Practical Advice from Successful Farmers – Alliums Q & A

Host – Patrick Byers, MU Extension

Guest – Curtis Millsap, Millsap Farm

Curtis - First question – What is the best way for a home gardener to store onions?

Curtis - Onion storage for home gardeners depends on how long you want to hold them.

A really cool traditional way to store them is braiding the onions. For braiding, rather than letting them dry down completely, what we typically do, and we do mess around with braiding them occasionally just for fun, we let them wilt until the leaves are kind of soft, you know, the leaves are still pliable. If you let them dry down fully, they'll get crispy. Then you can braid them There are all sorts of cool patterns you can make.

Essentially what you're doing is adding an onion every time there's space to do so. You braid them and then you hang them. You can hang them in your kitchen at room temperature and they'll hold really well. We've had braids of onions hold for months around our place just for fun.

Something to mention about that. You always get some spoilage. With any storage system, you're going to get some spoilage. So, you do have to pay attention. If you walk into the kitchen and there's a strange smell, you might check your onion braids 'cause there's nothing that smells quite like a rotten onion.

But those work well. If you want to get a little longer lifespan, then you might put them in a basket in a lower cabinet where it's going to be a little bit cooler.

They'll last longer at 60 - 65°. If you want, you can put them in something like a garage, but you certainly don't want them to freeze. Freezing is going to ruin them. So you want them to be above freezing.

The problem is you're harvesting them in the summer and then trying to hold them. So it's better usually in the house if you don't have a cool storage space to put them in. The key thing is really good curing, getting them really nice and dry before you enclose them in anything. So if you're going to put them in the cabinet, for example, you would want to lay them out on a screen or out on the porch. Not necessarily in direct sun, but where it's warm, where there's going to be some breeze moving through to dehydrate those tops as much as possible and you should have a nice tight couple layers of onion wrappers.

Patrick - Another question - for side dressing, is chicken manure a good option? Does it need to be aged? If so, for how long?

Patrick - The answer is yes, it can be a good option, but it needs to be used carefully because manure, whether or not it's aged or fresh, does carry some risk of food borne illness so be cautious. A good rule of thumb is 120 days between when you apply the side dressing to when you harvest the onions. Predict when your harvest day will be and then back up 120 days. And that should give you a good margin of safety.

Curtis - A nice option is still chicken manure, but what we use, for the most part, is pelletized composted chicken litter. So it's been heat treated. We've gotten rid of the pathogens and that eliminates that time restraint. You know 120, days unless you're wintering onions, you're going to have to apply that a long time in advance of harvesting, which is fine. But if you want to do something a little more emergent, about 3 weeks ago we went through and side dressed our onions and we do that with that pelletized chicken litter. And there's a lot of different brands. Chick Magic is one. We use one called Healthy Garden. They're all essentially the same thing, which is to say, layer or broiler bedding that has been composted and then made into granules or pellets, the two different versions. I like the granules which are the texture of kitty litter. It's easy to work with. It's easy to measure out and sprinkle and spread. It's a really nice product. And like Pat was saying, the concern with any manure, if

you're putting it on vegetables, is you really need to give it several months. Four months is kind of the gold standard as far as how long you need to wait. Certainly within organic standards we can't apply fresh manure any sooner than 120 days before harvest. And that's good sense. So using something already composted is a better choice.

Patrick - The next question, regarding garlic, do you harvest and market the scapes?

Curtis - Yes, if we have varieties good for making scapes. The softnecks don't make scapes, the hardnecks absolutely. And the scapes are a great product. There is a smaller market for scapes than there is for bulbs, but that's OK because you only have scapes for about two or three weeks at the most. We typically bundle them. We've done different ways, but usually we do 10 scapes in a bundle. We haven't done hardneck for a couple of years because we had a seed problem. But when we were doing a lot of hard neck, we would usually sell those bundles for about $4.00 for 10 scapes. So it's a pretty good price. It's well worth doing.

To harvest the scapes, they need to be tender enough to snap. So you need to be paying attention. They come up and then they curl over. And while they're curled over is the ideal time to harvest them. But you want to let them get as big as possible so you can go out there and snap every once in a while and make sure they're still snapping. And if it starts to get a little tough to snap, then you know it's time to get them all snapped.

If you haven't eaten scapes, they're fantastic. They're like a cross between garlic and asparagus. They're really, really tasty.

Patrick - Keep in mind that that many softneck strains of garlic do not form scapes. It's primarily a hardneck trait.

Patrick - Next question, if you cannot access chicken manure compost, is there a substitute that works well?

Curtis - Absolutely. So here's the thing about all our alliums. They are all leaves, right? So we're not growing roots, we're not growing stems, we're growing leaves.

Now that's over simplistic, but if you think about it from the base level, anytime you're growing leaves, nitrogen is what you want. So in our case, any organic source of nitrogen will work. So we can use a chicken litter or like I said, the composted pelletized stuff which is kind of cooked and reformed.

We can use blood meal as a great product, easy to find, but a little bit expensive. Feather meal is another product. You'll notice the trend here is it's all animal byproducts. That's because animal byproducts tend to be high in nitrogen. Both blood meal and bone meal are cooked products, so they are safe to apply up to the day of harvest. But I don't know why you'd want to fertilize something that close to harvest. That would be pointless. The point is they will reward you for adding nitrogen.

We aim to get it on the crops before the beginning of May, but it could go maybe as late as the middle of May and still be useful.

