

# 2019 Growing Season for Corn in Indiana

Dr. R.L. Nielsen  
Extension Corn Specialist,  
Dept. of Agronomy  
Purdue University

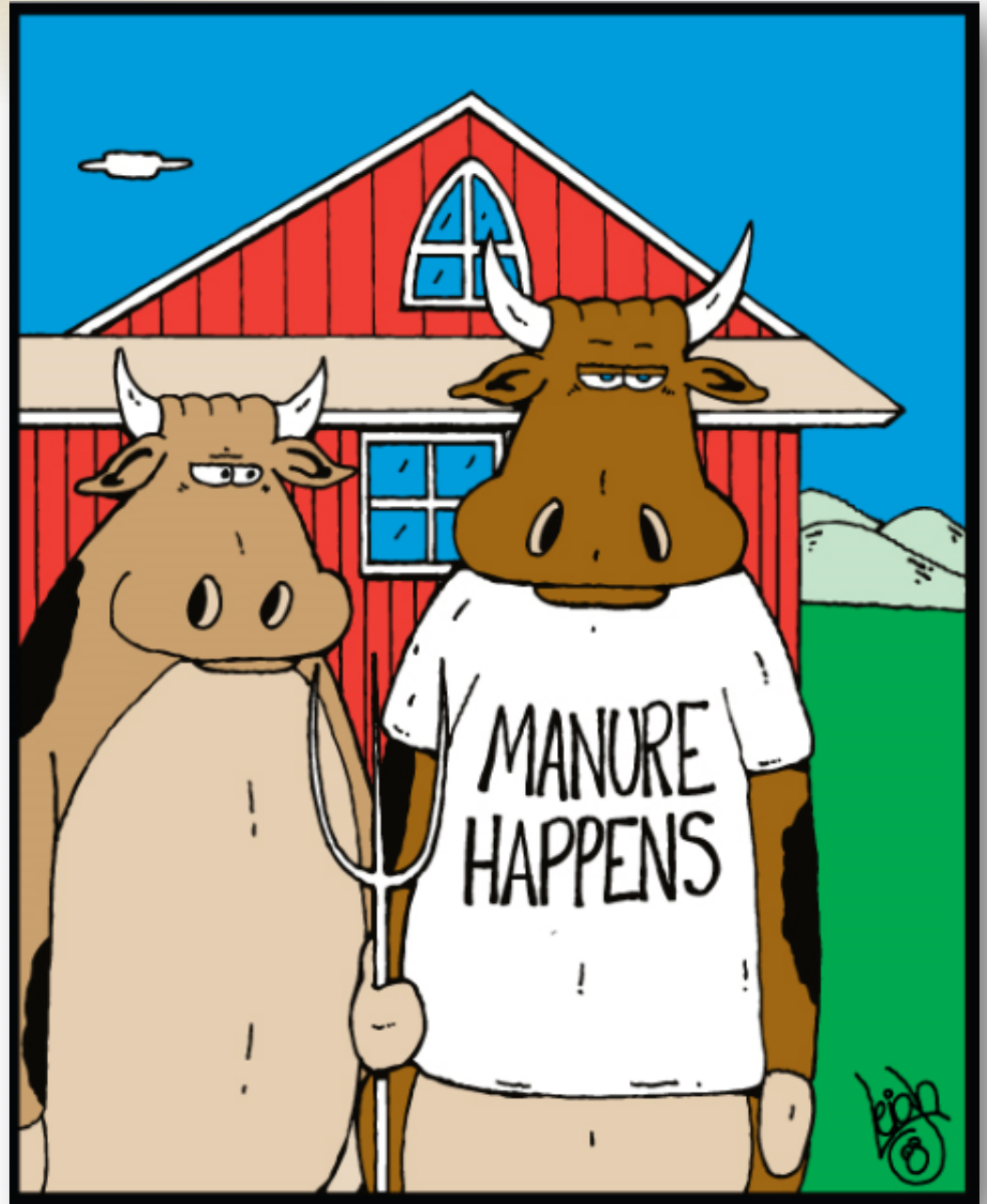
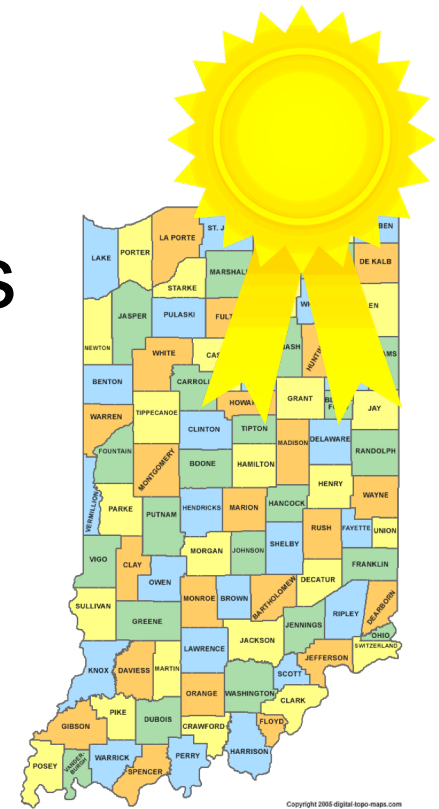


