



OLE AND SVEN CROP RESEARCH SUMMARY 2005-18

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Ole & Sven plots started in 2004, born out of the vision to do everything we can to help farmers raise more bushels!

So what's with the name? The idea is to highlight two divergent farming strategies. Ole invests in his crops to maximize yields, while Sven cuts corners and just gets by on his farm.

Our recurring corn and soybean tests include Planting Date, Speed, Population and Depth. All studies are done in 30" rows, 200' long. We also add new studies every year, depending on what we see as valuable to growers in our region. While this is side-by-side data, tracking the same trials over a period of years has shown trends.

Don't be shy. Let us know if you have any research ideas that could benefit your operation!

**Data unavailable in 2009 due to hail and wet, late conditions. *Full 2015 information unavailable due to lost data.*



August - 2019



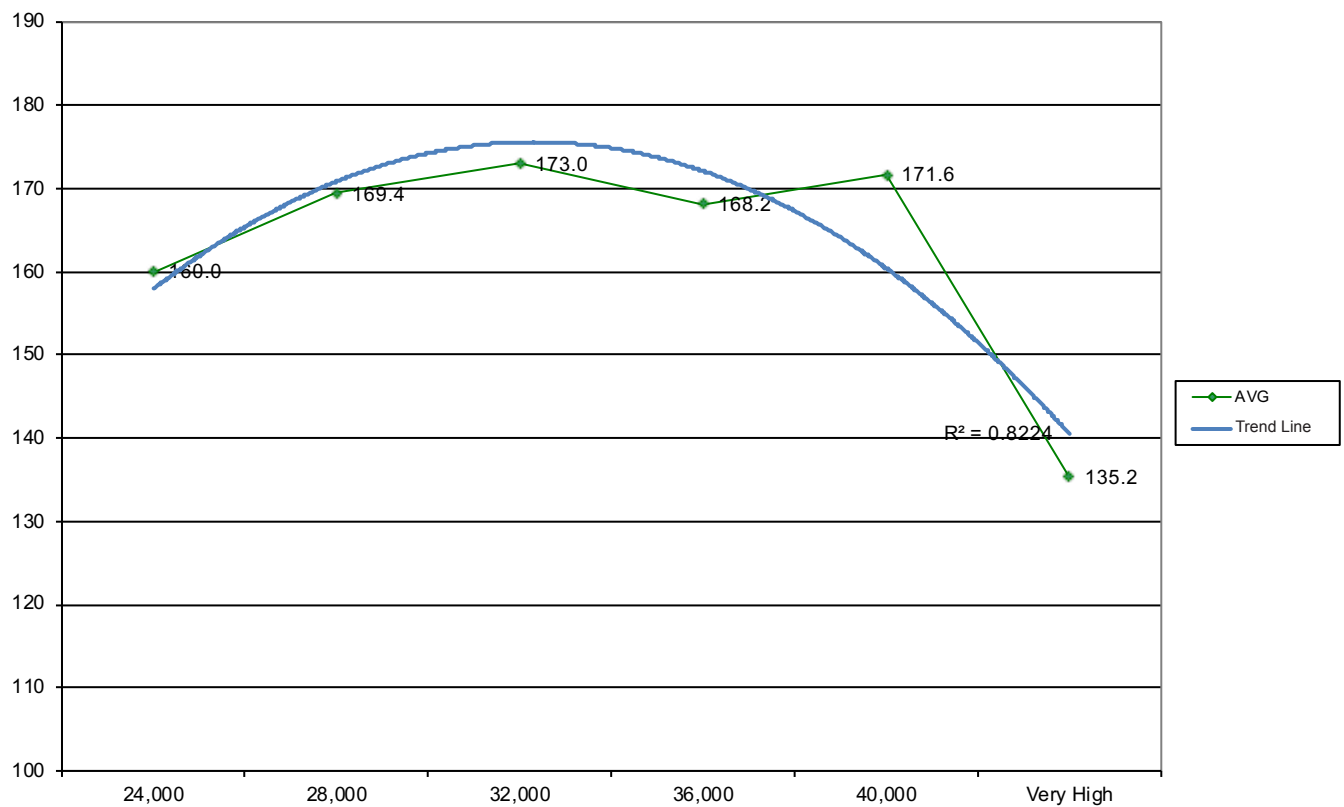
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Corn: Population

Our recommendation of 32,000/acre holds true in this data set.

Corn Population 2005-2018



Population	2005	2006	2007	2008	2010	2011	2012	2013	2014E	2014L	2015	2015W	2016	2017	2018	AVG
24,000	169.5	113.2	153.7	214.9	187.3	130.3	112.5	145.0					186.5	158.7	188.0	160.0
28,000	173.6	102.9	169.7	229.2	189.1	151.2	112.5	147.3	162.5	203.6	183.0		202.9	162.0	195.6	169.4
32,000	185.9	128.7	166.2	230.9	198.0	154.5	109.9	151.0	152.3	201.1	184.0	168.1	211.0	163.0	194.6	173.0
34,000	184.8	92.7	154.5	219.1	178.2	160.2	110.4	145.7	164.7	199.5	171.0	172.1	213.1	167.7	202.6	168.2
40,000	192.0	123.5	165.1	211.3	185.1	147.1	121.1	150.4	164.6	203.8		168.8	203.7	172.1	206.3	171.6
Very High	112.3	46.3	141.6	168.2	187.6	142.5	81.3	144.1	182.9	203.5						135.2



