

2018 ‘Grower of The Year’ Steve Daletas took some time to answer questions from PNWGPG Gerry Gadberry that will be appear in our newsletter and on our website for our members. Thank you for your contribution Steve we appreciate the time you have taken to share some of your knowledge and growing techniques with us!



1: What got you started in this hobby and how long have you been growing giants? *I was a sports guy growing up. Anything I could compete in I did. The gardening aspect of my childhood I can't put my finger on. I just enjoyed working in the dirt and watching things grow. Looking back, I don't know if I grew for quality or quantity, probably the later. Either way, I know I found peace working in the dirt. It all changed when my wife Susie, a dental hygienist by trade cleaned a patients teeth who just happened to grow giant pumpkins. His name was Kirk Mombert. At that time he was probably considered one of the top growers in the world. Susie had a picture of our approximately 300 pound pumpkin sitting on our porch displayed in her operatory. They found a common thread and struck up a conversation around pumpkins. Six months later Kirk brought in a couple of seeds and a small handwritten note with a couple of growing tips on how to take a pumpkin to the next level and also an invite to the clubs weigh off in October. That seed and the friendship that followed are what got me started many years ago. As for how long I have been growing. I do take a year off every few years. With that said, I planted my first true Atlantic Giant seed with competition intentions in the late 1980's*

2: What is your typical weather like and how big is your growing area?

Springs can be a challenge as it's not uncommon to have cool and wet conditions well into late June. Once July 4th passes our summers are generally quite nice with highs averaging in the low to mid 80's but cooling off quickly in the evenings with average lows hovering around 50 degrees in July and August and low to mid 40s June and early fall. September is really where it's at for us. Because we don't see the explosive growth rates some growers see in the mid-west or back east, a nice September gives us the chance to put on several hundred extra pounds and maybe catch up to the really big pumpkins other growers are sitting on around the world.

As for the growing area, I allocate 1200 square feet per plant for half my plants and 1500 square feet for the others. Three of our four big pumpkins this past year were grown on the 1200 sq. foot plants. I am a big believer in lots of plant behind the pumpkin. The trick is getting the plant off to a great start early season so much of the plant is well established before pollination.

3: Can you describe your soil type and typical amendments, cover crops, and patch prep techniques you use?

The soil is listed as sandy or silty loam in the soil test results we get back from Western labs. Drainage is excellent as we are growing in the Willamette valley in what's considered "river bottom".

Amendments: I have really backed off the last 5 years. I don't know if that's a reflection on me just getting older or what but it seems to have worked out okay. Personally, I think in the past I prescribed to the theory that many of us growers prescribed to, just kept adding amendments because more must be better. For the last several years I have brought in roughly one to one and a half yards of a well composted amendment per 1000 sq. feet per year and that's pretty much it.

Cover crops: To get a handle on some of the disease issues I've had I chose to grow several crops of mustard on my off years to help clean up the soil. On the years I do grow I will plant a rye grain or annual rye cover crop in the fall.

Patch prep techniques: Nothing earth shattering here. But...like I mentioned earlier, springs can be a challenge. If you want to be competitive come October I really feel that the spring prep is where it's at. Regardless of the weather, the plant needs to be germinated by a certain date, needs to be planted by a certain date and needs to hit the ground running from the day that you do plant the seedling outside. This is all on the grower. If you wait for the right forecast to get things going you are probably starting out behind. I work very hard starting in February to cover the patch on days forecasted to be wet and uncover the patch on days where no precipitation is predicted so the soil will be dry enough to do a full till, soil test and nutrient amendment by no later than the middle of April. Then heat cables are placed in the planting area and greenhouses are moved into place to get the soil an optimum temperature before the young plants are transplanted outside. My goal is to create an environment in the pumpkin patch early on similar to what we create inside our house during and after seed germination.

4: What is your water source, how much water do you typically use a week and do you use "fertigation" to inject nutrients into the water?

