

# 2012 Feed Composition Tables

All values except dry matter (DM) are shown on a DM basis.

| FEEDSTUFF                          | ENERGY |       |                             |                 |                 | PROTEIN |       | FIBER |       |       |        |      |       |      |      |     |       |       |        |
|------------------------------------|--------|-------|-----------------------------|-----------------|-----------------|---------|-------|-------|-------|-------|--------|------|-------|------|------|-----|-------|-------|--------|
|                                    | DM %   | TDN % | NE <sub>m</sub> (Mcal/cwt.) | NE <sub>p</sub> | NE <sub>l</sub> | CP %    | UIP % | CF %  | ADF % | NDF % | eNDF % | EE % | ASH % | Ca % | P %  | K % | Cl %  | S %   | Zn ppm |
| Alfalfa Cubes                      | 91     | 57    | 57                          | 25              | 57              | 18      | 30    | 29    | 36    | 46    | 40     | 2.0  | 11    | 1.30 | 0.23 | 1.9 | 0.37  | 0.33  | 20     |
| Alfalfa Dehydrated 17% CP          | 92     | 61    | 62                          | 31              | 61              | 19      | 60    | 26    | 34    | 45    | 6      | 3.0  | 11    | 1.42 | 0.25 | 2.5 | 0.45  | 0.28  | 21     |
| Alfalfa Fresh                      | 24     | 61    | 62                          | 31              | 61              | 19      | 18    | 27    | 34    | 46    | 41     | 3.0  | 9     | 1.35 | 0.27 | 2.6 | 0.40  | 0.29  | 18     |
| Alfalfa Hay Early Bloom            | 90     | 59    | 59                          | 28              | 59              | 19      | 20    | 28    | 35    | 45    | 92     | 2.5  | 8     | 1.41 | 0.26 | 2.5 | 0.38  | 0.28  | 22     |
| Alfalfa Hay Midbloom               | 89     | 58    | 58                          | 26              | 58              | 17      | 23    | 30    | 36    | 47    | 92     | 2.3  | 9     | 1.40 | 0.24 | 2.0 | 0.38  | 0.27  | 24     |
| Alfalfa Hay Full Bloom             | 88     | 54    | 54                          | 20              | 54              | 16      | 25    | 34    | 40    | 52    | 92     | 2.0  | 8     | 1.20 | 0.23 | 1.7 | 0.37  | 0.25  | 23     |
| Alfalfa Hay Mature                 | 88     | 50    | 50                          | 12              | 49              | 13      | 30    | 38    | 45    | 59    | 92     | 1.3  | 8     | 1.18 | 0.19 | 1.5 | 0.35  | 0.21  | 23     |
| Alfalfa Seed Screenings            | 91     | 84    | 92                          | 61              | 87              | 34      |       | 13    | 15    |       |        | 10.7 | 6     | 0.30 | 0.67 |     |       |       |        |
| Alfalfa Silage                     | 30     | 55    | 55                          | 21              | 55              | 18      | 19    | 28    | 37    | 49    | 82     | 3.0  | 9     | 1.40 | 0.29 | 2.6 | 0.41  | 0.29  | 26     |
| Alfalfa Silage Wilted              | 39     | 58    | 58                          | 26              | 58              | 18      | 22    | 28    | 37    | 49    | 82     | 3.0  | 9     | 1.40 | 0.29 | 2.6 | 0.41  | 0.29  | 26     |
| Alfalfa Leaf Meal                  | 89     | 60    | 60                          | 30              | 60              | 26      | 15    | 16    | 24    | 34    | 35     | 3.0  | 10    | 2.88 | 0.34 | 2.2 |       | 0.32  | 39     |
| Alfalfa Stems                      | 89     | 47    | 47                          | 7               | 46              | 11      | 44    | 44    | 51    | 68    | 100    | 1.3  | 6     | 0.90 | 0.18 | 2.5 |       |       |        |
