









# August 2007 Late Season Flooding

Rain has saturated and flooded many of lowa's corn fields.

### Add two seconds of rainfall.

### **Roll for effects:**

1-3: Short term flooding (No Damage)
4: Stalk diseases result in loss of harvest efficiency (-1
Crop)

5: Poor grain quality creates storage problems (-2 Crop)
6: Corn ear diseases and molds make grain
unmarketable (-3 Crop)

## October 2019 Early Snowfall

Rain has saturated and flooded many of Iowa's corn fields.

### Add one second of rainfall.

### **Roll for effects:**

1-3: Crops withstand overwintering (No Damage)
4-6: Wetting and freezing causes split pods and seed
shattering in soybean (-1 Crop)

## July 2015 Abnormally Dry

Parts of northwest Iowa are listed as 'abnormally dry' on the most recent edition of the Drought Monitor. Corn and soybean crops are wilting in the afternoon on some of the light soil areas.

Replace 1 of your wet fields holding a plant with a dry field.

## April 2018 Low Soil Nitrate

The soil nitrate accumulation in the top foot of soil is lower than the previous 5 years due to low organic matter mineralization and nitrification.

Roll dice for number of additional drops of fertilizer.

# October 2015 Bumper Crop Harvest

Crops grew unusually tall this year: Corn grew about 10 to 12 feet high, and soybeans are 5 feet tall.

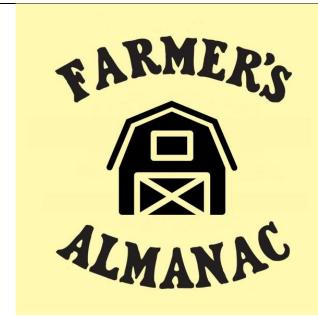
Roll dice for number of Bonus Crop.

## June 2010 Extreme Weather

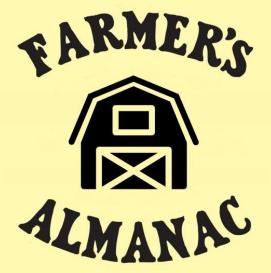
Extended periods of rainfall, flooding, hail, or all of the above have producers scrambling for replant or prevented planting options.

Pick one plant to replace and add 3 nitrate drops.

Add two seconds of rainfall.













# July 2017 Drought Stress Promotes Spider Mite Injury

A few places in southern and northwestern lowa have already reported two-spotted spider mite populations with prolonged feeding in soybean this year.

### **Roll for effects:**

- 1-3: No spider mites or injury observed (No Damage)
- 4: Mites scattered in middle and top canopy, yellowing and some leaf loss observed (-1 Crop)
- 5: Mites common in middle canopy, lower leaf yellowing and leaf drop common (-2 Crop)
- 6: Lower leaf loss common and yellowing moving to the middle canopy (Replace one plant)

# September 2013 Stalk Breakage and Rot Caused by Physoderma

Excessive wet weather conditions result in an unusual disease has been reported in several fields in southwest and western lowa over the past couple of weeks.

### Roll for effects:

1-3: Crops not infected (No Damage)
4-6: Infection present, move plant to a new field (-1
Crop)

## May 2009 Soil Crusting After Heavy Rain Events

Conventionally tilled fields that were planted recently to corn or soybean form soil crust.

Replace any normal crop field with a new, dry field of your choice.

## May 2013 Low Soil Nitrate

Unfortunately, much of Iowa has received considerable precipitation since soils thawed, especially the eastern two-thirds of Iowa. Therefore, we have lost the opportunity to use much of the profile nitrate carried over from last year.

Roll dice for number of additional drops of fertilizer.

# October 2016 Bumper Crop Harvest

Bumper grain yields are being harvested from most Iowa fields this fall. However, due to low crop prices producers are thinking of reducing phosphorus (P) and potassium (K) fertilizer application rates.

Roll dice for number of Bonus Crop.

Next turn, apply only 1-2 drops of fertilizer per plant.

## June 2008 100-Year Flooding

High water and flooding in small, headwater streams in north-central and eastern lowa, particularly in June, combined and accumulated in large, mainstem rivers and resulted in flooding of historic proportions in the Cedar and lowa Rivers.

