Weather Considerations

- ☐ The predictable thing about weather is that it is unpredictable.
- □ Good weather in early spring usually means more than average number of days suitable for planting.
 - ✓ No guarantees!
 - ✓ Soil sufficiently dry and subsequent rainfall less likely to saturate soil.
- Decision to begin planting depends upon personal approach to risk.
 - ✓ About half of the days during April and May are suitable for fieldwork.
- ☐ Should the decision be base upon soil temperature?

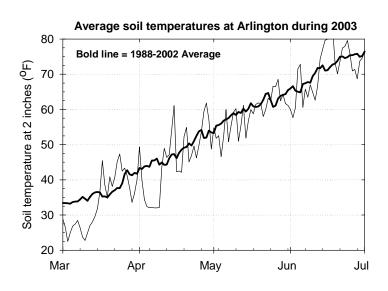


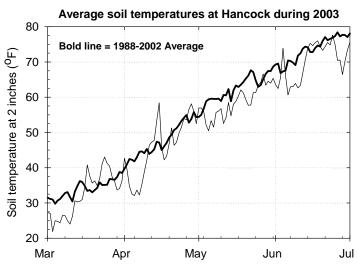
Should Soil Temperature or Calendar Date be used to Begin Planting? Answer: Probably both!

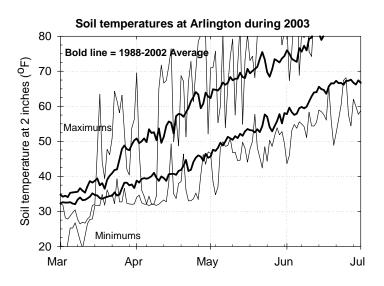
- □ For germination and emergence of corn, the seed needs water, oxygen and a minimum temperature of 50 °F.
 - ✓ Requires seed-soil contact for water uptake.
 - ✓ Seed absorbs 30% of it's weight in water.
 - ✓ Under average spring conditions corn emerges 13 days after planting.
- Difficult to use soil temperature as a guide to begin planting.
 - ✓ When should soil temperature be measured?
- ☐ If soil temperature isn't ideal for planting, it soon will be.
- ☐ Soil moisture is more important than soil temperature.
 - ✓ Monitor top 6 inches for soil moisture.

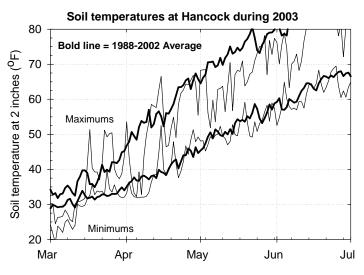


2003 Soil Temperatures at Arlington and Hancock





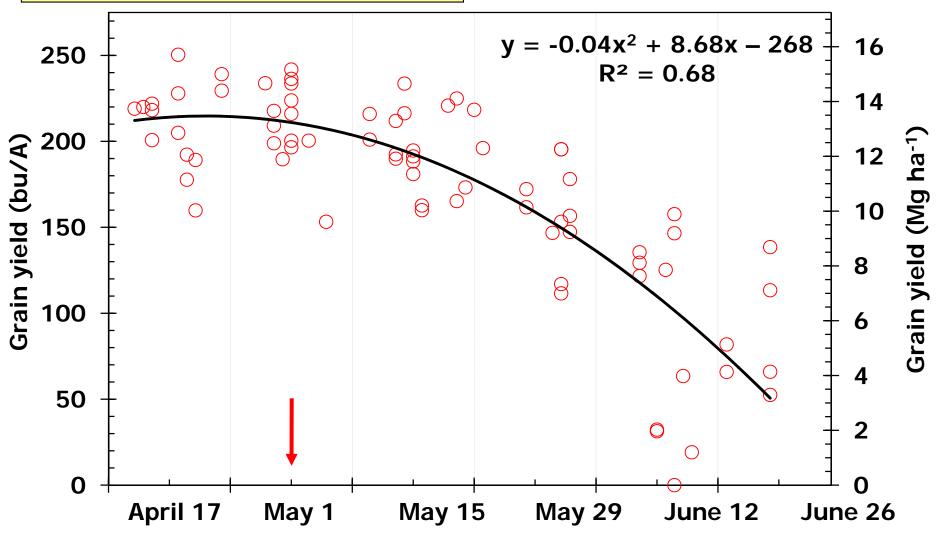






Grain yield decreases 0.5 bu/A per day on May 15 and accelerates to 2.5 bu/A per day on June 1 ...

