

Welcome to the Market Garden!

This document contains information that you need to know if you are beginning as a volunteer or intern. First, the important things:

1. The bathroom is in the middle of Extension Center building complex. Please remember to wash your hands.
2. The water in the packing shed is potable water. The water in the greenhouse is not potable. Drink water often.
3. Raoul Adamchak is the Market Garden Coordinator. He manages the Market Garden, but he has lots of help. First and foremost, there are student employees and a graduate student teaching mentor. They have worked here for a long time and know what's going on. If you have questions and you can't find Raoul, you can always ask them and they can help you. Next, if you are part of the PLS 49 class, there is a TA for class, who also knows what's going on. There are pictures for all of these folks on the Most Wanted Board in the packing shed for easy recognition.
4. The Market Garden is open for work from 8 am to 12 noon, Monday through Friday.
5. After you read this Welcome document, you need to read our safety training and sign it. Everybody needs to do this when they first come out, and once each year thereafter.

### **The Purpose of the Market Garden, Production, and Schedule**

The purpose of the Market Garden is to provide a place where students can get hands-on experience in agriculture. It is a working farm (in more ways than one). We have a CSA (Community Supported Agriculture project, a subscription produce service) that serves 70 members of the campus community. The CSA is a great learning tool because it allows the students to grow a wide variety of vegetables and fruits. It also helps to raise funds for the Student Farm to help buy supplies, equipment, have events, and fund student employees. Students also learn about running a CSA, which is a form of direct marketing. Our harvest days for the CSA are Mondays and Thursdays. It usually takes us all morning to complete the harvest.

We also sell produce to the Coffee House and the UC Davis Dining services. This helps provide fresh, local food to UC Davis students, and gives students a sense of the standards and practices required to sell produce at the retail level. Harvest for the Dining Services is usually on Monday and Thursday. Harvest for the Coffee House is on Tuesday.

In the Spring and Fall we participate in the farmers' market that is held on campus on Wednesdays. Here students have the opportunity to develop the skills to sell produce directly to the consumers.

On Tuesdays, Wednesdays and Fridays we work on all the other activities required to run a farm. We prepare ground for planting, sow seeds in the greenhouse or in the field, transplant, irrigate, fertilize, mulch, cultivate, and manage pests.

We have a greenhouse in the Market Garden where we propagate seedlings to transplant in the field and grow plants for food production. Extra care and attention needs to be given to

pants in the greenhouse in order to produce healthy, vigorous seedlings. Students who are interested in greenhouse activities must be at the farm on Tuesdays, Wednesdays, or Fridays.

### **Tools**

If you are going to work on the farm, you will be using tools. Some tools are kept in the *packing shed* (which is where we wash and pack the harvest from our fields). These include harvest knives, clippers, and trowels, which are all kept on the board located on the north side of the packing shed. Return these tools to their place after you are done using them. The clippers and knives are often sharp (or needs to be sharpened), use them carefully. There is also a crescent wrench hanging on the north wall, an all-purpose tool, as well pliers and screwdriver located in the metal cabinet on the west wall.

Shovels, forks, hoes and rakes are in the *storage shed* located east of the packing shed. They are on the hooks on the west wall. Please return them to their homes when you are done using them. The storage shed also contains rubber boots for use when the ground is wet, as well as rain coats. Floating row cover, which we use to protect crops in the field from rabbits and frost, is also kept in the storage shed.

The big tools, tractors and the implements that go on them, are located at the *shop*, which is at the west end of the Extension Center Drive. Students who make a serious commitment to the farm can be trained to operate the tractors. The shop also contains welding equipment, replacement irrigation parts, repair tools, and a workspace for projects. Jason Graff is the Field Operations Coordinator. He manages the shop and provides training for shop equipment and activities.

### **Irrigation**

The crops in the Market Garden are irrigated. We use drip, sprinkler, and furrow irrigation, and there is equipment associated with each type of irrigation. Students are trained to work with each type of irrigation appropriate to the season.

### **Food Motto**

Year-round in the Market Garden there is tasty, fresh nutritious produce. Our motto at the farm is "Them that works, eats." This means that if you are working here, you are welcome to take produce home.

If you are going to work here on a harvest day, please continue reading.

## Packing Shed Orientation for Harvest Days

### Dry erase board

Check the dry erase board on the north wall of the packing shed. The board lists:

- Total number of baskets for Monday and Thursday CSA harvests (top right of board)
- Specific crops to be harvested: an **open circle** drawn next to the crop name indicates that the crop is currently being harvested. A **filled in circle** next to the crop name indicates that harvesting for that crop has been completed, though it may still need to be washed and packed. If you're picking a particular crop, remember to draw the circle and/or fill it in to let others know the progress on that crop.
- Any special instructions for harvesting specific crops
- Notes on crops that have been harvested previously and kept in the cooler or drybox.

### Supplies

Many harvesting and packing supplies are found in the supply cabinet on the west shelf of the packing shed.

Supply or Tool	Where to find
<ul style="list-style-type: none"><li>• Clippers</li><li>• Lettuce/field knives</li><li>• Trowels</li></ul>	On the tool board hanging on the North wall
<ul style="list-style-type: none"><li>• Gloves, latex and garden (not required, only use if wanted for comfort)</li></ul>	Supply cabinet
<ul style="list-style-type: none"><li>• Twist ties</li><li>• Small and large plastic bags</li></ul>	Supply cabinet
<ul style="list-style-type: none"><li>• Boxes and harvesting baskets</li></ul>	Shelves on west wall of packing shed
<ul style="list-style-type: none"><li>• Paper for lining baskets and boxes</li></ul>	Dispenser on north wall of packing shed
<ul style="list-style-type: none"><li>• Shovels</li><li>• Digging forks</li></ul>	Storage shed east of packing shed (key is hung on the wall on the southeast corner of packing shed)

### General points to keep in mind

- Produce and boxes of produce should not be put on the floor at any time. Extra space is available on the tables just outside the packing shed on the north side.
- Try to keep the tables and shelves in the shed clear for incoming produce. As boxes are emptied, fold them up and replace them in the stack.
- Because the packing shed can get crowded, it's usually most efficient to have 2-4 people washing and packing in the shed while others are harvesting in the field.