| Almond Hulls                       | 89     | 56    | 56                          | 23              | 56              | 3       | 60    | 16    | 29    | 36    | 100    | 3.1  | 7     | 0.24 | 0.10 | 2.0 | 0.03  | 0.07  | 20     |
| Ammonium Chloride                  | 99     | 0     | 0                           | 0               | 0               | 163     | 0     | 0     | 0     | 0     | 0      | 0.0  |       | 0.00 | 0.00 | 0.0 | 66.00 | 0.00  | 0      |
| Ammonium Sulfate                   | 99     | 0     | 0                           | 0               | 0               | 132     | 0     | 0     | 0     | 0     | 0      | 0.0  |       |      |      |     |       | 24.15 |        |
| Apples                             | 17     | 70    | 73                          | 44              | 71              | 3       | 10    | 7     | 9     | 25    | 10     | 2.2  | 2     | 0.06 | 0.60 | 0.8 |       |       |        |
| Apple Pomace Wet                   | 20     | 68    | 70                          | 41              | 69              | 5       | 10    | 18    | 27    | 36    | 27     | 5.2  | 3     | 0.13 | 0.12 | 0.5 |       | 0.04  | 11     |
| Apple Pomace Dried                 | 89     | 67    | 69                          | 40              | 68              | 5       | 15    | 18    | 28    | 38    | 29     | 5.2  | 3     | 0.13 | 0.12 | 0.5 |       | 0.04  | 11     |
| Artichoke Tops (Jerusalem)         | 27     | 61    | 62                          | 31              | 61              | 6       |       | 18    | 30    | 41    | 40     | 1.1  | 10    | 1.62 | 0.11 | 1.4 |       |       |        |
| Avocado Seed Meal                  | 91     | 52    | 52                          | 16              | 51              | 20      |       | 19    | 24    |       |        | 1.2  | 16    |      |      |     |       |       |        |
| Bahiagrass Hay                     | 90     | 53    | 53                          | 18              | 53              | 6       | 37    | 32    | 41    | 72    | 98     | 1.8  | 7     | 0.47 | 0.20 | 1.4 |       | 0.21  |        |
| Bakery Product Dried               | 90     | 90    | 100                         | 68              | 94              | 11      | 30    | 3     | 9     | 30    | 0      | 11.5 | 4     | 0.16 | 0.27 | 0.4 | 2.25  | 0.15  | 33     |
| Bananas                            | 24     | 84    | 92                          | 61              | 87              | 4       |       | 4     | 5     |       |        | 0.8  | 3     | 0.03 | 0.11 | 1.5 |       |       | 8      |
| Barley Hay                         | 90     | 57    | 57                          | 25              | 57              | 9       |       | 28    | 37    | 65    | 98     | 2.1  | 8     | 0.30 | 0.28 | 1.6 |       | 0.19  | 25     |
| Barley Silage                      | 35     | 59    | 58                          | 26              | 58              | 12      | 22    | 34    | 37    | 58    | 61     | 3.0  | 9     | 0.46 | 0.30 | 2.4 |       | 0.22  | 28     |
| Barley Silage Mature               | 35     | 58    | 58                          | 26              | 58              | 12      | 25    | 30    | 34    | 50    | 61     | 3.5  | 9     | 0.30 | 0.20 | 1.5 |       | 0.15  | 25     |
| Barley Straw                       | 90     | 44    | 44                          | 1               | 43              | 4       | 70    | 42    | 55    | 78    | 100    | 1.9  | 7     | 0.32 | 0.08 | 2.2 | 0.67  | 0.16  | 7      |
| Barley Grain                       | 89     | 84    | 92                          | 61              | 87              | 12      | 28    | 5     | 7     | 20    | 34     | 2.1  | 3     | 0.06 | 0.38 | 0.6 | 0.18  | 0.16  | 23     |