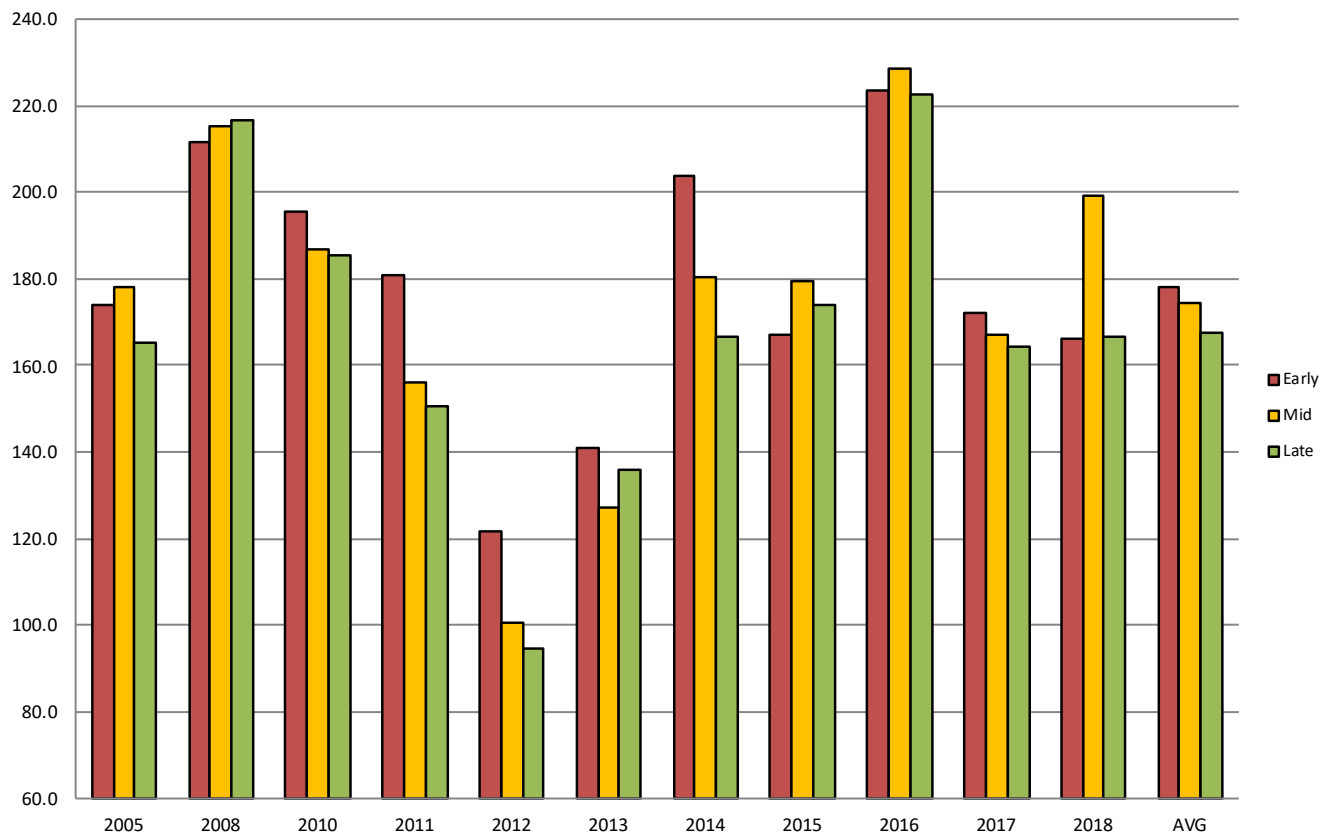
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Corn: Planting Date

This reaffirms the data from NDSU that early planting will lead to higher yields.

Corn Planting Date 2005-2018



Planting Date	2005	2008	2008	2010	2010	2011	2011	2012	2013	2013	2014	2014	2015	2016	2017	2018	AVG
Early	174.11	221.15	202.13	195.5	195.7	171.6	190.5	121.92	157.3	124.64	217.0	190.1	167.0	223.7	171.9	166.3	178.0
Mid	178.12	222.16	208.43	184.9	188.7	143.9	168.5	100.77	138.6	116.0	196.7	164.5	179.3	228.5	167.1	199.0	174.5
Late	165.27	213.14	220.34	183.4	187.2	138.8	162.4	94.62	153.1	118.79	170.1	163.5	174.0	222.5	164.5	166.8	167.6



