

## 2018 Fertilizer Replicated Strip Trial Results

This is a 190 acre fall application fertilizer trial comparing a conventional anhydrous and dry fertilizer broadcast program vs. injecting a complete dry blend of nutrients using urea as the primary nitrogen source in Hamilton county, Iowa.

Drone Image taken August 1, 2018

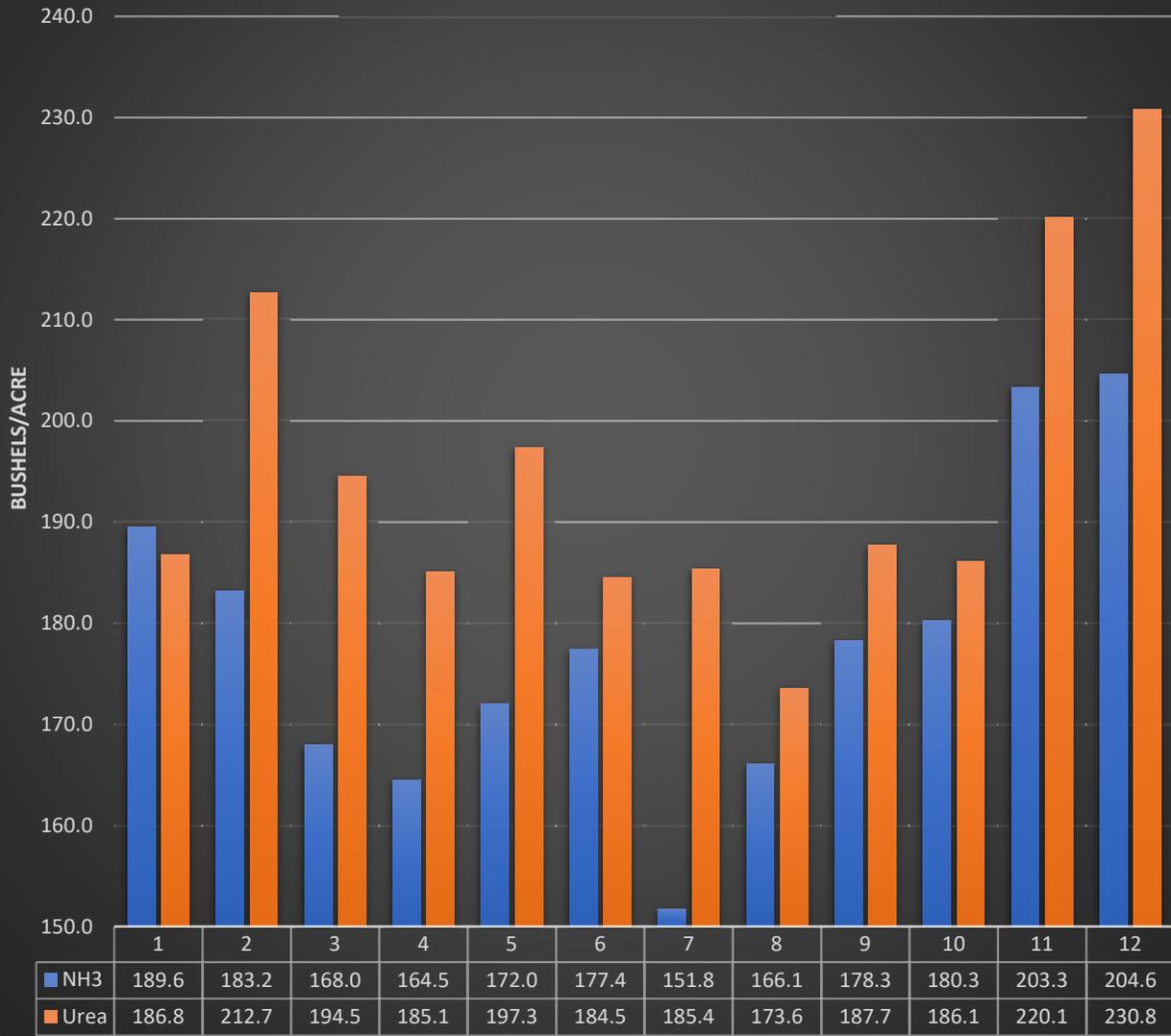


<b>Trial Type</b>	<b>Crop Nutrition - Fertilizer</b>
<b>Trial Detail</b>	<b>NH3 injected and dry fertilizer broadcasted vs. Complete dry blend injected</b>
<b>Crop Rotation</b>	<b>Corn Following Soybeans</b>
<b>Fertilizer Application Date</b>	<b>11/13/2017</b>
<b>Planting Date</b>	<b>5/12/2018</b>
<b>Seed</b>	<b>Multiple Hybrids</b>
<b>Application Detail</b>	<b>NH3 Strips 130-0-0* &amp; Broadcast application 21-80-80-10-1* (Potassium Chloride and NPSZ)</b>
	<b>Urea Strips 130-80-80-10-1* (Urea, Potassium Chloride and NPSZ)</b>
<b>Harvest Date</b>	<b>10/27/2018</b>
<b>Trial Notes</b>	<b>1. Additional 50# of Nitrogen applied with preemergent herbicide</b>
	<b>2. Both applications include 1qt of N-Serve per acre</b>
	<b>3. Complete urea based blend was placed at 5 inches deep</b>