| Barley Grain, Steam Flaked         | 85     | 90    | 100                         | 70              | 100             | 12      | 39    | 5     | 7     | 20    | 30     | 2.1  | 3     | 0.06 | 0.35 | 0.6 | 0.18  | 0.16  | 23     |
| Barley Grain Steam Rolled          | 86     | 84    | 92                          | 61              | 87              | 12      | 38    | 5     | 7     | 20    | 27     | 2.1  | 3     | 0.06 | 0.41 | 0.6 | 0.18  | 0.17  | 30     |
| Barley Grain 2-row                 | 87     | 84    | 92                          | 61              | 87              | 12      |       | 6     | 8     | 24    | 34     | 2.3  | 2     | 0.05 | 0.31 | 0.6 | 0.18  | 0.17  |        |
| Barley Grain 6-row                 | 87     | 84    | 92                          | 61              | 87              | 11      |       | 6     | 8     | 24    | 34     | 2.2  | 3     | 0.05 | 0.36 | 0.6 | 0.18  | 0.15  |        |
| Barley Grain Lt. Wt. (42-44 lb/bu) | 88     | 78    | 83                          | 54              | 80              | 13      | 30    | 9     | 12    | 30    | 34     | 2.3  | 4     |      |      |     |       |       |        |
| Barley Feed Pearl Byproduct        | 90     | 74    | 78                          | 49              | 76              | 15      | 25    | 12    | 15    |       |        | 3.9  | 5     | 0.05 | 0.45 | 0.7 |       | 0.06  |        |
| Barley bran                        | 91     | 59    | 59                          | 28              | 59              | 12      | 28    | 21    | 27    | 36    | 6      | 4.3  | 7     |      |      |     |       |       |        |
| Barley Grain Screenings            | 89     | 71    | 74                          | 46              | 73              | 12      |       | 9     | 11    |       |        | 2.6  | 4     | 0.35 | 0.33 | 0.9 |       | 0.15  |        |
| Beans Navy Cull                    | 90     | 84    | 92                          | 61              | 87              | 24      | 25    | 5     | 8     | 20    | 0      | 1.4  | 5     | 0.15 | 0.60 | 1.4 | 0.06  | 0.26  | 45     |
| Beet Pulp Wet                      | 17     | 77    | 82                          | 53              | 79              | 9       | 35    | 20    | 25    | 45    | 30     | 0.7  | 5     | 0.65 | 0.08 | 0.9 | 0.40  | 0.22  | 21     |
| Beet Pulp Dried                    | 91     | 76    | 81                          | 52              | 78              | 9       | 44    | 21    | 26    | 46    | 33     | 0.7  | 5     | 0.65 | 0.08 | 0.9 | 0.40  | 0.22  | 21     |
| Beet Pulp Wet with Molasses        | 24     | 77    | 82                          | 53              | 79              | 11      | 25    | 16    | 21    | 39    | 33     | 0.6  | 6     | 0.60 | 0.10 | 1.8 |       | 0.42  | 11     |
| Beet Pulp Dried with Molasses      | 92     | 77    | 82                          | 53              | 79              | 11      | 34    | 17    | 23    | 40    | 33     | 0.6  | 6     | 0.60 | 0.10 | 1.8 |       | 0.42  | 11     |
| Beet Root (Sugar)                  | 23     | 80    | 86                          | 56              | 83              | 4       |       | 5     | 7     | 16    |        | 0.4  | 3     |      |      |     |       |       |        |
| Beet Tops (Sugar)                  | 19     | 58    | 58                          | 26              | 58              | 14      |       | 11    | 14    | 25    | 41     | 1.3  | 24    | 1.10 | 0.22 | 5.2 | 0.20  | 0.45  | 20     |
| Beet Top Silage                    | 25     | 52    | 52                          | 16              | 51              | 12      |       | 12    |       |       |        | 2.0  | 32    | 1.38 | 0.22 | 5.7 |       | 0.57  | 20     |