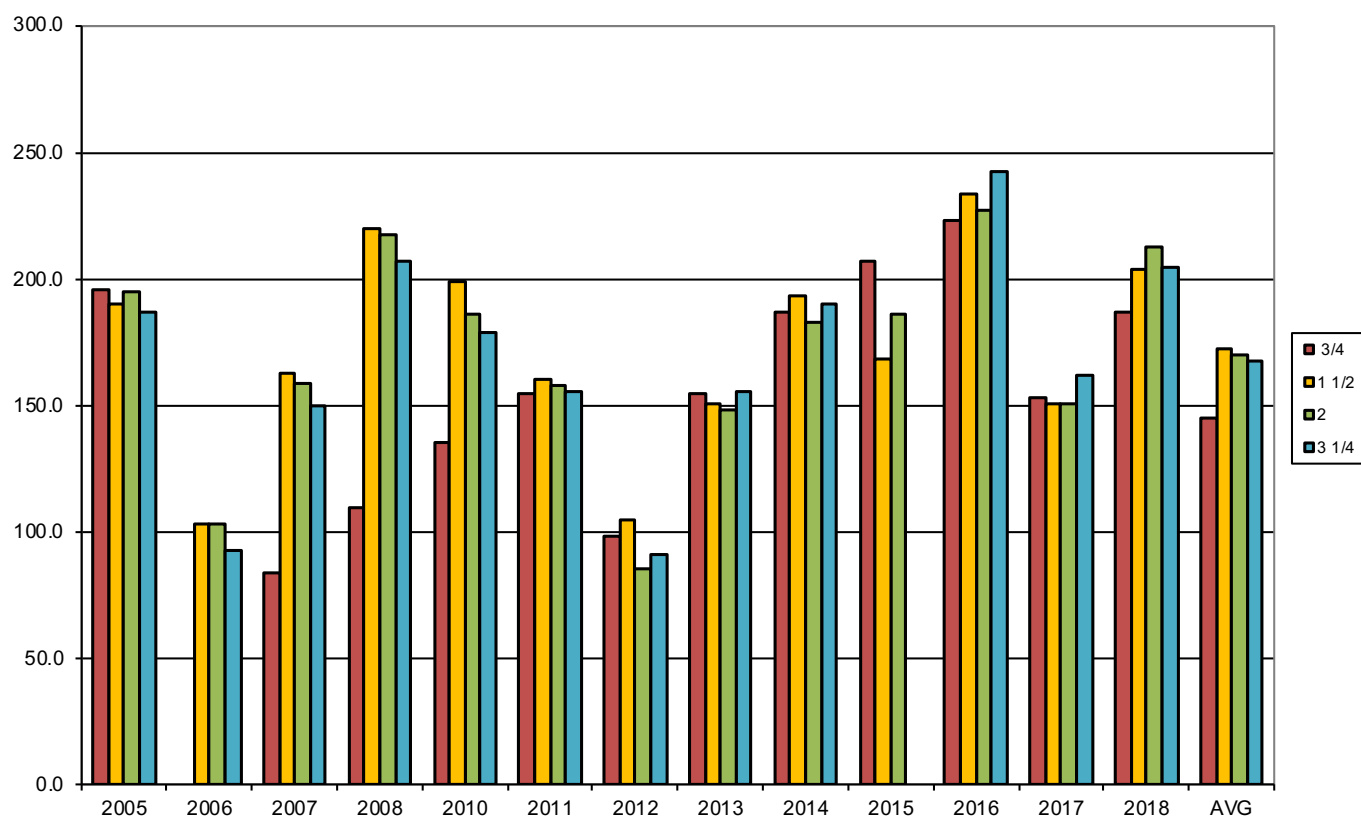
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Corn: Planting Depth

Our recommendation: 1 1/2" early - 2" late planting depth in corn.

Corn Planting Depth 2005-2018



Planting Depth	2005	2006	2007	2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	AVG
1/2"						107.5	38.9	141.6	202.7		144.5	120.4		94.4
3/4"	195.3	0.0	83.6	109.4	135.1	154.9	97.9	155.0	187.1	207.0	223.4	153.2	186.6	145.3
1 1/2"	189.7	102.9	162.6	219.8	199.1	160.6	105.0	150.8	192.9	168.0	233.6	150.5	203.7	172.2
2"	195.0	102.9	158.6	217.1	185.9	158.0	85.2	148.4	182.6	186.0	227.4	150.5	212.4	170.0
3 1/4"	187.0	92.7	149.8	206.9	178.4	155.1	90.7	155.2	190.2		242.1	162.0	204.3	167.8



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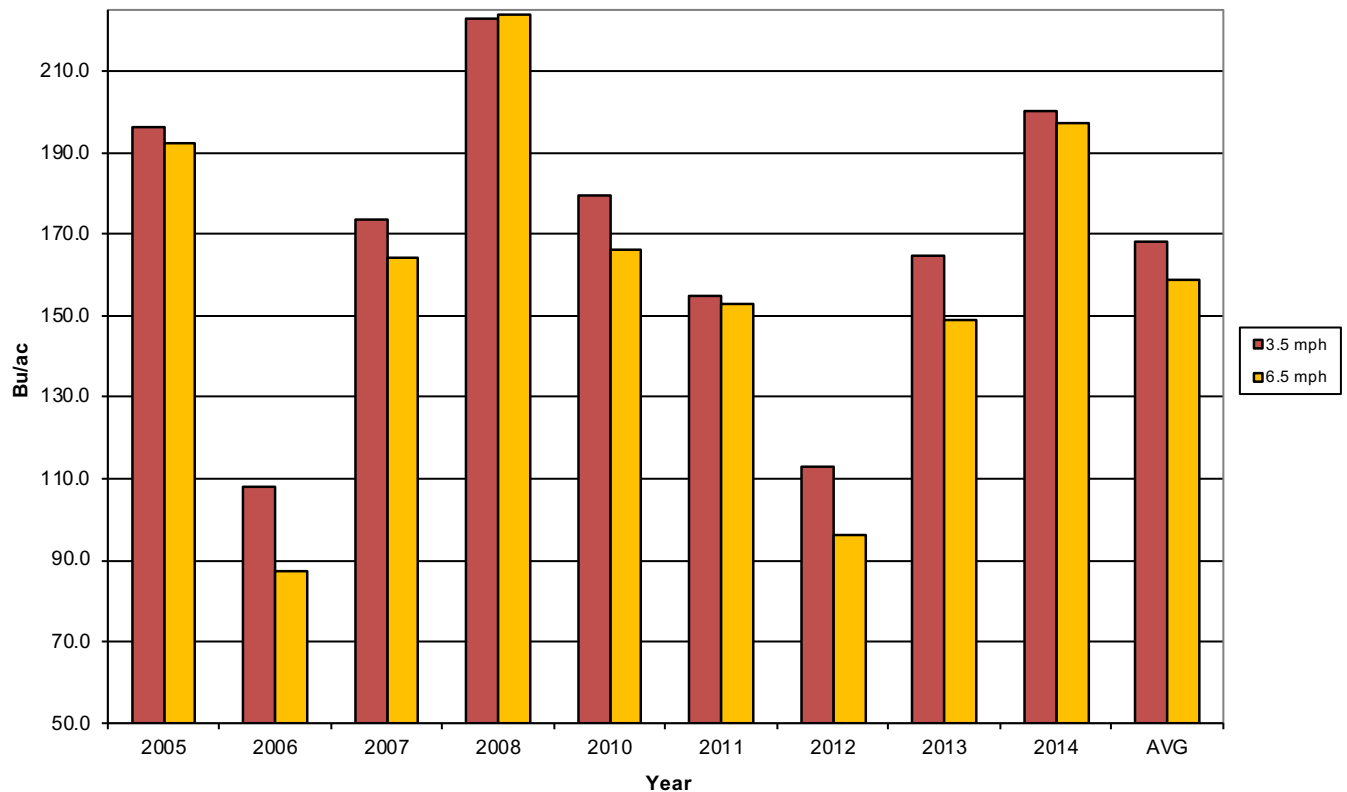
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Corn: Planting Speed

