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

| Crop                                     | Year  | 2011 | 2012 | 2013 | Avg               |
|--|-------|------|------|------|-------------------|
| Spring Wheat – Control                   | Bu/Ac | 28.0 | 55.7 | 43.0 | 42.2              |
| Protein Content                          | %     | 13.4 | 15.0 | 14.5 | 14.3              |
| Test Weight                              | Lb    | 59.3 | 58.3 | 60.4 | 59.3              |
| Spring Wheat – Rotation                  | Bu/Ac | 30.1 | 45.1 | 36.5 | 37.2              |
| Protein Content                          | %     | 13.7 | 13.4 | 13.2 | 13.4              |
| Test Weight                              | Lb    | 58.8 | 59.5 | 60.2 | 59.5              |
| Sunflower (oilseed type)                 | Lb/Ac | 891  | 1590 | 1480 | 1480              |
| Percent oil Content                      | %     | -    | 37.3 | 37.6 | 37.5 <sup>b</sup> |
| Corn Grain (90 Day forage type)          | Bu/Ac | 15.0 | 55.2 | 87.9 | 52.7              |
| Corn Forage (Dry Matter (DM))            | T/Ac  | 1.65 | 3.66 | 4.01 | 3.11              |
| Triticale – Hairy Vetch Hay <sup>a</sup> | T/Ac  | 2.71 | 1.59 | 0.00 | $2.15^{b}$        |
| Pea Grain                                | Bu/Ac | 19.1 | -    |      | 19.1              |
| Pea-Barley Forage (DM)                   | T/Ac  | =    | 3.11 | 4.52 | $3.82^{b}$        |
| Cover Crop:                              |       |      |      |      |                   |
| October                                  | T/Ac  | -    | 2.61 | 2.84 | 2.73              |

<sup>&</sup>lt;sup>a</sup> Triticale was winter killed. No hay harvested. Cover crop planted late June 2013

Table 2. Cow and calf performance through weaning a

|                        | Control | Integrated | Forage |  |
|------------------------|---------|------------|--------|--|
| No. Cows with Calves   | 72      | 72         | 72     |  |
| Cow:                   |         |            |        |  |
| Start Wt., lb.         | 1441    | 1348       | 1321   |  |
| Wean Wt., lb           | 1386    | 1361       | 1337   |  |
| Gain, lb               | -55     | 13         | 16     |  |
| ADG, lb                | -0.35   | 0.083      | 0.103  |  |
| Cow BCS <sup>b</sup> : |         |            |        |  |
| Start                  | 6.3     | 5.9        | 6.1    |  |
| Weaning                | 4.4     | 4.4        | 4.5    |  |
| Calf:                  |         |            |        |  |
| Birth Wt., lb          | 88.3    | 88.8       | 88.7   |  |
| Weaning Age, d         | 176.1   | 176.2      | 176.5  |  |
| Weaning Wt., lb        | 515     | 508        | 499    |  |
| ADG, lb                | 3.30    | 3.26       | 3.20   |  |

<sup>&</sup>lt;sup>a</sup>Grazing of native range pasture started on June 16, 2013 and calves were weaned November 19, 2012 a total of 156 days.

<sup>&</sup>lt;sup>b</sup> 2-year average

<sup>&</sup>lt;sup>b</sup>Body Condition Score: (1 – emaciated; 9 – obese)