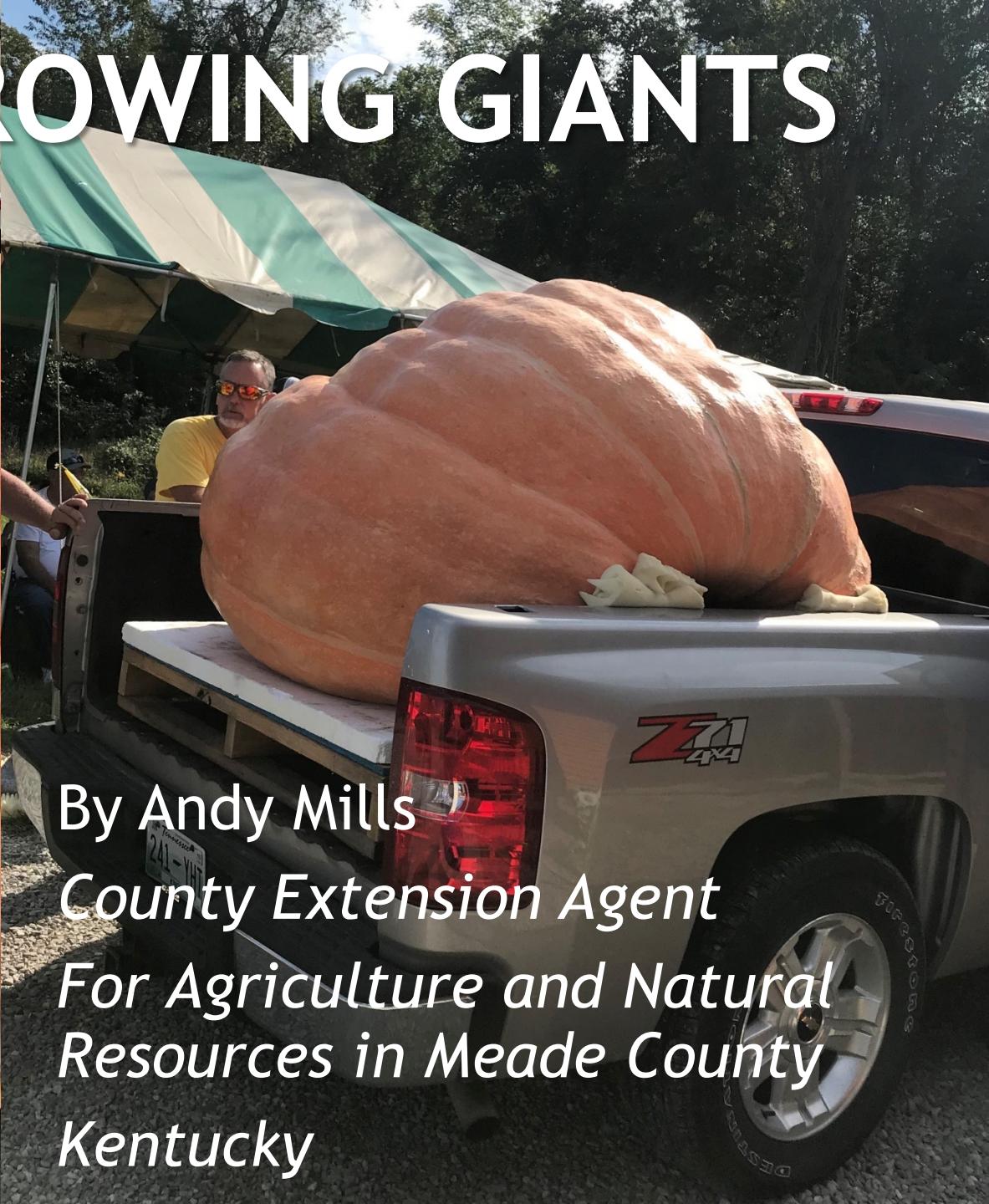




# GROWING GIANTS

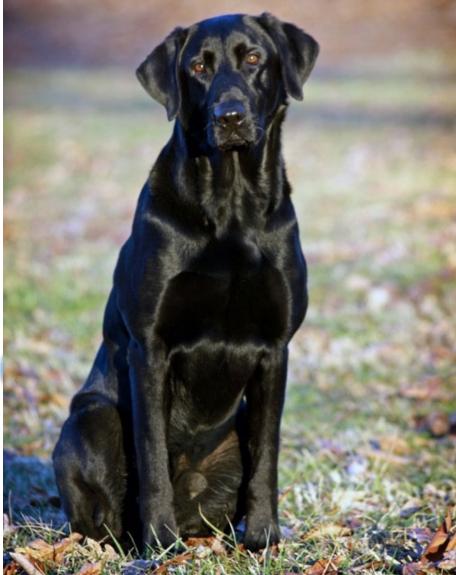


By Andy Mills  
*County Extension Agent*  
*For Agriculture and Natural*  
*Resources in Meade County*  
*Kentucky*



I grew my first  
melons in 2015.

## Pedigree:



[FC AFC Code Blue \(2000 Hall of Fame\) \(.BLK\)](#)  
Hips: LR-65244G60M (EXCELLENT)

'11 NAFC FC  
AFC Cody Cut A  
Lean Grade

[Ms Lean Mac'ce QAA \(.BLK\)](#)  
Hips: LR-106035E31F (EXCELLENT)  
Eyes: LR-33975 (Normal)

[Code Red QAA \(.BLK\)](#)  
Hips: LR-31572G89M (GOOD)

[Nikcoal of North Boundary \(.BLK\)](#)  
Hips: LR-18702 (NORMAL)

[2xNAFC 2xCNAFC FC CFC  
Ebonstar Lean Mac \(.BLK\)](#)  
Hips: LR-46627G24M (Good)  
Eyes: LR-6972/2001--126

[FC AFC CFC Candlewood's MS  
MB Kate \(.BLK\)](#)  
Hips: LR-45730G27F (GOOD)

[Super Powder QAA \(1995 Hall Of Fame\) \(.BLK\)](#)