**Most planters are engineered for maximum of 5mph planting speed.
We do not recommend exceeding this.**

Corn Planting Speed 2005-2014

**2015-2018 we have been using a high speed precision planter.
With this technology speed has not shown to have an impact on yield.**



Planting Speed	2005	2006	2007	2008	2010	2011	2012	2013	2014	AVG
3.5 mph	196.3	108.1	173.4	223.0	179.7	154.9	112.9	164.7	200.0	168.1
6.5 mph	192.3	87.5	164.3	224.0	166.0	152.8	96.0	148.8	197.4	158.8



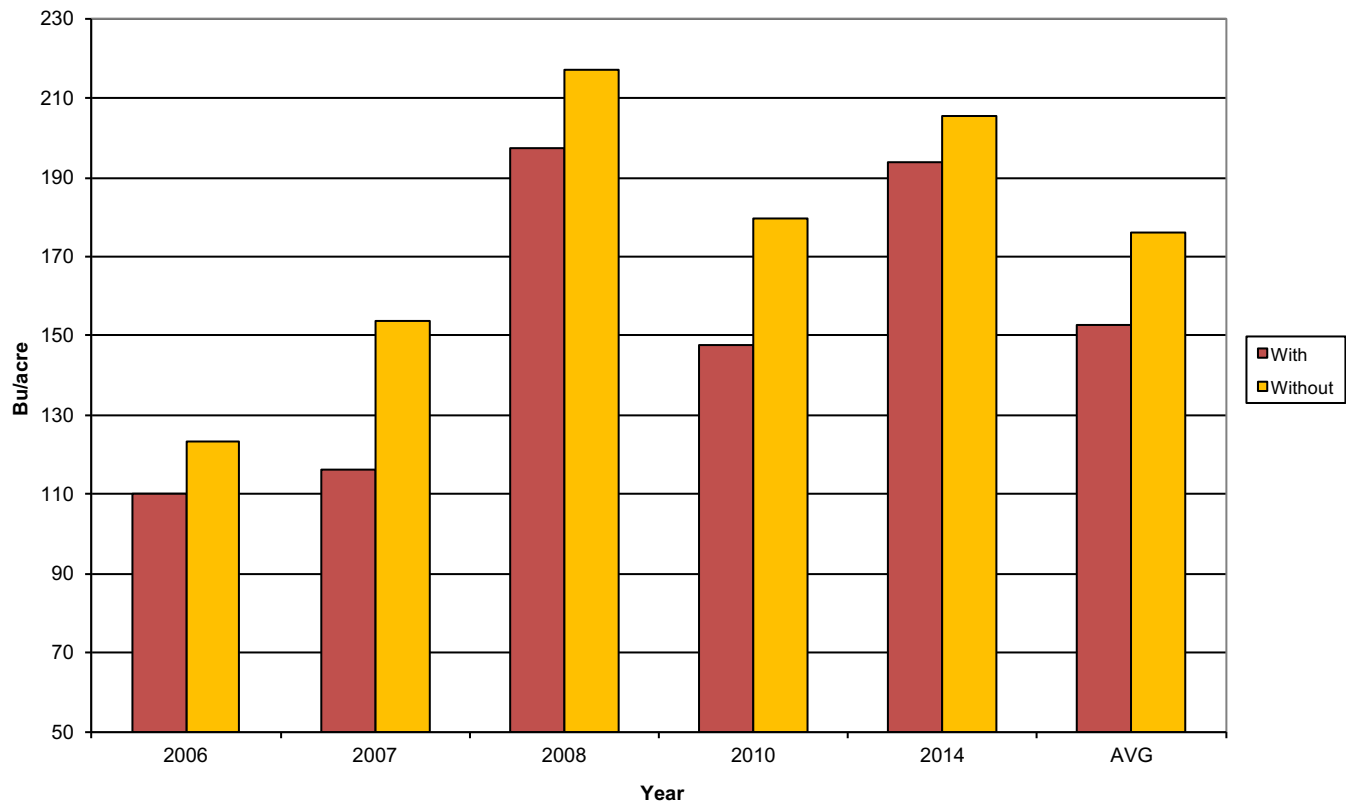
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Corn: Defoliation at V5

This study simulates the effects of an early season hail event.