| Bermudagrass Coastal Dehydrated    | 90     | 62    | 63                          | 33              | 63              | 16      | 40    | 26    | 29    | 40    | 10     | 3.8  | 7     | 0.40 | 0.25 | 1.8 | 0.72  | 0.23  | 18     |
| Bermudagrass Coastal Hay           | 89     | 56    | 56                          | 23              | 56              | 10      | 20    | 30    | 36    | 73    | 98     | 2.1  | 6     | 0.47 | 0.21 | 1.5 | 0.70  | 0.22  | 16     |
| Bermudagrass Hay                   | 89     | 53    | 53                          | 18              | 53              | 10      | 18    | 29    | 37    | 72    | 98     | 1.9  | 8     | 0.46 | 0.20 | 1.5 | 0.70  | 0.25  | 31     |
| Bermudagrass Silage                | 26     | 50    | 50                          | 12              | 49              | 10      | 15    | 28    | 35    | 71    | 48     | 1.9  | 8     | 0.46 | 0.20 | 1.5 | 0.72  | 0.25  | 31     |
| Birdsfoot Trefoil Fresh            | 22     | 66    | 68                          | 38              | 67              | 21      | 20    | 21    | 31    | 47    | 41     | 4.4  | 9     | 1.78 | 0.25 | 2.6 |       | 0.25  | 31     |
| Birdsfoot Trefoil Hay              | 89     | 57    | 57                          | 25              | 57              | 16      | 22    | 31    | 38    | 50    | 92     | 2.2  | 8     | 1.73 | 0.24 | 1.8 |       | 0.25  | 28     |
| Biuret                             | 99     | 0     | 0                           | 0               | 0               | 248     | 0     | 0     | 0     | 0     | 0      | 0.0  | 0     | 0.00 | 0.00 | 0.0 | 0.00  | 0.00  | 0      |
| Blood Meal, Swine/Poultry          | 91     | 66    | 68                          | 38              | 67              | 92      | 82    | 1     | 2     | 10    | 0      | 1.4  | 3     | 0.32 | 0.28 | 0.2 | 0.30  | 0.70  | 22     |
| Bluegrass KY Fresh Early Bloom     | 36     | 69    | 71                          | 43              | 70              | 15      | 20    | 27    | 32    | 60    | 41     | 3.9  | 7     | 0.37 | 0.30 | 1.9 | 0.42  | 0.19  | 25     |
| Bluegrass Straw                    | 93     | 45    | 45                          | 3               | 44              | 6       |       | 40    | 50    | 78    | 90     | 1.1  | 6     | 0.20 | 0.10 |     |       |       |        |
| Bluestem Fresh Mature              | 61     | 50    | 50                          | 12              | 49              | 6       |       | 34    |       |       |        | 2.5  | 5     | 0.40 | 0.12 | 0.8 |       | 0.05  | 28     |

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| FEEDSTUFF                          | ENERGY |       |                 |                                |                 | PROTEIN |       | FIBER |       |       |        |      |       |       |       |     |      |      |        |
|------------------------------------|--------|-------|-----------------|--------------------------------|-----------------|---------|-------|-------|-------|-------|--------|------|-------|-------|-------|-----|------|------|--------|
|                                    | DM %   | TDN % | NE <sub>m</sub> | NE <sub>l</sub><br>(Mcal/cwt.) | NE <sub>i</sub> | CP %    | UIP % | CF %  | ADF % | NDF % | eNDF % | EE % | ASH % | Ca %  | P %   | K % | Cl % | S %  | Zn ppm |
| Bone Meal Steamed, Swine/Poultry   | 95     | 16    | 27              | 0                              | 11              | 13      |       | 1     | 0     | 0     | 0      | 11.6 | 77    | 27.00 | 12.74 | 0.2 |      | 2.50 | 290    |
| Bread Byproduct                    | 68     | 90    | 100             | 68                             | 94              | 14      | 24    | 1     | 2     | 3     | 0      | 3.0  | 3     | 0.10  | 0.18  | 0.2 | 0.76 | 0.15 | 40     |
