

Table 1. Diverse crop rotation yields for grain, oilseed, forage, and cover crops

Crop	Year	2011	2012	2013	2014	Avg ^b
Spring Wheat – Control	Bu/Ac	28.0	55.7	46.8	44.2	43.7
Protein Content	%	13.4	15.0	14.5	13.7	14.2
Test Weight	Lb	59.3	58.3	60.4	62.1	60.0
Spring Wheat – Rotation	Bu/Ac	30.1	45.1	39.2	47.9	40.6
Protein Content	%	13.7	13.4	13.2	13.0	13.3
Test Weight	Lb	58.8	59.5	60.2	61.9	60.0
Sunflower (oilseed type)	Lb/Ac	891	1590	1959	1060	1375
Percent oil Content	%	-	37.3	37.6	40.4	38.4 ^c
Corn Grain (90 Day forage type)	Bu/Ac	15.0	55.2	87.9	45	50.8
Corn Forage (Dry Matter (DM))	T/Ac	1.65	3.66	4.01	3.5	3.35
Triticale – Hairy Vetch Hay	T/Ac	2.71	1.59	0.00 ^a	0.66	1.65 ^c
Pea Grain	Bu/Ac	19.1	-	-	-	19.1
Pea-Barley Forage (DM)	T/Ac	-	3.11	4.53	3.75	3.80 ^c
Cover Crop:						
September	T/Ac	-	4.25	3.25	0.62	2.71

^a Triticale was winter killed. No hay harvested. Cover crop planted late June 2013

^b 4-year average

^c 3-year average

Table 2. Cow and calf performance through weaning

	Control		Integrated		Forage	
	72 ^a	72 ^b	72 ^a	72 ^b	72 ^a	72 ^b
No. Cows with Calves	72 ^a	72 ^b	72 ^a	72 ^b	72 ^a	72 ^b
Cow:						
Start Wt., lb.	1441	1614	1348	1631	1321	1609
Wean Wt., lb	1386	1606	1361	1606	1337	1574
Gain, lb	-55	-8	13	-25	16	-35
ADG, lb	-0.35	-0.05	0.083	-0.15	0.103	-0.21
Cow BCS ^c						
Start	6.3	6.5	5.9	6.3	6.1	6.2
Weaning	4.4	5.9	4.4	5.6	4.5	5.3
Calf:						
Birth Wt., lb	88.3	95.8	88.8	97.8	88.7	93.8
Weaning Age, d	176.1	164	176.2	163	176.5	165
Weaning Wt., lb	515	573	508	588	499	585
ADG, lb	3.30	3.50	3.26	3.60	3.20	3.55

^a Grazing in 2013 started on June 16 and ended on November 19, 2013. Calves were weaned Nov. 19

^b In 2014, grazing started June 17 and ended November 4-6. Calves were weaned Nov 4-6.

^c Body Condition Score: (1 – emaciated; 9 – obese)