\* *Actual analysis not weight*

## Yield Results & Conclusion

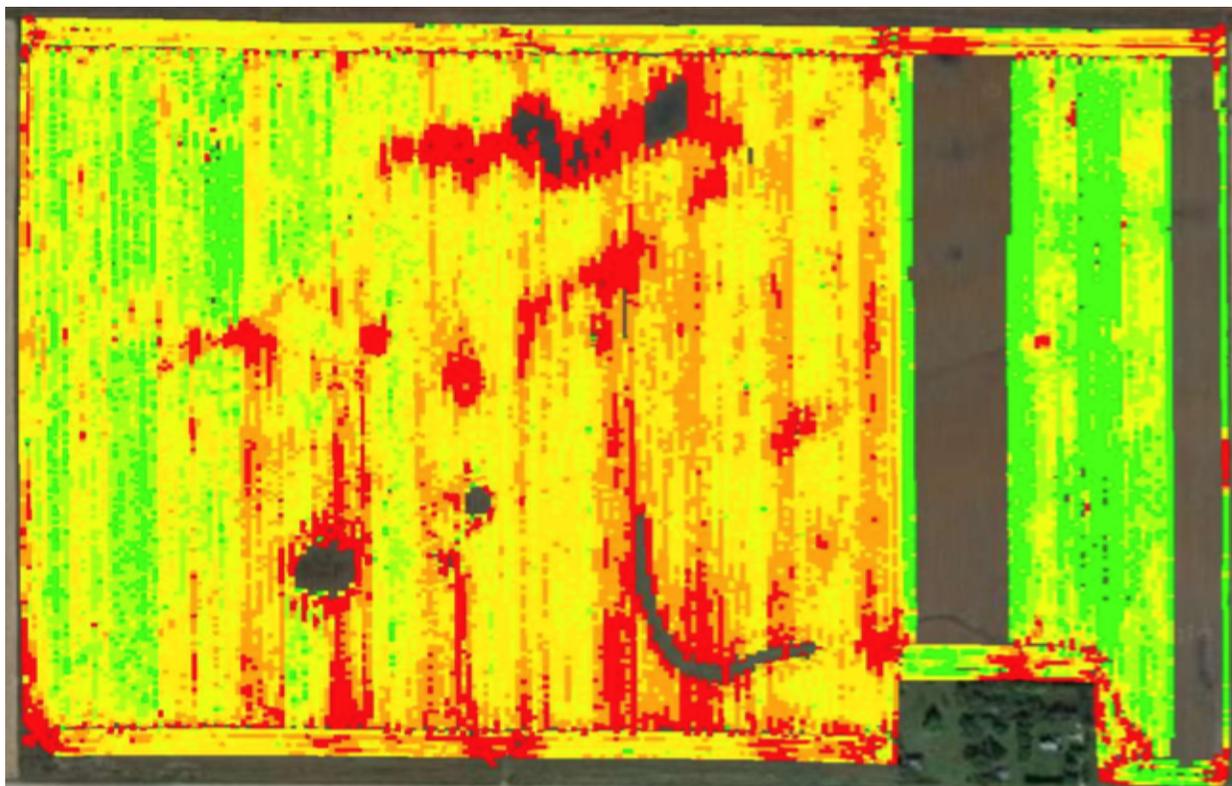
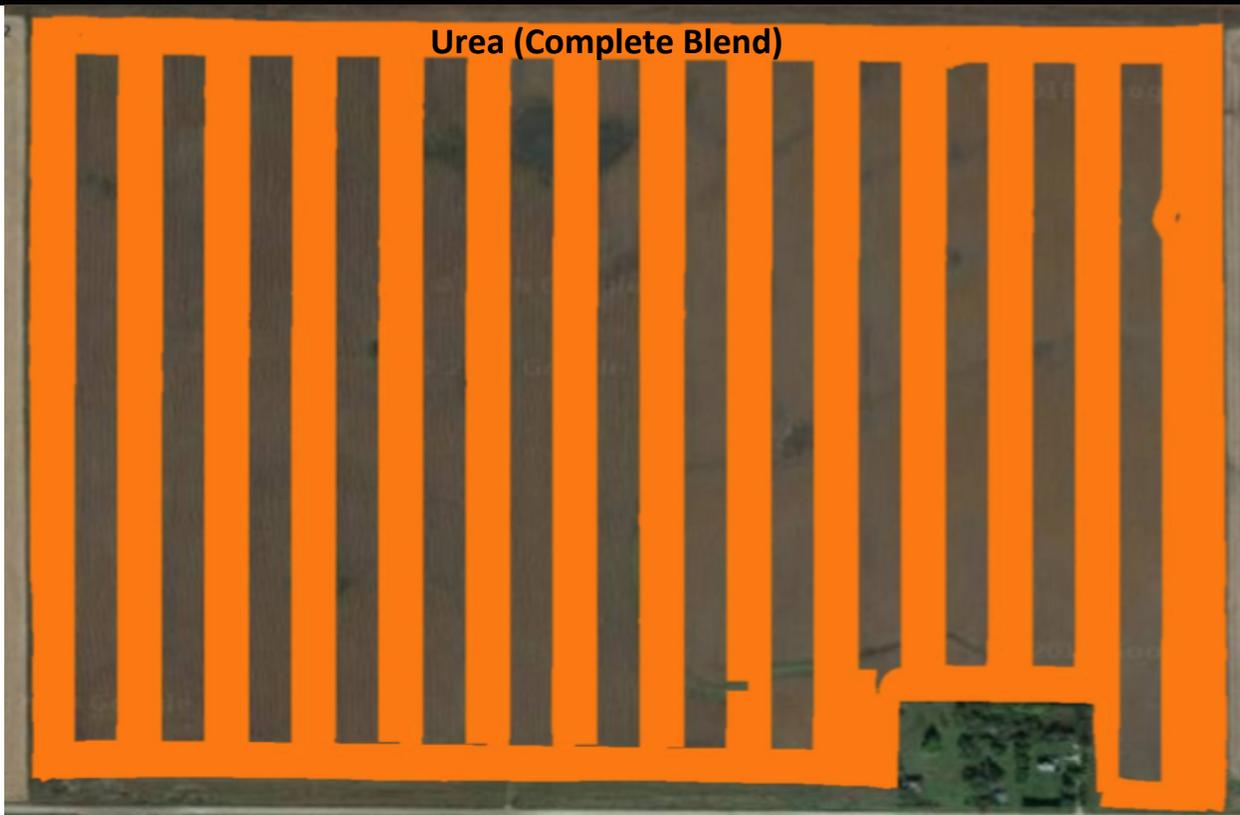
### NH3 and Broadcast Vs. Urea (Complete Blend)



Yield Average for All Individual Treatments (Bu/acre)	<u>Urea (Complete Blend Injected)</u>	<u>NH3 + Dry Broadcast</u>	<u>Yield Difference</u>	A randomization test suggested strong evidence of a significant yield difference
	195.4	178.3	17.1	

## Application Layout & Harvest Map

Urea (Complete Blend)



\* 18 acres of harvest data not available

## Summary Statistics and Rainfall

Harvest Attribute	Treatment		Attribute Differences
	Complete Injection	NH3/Broadcast	
Combine Speed (MPH)	4.8	4.9	-0.1
Grain Moisture (%)	17.0	17.2	-0.2