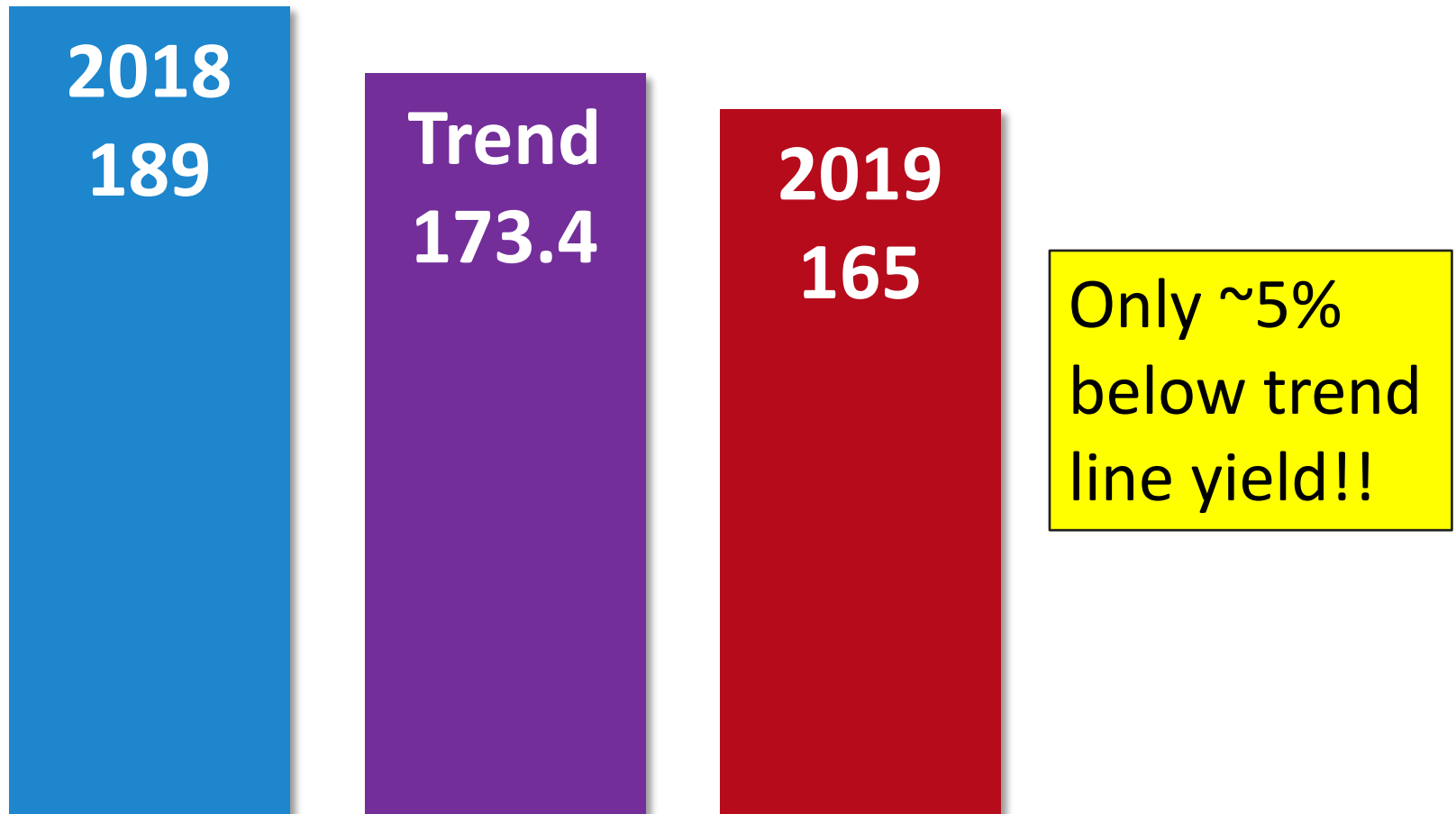
Image source: <https://wrlinc.files.wordpress.com/2017/08/manure-happens.png?w=1075>

# 2019: Many near-record achievements

- Planting progress statewide was among the 3 latest in past 40 years
  - Nearly 710,000 acres not planted
- Silking and grain maturity were among 3 latest in 40 years
- Grain harvest 5<sup>th</sup> latest in 40 years
- Season-long crop condition ratings were 4<sup>th</sup> worst in 34 years



# Statewide 2019 grain yield estimate was amazingly good!



Data derived from USDA-NASS, 2019 est. current as of Nov 2019



# Lessons learned (mostly re-learned) in 2019...

- Late planting, by itself, does NOT guarantee disastrously low yields
- Modern hybrids are remarkably resilient to a wide variety of crop stresses
- Soil compaction, resulting from tillage and planting in wet soils, is a “gift” that keeps on giving all season long
- Rainfall during grain fill is still important
- Corn that matures in mid- to late October takes forever and a day to dry down

Image: <https://www.fa-mag.com/>

# Our greatest agronomic challenge...



...is figuring out how to stress-proof our crops against “normal” weather.

# “Normal” weather today...

...can be defined as an unpredictable number of unpredictable **extreme weather** events, each occurring unpredictably, with unpredictable severity.



**Greater climate variability  
= Higher frequency of  
extreme weather events**



Image: <http://www.keepbänderabeautiful.org/climate-change.jpg>

# Strategies for stress-proofing your crop...

- More resilient crop genetics
- Sound agronomic decision-making
- Identification & mitigation of field-specific Yield Limiting Factors (YLFs)