



# Harmony Valley Farm

An update for our Community Supported Agriculture Members - Since 1993

July 10-11, 2015

## Managing Weeds At Harmony Valley Farm

by Kelly Kuester

How do you manage weeds? That is a great question we're often asked and it has a variety of answers depending on the crop, the stage of growth of the crop, the weather conditions, etc. While conventional farmers often use chemical forces in their battle against weeds, we turn to non-chemical methods including mechanical cultivation and flaming. Richard and Rafael keep a close watch over our fields. Richard referred to Rafael as the "Weed Manager". His observations have been extremely helpful in deciding when to cultivate and which implement to use on each crop. The goal is to reduce the weed seed, also known as the 'seed bank' in the soil. Weed seeds can live for 10 – 30 years in the soil, just waiting for the perfect time and conditions to grow. Our job is to remove weeds and not let them produce any more seeds. Below I will summarize some of our equipment, crew and processes that take on the task of keeping the weeds at bay! Make sure you visit our Blog at [www.harmonyvalleyfarm.blogspot.com](http://www.harmonyvalleyfarm.blogspot.com) for lots of pictures to help visualize the processes we use.



If you have ever been to our farm or seen field pictures, you have seen our raised bed fields. Our first line of defense is to reduce the weed seed in the top 2 inches of soil before planting a crop. We try, but do not always have the perfect weather conditions or enough time, to make the beds 2 weeks prior to planting, thus giving the weeds time to sprout. If that happens, we can use the 'Flamer' to burn off the weeds that have sprouted prior to planting. Juan or Rafael have been Richard's go to guys when it comes to flaming our fields. The 'Flamer' is a piece of equipment that takes the propane from the large tank mounted on the implement and through the pipes to create, in essence a flame thrower. Sounds pretty cool right! No, there is no big ball of

flames; it is really just enough heat/flames close to the ground to burn the weeds that are already growing, but can save a huge amount of time and manpower. We can also use the 'Flamer' after the crop is planted but before the plants push through the ground to burn the weeds that are already growing.

Once the crop is out of the ground we lose the option to flame. Now we have to turn to a variety of different cultivating implements for help. This will depend on the crop and how big it is in the field. A good example is our cilantro. It is planted on raised beds in rows of 5 on top of each

raised bed. We use the 5 row 'basket weeder' to loosen the soil and pull out any small weeds that are already growing in the top inch of soil. Rafael has done an excellent job with perfecting his basketing procedures. Rogelio, Ramon and Jose Manuel have also done a great job with the basket weeder.

Last year we purchased an awesome German made K.U.L.T. Kress Cultivator. We refer to this as 'The Kult'. Rafael learned how to operate this implement and has now taught Oscar and Luis how to use it. Weeds growing in the row are a huge problem as they are hard to get

## This Week's Box

**FRESH GARLIC:** It's time to start the garlic harvest! The week's boxes contain fresh garlic, just harvested yesterday! You'll find the cloves to be juicy & mild in flavor. We have not dried it yet so the layers of skin will be a bit tougher and are a little more difficult to remove. Handle with care so as not to bruise the tender, fresh cloves. Store this garlic on the countertop to allow it to dry down.

**RED SCALLIONS:** Fresh scallions store best in a plastic bag in the fridge. Scallions are excellent sautéed with other vegetables in side dishes. Try sautéing thinly sliced scallions & carrots with olive oil, butter, a pinch of sugar and a couple tablespoons of soy sauce.

**BROCCOLI:** Broccoli is delicious when steamed, roasted or sautéed for a quick & simple side dish. You can also add it to your next stir-fry or try David Gingrass' recipe for Caramelized Broccoli with Garlic on [foodandwine.com](http://foodandwine.com)

**SUGAR SNAP PEAS:** Sugar snap peas are nature's candy! Enjoy them raw right out of the bag-the whole pea pod is edible.

**YELLOW BEANS:** Yellow beans are very similar to green beans, the only difference is the color. Beans are delicious when steamed, sautéed, or added to salads. You could also try the recipe for Yellow Wax Beans & Scallions on [101cookbooks.com](http://101cookbooks.com).

**ZUCCHINI OR CUCUMBER:** Most of us think of summer squash as yellow and zucchini as green. However, they are both summer squash & can be used interchangeably! When making exchanges be sure to go by weight, not number of squash. Try the recipe for Summer Squash Gratin with Gruyere and Salsa Verde at [smittenkitchen.com](http://smittenkitchen.com). Store cucumbers in a warmer part of the refrigerator or on the countertop. Wash cucumbers just before use. Cucumbers are great plain as a snack, in salads or sandwiches. Check out our own recipe database for lots of cucumber recipes!

**CAULIFLOWER:** Cauliflower is full of antioxidants & has a high fiber content. It can be steamed or roasted for an easy side dish, or you can make pizza crust out of your cauliflower!

**RED BEETS:** Beets can be roasted, boiled, or thinly sliced raw & added to salads. You could even make a beet pesto! Don't forget to save the greens & stems though, as they are edible and make a great substitute for any green. They can be steamed, sautéed, braised, added to soups and eaten raw.