Corn Defoliation 2005-2014



Defoliation	2006	2007	2008	2010	2014	AVG
With	110.12	116	197.17	147.8	193.59	152.9
Without	123.53	153.65	217.4	179.7	205.33	175.9



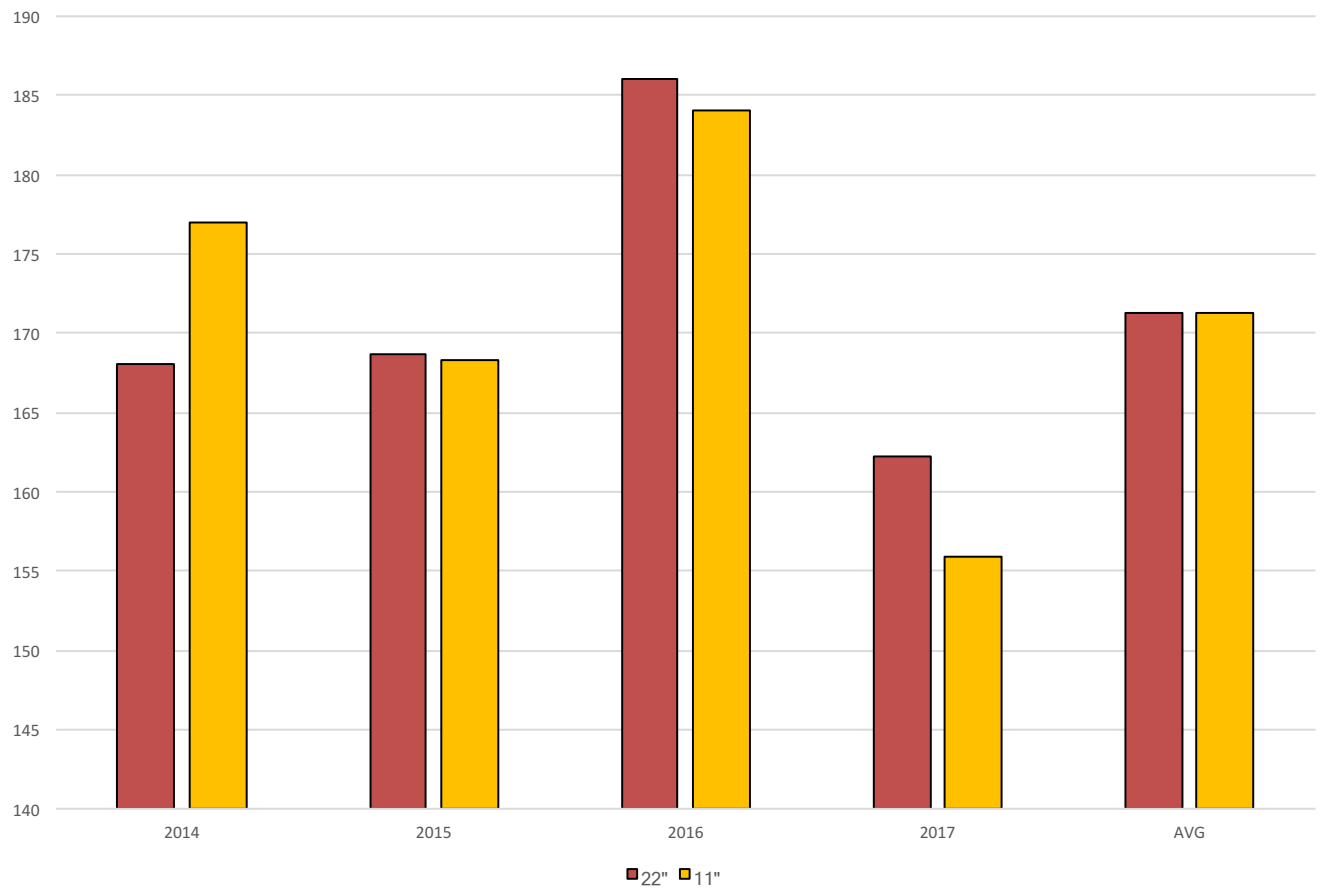
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Corn: Width Study

This study explores the performance of row width.
Our recommendation: there is not an advantage to very narrow rows.

Row Width 2014-2017



Row Study	2014	2015	2016	2017	AVG
22"	168	168.7	186.1	162.2	171.25
11"	177	168.3	184.1	155.9	171.33



