

U.S. Dairy Forage Research Center Annual Field Operations Report June 2003

R.P. Walgenbach, Management Agronomist & Farm Manager

The 2002 crop year began with warm and dry conditions during April. This was followed by cool and wet weather during early May. Fortunately we had a window to plant legumes, corn and soybeans in a timely manner. The winter was very mild with moderate amounts of snow. The first cutting was started early by spraying two fields with glyphosate followed by a harvest and planting of corn and soybeans. The first cutting went well with the exception of one heavy rainfall over a weekend that took us by surprise. The glyphosate sprayed fields produced about one ton dry matter per acre, other established fields ranged in yield from 1.8 to 2.4 tons of dry matter per acre for first cutting. Above average rain fell in June but this pattern did not continue in July. Corn and soybeans showed signs of moisture stress but we did get timely rain to help this situation. It seemed that when the crops needed an inch or more of rain they would get $\frac{1}{3}$ of an inch. The soybean aphids and white mold were not a significant problem this past season. In spite of the dry and hot weather in July we had excellent yields of soybeans.

No turnovers occurred on the field crew this past year. But the only herd manager that has been at the research center announced his retirement. Len Strozinski has served the dairy industry and research center over the last 22 years. I have enjoyed working with Len and appreciate his advise, hard work and friendship over the years. Len's official retirement will actually occur in January of 2003. This will provide a period of overlap between Len and the new herd manager, Dr. Jill Davidson. I am very pleased that Jill has decided to take on the very challenging job of managing our research herd. Jill is originally from Ohio and was raised on a dairy and crop enterprise. She has a BS degree from Ohio State University and a Masters degree in reproductive physiology from Florida State and a PhD in dairy nutrition and management from Michigan State University.

The transfer of crop and pastureland to USDA custody from the Department of Defense is sounding like the proverbial broken record. In spite of my frustrations at the rate of progress I can say that there is progress. A legal survey was completed this summer and the USDA footprint for transfer is becoming a reality. The meetings and discussion concerning the remaining property still continue, as does our involvement in this exciting and unique opportunity. All in all it has been a very successful year at the research farm, which is due in large part to the excellent efforts of our office, field and barn staff. They all have my thanks.

Table 1. 2002 precipitation (ppt)

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
ppt inches											
0.23	2.17	1.02	3.6	3.66	5.55	1.9	3.78	1.92	2.38	0.28	0.32

Table 2. 2002 planting and harvesting dates

Crop	Acres	<u>Planting</u>		<u>Harvesting</u>	
		Start	Finish	Start	Finish
Winter Wheat 02	57.6	-	-	7/15	7/16
Soybeans	331.8	5/7	5/24	9/26	10/30
Corn Grain	264.6	4/26	5/15		
Corn Silage	176.8	-	-	9/3	9/30
Alfalfa-Spring	22.4	4/11	4/12	-	-
Birdsfoot Trefoil	51.2	4/17	4/18	-	-
Red Clover	20.6	4/11	4/11	-	-
Winter Wheat 03	62.0	10/8	10/9		
Birdsfoot Trefoil	10.0	8/19			

Table 3. 2002 forage cutting dates

Crop	<u>Alfalfa-Established</u>			<u>Alfalfa-Spring Seeded</u>		
	Acres	Start	Finish	Acres	Start	Finish
First*	282.5	5/20	5/31	22.4	6/27	-
Second	237.7	6/24	7/1	22.4	7/30	-
Third	237.7	7/18	7/31	22.4	8/27	
Fourth	237.7	8/20	8/27			
<u>Birdsfoot Trefoil-Spring Seeded</u>						
				First	51.2	7/9 7/10
				Second	51.2	8/20 -
<u>Red Clover-Spring Seeded</u>						
				First	20.6	7/3 -
				Second	20.6	8/15 -

*44.8 acres of alfalfa were sprayed with glyphosate and harvested for first cut, 14.3 acres were then planted no-till with corn and 30.5 acres were then no-till planted with soybeans. Corn and soybean acres are reported in these respective crops.

Table 4. 2002 crop yield data

Crop	Acres	Low	High	Mean	Total
Winter Wheat	57.6	—	—	79.8	4,597
Soybeans	331.8	48.9	70.8	60.6	20,119
Corn Grain†	264.6	102.0	187.0	164.2	43,441
tons DM (as is) per acre					
Corn Silage DM	176.8	5.2	9.6	7.3	1,292
Corn Silage (as is)‡	176.8	14.7	22.0	20.3	3,593
Alfalfa ††	237.7	3.98	6.0	5.0	1,199
Alfalfa Spring Seeded	22.4	—	—	3.2	59
Red Clover	20.6	—	—	2.6	55
Birdsfoot Trefoil	51.2	—	—	2.11	107.88

† 14,084 bushels were harvested and stored as dry shell corn and 29,357 bushels were harvested and stored as high moisture shelled corn. Moisture range at harvest for dry shell corn was 20.0 to 28% and for high moisture shell corn it was 24.6 to 30.8%. Corn grain yields are adjusted to 15.5% moisture.

‡ Corn silage harvest moisture ranged from 54 to 69%

†† Alfalfa yields include hay (28 tons of DM) and silage

U.S. DAIRY FORAGE RESEARCH CENTER
ANNUAL DAIRY OPERATIONS REPORT
JANUARY 2003 (for 2002)

JILL A. DAVIDSON - HERD MANAGER

HERD STATISTICS		CHANGE FROM PREVIOUS YEAR
<i>Herd Inventory</i>		
Milking cows	291	-31
Dry cows	53	+6
average cow age	49 months	+5
percent first lactation	38%	-3
percent second lactation	32%	+4
percent third lactation	19%	+2
percent greater than third	11%	-1
Herd replacements	331	+11
Total	675	-14
Rumen fistulated cows	25	
<i>Herd Performance</i>		
Cows calved	355	-22
Heifer calves born live	169	+13
Heifer calves born dead	9	-11
Bull calves born live	163	-7
Bull calves born dead	14	-1
Heifer calves died < 1 year old	5 (2.8%)	0
DHIA rolling herd average		
milk	23,153 lbs.	+735
protein	702 lbs.	+29
fat	927 lbs.	+50
Milk sold in 2002	7,477,986 lbs.	+91,372
Average Mailbox Milk Price/cwt	\$12.08	-3.10
Heifer calves sold	7	-12
Bull calves sold	163	-7
Cows Sold		
Cows culled for:		
Reproduction Problems	55	+4
Poor Production	16	+8
Poor Feet and Legs	10	+2
Mastitis	29	+8
Other	28	+8
Cattle Sales Revenue	79,842	-9132
<i>Herd Reproduction</i>		
Average days open	154	+24
Average calving interval	13.8 months	+0.6
Average services per conception	2.7	-0.2
Average age at first calving	24 months	0