohlrabi |  | lbs | \$ | 0.65 | \$ | 1.30 |
| Nov 2nd | Winter Squash, Delicata |  | lbs | \$ | 1.15 | \$ | 5.75 |
|  |  |  |  |  |  | \$ | 16.72 |
| Nov 9th | Radicchio |  | heads | \$ | 1.23 | \$ | 2.46 |
| Nov 9th | Fennel |  | lbs | \$ | 0.98 | \$ | 1.96 |
| Nov 9th | Onions | 1.5 | lbs | \$ | 1.45 | \$ | 2.18 |
| Nov 9th | Collards | 1.5 | lbs | \$ | 0.77 | \$ | 1.16 |
| Nov 9th | Beets |  | lbs | \$ | 1.24 | \$ | 2.48 |
| Nov 9th | Rutabaga |  | lbs | \$ | 1.06 | \$ | 3.18 |
| Nov 9th | Winter Squash, Acorn |  | lbs | \$ | 1.07 | \$ | 4.28 |
|  |  |  |  |  |  | \$ | 17.69 |
| Nov 16th | Escarole |  | heads | \$ | 1.01 | \$ | 2.02 |
| Nov 16th | Turnips, Hakurei |  | lbs | \$ | 1.39 | \$ | 2.09 |
| Nov 16th | Leeks |  | lbs | \$ | 0.84 | \$ | 1.68 |
| Nov 16th | Kale | 1.25 | lbs | \$ | 0.95 | \$ | 1.19 |
| Nov 16th | Carrrots |  | lbs | \$ | 1.33 | \$ | 2.00 |
| Nov 16th | Celeriac |  | lbs | \$ | 1.64 | \$ | 4.92 |
| Nov 16th | Winter Squash, Delicata |  | lbs | \$ | 1.15 | \$ | 5.75 |
|  |  |  |  |  |  | \$ | 19.64 |

Keeping Running Tally of Share Costs

Note: These costs are not based on actual farm data.

How much of a crop was harvested from what amount of space?

How much could have been harvested?
How much of the harvested crop was marketable? How much was left unsold?

How are yield records useful?

- Decisions about how much to plant to achieve sales plan

Ideas for record keeping...

- Estimate based on sales records + space planted
- Sampling cull rate
- Sampling harvest amounts
- Eye-balling + estimating crop potential

What is the birthing rate for an animal?
What is the death rate (pre and post weaning)?
What is the replacement rate for breeding livestock?
How many animals were harvested?
What carcass weight can you expect relative to live weight?
What yield of cuts can you expect?

How are livestock yield records useful?

- Decisions about how many breeding animals to achieve sales plan

Ideas for record keeping...

- SWGLA Yield and Margin Calculator
- The Butcher Kept Your Meat

What are the labor activities required to produce a crop or raise and animal?
How long does each activity take?
How often does it happen?

How are labor records useful?

- Awareness of inefficiencies/opportunities to improve
- Decisions about production changes and investing in tools/equipment
- Setting expectations/goals and planning the workday


## Ideas for record keeping...

- Do time studies to determine activity rates
- Focus on occurrences for key activities

| Labor Activity | Min | Oty | Unit | Standard Rate |
| :---: | :---: | :---: | :---: | :---: |
| Mowing | 21 | 400 | bed ft | 5.3 min/100 bed ft |
| Disking | 14 | 400 | bed ft | $3.5 \mathrm{~min} / 100 \mathrm{bed} \mathrm{ft}$ |
| Spading | 15 | 300 | bed ft | $5 \mathrm{~min} / 100 \mathrm{bed} \mathrm{ft}$ |
| Spreading | 13 | 300 | bed ft | $4.3 \mathrm{~min} / 100$ bed ft |
| Tilling | 36 | 1200 | bed ft | $3 \mathrm{~min} / 100 \mathrm{bed} \mathrm{ft}$ |
| Direct Seeding | 14 | 900 | row ft | 1.6 min/100 row ft |
| Transplanting | 60 | 360 | plant | . $17 \mathrm{~min} / \mathrm{plant}$ |
| Drip Header In/Out | 12 | 3 | bed | 4 min/bed |
| Drip Tape In/Out | 31 | 1500 | row ft | 2.1 min/100 row feet |
| Drip Prep to Run | 17 | 1500 | row ft | $1.1 \mathrm{~min} / 100$ row feet |
| Row Cover In/Out | 90 | 300 | bed ft | $30 \mathrm{~min} / 100$ bed ft |
| Row Cover On/Off | 18 | 200 | bed ft | $9 \mathrm{~min} / 100 \mathrm{bed} \mathrm{ft}$ |
| Cultivate | 54 | 1500 | bed ft | 3.6 min/100 bed ft |

Records represented here are for example purposes only. Not based on actual farm data.

## TIME STUDIES TO STANDARD RATES

| Harvest | Min | Oty | Unit | Units/Hour | Min/Unit |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Arugula | 60 | 15 | lbs | $15 \mathrm{lbs} / \mathrm{hr}$ |  |
| Beets (tops off) | 90 | 300 | lbs | $200 \mathrm{lbs} / \mathrm{hr}$ |  |
| Beets (tops on) | 120 | 100 | bu |  | $1.2 \mathrm{~min} / \mathrm{bu}$ |
| Broccoli | 70 | 280 | lbs | $175 \mathrm{lbs} / \mathrm{hr}$ |  |
| Carrots (tops off) | 150 | 600 | lbs | $\mathbf{2 4 0} \mathrm{lbs} / \mathrm{hr}$ |  |
| Carrots (tops on) | 100 | 50 | bu |  | $\mathbf{2 ~ m i n / b u}$ |
| Kale | 120 | 75 | bu |  | $1.6 \mathrm{~min} / \mathrm{bu}$ |

## Start Small

## GETTING INTO A RECORD KEEPING HABIT

Figure Out the Specifics:
What, Who, When, How, Where
Use Triggers/Visual Cues/Prompts
Piggy-Backing and Pairing

Ask to Be Held Accountability

## EXERCISE

I. Choose one record you want to start keeping now or next season.
2. What will you use the information for?
3. Exactly what information will you write down or record?
4. How will information get recorded? With pen and paper? On a spreadsheet? Phone? What materials to do need to gather/buy?
5. Where will your record keeping system live? Where will it happen?
6. When will this record keeping happen?
7. Who will be responsible for doing it?
8. What triggers, or cue wills help you remember to keep this record?
9. Will keeping this record be paired with any other activities?
10. Who will you ask to hold you accountable?

## RESOURCES

## Quickbooks:

Blackthorn Bookkeeping - Kellee Boyer Small Farm School Presenter
Cornell Small Farms: Quickbooks for Farmers
Julia Shanks Food Consulting

## POS:

Modernizing Your Farm Sales with Mobile Point of Sale Systems - GrowNYC

## Books on Habits:

Better Than Before: Mastering the Habits of Our Everyday Lives by Gretchen Rubin Atomic Habits:An Easy and Proven Way to Build Good Habits and Break Bad Ones by James Clear Tiny Habits: The Small Changes that Change Everything by BJ Fogg
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