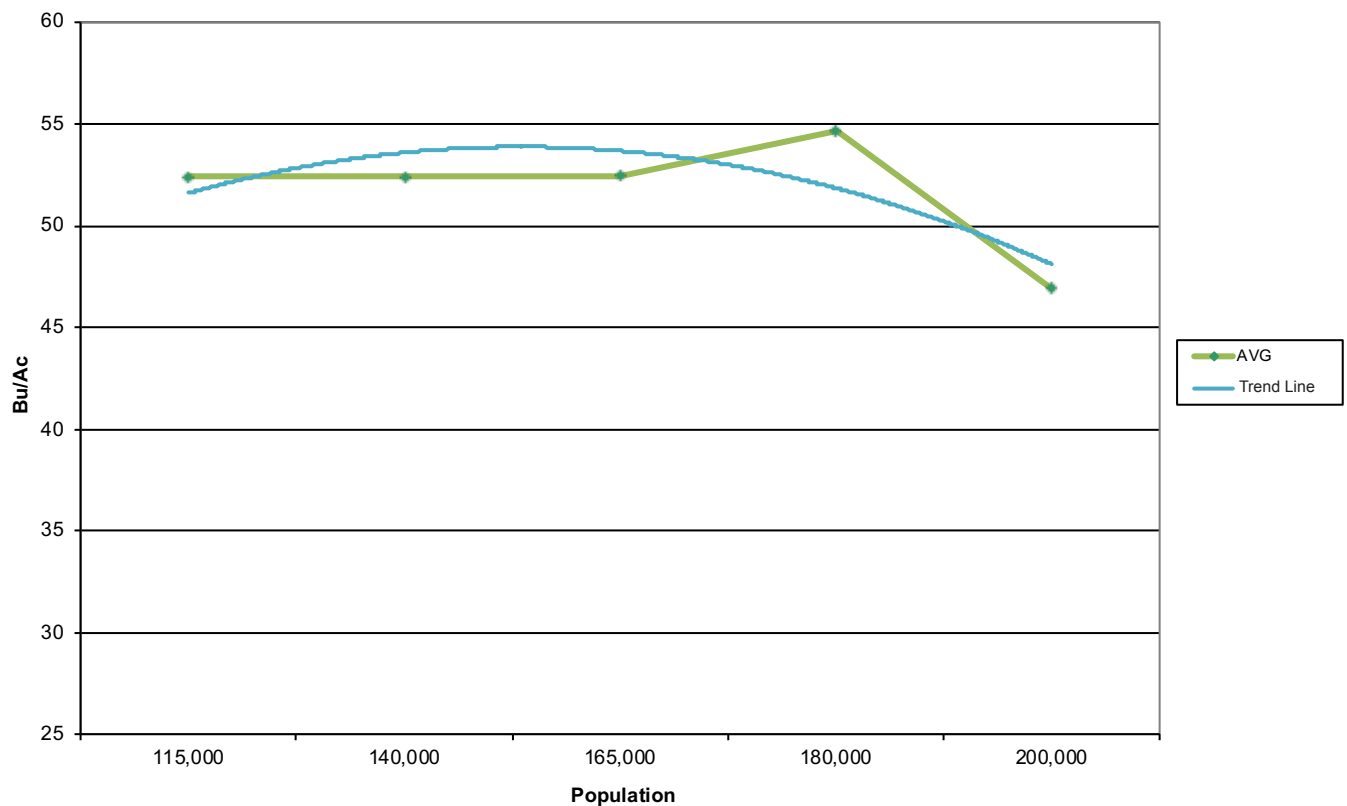
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Soybeans: Population

Our recommendation:
Solid seeding - 188,000
22" rows - 165,000
30" rows - 155,000

Soybean Population 2005-2018



Population	2008	2010	2011	2012	2013	2014	2014W	2015W	2016	2016W	2017W	2017	2017	2018	AVG	14-18 AVG
115,000	44.9	50.7	51.0	43.0	32.6	46.9	48.6	55.6	59.4	53.1	45.6	46.1	47.6	55.9	48.8	52.4
140,000	44.9	54.6	48.9	38.0	40.3	48.7	47.5	55.1	60.7	51.2	46.7	45.5	46.4	56.6	49.3	52.4
165,000	46.0	54.7	51.0	37.9	44.0	46.5	48.1	56.0	62.4	49.0	45.0	45.0	47.9	57.3	50.0	52.5
180,000	46.0	54.6	51.0	39.7	44.0	48.6	51.9	56.9	67.0	50.5	41.8	53.0	53.4	57.9	51.4	54.7
200,000	48.2	56.4	55.0	39.9	45.9	46.9									48.8	46.9



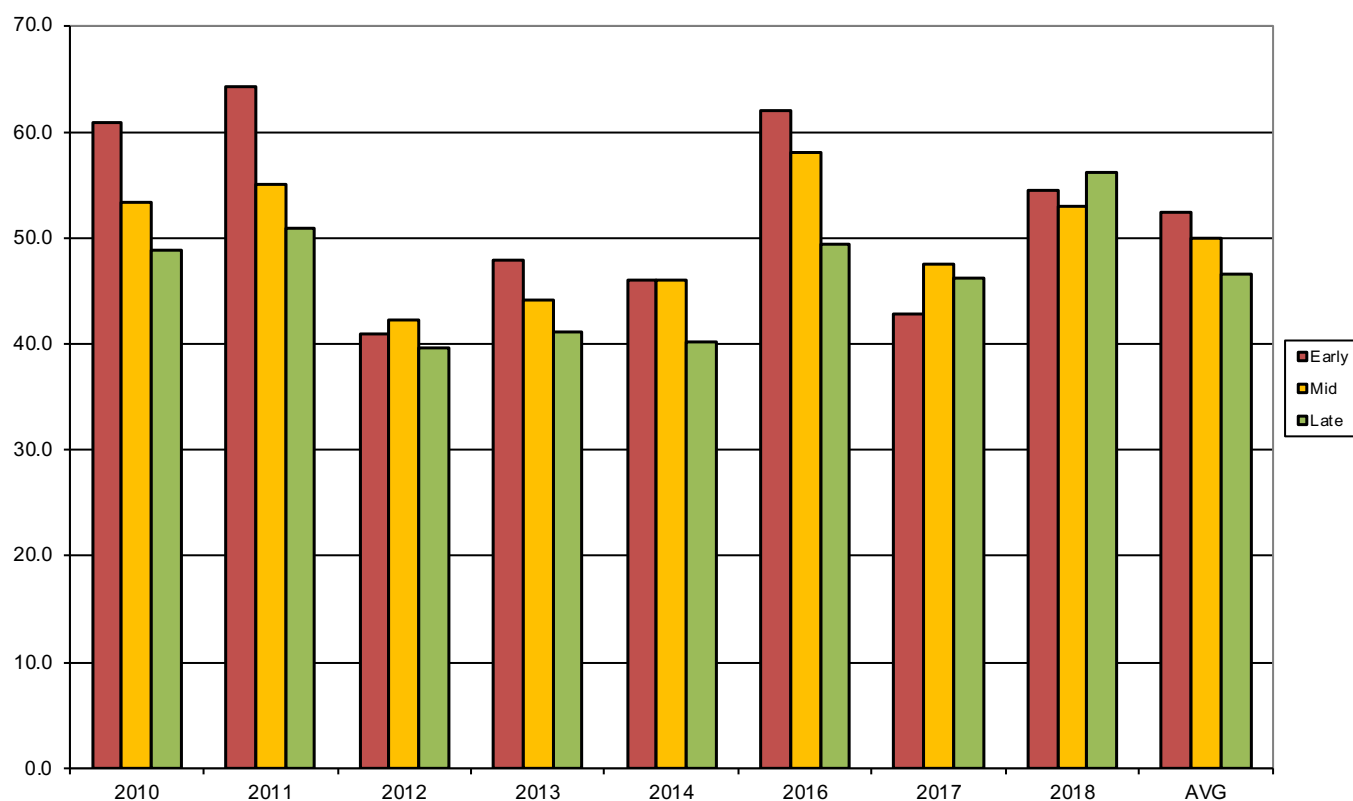
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Soybeans: Planting Date