*I use two sources for water. I am roughly 1/4 mile from the closest water faucet on the farm. The faucet's water source is a well with a pH in the mid 7's. I use this source early season and as a backup during the summer months when the farm is not irrigating. I move the well supplied water via a **lot** of garden hoses all strung together. When the farm is irrigating they pull water out of the Willamette river (pH in the low 8's) which I tap into for most of the season. I also store water in a 1500 gallon tank so I always have at least one days' worth of water at my fingertips at all times.*

*This year one of my preseason goals was to bump up the moisture level in the soil a bit. At the peak of the growing season I was using up to 180 gallons of water per 1000 sq. feet per day. I say that with a word of caution though. Get to know **your** soil. Too much moisture can be just as detrimental to growing a giant pumpkin as too little water. I feel many growers don't really know how wet or dry their soil is under the plant where it's most important. This was one of the key areas I focused on this past year. Knowing where the line was between just right and too much and pushing to maintain that line all summer long.*

Fertigation: I feed the pumpkins daily. This may sound time consuming but once set up it's actually easier and more efficient than doing so intermittently. I use a Dosatron fertilizer injector plumbed into the irrigation line downstream of the water tank which allows nutrients to be pulled from a separate tank every time the patch is watered. I replenished the nutrient tank about once a week with a nutrient mixture that changes slightly as the season progresses. All water and nutrients are applied via a low flow drip tape spaced 12 inches apart with emitters also 12 inches apart.

5: You're 2018 season was fantastic! Earning you the coveted "GPC Grower Of The Year" (GOTY) award, first place at Half Moon Bay (your 4th win there), first place at Bauman's Farms, and Terminator weigh offs! You grew 2469, 2170, 2157, 2003, 1927.5, and 1713.5 pound pumpkins a truly amazing accomplishment! Were they grown under a greenhouse or outdoors? How did you decide on what seeds to grow and do you think the World Record will be beat this year?

First off, thank you. It was a very special season and one I hope every pumpkin grower gets the opportunity to experience at least once.

After the 14' by 16' early season greenhouses were removed the third week of May all the pumpkins were grown outdoors. I had originally intended to grow half the plants under plastic and the other half truly outdoors but a little mishap with Mother Nature and a large piece of plastic changed those plans in a matter of minutes.

Seed choices: I am somewhat old school when choosing which seeds to plant. I have typically grown proven seeds that have a track record of growing a large or heavy pumpkin. For unproven seeds, I chose to grow our 1928.5 from 2017 as I had a hunch it might do something special. In hindsight I should have let our 1989.5 from 2017 grow also. I do believe that one's own seeds seem too often grow best in the dirt where they grew. I'm trying to put that belief to practice in my patch a bit more. I also look very closely at genetics when I'm choosing a plant as my pollinator. I try to make crosses that haven't been made in the past and whenever possible try to find the most dissimilar genetics to make those crosses with.

Regarding the world record, I do believe there is a good chance it will be broken in the near future. And as hard as it would be to imagine a few years ago I can see a 3000 pound pumpkin in the future also. As for a time frame, I don't know if we quite have all the tools necessary to grown one yet but I do think we are getting there. Maybe within the next decade.

6: Can you share your early season planting site layout for us (hoop houses, soil heating cables, growing pit/ mounds, magic ferry dust :)

Like I mentioned in question number two and three, I feel very strongly that preseason prep is where it's at. That's not to say you can coast after the plants are in the ground. If you start out behind, with the way these pumpkins currently grow you would be hard pressed to "catch up" if you get a late start.

There is lots of debate on soil heat cables, are they really needed or not. I look at them as a simple insurance policy to ensure my planting/early season rooting area stays warm if the spring weather doesn't cooperate. My hope is to not need them but we never really know until it's too late. I dig a couple of six foot by six foot holes, twelve inches deep and lay out a 40 foot heat cable at the bottom then fill in the hole while adding a few extra "goodies" (a mixture of WOW mycos, Rootshield, WOW Azos, kelp meal, worm castings and bone meal) It's a lot of work to install and some springs they probably aren't needed, But it gives me peace of mind and is now just part of my preseason prep work.

