

New Morning Farm Crop Managers' Tasks

Crop Monitoring

You should be the one most informed and most in control of your crop. You will make the biggest difference in the success or failure of your crop. This means COORDINATING with many people - crew leaders for scheduling/general guidance, field manager for planting schedules/locations, pest control manager for pest and disease scouting, irrigation managers for soil moisture, cultivators for weed control. Refer to the crop folders for insight gained from previous crop managers, and TAKE NOTES and add them to the folder through out the season/end of the year. Find out who on the crew has managed your crop before and ask for their guidance. If you have questions, ASK - managing a crop is intensive. We expect that you will have autonomy in management of your crop, but we don't expect that you will know everything you need to know at any given time.

Be aware of the location of each planting of your crop and monitor it while it's growing in the field. You should physically go and look at your crops several times a week, especially right after they have been transplanted/or have germinated. Look at the entire stand of a crop, not just in one place. Things to look for:

- 1. Germination:** Is it a good stand? If the crop was transplanted, are there any signs of shock? Were transplants adequately watered in?
- 2. Weed pressure:** If you notice weed pressure that is significant enough to potentially compete with the crop, let the crew leader know about it.
- 3. Pest problems:** Crops are especially vulnerable when they are small. Look for holes in the leaves, bugs, leaves entirely bitten off by a larger animal, etc. Let the crew leader and pest control manager know IMMEDIATELY if you see a problem. ASK FOR GUIDANCE about what to look for - the faster we deal with a problem, the less damage will be done overall.
- 4. Plant growth:** How do plants generally look? Are they healthy? Yellowed? Are they flowering or starting to fruit? How is the fruit developing? (Ex. Is the basil starting to flower? It's time to top it.)
- 5. Schedule and lead special practices in the field:** At times it will be necessary for the crop manager to do something to the crop, such as pulling flower stalks off rhubarb, topping Brussels sprouts, covering/uncovering cucumbers with remay, etc. Know the special procedures for your crops and schedule with the crew leader when things need to get done.
- 6. Variety differences:** Take special note of differences between varieties of your crop. Is one more disease/pest resistant? Does one yield more? Etc.
- 7. Soil Moisture:** Different crops have different water needs depending on where they are in their life cycle. Know what these are and stick your hand in the dirt to see what's going on. Coordinate with irrigation managers if you notice patterns/changes in your crop.

Projections and Inventories

Check field conditions. How is the crop growing? Monitoring the weekly growth of a crop will help you estimate when the crop will be of harvestable maturity. However, SEASONAL and CLIMATIC DIFFERENCES will impact how fast your crop will grow or ripen.

Set timing of harvest. When will the crop be ready to pick? When will other generations of the same crop be ready to pick? Will waiting to harvest something cause a glut down the line? Do we have the crop in storage, should we postpone harvesting if possible? If you are harvesting for sale to TOG, what are TOG standards for the crop? What are market standards for the crop?

Estimate harvest amounts. Until you become familiar with a crop, estimating harvest amounts are difficult. First you should look at the entire stand of a crop; will all parts of the stand yield an equal amount, or are there places where the crop is thin or has been damaged? It can be helpful to divide a stand into segments, estimate how much will be harvested from a segment, and extrapolate from that. Try picking a small amount of the crop to get a feel for how much it takes to fill a box. What is the weather going to be like? Cloudy, cooler weather means slower growth, while hot weather means the opposite. Keep in mind quality standards and “the cull factor” when estimating harvest amounts - a portion will invariably be tossed out.

Projections. Estimating harvest amounts leads to projecting how much of a crop will be available for market and/or TOG. Each crop manager is responsible for making TOG projections and submitting them to the Produce Manager (Shirley). Don't make the Produce Manager come find you or make your projections for you!!! You can update projections later (and should IMMEDIATELY if there are any severe changes (e.g. the deer ate half the lettuce last night), but it is important to give TOG a general idea of what we have to offer. When projecting for TOG, always factor in what will be needed for markets. WE SATISFY MARKET NEEDS BEFORE OFFERING TO TOG. Fulfilling the TOG commitment for your crop is secondary to fulfilling market needs.

Record quantity harvested. Keep a record of amount harvested throughout the season. This information is needed for market planning and yield information. Having a record will also make estimating harvest amounts easier.

Keep track of storage amounts. Crop managers should know how much of each of their crops is in the cooler at any given time. This includes factoring in usable returns from markets.

Report to the Produce Manager. Don't give information directly to TOG. The Produce Manager will communicate with TOG. If you need to update or change a projection or offer, ask the Produce Manager to call TOG for you. It is very important to keep TOG updated to changes in produce availability. If they are aware of changes, TOG can sell more produce or supplement our offer with produce from other growers. Work with the Produce Manager and Assistant Produce Manager to keep crops organized in coolers. This means rotating your crop so that the older dates will be in front/used first. The coolers are in a constant state of dynamic chaos. ASK if you are not sure where your crop is or where you should put it.

Harvest Management

Determine the amount of crop to be harvested PRIOR to harvest day. On Thursday or Friday, give the crew leaders a list of your harvests for the coming week - and include what day, how many people, and how many hours you think you will need. This means checking the coolers for any existing inventory, adding up what you will need for markets based on RMI amounts, and any TOG offers that you will make. Scheduling an appropriate harvest day means making sure that you will have the correct amount of inventory in the cooler through out the week for pack out for TOG or markets. Work with the produce manager and crew leaders to determine what day you will need to harvest your crop.

Organize harvest equipment. Everything needed for harvest should be ready to go BEFORE the crew is ready. Collect boxes, liners, bags, labels, twist ties, rubber bands, labels, knives, shovels, etc., from the harvest station in the packing shed. Always have extra supplies/boxes. You may want a pallet(s) on the truck to pull off the harvest easily. You may need stickers or labels for crops that are packed in the field (e.g., different varieties of kale).

Organize harvest crew. Determine the best number of people to harvest most efficiently and tell the crew leaders. Give clear harvest instructions to the crew before starting and when additional help arrives: Demonstrate technique, set harvest pace, show examples of size and quality standards.

Check the crew's technique. Make sure everyone is doing a thorough and not missing harvestable crop. Check that the crew is using tools effectively. Make sure the process as a whole is operating efficiently: no one should be standing around waiting to do their part. You may need to readjust roles (ex. You may need to have two people pulling beets and one boxing them, rather than the other way around).

Unloading and storage. The crop manager alone should unload crops and put in the appropriate cooler. Do not have the entire crew walk in and out of the packing shed carrying boxes. This only results in chaos and people standing around. If necessary, chose appropriate number of people to help.

Use crop cost worksheets. Every time you harvest is ideal, aim for at least 5 times during the season per process (e.g. transplanting, picking, bunching, etc.). It is also valuable in comparing the efficiency of different techniques.

Quality Control

Supervise harvest quality.

Monitor handling and storage. Make sure crops are being picked and packed without being damaged. Ensure crop is handled correctly post-harvest - cooled appropriately, stored in the appropriate cooler, etc.

Maintain quality in storage.

Rotate items in storage.

Apply TOG standards. Ensure crops meet size and weight standards and that the correct labeling and packing materials are used.

Record dates on labels. (Julian dates)

Crop Records/Information

Review your crop folder at the beginning of the season so that you understand what information you will need to keep track of. Gather and store more information in this folder (electronically and physically).

Read TOG standards for the crop.

Seek out information about your crop. PSU, Cornell, and various other sources will have useful information. Ask the field manager and crew leaders for guidance.

Complete mini crop reports bi-weekly. Forms will be provided for you to fill out. Ask for them if you don't have any. Give these to crew leaders.