As with corn, planting early has advantages. But watch soil / air temperatures.

Soybeans Planting Date 2010-2018



Planting Date	2010	2010	2011	2011	2012	2013	2013	2014	2014	2016	2017	2018	AVG
Early	59.9	61.7	65.2	63.2	40.9	51.8	44.1	49.5	42.5	62.0	42.8	54.6	52.4
Mid	52.4	54.2	53.0	57.1	42.3	49.8	38.4	46.1	46.0	58.0	47.5	53.0	49.9
Late	52.7	45.0	48.9	53.0	39.6	47.8	34.5	39.0	41.6	49.4	46.2	56.1	46.6



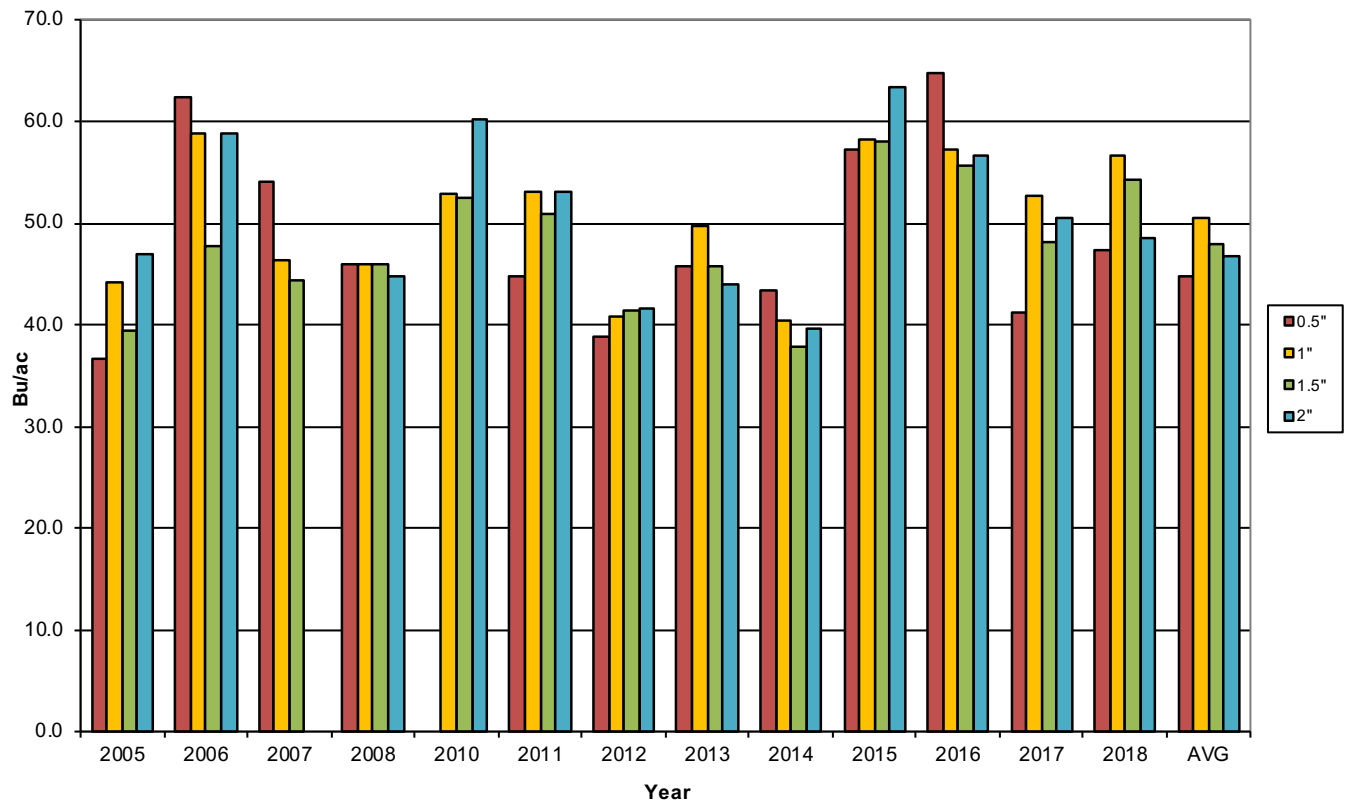
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Soybeans: Planting Depth

Soybeans are very adaptable to planting depth,
but we recommend 1-2" depending upon soil conditions.