[Twiggys Classy Rascal \(.BLK\)](#)  
Hips: LR-6331 Excellent

['84 NAFC FC AFC Trumarc's Zip Code \(1993 Hall of Fame\) \(.BLK\)](#)  
Hips: LR-10091 (Normal)

[Hunters Marsh Sagebrush-Sal \(.BLK\)](#)  
Hips: LR-15193 (NORMAL)

[1987 CNFC 1992 CNAFC Waldorf's High Tech \(YLW\)](#)  
Hips: LR-22799-T (Good)

[Ebonaceae Princess WCX QAA \(.BLK\)](#)  
Hips: LR-21503-T (EXCELLENT)

[FC-AFC Trumarc's Ziparoo \(.BLK\)](#)  
Hips: LR-34182G24M (Good)

[1990 1991 & 1993 NFC- FC-AFC Candlewood's  
Tanks A Lot \(1997 Retriever Hall Of Fame\) \(.BLK\)](#)  
Hips: LR-33631G27F (Good)

**Deer Valley Growth Fund**    **Reg: AAA +\*18827828**    **Bull**

[AMF-CAF-D2F-DDF-M1F-NHF-OHF-OSF-RDF] [Click here for info](#)

**Birth Date:** 01/22/2017 **Tattoo:** 71122

**Parentage:** SNP **Genomic:** Angus GS **Genomic Prog:** 12037

**Parents Qualified**

**Breeder:** 1146419 - Deer Valley Farm, Fayetteville TN

**First Owner:** 1146419 - Deer Valley Farm, Fayetteville TN

**Owner(s):** 1146419 - Deer Valley Farm, Fayetteville TN



Basin Payweight 006S	<b>AAA #+*15332050</b>	<b>AAA #13469989</b>
Basin Payweight 1682	<b>AAA #+*17038724</b>	<b>AAA +14401027</b>
21AR O Lass 7017	<b>AAA 15875998</b>	<b>AAA #15313140</b>
Plattemere Weigh Up K360	<b>AAA #*16692552 [RDF]</b>	<b>AAA 15229227</b>
Deer Valley Rita 36113	<b>AAA +*17785214</b>	<b>AAA #*14963730</b>
Deer Valley Rita 9457	<b>AAA +16356356</b>	<b>AAA #16274856</b>
	G A R New Design 5050	<b>AAA #+13728513 [RDF]</b>
	G A R Ext 614	<b>AAA +12304057</b>
	# Pathfinder + Embryo Transplant * Parents Qualified	



Pumpkin  
2749 Gienger  
2023  
% Heavy:14.00  
OTT:500.00  
Color:Orange  
Photo:Yes

Grower Name: **Travis Gienger**

City: **Anoka** State: **Minnesota** Country: **United States**

Weigh Off Location: **Safeway World Championship Pumpkin Weigh-Off**

[Compare Pumpkins](#)

[Detail](#) [Progeny](#) [Detail](#) [Progeny](#) [Modify](#) [Add Photo\(s\)](#)

Seed  
2365 Wolf 2021  
% Heavy:4.00  
OTT:487.00  
Color:  
Photo:Yes

Pollinator  
2365 Wolf 2021  
% Heavy:4.00  
OTT:487.00  
Color:  
Photo:Yes

Seed  
1885.5 Werner  
2019  
% Heavy:4.00  
OTT:441.00  
Color:Orange  
Photo:Yes

Pollinator  
2174 Daletas  
2020  
% Heavy:3.00  
OTT:470.00  
Color:Orange  
Photo:Yes

Seed  
1885.5 Werner  
2019  
% Heavy:4.00  
OTT:441.00  
Color:Orange  
Photo:Yes

Pollinator  
2174 Daletas  
2020  
% Heavy:3.00  
OTT:470.00  
Color:Orange  
Photo:Yes

Seed  
1501  
VanderWielen  
2017  
% Heavy:-2.00  
OTT:413.00  
Color:Orange  
Photo:Yes

Pollinator  
2112 Skinner  
2017  
% Heavy:4.00  
OTT:464.00  
Color:  
Photo:Yes

Seed  
2624.6  
Willemijns 2016  
% Heavy:21.00  
OTT:496.00  
Color:Orange  
Photo:Yes

Pollinator  
2114 Wallace  
2018  
% Heavy:11.00  
OTT:451.00  
Color:  
Photo:Yes

Seed  
1501  
VanderWielen  
2017  
% Heavy:-2.00  
OTT:413.00  
Color:Orange  
Photo:Yes

Pollinator  
2112 Skinner  
2017  
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Photo:Yes

Pollinator  
2114 Wallace  
2018  
% Heavy:11.00  
OTT:451.00  
Color:  
Photo:Yes

Seed 2004 VanderWielen 2016 % Heavy:3.00 OTT:468.00 Color:Orange Photo:Yes	Pollinator 2145.5 McMullen 2015 % Heavy:7.00 OTT:477.00 Color:Orange Photo:Yes	Seed 1810 Werner 2016 % Heavy:22.00 OTT:415.00 Color:Orange Photo:Yes	Pollinator 1810 Werner 2016 % Heavy:22.00 OTT:415.00 Color:Orange Photo:Yes	Seed 2145.5 McMullen 2015 % Heavy:7.00 OTT:477.00 Color:Orange Photo:Yes	Pollinator 1872.8 Willemijns 2015 % Heavy:10.57 OTT:439.00 Color:Orange Photo:Yes	Seed 2145.5 McMullen 2015 % Heavy:7.00 OTT:477.00 Color:Orange Photo:Yes	Pollinator 2624.6 Willemijns 2016 % Heavy:21.00 OTT:496.00 Color:Orange Photo:Yes	Seed 2145.5 McMullen 2015 % Heavy:7.00 OTT:477.00 Color:Orange Photo:Yes	Pollinator 1810 Werner 2016 % Heavy:22.00 OTT:415.00 Color:Orange Photo:Yes	Seed 1810 Werner 2016 % Heavy:22.00 OTT:415.00 Color:Orange Photo:Yes	Pollinator 1872.8 Willemijns 2015 % Heavy:10.57 OTT:439.00 Color:Orange Photo:Yes	Seed 2145.5 McMullen 2015 % Heavy:7.00 OTT:477.00 Color:Orange Photo:Yes	Pollinator 2624.6 Willemijns 2016 % Heavy:21.00 OTT:496.00 Color:Orange Photo:Yes
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# UNDERSTANDING



# Takes Planning

It's easier to start at the end to help plan the beginning.



