Table 11. Subset of NESARE forage and feed quality analyses for the GRAIN rotation in A) 2010 and B) 2012. The main management comparison in this rotation is reducing herbicide (RH) use via a variety of weed management tactics compared to a more "standard" herbicide program. In the RH rotation, forage is composed of alfalfa, orchard grass, pea, triticale, with pea and triticale permanently removed in the first cutting (year 1). In the SH rotation, forage is pure alfalfa for all three years. Standard errors (SE) are presented. See 2011 Annual Report for that year's data.

| A) 2010 | | % Crude Protein | | | % Neutral Detergent Fiber | | | Net Energy of Lactation (Mcal/lb) | | |
|---|-------------------------------|--------------------|---------------|-------------|------------------------------|------------|---------|--------------------------------------|------|-------|
| Crop Entry | Harvest Date | RH | SH | (SE) | RH | SH | (SE) | RH | SH | (SE) |
| Canola^ | | - | - | - | - | - | - | | - | - |
| Corn Grain | | 8.73 | 8.80 | 0.16 | 9.00 | 9.80 | 0.554 | 0.95 | 0.95 | 0.003 |
| Soybean | | 30.43 | 30.03 | 0.31 | 31.87 | 33.20 | 0.14 | 1.02 | 1.01 | 0.016 |
| Forage Yr. 1 (cut #1)/silage ~ | 6/29/2010 | 16.63 | 20.93 | 1.26 | 51.40 | 35.37 | 1.058 | 0.61 | 0.68 | 0.012 |
| Forage Yr. 1 (cut #2)/hay | RH: 8/26/2010 SH: 8/3/2010 | 18.87 | 25.00 | 1.26 | 43.53 | 44.07 | 1.058 | 0.57 | 0.52 | 0.012 |
| Forage Yr. 1 (cut #3)/hay [#] | 9/14/2010 | - | - | - | - | - | - | - | - | - |
| a,b: Different lowercase letters b | etween RH and SH f | or a particu | ılar variable | indicate | a statistical | difference | between | 1 | | |
| main management treatments at the 0.05 level. | | | | | | | | | | |
| ^For canola, one composite samp | ole of meal was take | n for all tre | atments in | the first y | year. | | | | | |
| ~ For alfalfa + grass, subsamples v | vere taken for one o | rop entry b | ecause all | crop entry | points wer | e new see | dings. | | | |
| For the 3rd cutting, only one tre | atment (SH) was cut | | | | | | | | | |

| B) 2012 | | % Cr | ude | | % Neutral | | | Net Energy of | | b) |
|---------------------------------|--------------------|---------|--------------|-----------|----------------|-----------------|---------|---------------|-----------|------|
| | | Prot | ein | in | | Detergent Fiber | | Lactation | (Mcal/lb) | |
| Crop Entry | Harvest Date | RH | SH | (SE) | RH | SH | (SE) | RH | SH | (SE) |
| Canola^ | 7/3/2012 | 37.40 | 40.75 | - | 30.30 | 30.35 | - | 0.90 | 0.87 | - |
| Corn Grain | 11/13/2012 | 9.27 | 9.33 | 0.11 | 9.57 | 9.50 | 0.41 | 0.94 | 0.94 | 0.00 |
| Soybean | 10/25/2012 | 39.80 | 40.20 | 0.38 | 22.67 | 21.03 | 1.56 | 1.17 | 1.18 | 0.01 |
| Forage Yr. 1 (cut #1)/silage | 6/20/2012 | 18.97 b | 31.07 a | 0.97 | 54.33 a | 30.67 b | 1.57 | 0.57 b | 0.68 a | 0.01 |
| Forage Yr. 1 (cut #2)/hay | 7/30/2012 | 21.63 | 25.00 | 0.97 | 43.93 | 37.07 | 1.57 | 0.59 | 0.63 | 0.01 |
| Forage Yr. 1 (cut #3)/hay | 9/6/2012 | 20.77 | 22.33 | 0.97 | 45.20 | 40.30 | 1.57 | 0.58 | 0.59 | 0.01 |
| Forage Yr. 2 (cut #1)/silage | RH: 5/11/12 | 22.00 | 24.47 | 0.87 | 42.43 | 45.50 | 1.33 | 0.67 a | 0.58 b | 0.01 |
| | SH: 5/25/12 | | | | | | | | | |
| Forage Yr. 2 (cut #2)/silage | RH: 6/8/12 | 18.10 b | 25.27 a | 0.87 | 49.53 | 43.37 | 1.33 | 0.61 | 0.60 | 0.01 |
| | SH: 6/26/12 | | | | | | | | | |
| Forage Yr. 2 (cut #3)/hay | RH: 7/9/12 | 17.70 b | 23.50 a | 0.87 | 52.47 a | 41.23 b | 1.33 | 0.58 | 0.60 | 0.01 |
| | SH: 7/24/12 | | | | | | | | | |
| Forage Yr. 2 (cut #4)/silage | RH: 8/3/12 | 25.33 | 25.10 | 0.87 | 44.43 | 50.37 | 1.33 | 0.64 a | 0.51 b | 0.01 |
| | SH: 8/22/12 | | | | | | | | | |
| Forage Yr. 2 (cut #5)/silage | 9/6/2012 | 30.90 | - | 0.50 | 32.55 | - | 2.91 | 0.87 | - | 0.02 |
| Forage Yr. 3 (cut #1)/silage | RH: 5/11/12 | 19.73 b | 26.03 a | 0.78 | 47.20 | 43.03 | 1.45 | 0.650 | 0.597 | 0.01 |
| | SH: 5/25/12 | | | | | | | | | |
| Forage Yr. 3 (cut #2)/hay | RH: 6/8/12 | 19.20 b | 25.47 a | 0.78 | 49.83 b | 41.13 a | 1.45 | 0.627 | 0.610 | 0.01 |
| | SH: 6/26/12 | | | | | | | | | |
| Forage Yr. 3 (cut #3)/silage | RH: 7/9/12 | 17.73 b | 23.50 a | 0.78 | 50.53 a | 41.23 b | 1.45 | 0.603 | 0.600 | 0.01 |
| | SH: 7/24/12 | | | | | | | | | |
| | | | | | | | | | | |
| a,b: Different lowercase letter | | | articular va | riable in | dicate a stati | stical differ | ence be | tween | | |
| main management treatments | at the 0.05 level. | | | | | | | | | |