**FENNEL:** Take a look at last week's newsletter for detailed fennel information. Fennel is also wonderful when tossed with olive oil, salt and pepper and roasted

**GREEN TOP CARROTS:** See this week's vegetable feature for more information.

**SWEETHEART CABBAGE:** This pointed cabbage is mild & sweet and is best eaten raw in salads. It can be added to stir-fries or served with butter and black pepper as a tasty accompaniment to grilled steaks or chops.

to without damaging the crop. This implement, when conditions are good, will help to reduce those pesky weeds in the row. There is one person (Oscar) driving the tractor and another (Luis) steering the implement to make sure the crop does not get pulled out. The Kult has little fingers that come close to weaving together near the base of the crop loosening the soil and 'stirring' out the small weeds. We use this machine with our transplanted brassicas (broccoli, cauliflower, etc). We transplant our brassicas to give them a head start on the weeds, giving them the advantage of being larger than the sprouting weeds. It is way easier to get rid of smaller weeds when our crop is larger and easier to see in the row and the Kult works very well with these crops.

For other larger crops, it makes more sense to bury the weeds with dirt. This is a great option for crops like potatoes or corn. Vicente has learned how to use the Lilliston cultivator with ease. The open steel fingers on this implement pull up the soil between each crop row and push the loose soil around the plant, essentially burying the weeds.

When all mechanical attempts have been applied, we have one more tool: our hands to do hand weeding. This is very time consuming but also necessary in some cases. With carrots or parsnips, both of which have longer germination rates, the weeds generally pop up before the crop. After the field is flamed with the flame weeder and the crop starts coming up, we need to make sure the hand weeding gets started soon. This takes very good eye-hand coordination as well as knowing the difference between the crop and a weed.

I can't stress this enough, but extreme precision while using any of these implements makes the difference between a well weeded crop and not having any crop at all because it was all pulled out or buried. You have to watch the front of the tractor to see where you are going, but also the back to make sure you are not pulling up any plants. Even the hand weeders need to be careful.

Here are some parting thoughts on weeds. Richard estimates that we kill 90 -95% of the weeds in our fields with the above mentioned techniques. Did you know that 1 weed that has gone to seed can produce up to 20,000 seeds and that these seeds can and will be carried by birds and the wind? This means that even though we remove a lot of weeds, we will always have some weeds to deal with on the farm. Did you also know that Mother Nature does not like bare ground? Turns out she doesn't like to be naked! We use cover crops to help with the weeds (and other reasons) since if we don't cover it, she will use the weed seeds in her seed bank to cover herself up. I know we have only touched briefly on the weed subject and there is a lot of information out there we didn't discuss. Rest assured that Richard and Rafael are on top of the weed battle. Discussing when to cultivate, which crops, upcoming weather, which implements to use, should they use fingers, discs, knives or how deep to go when cultivating are just some of the conversations that they have on a daily basis. In the end, we are grateful to all of our cultivating crew for their attention to detail, which allows us to have healthy crops to harvest and eat!

### Vegetable Feature: Green Top Carrots

by Andrea Yoder

Carrots have become a staple item in many American households. We assume most people have their "go-to" ways to use carrots, and seldom ever feature them in the newsletter. After a long winter hiatus, we're happy to see fresh carrots coming in from the field again and thought it is worth mentioning some of the differences between early season carrots and those we harvest in the fall for winter storage.

There are many different types and varieties of carrots, some more well-suited for growing at different times of the season. Right now we're harvesting two varieties of carrots that are classified as "nantes" carrots. They are characterized by being more tender and juicy with a slightly different shape than our storage carrots. They also take fewer days to get to maturity and are often harvested with the tops intact. There are many things you can do with the actual carrot ranging from simply eating it raw to silky smooth soups, shredded carrot salads and (to satisfy the fancy side) even carrot soufflé. The carrot tops, however, are often removed and discarded. But wait...the tops are the bonus, don't discard them!

The green tops of the carrots are edible as well, allowing you to maximize the entire plant. Carrot tops have an earthy "green" flavor with hints of carrot and are actually quite versatile in their uses. They add breadth of flavor to soups or stocks, can be incorporated into stir-fries, and are excellent when sautéed with beet greens along with garlic, onions and a splash of lemon juice or vinegar. You can also blanch the carrot tops and then blend them along with oil, salt and pepper to make a simple sauce for fish, roasted meats or other vegetables. You can also consider dipping the carrot tops into tempura batter for a lacy, tasty fried alternative.....one of Farmer Richard's favorite uses for carrot tops. Finally, as with many other greens they can also be incorporated into pesto, the featured recipe of the week. So, take advantage of these early season carrots and see if you can find some creative ways to utilize the tops and the roots!

We love to hear from our members! Please feel free to email recipe ideas or post your pictures & recipes to our Facebook page!

### Carrot Top Pesto

Yield: about  $\frac{2}{3}$  cups

1 cup lightly packed carrot leaves (stems removed)

6 Tbsp extra-virgin olive oil

1 large garlic clove

$\frac{1}{4}$  tsp kosher or fine sea salt

3 Tbsp pine nuts, toasted

$\frac{1}{4}$  cup freshly grated Parmesan cheese

1. In a food processor, combine the carrot leaves, oil, garlic and salt and process until finely minced.
2. Add the pine nuts and pulse until finely chopped. Add the Parmesan and pulse just until combined.
3. Taste and adjust the seasoning. Use immediately or cover and refrigerate for up to 2 days.

This recipe was borrowed from a beautiful cookbook entitled **Roots**, by **Diane Morgan**. In the introduction to this recipe the author writes: "This recipe is an absolute keeper, and it's satisfying to make use of the whole plant. I serve this as a dip with crudité (fresh vegetables), and often add a dollop on top of bruschetta that has been smeared with fresh goat cheese. It's also perfect simply tossed with pasta."