# Planning

- ▶ Harvest date of September 20<sup>th</sup> . This is the day before the weigh off.
- ▶ 20 - 30 days from planting the seed the pumpkin plant will start to vine.
- ▶ 30 days from the start of vining the pumpkin plant will bloom and set fruit.
- ▶ The longer the fruit is on the vine the bigger it can get (as long as it is still growing, of course).
- ▶ Ideally, we would want the fruit to be gaining weight for at least 90 days.
- ▶ When we do the math:
  - ▶ 30 days to vine + 30 days to bloom + 90 days to grow = 150 days
  - ▶ 150 days prior to the harvest date of September 20<sup>th</sup> is the date of April 18<sup>th</sup>.
  - ▶ This means seeds needed to be planted by April 18<sup>th</sup>.



# The Growing Season

What we want or need is:

30 days - from planting seed to vining

30 days - from vining to flowering/setting fruit

90 days - from fruit set to harvest, ideally

150 days

However, at best, our growing season in KY is 140 days.



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# Starting Inside

- For best germination, soil temperatures should be above 85° F
- Heating mat
- Greenhouse
- Incubator



## THE 6 STEPS TO STARTING A GIANT PUMPKIN SEED

1

Label everything



2

File the seeds



3

Soak the seeds



4

Place into pot



5

Check germination



6

Place into a bag



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# Setting Outside

## ► Soil Temperature

- Needs to be above 65°F, ideally above 70°F

## ► Air Temperature

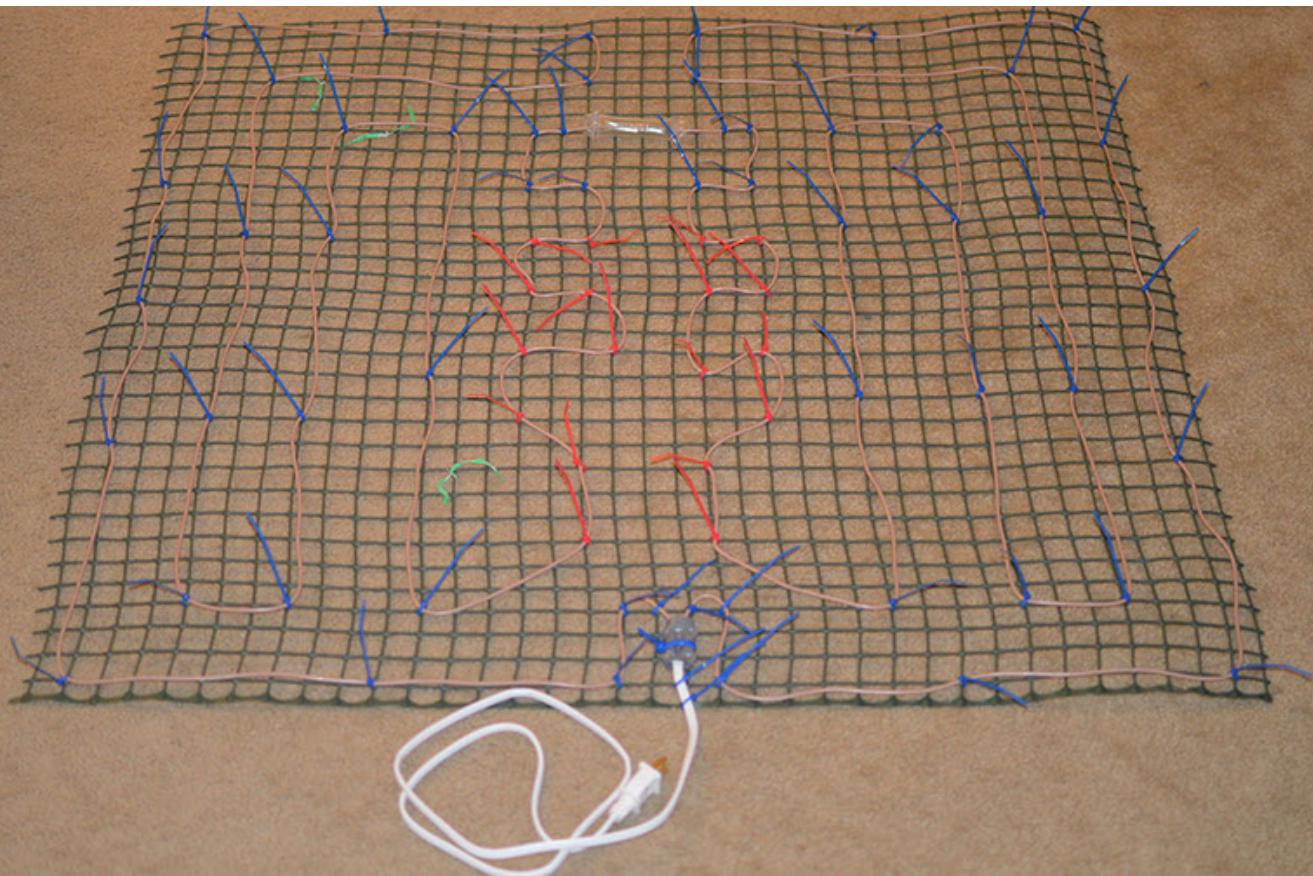
- Needs to be above 75°F

	2020 soil	2020 air	2021 soil	2021 air	2022 soil	2022 air	2023 soil	2023 air	Ave. soil	Ave. air
April 15	52.5	38.6	56.9	46.6	57.2	53.7	62.5	64.2	57.3	50.8
April 30	58.3	51.6	63.6	60.4	63.5	69.2	59	50.4	61.1	57.9
May 10	59.6	53.3	61.7	52.2	67.9	71.6	66.1	61.6	63.8	59.7
May 31	71.4	62	68.6	58.4	74.9	75	73.3	70.1	72.1	66.4