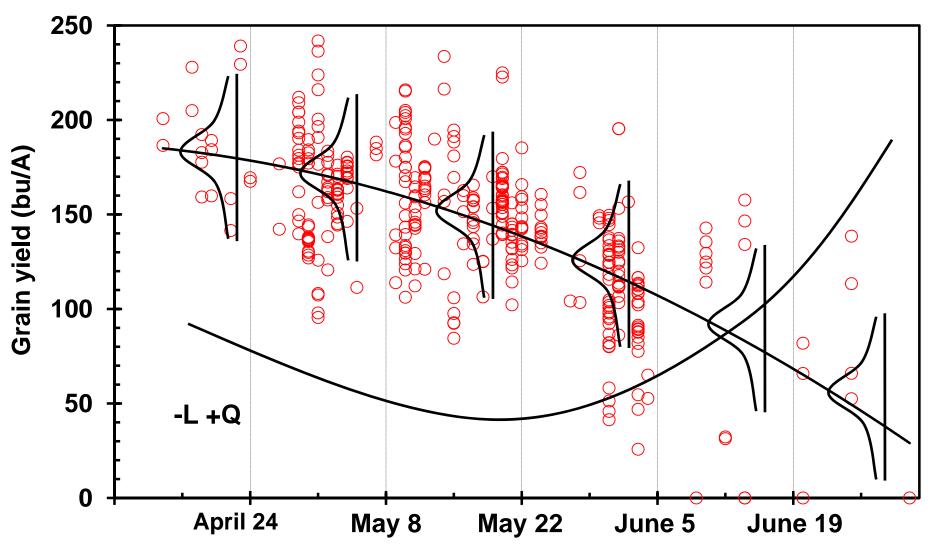
Source: Lauer (Full-season hybrid at Arlington 1997-2006)





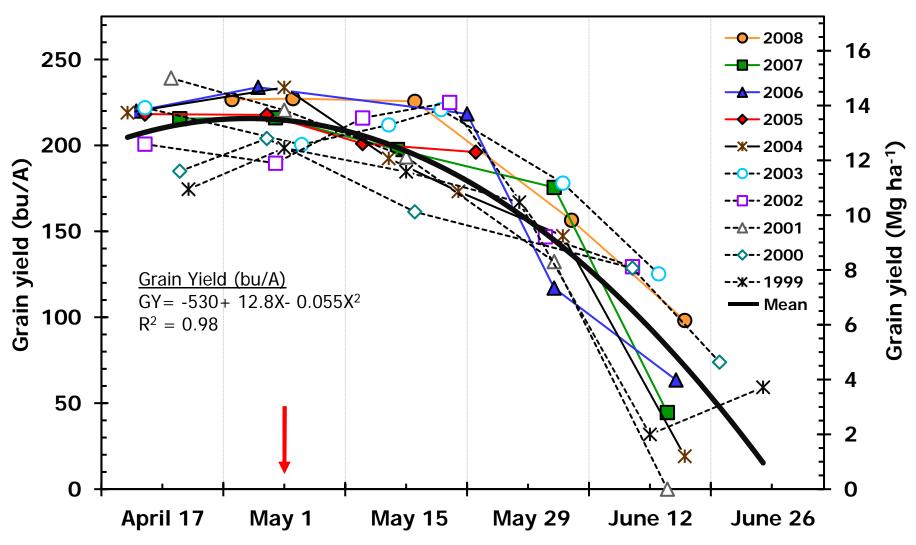
Lauer, © 1994-2009 University of Wisconsin – Agronomy

Grain Yield Response of Full-Season Corn Hybrids to Planting Date at Arlington (1976-2002)





The planting date producing maximum grain yield is May 1. Grain yield decreases 0.5 bu/A per day on May 15 and accelerates to 2.5 bu/A per day on June 1.

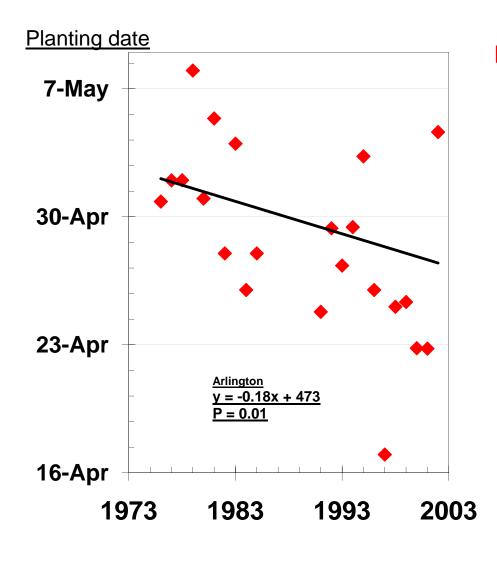




Source: Lauer (Full-season hybrid at Arlington, WI)

Lauer, © 1994-2009 University of Wisconsin – Agronomy

Are Optimum Planting Dates Getting Earlier?



- Yes, current optimum planting dates are 5 days earlier than 1974
 - ✓ Criteria: 10 or more years of data at a location
 - Arlington, WI = 5 days
 - Johnston, IA = 4 days

