Dear Albert,

It can be a big challenge to stay on top of your garden, with work, children’s soccer games, and all of life’s obligations. I find it helps if I head straight to my garden when I get home from work. Just TEN minutes a day of attention can make a huge difference in how your garden looks. When you are up-close-and-personal with your garden on a daily basis; you will notice weeds popping up, insects munching, or when it is time to harvest something for supper. If you sit down to drink a beer or a cup of tea, make a phone call, or get on the computer ~ suddenly your window of opportunity disappears and it is time to fix dinner or help the kids with their homework.

The simple hoe is one of my favorite all-around garden tools for getting the job done quickly and efficiently. Hoes can be used to accomplish many garden tasks, and they allow you to work while (mostly) standing upright. That is a major plus in my book, because it is a lot easier on your back than bending over. In a smallish garden, even five minutes of hoeing daily will keep you ahead of the game.

How you hold your hoe makes all the difference. That typical back-bent, two thumbs down position is what gives hoes a bad name; it’s a position that wears you out quickly, stresses your back, and should be avoided. For energy-efficiency, hold your hoe like you would hold a broom (both thumbs facing up). Stand up straight. Keep the hoe relatively close to your feet, and wear close-toed shoes just in case. Keep the hoe blade more or less parallel with the soil surface, entering the soil just enough to undercut the weeds and break the soil surface. It may feel funny at first, but practice this position until you get used to it. Develop a rhythm of moving down the row, hoeing between the plants and alongside the plants without disturbing their roots. If you are like me, you will love the difference (compared to the hacking-style hoeing), and may decide that hoes rate among your top five garden tools. The bottom-thumb-up/top-thumb-down/standing-up-straight position works well for incorporating soil amendments.

People have been using hoes since before recorded history...maybe a bone lashed to a stick. I bought a mini-tiller one time and tried to use it on a fairly compacted garden spot (If you have soft fluffy soil, mini-tillers...
are probably wonderful.) It was loud. It smelled. And it didn’t get the job done very quickly. I put the tool down in disgust, thinking “I could do this faster with a hoe!” **Hoes are very sustainable.** They don’t require fossil fuels. You don’t have to know anything about small engine repair, or the magic words to utter to get it started, and they don’t spew exhaust. They are quiet, non-polluting, and develop arm muscles. You could have a temporary setback if your hoe handle breaks. Just replace your handle and you’re back in business.

The other essential tip about hoes ~ they **SHOULD be kept sharp.** This is just as important as holding the hoe correctly. Many hoes don’t come with a sharp blade, but you can sharpen the blade yourself with a couple of files. I do most of the sharpening with a coarse file, and finish up with a fine file. The cutting edge should be the edge closest to the soil when holding the hoe like a broom. Stationary grinders are awesome for sharpening hoes; but they are dangerous and must be used with **extreme caution** while wearing safety glasses ~ as they will snatch the hoe right out of your hands and send it flying off in some unpredictable direction. If you do use a grinder, finish the job with a fine file. **Carefully** keep feeling the edge of the hoe blade to determine whether you have achieved the desired sharpness. If you are planning on doing lots of hoeing, keep the file in your back pocket and re-sharpen the hoe as needed.

**A few jobs you can accomplish with a hoe and without bending over:**

- Weeding
- Cultivating
- Hilling up potatoes
- Loosening soil
- Incorporating soil amendments
- Trenching a row to direct-sow seeds
- Making a raised bed area within your garden
- Mapping out your garden

One of the main uses for hoes is **weeding and cultivating.** Any garden book will recommend weeding regularly and early, before the weeds get big. Learn to recognize your main weeds and hoe them out as they are sprouting and tiny ~ when the work will be easy. If you wait until the weeds get big, it will be a back-breaking task and could require a jack-hammer. Learn how your garden plants look when they are just emerging so that you don’t accidentally eradicate them! Hoe as shallowly as possible and still accomplish your weeding job. That way, you will minimize the number of weed seeds that you bring to the surface that could potentially germinate. My main weeds are morning glory and amaranth. Right now I can hoe the morning glories out - root and all - with ease. If I fall behind, in no time the morning glories will be climbing up every plant in my garden.

**Cultivating with a hoe** breaks the soil’s crust and **allows the soil to be receptive to air and water.** This is **at least as important as the weeding.** Our clay soils quickly crust over following a rain (note the un-hoed portion of the garden in the photo). This crust acts as a barrier to oxygen and water reaching the plant roots. When I was farming, I spent many days hoeing. This gave meaning to the term "long row to hoe", but I consistently observed noticeable positive results following hoeing. The plants seemed to grow overnight and visibly look more vigorous (the plants actually kind of glowed, plants DO love attention.)

There are many different **hoe styles** – mine is just a cheap, regular old hoe...but it works as long as you sharpen it. I have lusted after some of the heavy "Italian" style hoes for sale at the OGS Spring Conference. Elliot Coleman designed a lightweight, very sharp hoe called the collinear hoe that is perfect for small weeds. Its long rectangular shape allows you to get very close to a plant without damaging it. Many people prefer stirrup hoes. They come in different widths, are the shape of a stirrup attached to a handle, and work with a push/pull action. I have tried a number of hoes and I do have personal preferences, but each gardener will
have favorite hoes that work best for them. If you like the look of a hoe, get a feel for how it will work by handling it before you buy it. If you like the test-drive, it may become a favorite garden tool.