# Setting Outside

- Warming up cold dirt



# Setting Outside

- Warming up cold dirt



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# Setting Outside

- Warming up cold dirt





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# Soil

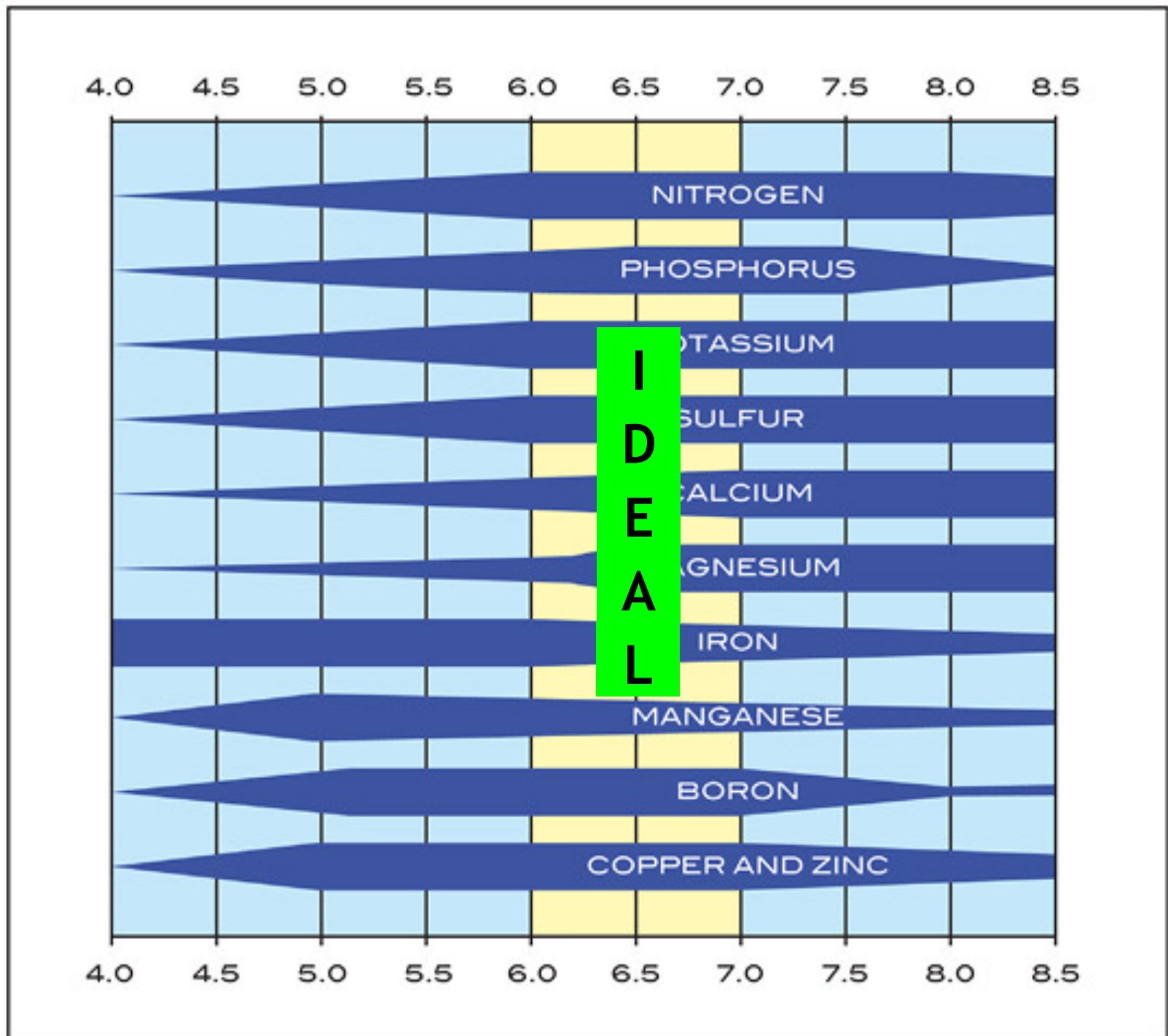
- ▶ Soil pH
  - ▶ 6.0 - 6.8
  - ▶ pH table
  - ▶ High pH has its problems too

## Soil Health/Fertilizer

- UK recommendations with a twist.
- Soil inoculants, and multiple kinds of organic fertilizer.



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# Vining

- Anchoring - small wooden skewers work well. Most growers cover the vines.

