

# McNay Memorial Research and Demonstration Farm Summary

**RFR-A20126**

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

Ag Specialist ..... Gary Thompson  
Ag Specialist ..... Chase Altenhofen  
Ag Specialist ..... Charles Phillips

Associate Dean for Operations ..... Mark Honeyman  
Farms Manager ..... Tim Goode

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.* Due to Covid-19, no on farm events were held in 2020.

*Livestock.* In 2020, the purebred Angus herd produced 227 calves in the spring and 90 calves in the fall. A new, portable “smart” feeder was acquired that measures individual animal feed intake based on electronic identification tags.

### Crop Season Comments

A beautiful April and first half of May allowed fieldwork to progress. Corn and most of the soybean were planted on time. The last half of May turned extremely wet and delayed completing soybean planting into June. Herbicide and fertilizer applications were completed in June. July temperature and precipitation were about average but led into a dry August. The August derecho missed the McNay Farm with minor rain. September and October were pleasant with harvest and fall work accomplished in a relatively easy manner. Corn averaged 166 bushels/acre and soybean averaged 58 bushels/acre. The wet period during the last half of May reduced yields more than any other event.

### Weather Comments

*Winter.* Winter was an average southern Iowa winter. Cattle stayed in above average condition.

*Spring.* March, April, and first half of May were pleasant. Crops were planted in a timely manner and calving was uneventful. Late May was extremely wet and set some things back but replenished needed moisture for pastures and hay.

*Summer.* Summer was typical, becoming dry in August and late hay cuttings were below average. Crops progressed well though the months.

*Fall.* Fall was cool but dry and allowed harvest to be completed on time. The lack of late summer moisture led to less grazing days later in fall. Calves were weaned on time with few health challenges.

The growing season of March through October had 26.87 in. of precipitation compared with an average of 29.48 in. For the year, precipitation was 2.61 in. below the long-term average (Table 1). Excessive rain in May led to some stand loss in corn. Dry weather in August reduced yield potential for soybean.

**Table 1. McNay Research and Demonstration Farm, Chariton, IA, monthly rainfall and average temperatures for 2020.**

<u>Month</u>	<u>Rainfall (in.)</u>		<u>Temperature (°F)</u>		<u>Days 90°F or above</u>
	<u>2020</u>	<u>Deviation from normal</u>	<u>2020</u>	<u>Deviation from normal</u>	
March	2.62	0.60	42	3.92	0
April	2.52	-0.88	47	-3.00	0
May	5.19	0.78	58	-3.17	0
June	5.47	0.54	72	1.88	1
July	3.69	-0.38	75	0.11	11
August	1.35	-2.61	71	-1.91	6
September	3.70	-0.36	61	-3.66	2
October	<u>2.33</u>	<u>-0.30</u>	47	-6.35	<u>0</u>
Totals	26.87	-2.61			20

### Research Farm Projects

<u>Research Project/Demonstration</u>	<u>Project Leader</u>
Annual forage plots	C. Clark
Beef cattle breeding project	J. Williams
Beef cattle creep feeding	P. Wall
Beef heifer management	M. Hindman
FACTS Plots	S. Archontoulis/M. Castellano
Fertilizer – Agrocete	S. Archonoulis
Fungicide/insecticide	D. Mueller
Insect traps	E. Hodgson
Long-term N fertilizer	M. Castellano
Long-term tillage	M. Al-Kaisi
On Farm alfalfa fertilization	M. Witt
On Farm AMS on soybean	M. Witt
On Farm micronutrients on corn	M. Witt
Rye cover crop grazing study	R. Vittetoe/E. Lundy/D. Loy
Soybean date of planting, maturity, fungicide	M. Witt/Iowa Soybean Association
STRIPS study	T. Youngquist