Nitrogen is the key.

Certainly they need sulfur, they need phosphorus, they need potassium. But, you're really keying in more than most crops on the nitrogen needs for this crop because it is just a giant leaf.

Patrick - OK, next question. If planting in a raised bed, what other plants in the same bed might affect alliums? Or in a raised bed with prior use?

Curtis - I don't know that I have a good answer for this one. Do you have, Patrick?

Patrick - I don't know that I do either. There's a lot of discussion about companion plants and of the synergistic effects of different plant combinations. There's not a lot of science on that yet, but certainly some strong opinions. I don't know that I have a good answer, but I

will say about the final part of that question, it's always good to rotate. Planting alliums after alliums is probably not a good idea. So, think about your crop families and figure out a plan in which you don't follow alliums with other alliums.

Curtis - And I would say too, I don't know that I have a lot of contrary rotations, but I can tell you what our rotations are that seem to work well. For example, for years we have done fall brassicas and then spring alliums and that seems to work really well for us. I know sometimes people will talk about brassica suppressing the growth of following crops. I have not seen that with the alliums. So that's a nice thing.

And then the other thing I would say is that we follow our sweet potatoes with fall planted alliums, which we talked about in the video. Those little bulbs that we use, the sets, that's a nice timing thing. It really came about because of the timing, but coincidentally it works really well.

So things that I would consider now that we're thinking of considerations beyond compatibility is also the weed pressure. You've got to have a weed free bed for onions. And so probably the most important consideration is this - I want to plant them where I know I'm going to have excellent weed control because alliums just won't tolerate any degree of weediness.

And then the other thing I'll say is that we have done companion planting with tomatoes, onions planted alongside tomatoes. And they seem to do well together in terms of nutrient needs and biological needs. But the onions are too slow to mature. And so that didn't work out very well because by the time the onions are getting close to maturity, the tomatoes are vastly overpowering them, creating way too much shade. And so that's a problem.

In companion planting you want to think about timing. The early crops really need to be pretty fast. And alliums, for the most part, are not a fast crop. Scallions are as fast as it gets. But even there you're still looking at 6 weeks from transplant to harvest.

With six weeks of tomato growth, you're going to have a 2 foot tall, 3 foot tall plant and it's going to be really overshadowing the alliums. So that doesn't work, I can tell you that. Other things may be worth investigating. But the onions for the most part at our farm, they grow by themselves and they seem to appreciate that.

Oh, also, I will point out you can put onions really close together, so if your primary concern is saving space, they will share space fairly well with each other. So that's a reasonable option.

Patrick - Next question, do you use raised rows in the field or raised beds in the greenhouse?

Curtis - Yes, on both, but it depends on the crop a little bit. Raised beds really are a benefit in this kind of weather. So this exact weather we're having is one of the big reasons that growers raise their beds. And I'm sure we've all seen this in the last couple weeks, at least if you're in Southwest Missouri. We've had several times when our raised beds looked like they were floating because the paths were so full of water, several inches of water. And our beds are still up above the water just a little bit and then they drain off a lot faster. Of course, I'm telling you things you already know probably, but the plants need to have a lot of air in their roots. They need well aerated soil. So if you don't have raised beds in this kind of weather, you tend to get a lot of root rot. You can even get plant die back just because of the amount of water and the lack of air in those roots. So that's why we use raised beds.

Now I want to say there are times when we don't want to use raised beds, right? So for summertime brassicas we find limited utility for the raised beds. We may sometimes do it so that we can lay plastic well because it's much easier to put biodegradable plastic over a raised bed. But we'll try to minimize that rise to just a bare minimum for what we need to make the plastic work structurally because by the middle of summer, we don't want the soil to drain out faster. We don't want the soil to warm up faster. We want the opposite.

So that's the caveat. This time of year, raised beds are great. It helps them drain, it helps the soil warm up. And so we do that in the field.

But as soon as we get to July and August plantings, we're not excited about raised beds. We'd prefer to have them lower. And if we do have a permanent raised bed situation, then that June time frame is when I'll be looking at putting a bunch of wood chips in the paths. So we're basically unraising the beds. We're mulching up around the beds so that the sides of the beds are no longer evaporating as much. They're no longer picking up heat from the atmosphere.

In the greenhouses, we do have some of both. I have some that are raised beds and I have some that are just flat on the ground.

The first raised bed I ever built in my greenhouse was about 2 1/2 feet tall and it turns out that requires a tremendous amount of soil, like a dump truckload of soil per bed. Subsequent raised beds are much smaller and that's been plenty. You don't need 2 1/2 feet of soil to grow plants. Most of my raised beds in my greenhouse are around a foot deep, maybe even a little less. And below that is compacted clay and rock. So they're not concrete bottom, but it's pretty tough stuff. And I can grow really nice carrots in those beds. Twelve inches is plenty of soil, 10 inches is plenty of soil.

So that's the answer to that. I do use raised beds, but I really only use them if there's the structural reasons we talked about, drainage and warmth.

The third reason to use raised beds is if you have a farm like mine where we get a lot of tours and a lot of educational guests and people who want to work with us in the fields, having a raised bed makes it much, much easier for people to understand where they can walk and where they can't. It gives a structural guidance. You can say “stay in the lowered path. That's where you belong.” It gives them a visual and a physical cue that this is where they belong, down here in this path. Don't get on the beds! So, yes, that’s a third good reason for us to use them.