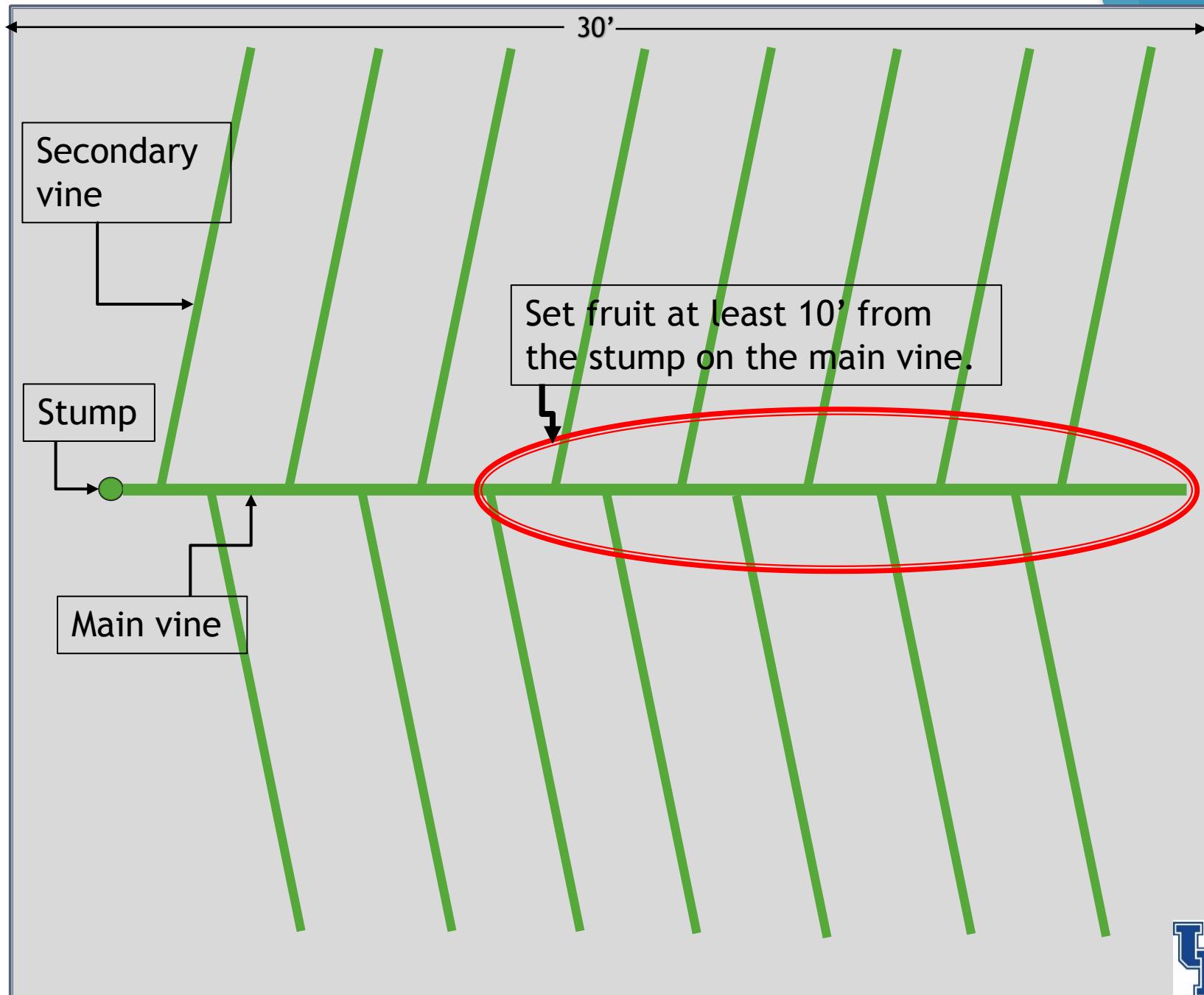


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# Spacing & Shaping

- ★ The biggest pumpkins are grown in areas no smaller than 900 sq. ft.
- ★ Most growers confirm that the biggest pumpkins are grown on the main vine at least 10 feet from the stump.
- ★ Most growers terminate all the vines when they reach the patch boundaries.



# Setting Fruit

Ideally, 60 days from starting the seed fruit set will begin. Hand pollination assures some degree of pollination.



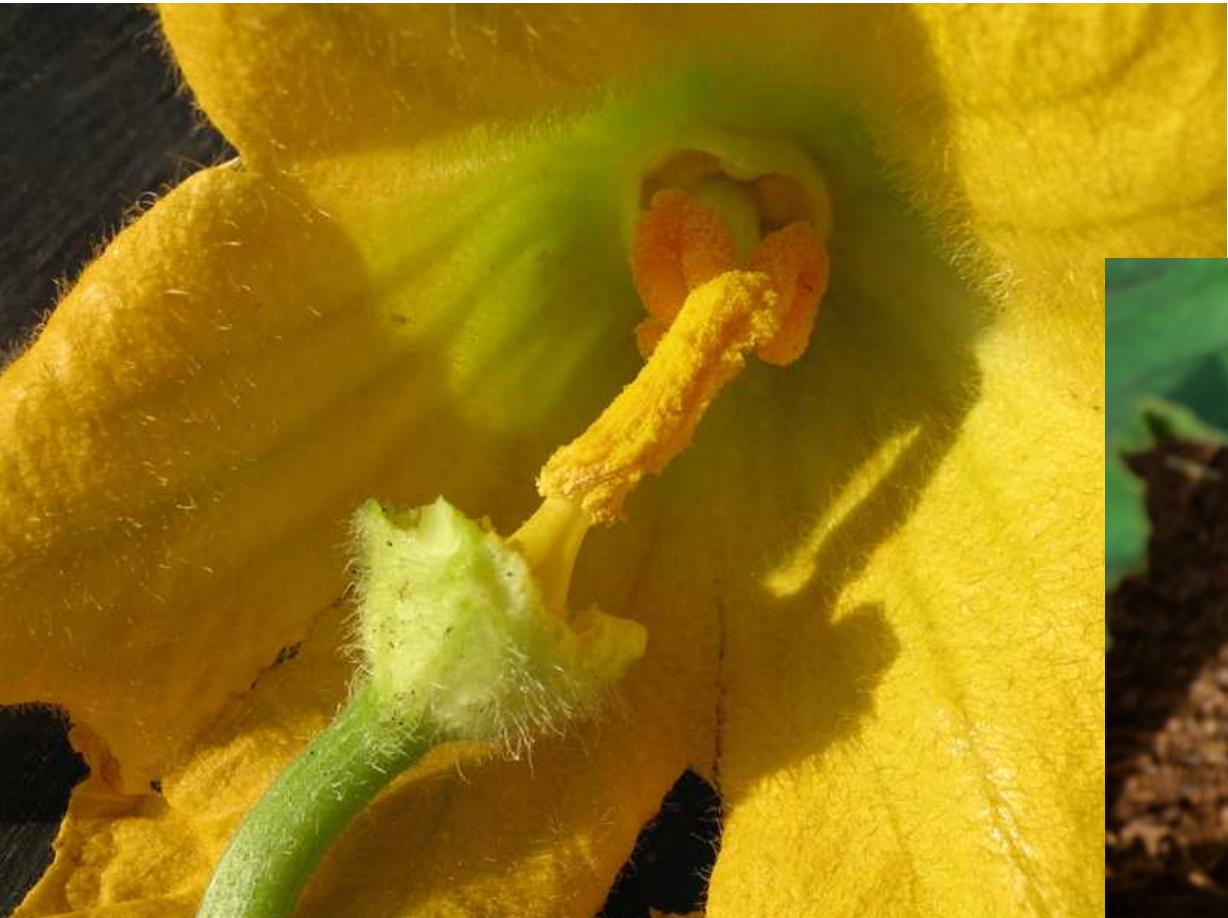
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# Hand Pollination