## Setting up the CSA baskets

- If the CSA baskets are not in the packing shed, they will be tacked next to the Produce Prison (across the street from the Market Garden and next to the Ecological Garden). Also check for baskets that have been left in the Produce Prison.
- Line up the appropriate number of baskets for that day (check the dry erase board) on the shelves on the east wall of the packing shed.
- Remove any leftover produce from the baskets. Remove and discard the used pieces of paper.
- Tear off new paper and line each basket with a sheet.

## Harvesting

Check the dry-erase board for crops that need to be harvested, or harvesting in progress with which someone might need a helping hand.

### Preparing for going out to the field

- If you are harvesting greens, herbs, root vegetables, long leans or other crops that will need to be bunched, count out the number of twist ties you will need (usually the number of CSA baskets for that day). For thinner items, use twist ties cut in half. Some items will be easier to clean if you wash them first and then bunch them.
- Bring one or more boxes or baskets with you to hold what you harvest. Check boxes carefully when you assemble them to make sure the bottom is not going to fall out. For carrying smaller items that may fall through the cracks or with especially soiled boxes or baskets, line the bottom with paper. Baskets may be easier to use for delicate items of which you are gathering a large quantity to be packed in bags, such as fava beans or spinach leaves.
- For smaller items to be picked in large quantities (cherry tomatoes, berries, figs) use the green plastic pint baskets to keep track of the quantities as you pick – for most crops, each CSA basket will get about one of these pint baskets, transferred to a plastic bag. Pint baskets can be carried to and from the field on the large black plastic trays.
- Bring any needed tools with you to the field: clippers, lettuce knives, digging forks, etc.

### Harvesting tips

- *Ask Raoul or others for specific instructions for harvesting each crop, including amounts to be harvest for each basket and the crop maturity/size/color at harvest.*
- A good general rule for greens and other bunched produce is to pick a family meal-sized” portion for each basket.
- In general, look for attractive, healthy, sizable produce with minimal pest, weather, and disease damage.
  - For greens, harvest leaves that are not brown or wilted. Avoid plants that have bolted or gone to seed unless asked to do otherwise. On hot/sunny days greens should be kept in the shade as they are being harvested and moved to a cool, shaded area quickly to avoid wilting.
  - You may want to trim up the ends of individual or bunched produce with clippers as you go, while leaving as much of the healthy, usable portion as possible. Remove any wilted, yellowed, or browned leaves from your bunches. Trim long leek roots and the tips of the leaves, remove the outer browned skin of green garlic, and remove wilted leaves at the base of lettuce heads.

### **Harvesting tips, continued...**

- For broccoli, kohlrabi, and cauliflower, check for firmness and avoid those with oozing dents or rodent/insect damage.
- For tomatoes, eggplants, peppers, etc., check for firmness and avoid produce with soft spots, holes, oozing cracks, sunburn, or blossom end rot.

### **Washing**

- Most root vegetables and greens are washed before packing. Keeping the greens moist also prevents wilting once they are packed. Use the sprayers in the packing shed to gently but thoroughly spray soil and other residues off of produce.
- For some more delicate produce (such as lettuce and spinach leaves), it may work best to fill a basin with water and dunk larger quantities to gently remove soil.
- Allow washed produce to drain on the plastic trays before packing.

### **Packing in plastic bags**

- Pack greens and herbs in bags leaf ends first, then stand the greens upright on the stem ends in the CSA baskets. This helps avoid damage to the greens and pooling of moisture in the bags.
- The leafy green tops of root vegetables may be packed separately with other greens – check with Raoul or others to make sure.
- Remove stems and calyxes before packing tomatoes (they poke each other and cause holes).
- Tie off bags of small items.

### **Packing the CSA baskets**

- Pack baskets carefully to avoid squishing, crushing, or tearing produce.
- After you have packed a particular item, check to make sure that each basket has received the item. If a significant amount is still remaining, add more to each basket if possible.

### **Transporting the baskets to the Produce Prison for pickup**

- CSA baskets should be ready for pickup by 12:00pm at the Produce Prison (across the street from the Market Garden and next to the Ecological Garden).
- For transport, it usually works best to stack 13 baskets in the bed of the mule (3 rows of 3 baskets each on the bottom, with 4 more baskets stacked on top where the baskets meet in the bottom row) and 3 baskets in the front of the mule.
- If enough people are present, a basket passing chain can be formed to pass the baskets from the shed to the mule.

## **Clean up**

After the baskets are packed and transported, clean up the packing shed.

- Remove all produce debris from the wash tank and put in the compost bin just west of the entrance to the packing shed.
- Spray out the wash tank thoroughly to remove soil. Make sure that the drain is not clogged and the water is draining freely.
- Put away all tools in the supply cabinet and the storage shed. Replace unused plastic bags and twist ties.
- Remove debris from and fold down empty boxes, then re-stack them. Straighten up the box stacks.
- Empty the refuse bin under the wash tank into the compost bin outside. Throw away any used paper into the waste bin outside.
- Sweep the floor thoroughly, then wet the floor and squeegee it.