

# Farm and Weather Summary

Chris Beedle—farm superintendent

## Farm Comments

**Anniversary.** A momentous occasion happened at the Western Research and Demonstration Farm (WRF). This was the 75th year of cooperation of Iowa State University and the Western Iowa Experimental Farm Association. The year was marked by a well-deserved celebration of Iowa State University staff past and present, association directors and members, local youth and the public of farmers, industry, and friends.

**Developments.** Equipment changes during 2021 included a Case IH 1620 combine with a 15-ft. bean platform and four-row corn head. The combine was equipped with Ag Leader technology for yield maps.

Numerous general farm maintenance activities occurred. Large scale repairs and replacement of sections of the water system at the farm were done in the fall. The well pump in the “shallow well” was replaced along with upgrades in and to the valve pit adjacent to the well. A new water line was laid to the main office as well as a hydrant and curb stop valve at the cattle shed. Plans have been made to put a new roof on the block cattle shed and repurpose it for the pig project.

**Labor.** Dale Melby from Soldier, Iowa, helps during the summer and peak labor times in the spring and fall.

Harry Riesberg from Castana, Iowa, continues year-round assistance and performs many tasks vital to the operation of the farm.

Craig Riesberg, agricultural specialist, is becoming a vital component to the daily activities and planning that occurs at the farm. Along with his duties here at the farm, Craig has responsibilities with Monona County in the demonstration garden, swine and poultry project, fair week and other tasks as needed. A special thanks to Craig, Harry, and Dale.

**Field days and tours.** Four events were held during the year, with a total of 560 people visiting the farm or attending a meeting. The annual farm meeting and crop update event were postponed due to Covid-19. Representative Randy Feenstra visited the farm June 2 for an educational tour. Monona County special swine and poultry project day was June 15. A two-day event in celebration of 75 years of service was held September 14-15.

**New projects.** There were no cattle projects this year at WRF. A project with Dr. Lammers of the University of Wisconsin Platteville feeding hazelnuts to pigs was completed. The first round of a lairage test was conducted. In the realm of cover crops and with the construction of the interseeder, three small plot research plots and six on-farm trials were planted. Other project developments included completing eight on-farm cooperator trials.

**Livestock.** Livestock production in 2021 included a group of 36 steers pastured during the summer and then moved to the ISU Allee Farm in Newell for finishing. These steers were part of the ISU McNay Research Farm beef cattle breeding project.

Swine production consisted of finishing approximately 1,050 head spanning two projects. The pigs were weighed every 28 days. Following final weigh day, data was collected at the processing plant. The pigs were marketed for a niche pork market.



## Crop Season Comments

Corn planting started May 7 and was completed May 24. Corn harvest started October 21 and was completed November 9, with an average yield of 204 bushels per acre. Soybean were planted between May 5 and May 24. Soybean harvest started September 29 and was completed October 12, with an average yield of 63 bushels per acre. The corn and soybean yields were 1% above and 16% above, respectively, the five-year farm averages. Alfalfa yields averaged 3.85 tons per acre with three cuttings harvested, and were 19% below the five-year farm average.

The year began with a warm and wet January in western Iowa. February was closer to normal moisture, but well below average temperatures being the eighth coldest on record. March brought above normal temperatures and rainfall while April was warm and dry for planting. May was warm and wetter than normal (Table 1).

Planting was ahead of schedule in this part of the state with warm and dry weather in April. June through September were drier than the 30-yr. average with 5.41 in. less rain, and above normal temperatures. Most of the rest of the state was unseasonably dry for the entire growing season and into the fall harvest. Western Iowa had timely planting with timely rains and a timely harvest. Much of the rest of the state and country was not as lucky with drought conditions. Overall, it was a good growing season in western Iowa.

## Acknowledgements

Thanks to all members, sustaining members, and donors who support the Western Research and Demonstration Farm through donations of time, money, and products. Their support has made many of this year's trials possible.

## Sustaining Members

Community Bank, Dunlap  
 First State Bank—Mapleton  
 Sloan State Bank—Sloan and Whiting  
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 Valley Bank—Mapleton and Danbury  
 Novus Ag—Charter Oak  
 Heinen Brothers—Whiting  
 Farm Bureau Federation—Monona County  
 Brent McCall Farm Bureau Insurance—Onawa  
 Western Iowa Power Cooperative  
 Monona County Extension  
 Crawford County Extension  
 Harrison County Extension  
 Tyson Fresh Meats—Dakota City  
 Niman Ranch  
 Soil and Water Conservation Districts of Crawford,  
 Harrison, Monona, and Woodbury Counties

**Table 1. Monthly precipitation, average temperature, and departure from normal for 2021.**

	Precipitation		Temperature		Days 90F or above	Nights 32F or below
	Total	Departure	Mean	Departure		
January	1.12	+0.47	26.7	+5.44	30	
February	0.86	-0.10	14.9	-10.08	28	
March	3.44	+1.62	43.8	+6.78	14	
April	0.98	-2.27	50.9	+1.54	1	7
May	5.40	+0.81	59.9	+5.28	0	0
June	2.15	-2.68	75.6	+5.11	12	
July	3.96	-0.20	75.0	+0.93	4	
August	3.43	-0.70	74.7	+2.66	8	
September	1.27	-1.83	69.0	+4.33	3	
October	3.68	+1.33	55.8	+3.78	1	
November	0.21	-1.19	41.2	+3.91	18	
December	0.71	-0.34	31.58	+3.96	12	
Total	27.21	-5.08			125	

**Table 2. Monthly growing degree day units (GDD base 50) for the 2021 growing season April 1 to September 30.**

	GDD Monthly		GDD accumulation	
	Total	Departure*	Total	Departure*
April	210	+84	210	+84
May	375	+17	585	+101
June	719	+101	1304	+202
July	751	+8	2055	+210
August	738	+54	2793	+264
September	566	+121	3359	+385

\*Departure from 30-yr average as recorded at the ISU Western Research Farm weather station.