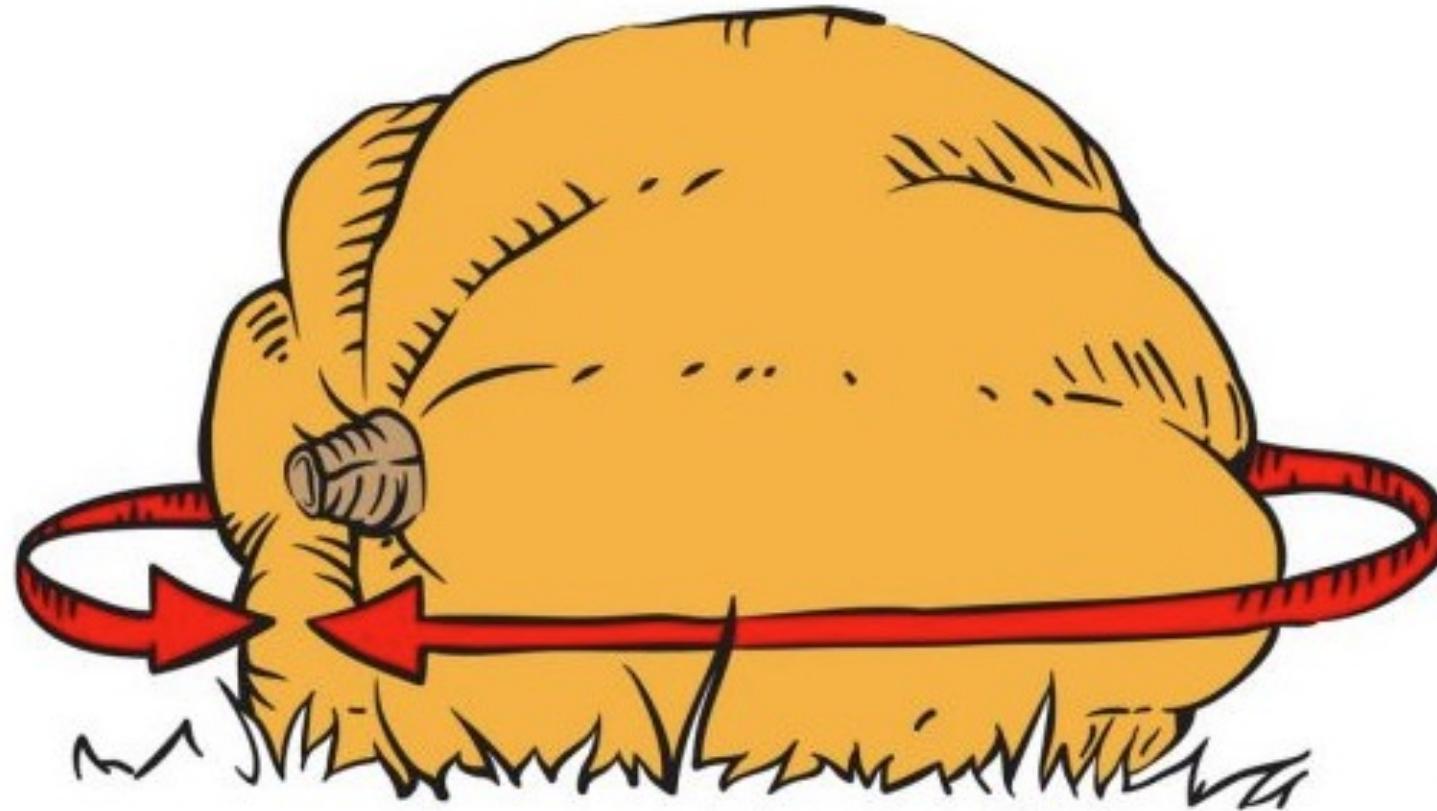
# Hand Pollination



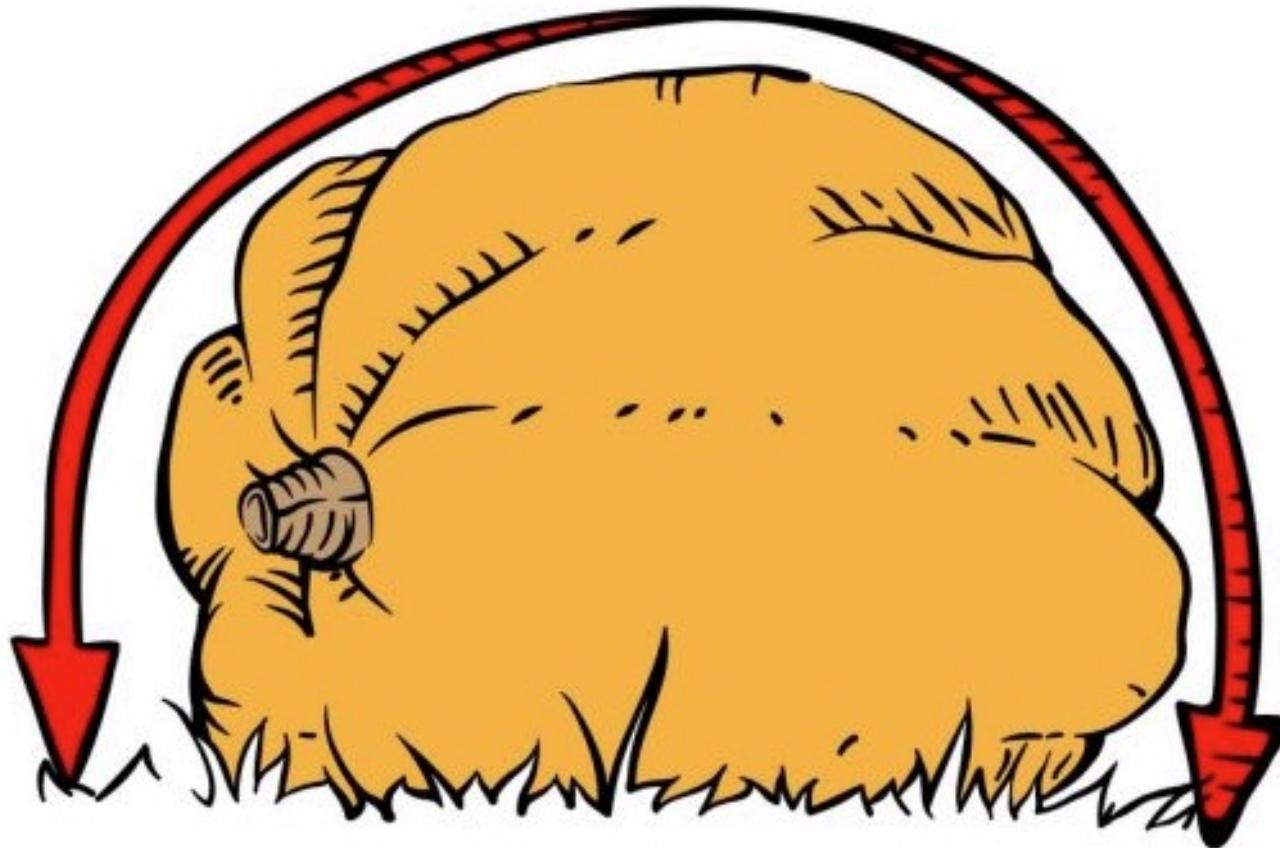


# Weighing On The Vine

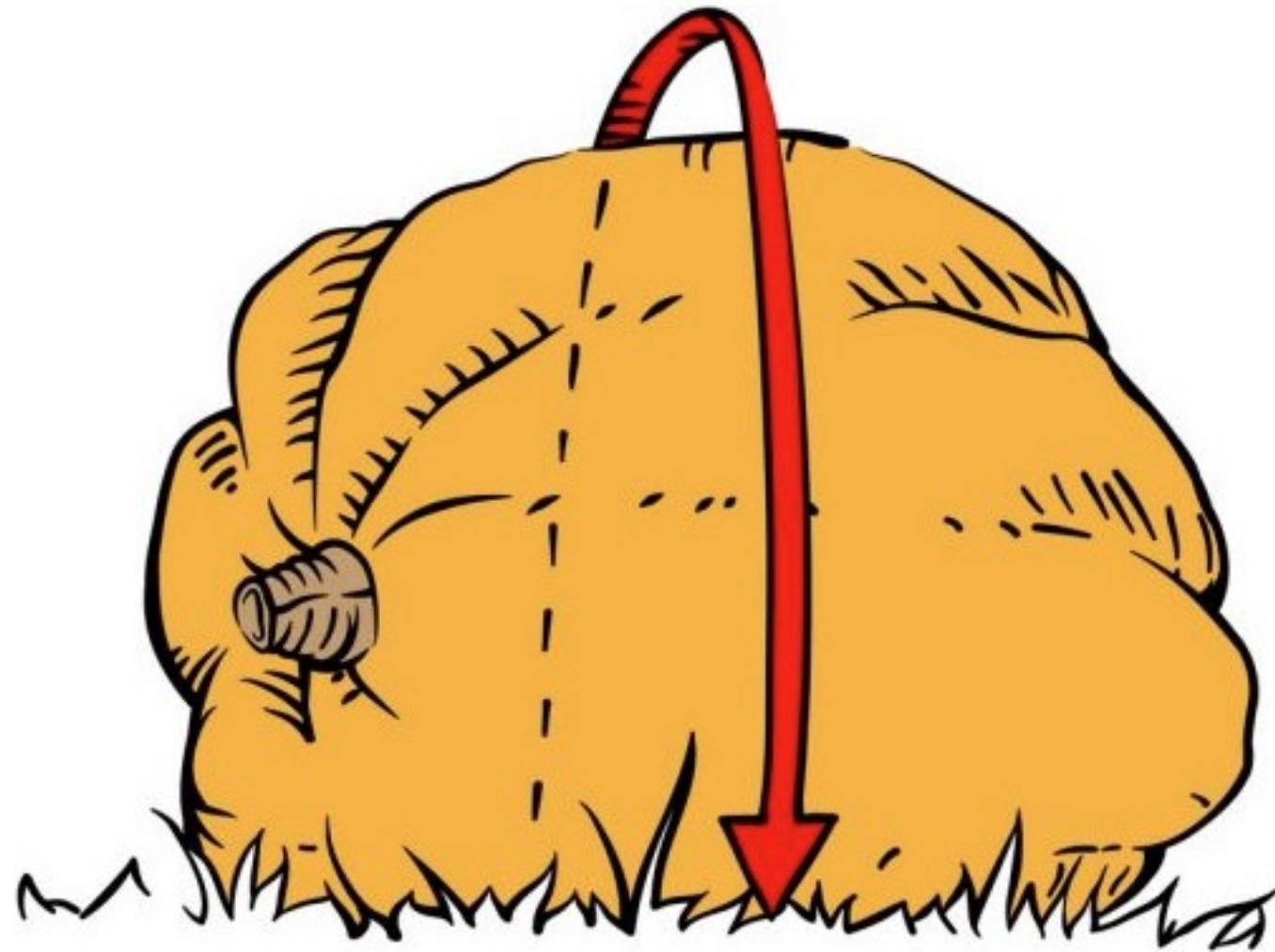
**The three measurements you need are:**



1. **Circumference** – Measure the circumference of the fruit parallel to the ground at stem height.



