

McNay Memorial Research and Demonstration Farm Summary

RFR-A19103

Manager, Crops and Operations Logan Wallace
Manager, Livestock..... Brad Evans

Ag Specialist Gary Thompson
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103 Curtiss Hall, 513 Farm House Lane
Iowa State University

McNay Memorial Research and Demonstration Farm
45249 170th Avenue
Chariton, IA 50049
(641) 766-6465 (phone and FAX)

Location: From the intersection of highways 65 and 34
go 4 miles south, 2½ miles east, and ¼ mile north.

Farm and Weather Summary

Logan Wallace, farm co-manager
Brad Evans, farm co-manager

Farm Comments

Developments. The McNay Research Farm focuses on beef cattle, forage, and crop research in south-central Iowa. The work continues to expand and is well received. Many soil conservation, cattle water system, and fence improvements were made last year. A pasture improvement project was started four years ago and will continue over the next several years. A cover crop grazing project continues into a fourth year.

Field days and tours. Five events were held with 287 people attending field days and visiting the farm.

Livestock. In 2019, the purebred Angus herd produced 230 calves in the spring and 108 calves in the fall.

Crop Season Comments

After a cold and wet March and first half of April, corn was planted in excellent conditions only to be followed by an extremely wet and cool May. Soybean planting was delayed until mid-June. June and July turned warmer and drier than normal. August and September brought adequate moisture and warmth to finish the season. Corn harvest was timely with an average yield of 171 bushels/acre. Soybean harvest was delayed and finally completed in late November. The June planted beans averaged 63 bushels/acre.

Weather Comments

Winter. Winter had colder temperatures and above-average snowfall making cattle chores more difficult than past years. Extra feed and bedding was needed to keep livestock in good shape.

Spring. The cold and wet conditions continued through the spring except for a two-week break at the end of April, allowing corn planting to be completed on time. Calving conditions were difficult requiring extra effort to keep livestock healthy. May rainfall was 5 in. above average, pushing soybean planting into mid-June.

Summer. After a cold and wet spring, summer began warm and dry. Although starting late, harvesting hay quickly caught up and crops grew quickly. Late summer brought plentiful moisture and ideal temperatures to advance crop growth.

Fall. Fall quickly returned to the cold and wet theme. Although corn harvest was completed on time, late maturing soybeans made for a challenging harvest that was not completed until after Thanksgiving. Calves were weaned on time and had few health challenges.

The growing season of March through October had 37.16 in. of precipitation compared with an average of 29.48 in. However, the rains came mostly early and late in the season. For the year, precipitation was above average at 7.68 in. above the long-term average (Table 1).

Acknowledgements

The McNay Research Farm thanks the Lucas County Cattlemen.

Table 1. McNay Research and Demonstration Farm, Chariton, IA, monthly rainfall and average temperatures for 2019.

Month	Rainfall (in.)		Temperature (°F)		Days 90°F or above
	2019	Deviation from normal	2019	Deviation from normal	
March	3.36	1.34	35	-2.62	0
April	2.66	-0.75	53	-2.28	0
May	9.44	5.04	60	-1.26	0
June	3.37	-1.54	71	1.39	2
July	3.83	-0.24	76	1.55	10
August	5.68	1.70	72	0.85	0
September	5.07	1.01	72	6.58	5
October	<u>3.75</u>	<u>1.12</u>	48	-5.16	<u>0</u>
Totals	37.16	7.68			17

Research Farm Projects

<u>Research Project/Demonstration</u>	<u>Project Leader</u>
Alfalfa variety plots	R. Vittetoe/J. Michel
Annual forage plots	C. Clark
Beef cattle breeding project	J. Williams
Beef cattle observation	J. Robbins
Beef cattle pinkeye	A. O'Connor
Beef cattle weaning/supplementation	K. Lippolis
FACTS Plots	S. Archontoulis /M. Castellano
Fungicide/insecticide	D. Mueller
Insect traps	E. Hodgson
Long-term N fertilizer	M. Castellano
Long-term tillage	M. Al-Kaisi
Milkweed species demonstration	R. Hellmich
Pasture herbicide	Corteva Agriscience
Potassium study	A. Mallarino
Rye cover crop grazing study	R. Vittetoe/E. Lundy/D. Loy
Soybean date of planting	Iowa Soybean Association
STRIPS study	T. Youngquist