Growing pits/mounds: I have never mounded the soil around the plant and I'm not a big believer in the idea of the "growing pit" being amended any different than the surrounding patch. I do put a little extra in the 6 by 6 hole, but these are the same products the entire patch has been amended with.

Hoop houses: Yes. I use them. Mine have evolved over the years. In the past I used small 5' by 6' A framed houses. I found that as we now germinate earlier and are pushing the plants harder I was growing out of that beneficial artificial environment I tried to create way too early. Currently I am using a 14' by 16' hoop house for each plant. They are built with 2 by 4s as a base frame. Then I use 3/4 inch PVC pipe that slides into holes drilled in the 2x4s to form a gentle semi-circle with a ceiling height of about 5 feet. Each house has a small heater to help elevate the night time temperatures and most important a 2' by 2' box fan to vent the house during the day. Early season I also use a "cattle panel", cut into smaller sections, bent in a semi-circle and placed over the young seedlings. This allows me to hang a 4' shop light near the young plant to provide some beneficial light if the sun doesn't shine during the day and also allow me to place a comforter over the panel at night to help retain heat and keep the young plant warm.

Magic fairy dust. Really?

7: What does your fertilizer / fungicide / insect program typically look like? Are you an organic gardener, commercial fertilizer user or both and is your fertilizing based on tissue and soil tests?

I am a big believer in soil and tissue testing. As much as I would like to think I can read a plant, the test show me year after year that I'm just not that good. With that said, I do believe after testing for several years you start to see trends that occur roughly the same time each year as the plant goes through its various stages of growth. With that information I have put together a drench and foliar program based on those test and observations. I feed (drench) daily. Think about how most people fertilize their lawn. Lawn starts looking a bit yellow and growth slows. They fertilize and water the lawn. Two weeks later the lawn explodes. Same thing happens to the pumpkin. Daily feeding helps eliminate this problem.

My foliar spraying for nutrients is done once a week with a secondary spray on the older part of the plant starting mid-June to combat the mobile nutrient draw that takes place as the plant shifts into high gear. I use organics whenever possible, especially in the pre-season patch prep. But due to their slower release I don't use many organics in my daily feedings as I feel I have less control. My daily feedings are all water based commercial fertilizers that I blend weekly.

Insects: We are fortunate on the west coast to not have many bugs to deal with. Cucumber beetles both striped and spotted are my number one enemy. I will get 5 or 6 waves of them throughout the season. They will inundate the patch overnight. So I've had to take a proactive approach to keep them at bay. I spray once a week regardless if I see a beetle or not, alternating Merit and Talstar. That combination is used through the end of September which also prevents/eliminates my number two insect pest, the aphid. I can count on them to appear like clockwork in late August/September.

8: What factors do you think contributed the most to your phenomenal success in 2018? Can you walk us through some of your growing techniques / cultural practices and plant design?

I make goals for myself every year. Those are based off reviewing notes and observations from previous years. My goals for 2018 were

- 1) Push the water harder.*
- 2) Try to keep the older (back end) of the plant healthier longer.*
- 3) Do everything I have done in the past better.*

The third goal I try to accomplish every year. I know for myself is I can always do better. Rather than make major changes each year my plan is to tweak or better micro manage the proven practices I have used in the past.

Regarding water: That has been a major focus of mine for several years. For 2018 I intended to bump up the moisture level in the soil by 1% as I felt I was still under watering a bit. I was surprised to find that at one point I was using up to 180 gallons of water per 1000 sq. feet per day. I also learned via the moisture probes in the soil that the plant takes up water differently when you look at the old end of the plant verses the newer end of the plant. As I was reducing the amount of water per square foot on the back end of the plant mid-August I actually had to increase the amount of water on the newer end as I found that the fresher roots were begging for water whereas the older roots didn't have the same demand. This is something I intend to better manage in the future.