Soybeans Planting Depth 2005-2018



Planting Depth	2005	2006	2007	2008	2010	2011	2012	2013	2014	2016	2017	2018	AVG
1/2"	36.61	62.42	54.11	45.99	0	44.83	38.75	45.8	43.3	64.7	41.3	47.2	44.8
1"	44.12	58.75	46.38	45.99	52.78	52.99	40.80	49.67	40.50	57.3	52.7	56.7	50.0
1 1/2"	39.43	47.73	44.45	45.99	52.54	50.95	41.35	45.8	37.9	55.7	48.0	54.3	47.9
2"	46.94	58.75	0	44.86	60.19	52.99	41.67	43.99	39.7	56.6	50.5	48.5	46.8



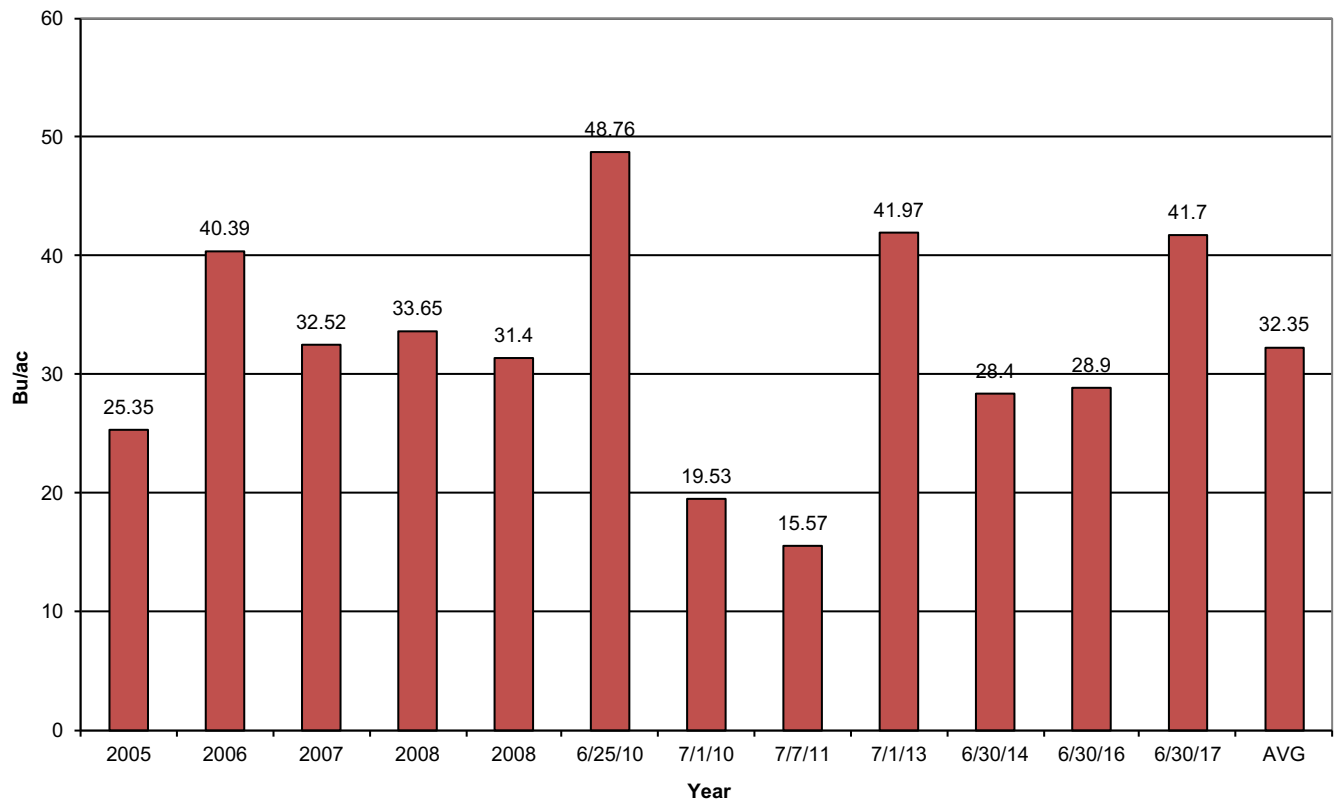
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Soybeans: Very Late Planting (Early July)

Every year there seems to be some late planting due to wet conditions or replanting.
This study shows yield potential with late planting.

Soybeans Late Planting 2005-2017



Late Planting	2005	2006	2007	2008	2008	6/25/10	7/1/10	7/7/11	7/1/13	6/30/14	6/30/16	6/30/17	AVG
	25.35	40.39	32.52	33.65	31.4	48.76	19.53	15.57	41.97	28.4	28.9	41.7	32.35



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Soybeans: In-Furrow

The data does not show a big advantage to using in-furrow fertilizer. The risk of seed burn is greater than the potential benefits so we recommend not applying liquid fertilizer with soybean seed in the furrow.

In-Furrow	2014	2014W	2015	2016	2017	2018	AVG
Check	48.7	48.7	55.4	52.4	49.7	54.4	52.1
10-34-0	46.9	52.2	56.3	50.4	47.5	54.8	51.7

Soybeans: Narrow Row

There has been a slight yield advantage to keeping the 22" rows vs planting at 11" but only 50% of the time. The difference is not enough to change your current practice either way on your farm.

Narrow Row	2015	2016	2017	2018	AVG
Check 22"	54.7	52.4	49.7	51.7	52.1
11"	55.4	48.0	48.3	52.0	50.9