2. **End to end** – Place your tape measure on the ground at the stem end, and at the blossom end. Measure the distance from ground to ground.



3. **Side to Side** – Placing the tape perpendicular to the plant stem at the widest point of the pumpkin. Place it on the ground on both sides, and measure this distance.

# 2017 GPC OTT Chart for Atlantic Giant Pumpkins (inches to lbs)

OTT	Ibs	OTT	Ibs	OTT	Ibs	OTT	Ibs	OTT	Ibs	OTT	Ibs	OTT	Ibs	OTT	Ibs	OTT	Ibs	OTT	Ibs
160	99	244	335	300	623	330	826	360	1060	390	1320	420	1602	450	1898	480	2204	510	2514
165	108	246	343	301	629	331	833	361	1068	391	1329	421	1611	451	1908	481	2214	511	2524
170	117	248	352	302	636	332	840	362	1076	392	1338	422	1621	452	1918	482	2224	512	2534
175	127	250	360	303	642	333	848	363	1085	393	1347	423	1631	453	1928	483	2234	513	2545
180	137	252	369	304	648	334	855	364	1093	394	1357	424	1641	454	1938	484	2245	514	2555
185	149	254	378	305	655	335	863	365	1101	395	1366	425	1650	455	1949	485	2255	515	2565
190	160	256	387	306	661	336	870	366	1110	396	1375	426	1660	456	1959	486	2265	516	2576
195	173	258	396	307	668	337	878	367	1118	397	1384	427	1670	457	1969	487	2276	517	2586
200	186	260	405	308	674	338	885	368	1127	398	1393	428	1680	458	1979	488	2286	518	2597
202	191	262	415	309	681	339	893	369	1135	399	1403	429	1689	459	1989	489	2296	519	2607
204	197	264	424	310	687	340	900	370	1144	400	1412	430	1699	460	1999	490	2307	520	2617
206	203	266	434	311	694	341	908	371	1152	401	1421	431	1709	461	2009	491	2317	521	2628
208	208	268	444	312	700	342	916	372	1161	402	1431	432	1719	462	2020	492	2327	522	2638
210	214	270	454	313	707	343	923	373	1170	403	1440	433	1729	463	2030	493	2338	523	2648
212	220	272	464	314	714	344	931	374	1178	404	1449	434	1739	464	2040	494	2348	524	2659
214	227	274	475	315	720	345	939	375	1187	405	1459	435	1748	465	2050	495	2358	525	2669
216	233	276	485	316	727	346	947	376	1196	406	1468	436	1758	466	2060	496	2369	526	2680
218	239	278	496	317	734	347	955	377	1204	407	1478	437	1768	467	2070	497	2379	527	2690
220	246	280	507	318	741	348	963	378	1213	408	1487	438	1778	468	2081	498	2389	528	2700
222	253	282	518	319	748	349	970	379	1222	409	1496	439	1788	469	2091	499	2400	529	2711
224	259	284	529	320	755	350	978	380	1231	410	1506	440	1798	470	2101	500	2410	530	2721
226	266	286	540	321	762	351	986	381	1240	411	1515	441	1808	471	2111	501	2420	531	2731
228	273	288	552	322	769	352	994	382	1248	412	1525	442	1818	472	2122	502	2431	532	2742
230	281	290	563	323	776	353	1002	383	1257	413	1535	443	1828	473	2132	503	2441	533	2752
232	288	292	575	324	783	354	1011	384	1266	414	1544	444	1838	474	2142	504	2451	534	2763
234	295	294	587	325	790	355	1019	385	1275	415	1554	445	1848	475	2152	505	2462	535	2773
236	303	296	599	326	797	356	1027	386	1284	416	1563	446	1858	476	2163	506	2472	536	2783
238	311	297	605	327	804	357	1035	387	1293	417	1573	447	1868	477	2173	507	2482	537	2794
240	319	298	611	328	811	358	1043	388	1302	418	1582	448	1878	478	2183	508	2493	538	2804
242	327	299	617	329	819	359	1051	389	1311	419	1592	449	1888	479	2193	509	2503	539	2815

# Potential Problems



# Wind



## Stem Stress

- ★ The stem starts out 3 inches off the ground when pollinated. At maturity it could end up 3 feet off the ground. Therefore, early in its growth, vines need to be trained to allow for this movement.



# Sun and Heat

★ The vine needs sun and warmer temperatures to grow.  
The fruit needs shade and cooler temperatures to remain pliable to grow larger.



## Vine and Stems

- ★ Losing the pumpkin late in the growing season usually happens because of the stump or stem splitting.



# Compaction

★ Pumpkins have a shallow root system. The use of walk boards help reduce foot compaction.



# Rodents



# Diseases & Insects

★ Same diseases and insects that attack field pumpkins attack giants as well. Insecticides and fungicides are a must to help protect against:

Vine Borer, Cucumber Beetles, Squash Bug, Aphids, Anthracnose, Powdery Mildew, Bacterial Wilt, Downy Mildew, Fusarium, Gummy Stem Blight, and others.



Dwight Slone

1514 pounds





**Day 19**  
**1514 Slone**  
**105 lbs.**



**Day 22**  
**1514 Slone**  
**194 lbs.**



**Day 25**  
**1514 Slone**  
**303 lbs.**



**Day 27**  
**1514 Slone**  
**378 lbs.**



**Day 45**  
**1514 Slone**  
**1093 lbs.**

# How I Got The Bug

## FRANK MUDD

- From Flaherty, KY
- Kentucky State Record Holder
- Has grown the 3<sup>rd</sup> largest watermelon in the world at 341 lb.
- Has grown 2 of the 4 largest watermelons in the world.



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# Websites

<http://www.bigpumpkins.com/ViewArticle.asp?id=132>

<http://www.bigpumpkins.com/Default.asp>

<https://tools.pumpkinfanatic.com/index.php>



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# Kentucky State Record

Scott Bayuk  
Adair County

1883 pounds





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