| Brewers Grains Wet                 | 23     | 85    | 93              | 62                             | 88              | 26      | 52    | 13    | 21    | 45    | 18     | 7.5  | 4     | 0.30  | 0.58  | 0.1 | 0.15 | 0.32 | 78     |
| Brewers Grains Dried               | 92     | 84    | 92              | 61                             | 87              | 25      | 54    | 14    | 24    | 49    | 18     | 7.5  | 4     | 0.30  | 0.58  | 0.1 | 0.15 | 0.32 | 78     |
| Brewers Yeast Dried                | 94     | 79    | 85              | 55                             | 81              | 48      |       | 3     |       |       |        | 1.0  | 7     | 0.10  | 1.56  | 1.8 |      | 0.41 | 41     |
| Bromegrass Fresh Immature          | 30     | 64    | 65              | 36                             | 65              | 15      | 22    | 28    | 33    | 54    | 40     | 4.1  | 10    | 0.45  | 0.34  | 2.3 |      | 0.21 | 20     |
| Bromegrass Hay                     | 89     | 55    | 55              | 21                             | 55              | 10      | 33    | 35    | 41    | 66    | 98     | 2.3  | 9     | 0.40  | 0.23  | 1.9 | 0.40 | 0.19 | 19     |
| Bromegrass Haylage                 | 35     | 57    | 57              | 25                             | 57              | 11      | 26    | 36    | 44    | 69    | 61     | 2.5  | 8     | 0.38  | 0.30  | 2.0 |      | 0.20 | 19     |
| Buckwheat Grain                    | 88     | 75    | 79              | 50                             | 77              | 12      |       | 13    | 17    |       |        | 2.8  | 2     | 0.11  | 0.36  | 0.5 | 0.05 | 0.16 | 10     |
| Buttermilk Dried                   | 92     | 88    | 98              | 65                             | 91              | 34      | 0     | 5     | 0     | 0     | 0      | 5.0  | 10    | 1.44  | 1.00  | 0.9 |      | 0.09 | 44     |
| Cactus, prickly pear               | 23     | 61    | 62              | 31                             | 62              | 5       |       | 16    | 20    | 28    |        | 2.1  | 18    | 4.00  | 0.10  | 1.5 |      | 0.20 |        |
| Calcium Carbonate                  | 99     | 0     | 0               | 0                              | 0               | 0       |       | 0     | 0     | 0     | 0      | 0.0  | 99    | 38.50 | 0.04  | 0.1 |      | 0.00 | 0      |
| Canarygrass Hay                    | 91     | 53    | 53              | 18                             | 53              | 9       | 26    | 32    | 34    | 67    | 98     | 2.7  | 8     | 0.38  | 0.25  | 2.7 |      | 0.14 | 18     |
| Canola Meal, Solv. Ext.            | 90     | 72    | 75              | 47                             | 74              | 41      | 30    | 11    | 19    | 29    | 23     | 2.0  | 8     | 0.74  | 1.14  | 1.1 | 0.07 | 0.78 | 68     |
| Carrot Pulp                        | 14     | 62    | 63              | 33                             | 63              | 6       |       | 19    | 23    | 40    | 0      | 7.8  | 9     |       |       |     |      |      |        |
| Carrot Root Fresh                  | 12     | 83    | 90              | 60                             | 86              | 10      |       | 9     | 11    | 20    | 0      | 1.4  | 10    | 0.55  | 0.32  | 2.5 | 0.50 | 0.17 |        |
| Carrot Tops                        | 16     | 73    | 77              | 48                             | 75              | 13      |       | 18    | 23    | 45    | 41     | 3.8  | 15    | 1.94  | 0.19  | 1.9 |      |      |        |