As for keeping the back end of the plant healthier, I think the problem must be approached on several fronts. Pumpkin plants are no different than many of the plants we grow. The older growth will "sacrifice" itself when deficiencies are present in the pumpkin and newer growth. This leads to the oldest growth failing sometimes even as early as late July. To combat this I have worked hard to identify the mobile nutrients in the plant that are getting "robbed" from the older foliage and built a foliar and drench schedule to target and replenish those nutrients on the back end of the plant specifically. Also, mismanagement of water/over watering the oldest growth leads to root diseases that in turn cause the older foliage to fail. I have tried to combat this by cutting back and better monitoring the amount of water applied to the back end of the plant early in August.

9: Steve you have been doing this a long time now and your weights keep going up every year. What are some of the biggest mistake you've made in this hobby and how have they changed your current practices?

*I could probably write a whole article on this topic alone. Just when I think I have made every mistake possible I find a new way to humble myself. This past season was no exception as I learned the hard way when repositioning pumpkins to relieve stem stress early August, something I have done a hundred times before. Take your **time** when working anywhere near your pumpkin. We spend hundreds of hours planning, prepping, amending, pruning, burying, and the list goes on. But I find I never seem to have enough time when it comes to the pumpkin. The pumpkin is the prize, not what gets tended to when all the other chores are done. It needs to be treated that way. One mistake and the season is over. Slow down, enjoy what's growing in front of your eyes and think. I broke off a really good pumpkin the first of August because I was in too big a hurry.*

Next in my long list of mistakes I have made is amending my patch with a contaminated compost. I did this to three different patches over the years and it's taken many many years to try to fix the problems it created. If in doubt, spend a few dollars ahead of time to have your amendments checked for pathogens before you commit to an amendment you don't have 100% confidence in to ensure it was processed correctly. It will be money well spent in the long run.

Another in my list of mistakes Converse with growers. Not just established growers but newer growers also. We all bring something to the table. A different energy, idea, perspective, or expertise that you may not have. I have found that when my networking with others took a back seat, my growing practices stopped evolving and my pumpkins weights seemed to stagnate. Besides, most of us love to talk pumpkins. You never know what "nugget" of information you might pick up in the course of a conversation.

Lastly, Test, Test, Test.....A reoccurring problem I have had in the past is burning some of the early leaves just after germination setting the plant back days or possibly weeks. This year I decided enough. I ran 4 trial runs starting in January with 4 sets of 6 seeds in each run (96 plants total) testing different lights, distance away from the lights, different products added to the seed start mix and timing to start drenching various product. My goal first off was to identify what was causing the burned leaves but I also wanted to figure out how hard I could push and still have a healthy plant. For the first time in years, even my leftover plants looked awesome. Test whenever you can. If you lose a pumpkin, don't pull the plant right away. Use it as a test plant for various spray combinations (nutrients, fungicides and insecticides). If multiple products can be tank mixed and sprayed in one application without injury to the foliage that's a huge time savings.

10: What advice do you have for growers looking to increase their personal bests in the patch?

I would encourage growers to get to know a successful grower in their area. We obviously all share the same passion for growing Atlantic Giants and most growers are more than happy to share their knowledge and techniques with anyone who asks. Not only will your weights probably go up, but more importantly, the friendships that come from growing these beasts will last a lifetime.

11: What is your favorite seed stock and what seeds out there do you think have the most potential?

Genetics are probably one of my weak spots. What looks great on paper doesn't always translate in the patch as we have all seen multiple times the last few years. What's great though is I think we have seen that you don't necessarily need one of a select few seeds to compete anymore. There are so many seeds with potential to break whatever record you have in your sights. Find a seed that you have a good feeling about and run with it. If in doubt, try one from your own patch. If you look at growers and their personal best more often than not you will see a grower's best pumpkin actually grown from a seed grown in their own patch.

One final thought. I think quite often the large pumpkins follow the weather. Plan, prep and do all you can do so you're ready when that special summer comes. You'll never really know until weigh off day if you had that perfect summer. So....Keep grinding, and when it's your turn, enjoy the ride.

Steve Daletas