Replace both plants in your fields and add 6 nitrate drops.

Add three seconds of rainfall.

Farm Location	Total Plant Growth Score	Reservoir Water Quality Score	Well Water Quality Score	Bonus/Penalties	Total Score
1					
2					
3					
4					
5					
6					
7					
8					

# WATER QUALITY

-5 pts

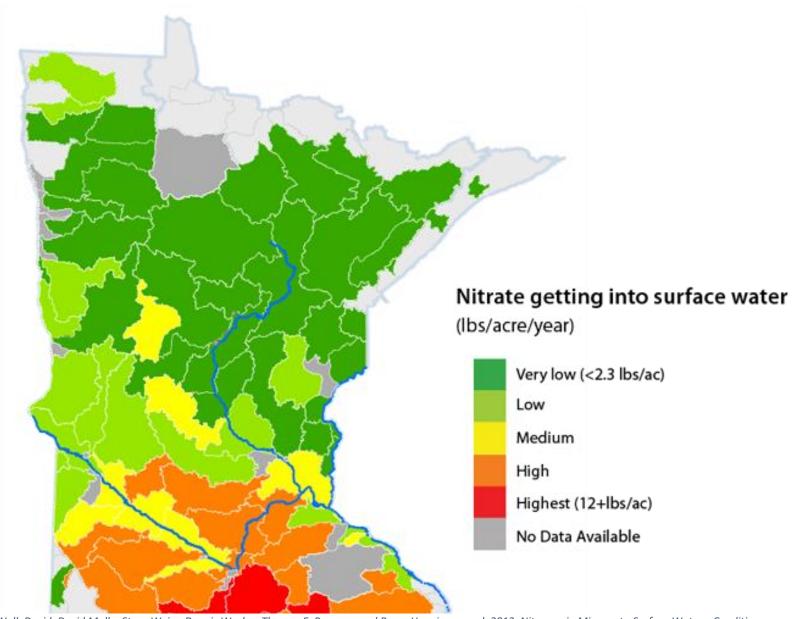
-10 pts

-15 pts

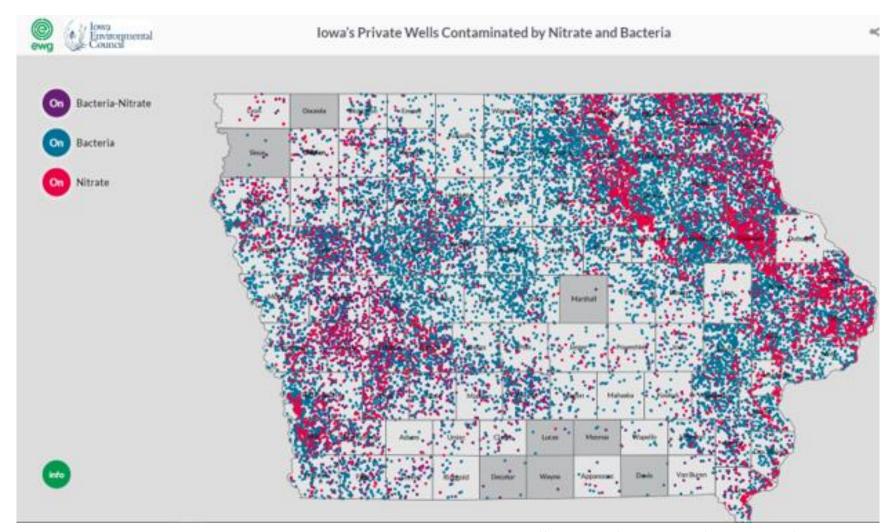
-20 pts

-25 pts

-30 pts



Wall, David, David Mulla, Steve Weiss, Dennis Wasley, Thomas E. Pearson, and Bruce Henningsgaard. 2013. Nitrogen in Minnesota Surface Waters: Conditions, trends, sources, and reductions. Saint Paul: Minnesota Pollution Control Agency.



Iowa Environmental Council. 2019. Iowa's Private Wells Contaminated by Nitrate and Bacteria. April. https://www.ewg.org/interactive-maps/2019\_iowa\_wells/.