**Mulching** is another effective method to prevent weeds and to keep the soil surface crust-free. So why hoe? Unless you have a free source of mulch, you will spend money purchasing it, which can be expensive for people with large gardens. You can mulch your potatoes heavily, in lieu of hilling them up. I do a little bit of both since my potatoes are planted closer together than is recommended. I hill them up for as long as I can (dirt is free!). When the plants get too big to allow me easy access with my hoe, I mulch my potatoes for the remainder of the season. What works best for you in your garden, within your time constraints, is the most important factor to consider.

"[Peter] went back towards the tool-shed, but suddenly, quite close to him, he heard the noise of a hoe – scrr-ritch, scratch, scratch, scritch...The first thing he saw was Mr. McGregor hoeing onions."

~ From *The Tale of Peter Rabbit*, by Beatrix Potter, 1902

Thanks for writing Albert,
Ruth

Gardeners: Got a question for Ruth? Email it to us enews@organicgrowersschool.org

**Ruth Gonzalez** is a former market farmer, avid gardener, local food advocate, and founder of the Tailgate Market Fan Club where she blogs at [http://tailgatemarketfanclub.wordpress.com](http://tailgatemarketfanclub.wordpress.com). In her job at Reems Creek Nursery, Ruth offers advice on all sorts of gardening questions, and benefits daily from the wisdom of local gardeners.

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**CRAFT 2011**

**A Great Start to 2011 CRAFT Season**

CRAFT farmers and interns united for the first time in 2011 at Full Sun Farm to discuss planning, recordkeeping, and greenhouse maintenance. Full-time farmers Alex and Vanessa talked about everything greenhouse- from misting systems to weed barriers, and how to schedule your seed sowings. New and seasoned farmers alike peppered them with questions and everyone seemed to walk away with something new to take back to their own farm. As founding members of CRAFT-WNC, the folks at Full Sun Farm do a bang-up job of kicking off the CRAFT season. Next month, we’re off to Sweet Earth Flower Farm to learn about basic cut flower production and management. Meantime, if you want to grab up some of Full Sun Farm’s vegetables or flowers, you can catch them at the North Asheville Tailgate Market at UNCA on Saturday Mornings. [www.fullsunfarm.com](http://www.fullsunfarm.com)

**NEWS BITS**

**Business Classes**

WNC Green Industry News blogspot announces classes for your business. [Click here for details.](https://www.mynewsletterbuilder.com/email/newsletter/1410844385[11/18/16, 12:30:47 PM])

**Workshop Opportunity**

Interested in learning more about the variety of natural nutrients available for plant production? Madison County Cooperative Extension will host a workshop entitled "Natural Nutrients". We will provide an overview of cover crops, compost, manures and commercial organic amendments. This free workshop will be held on Tuesday, May 10 from 5-7pm at the Madison County Cooperative Extension office in Marshall. We ask people to pre-register by calling 649-2411.
Farmer's Corner: Ask Tom

Dear Tom –

I injured my knee right at the beginning of transplant season. I can drag myself along the ground with a seedling tray but that’s really slow. Do you have any suggestions for a mechanical transplanting aid?

Thanks

-- Moses in Curtis Creek

Dear Moses –

In the early days of our farm, our production was low so transplanting was a minor task. As our production grew and before we hired a crew it could take me a full day each week. I found that I could work quickly for a couple of hours but then my pace slowed as my back pains increased.

I checked out mechanical devices to help with this task. Our farm still is small scale so we use a walk-behind tractor which does not offer a transplant attachment as far as I know. I found a device powered by foot pedals with very low bicycle gearing which straddled beds for strawberry harvest. There were also four-wheeled carts for weeding where the operator lays face down over the bed on a bed frame-like device. The strawberry machine was several hundred dollars which we could not afford at the time and the face-down posture did not seem practical for transplanting.

Our solution in the picture below was intended to help us transplant longer. The operator sits on the center platform facing the tray of transplants. The operator’s weight is borne by two wheelbarrow tires and one foot rests gently in each of the adjoining beds. From one location I can easily reach about twelve transplant sites – six to the left and six to the right. When those holes are filled gentle pressure rolls the device forward to the next set of twelve holes. I place transplant trays ahead in the bed so as I run out of starts, the next tray is nearby. When that row is complete, I move to the next one. If your field has any slope, pointing downhill helps. The landscape fabric also helps but I have used this device on bare soil also.
While the machine was a little slower than I was in my first twenty minutes or so of transplanting, it allows me to keep going longer and finish transplanting when conditions are right.

I cannot recall the cost but wheelbarrow tires are readily available at hardware stores. The two axles are large bolts and rest is scrap lumber. It took a few hours to assemble. The total cost including labor is probably less than $100. For comparison purposes, here is a tractor-mounted transplanter, which costs $2,000 - $5000 (new). Used tobacco setters are likely to be much less.

Our machine might be a little awkward with a stiff knee but probably will be an improvement on the plant and drag method that you described. Let me know if you want to take it for a test drive. With a larger crew now, our transplanting usually is done in less than an hour. So the machine spends a lonely life in the packing shed most of the time.

I hope you heal quickly. Thanks for your question.

-- Tom