Armstrong and Neely-Kinyon Research Farm Summary

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Staff

Farm Superintendent: Matt Groves
Agricultural Specialist: Randy Breach
Crops Specialist: Haley Stahl
Farms Manager: Tim Goode
Associate Dean for Facilities and Operations: Kendall Lamkey

103 Curtiss, 513 Farmhouse Lane, Iowa State University

Farm and Weather Summary

Matt Groves, Superintendent

Farm Comments

Developments. Completion of the shop portion of the new shed continues to progress. A contractor was secured and materials were delivered in December to begin construction. The farm leased a new John Deere tractor to take the place of a tractor that got moved to Neely-Kinyon. Farm staff continues to maintain the appearance of the farms; for example, volunteer tree removal on all the fields, garage door and walk door replacements. Corn harvest was disappointing due to wind damage and disease pressure and soybean yields were about average.

Field days and tours. We hosted our first event at Armstrong on May 5th with 150 Red Oak students learning all about corn production and it's uses. A similar event was held at Neely-Kinyon on May 15th for Adair County 3rd graders. June 26th was our big summer field day again partnering with the SWISH group focusing on soil health topics. An evening field day focusing on organic crop production was held on August 26th at Neely-Kinyon utilizing the long-term organic plots. We hosted several plot days, a district FFA soils contest and numerous other meetings and gatherings throughout the year. The farms had around 1,500 visitors in 2025.

Livestock. Armstrong farm fed-out the steer and heifer calves from the ISU cow herd at the McNay farm in Chariton. The individual feed bunk pens (FIMS) were used to look at individual feed intake for the steers on the Delayed Implant Impacts of Beef Quality study. We fed out the cull heifers from the cow herd that weren't selected for replacements. The McNay fall heifer calves again grazed the pasture until they were shipped to the Allee research farm for finishing.

Crop Season Comments

We started soybean planting on April 14th at Armstrong. Bulk corn was planted the week of April 14th at Neely-Kinyon. We received good rains at the end of April delaying corn planting but we were able to get the corn planted at Armstrong the first full week of May. We experienced heavy wind and rain on July 8th that damaged a good portion of our corn that would ultimately severely impact final yield. Along with wind damage, our corn suffered severely from southern rust pressure. Timely rains made for excellent hay yields again this year. Armstrong corn averaged 135 bushels/acre and soybeans averaged 64 bushels/acre. Yields at Neely-Kinyon were 189 bushels/acre on corn and 63 bushes/acre on soybeans.

Weather Comments

Winter 2024-2025. Fairly mild winter with the occasional freezing rain and snowstorms and a few bouts of frigid cold.

Spring 2025. Spring operations started in early April with planting starting April 14th. April and May brought timely moisture.

Summer 2025. Heavy rainfall and high winds on July 8th damaging corn at Armstrong. Decent rainfall through July and August with bouts of heat.

Fall 2025. Harvest started on September 22nd and was finished October 16th . Soybean and corn moisture was ideal for continuous harvest and storing.

Research Farm Projects

Project Title	Project Lead
BASF Corn Trial	BASF
BASF soybean trials	BASF
Sulfur x Nitrogen Corn trial	R. Roth
Corn fungicide "Cardinal" trial	A. Robertson
Delayed Implant Impacts on Beef Quality trial	E. Woolfolk
Iowa Crop Performance Test Trial, soybean	J. Rouse/G. Marzen
Stine corn and soybean trials	Stine Seed
Wyffels Corn Demo	Wyffels Hybrids
Long-term nitrogen/crop rotation study	S. Archontoulis
Long-term organic rotation study (LTAR)	K. Delate
Improved Systems Trial	M. Licht
Milkweed species demo	R. Hellmich
Monarch habitat (ARF and N-K)	R. Hellmich
Oat variety trial	PFI
Rye Variety Trial	PFI
Organic control of thistles	K. Delate
Organic grape study	K. Delate
Organic wheat study	K. Delate
Sorghum as a biomass crop	M. Fernandez
Statewide fungicide trial soybeans	D. Mueller/S. Wiggs
STRIPS bowl (ARF and N-K)	M. Helmers
Weather Station	D. Hermann
Interseeding Warm Season species in pasture	E. Woolfolk

Acknowledgements

Tony Leighton	Atlantic News Telegraph
Atlantic Chamber of Commerce	KMA Radio, Shenandoah
KJAN Radio, Atlantic	Wyffels Hybrids
Landus Cooperative, Atlantic	East Pottawattamie SWCD
Practical Farmers of Iowa	Iowa Beef Center
21st Century Coop	Iowa Farmer Today
Leopold Center for Sustainable Agriculture	Scoular Grain
Farm Bureau	Fox Welding
Tri-County Steer Carcass Futurity	Oakland Vet Clinic
Wyffels Hybrids	Bill Backhaus
Mike Muhlbauer	Waters Farm Supply, Cumberland
AgriVision, Massena	Lindeman Tractor, Atlantic
BASF/ASA	Sandbothe Firestone
Cass County NRCS	Glen Jones
Weirich Welding	Southwest Iowa Tiling
Stine Seed	Alex Mitchell
Pat Lewis Trucking	Brown Electric
Camblin Mechanical	Greenfield Oil

The mention of firm names or trade products does not imply they are endorsed over other firms or similar products not mentioned.

Table 1. Armstrong Research and Demonstration Farm, Lewis, monthly rainfall and average temperatures for 2025.

Month	Rainfall (in.)		Temperature (°F)		90° or above
	2025	Departure from Normal	2025	Departure from Normal	
January	0.00	0.9	32.2	-1.2	0
February	0.35	.95	32.4	3.6	0
March	1.55	.65	59.6	-10.6	0
April	3.33	.57	65.3	-3.1	0
May	2.03	2.67	73.6	-1.3	0
June	4.44	.50	85.8	-4.2	9
July	8.36	-3.86	86.8	-1.1	5
August	3.99	.11	80.8	3.0	1
September	1.67	1.33	80.9	-4.8	4
October	2.95	-.35	69.4	-6.3	0
November	1.07	1.13	51.2	-3.3	0
December	0.44	.96	38.9	-4.9	0
Total	30.14		63.08		19