| Cattle Manure Dried                | 92     | 38    | 40              | 0                              | 36              | 15      |       | 35    | 42    | 55    | 0      | 2.5  | 14    | 1.15  | 1.20  | 0.6 |      | 1.78 | 240    |
| Cheatgrass Fresh Immature          | 21     | 68    | 70              | 41                             | 69              | 16      |       | 23    |       |       |        | 2.7  | 10    | 0.60  | 0.28  |     |      |      |        |
| Citrus Pulp Dried                  | 90     | 78    | 83              | 54                             | 80              | 7       | 38    | 13    | 20    | 21    | 33     | 2.9  | 7     | 1.81  | 0.12  | 0.8 | 0.04 | 0.08 | 14     |
| Clover Ladino Fresh                | 19     | 69    | 71              | 43                             | 70              | 25      | 20    | 14    | 33    | 35    | 41     | 4.8  | 11    | 1.27  | 0.38  | 2.4 |      | 0.20 | 20     |
| Clover Ladino Hay                  | 90     | 61    | 62              | 31                             | 61              | 21      | 25    | 22    | 32    | 36    | 92     | 2.0  | 9     | 1.35  | 0.32  | 2.4 | 0.30 | 0.20 | 17     |
| Clover Red Fresh                   | 24     | 64    | 65              | 36                             | 65              | 18      | 21    | 24    | 33    | 44    | 41     | 4.0  | 9     | 1.70  | 0.30  | 2.0 | 0.60 | 0.17 | 23     |
| Clover Red Hay                     | 88     | 55    | 55              | 21                             | 55              | 15      | 28    | 30    | 39    | 51    | 92     | 2.5  | 8     | 1.50  | 0.25  | 1.7 | 0.32 | 0.17 | 17     |
| Clover Sweet Hay                   | 91     | 53    | 53              | 18                             | 53              | 16      | 30    | 30    | 38    | 50    | 92     | 2.4  | 9     | 1.27  | 0.25  | 1.8 | 0.37 | 0.46 |        |
| Coconut Meal, Mech. Ext.           | 92     | 76    | 81              | 52                             | 78              | 21      | 56    | 13    | 21    | 56    | 23     | 6.8  | 7     | 0.40  | 0.30  | 1.0 | 0.33 | 0.04 |        |
| Coffee Grounds                     | 88     | 20    | 36              | 0                              | 16              | 13      |       | 41    | 68    | 77    | 10     | 15.0 | 2     | 0.10  | 0.08  |     |      |      |        |
| Corn Whole Plant Pelleted          | 91     | 63    | 64              | 34                             | 64              | 9       | 45    | 21    | 24    | 40    | 6      | 2.4  | 6     | 0.50  | 0.24  | 0.9 |      | 0.14 |        |
| Corn Fodder                        | 80     | 65    | 66              | 37                             | 66              | 9       | 45    | 25    | 29    | 48    | 100    | 2.4  | 7     | 0.50  | 0.25  | 0.9 | 0.20 | 0.14 |        |
| Corn Stover Mature (Stalks)        | 80     | 54    | 54              | 20                             | 54              | 5       | 30    | 35    | 43    | 70    | 100    | 1.3  | 7     | 0.45  | 0.15  | 1.2 | 0.30 | 0.14 | 22     |
| Corn Silage Milk Stage             | 26     | 65    | 66              | 37                             | 66              | 8       | 18    | 26    | 32    | 54    | 60     | 2.8  | 6     | 0.40  | 0.27  | 1.6 |      | 0.11 | 20     |
| Corn Silage Mature Well Eared      | 34     | 72    | 75              | 47                             | 74              | 8       | 28    | 21    | 27    | 46    | 70     | 3.1  | 5     | 0.28  | 0.23  | 1.1 | 0.20 | 0.13 | 22     |
| Corn Silage Sweet Corn             | 24     | 65    | 66              | 37                             | 66              | 11      |       | 20    | 32    | 57    | 60     | 5.0  | 5     | 0.24  | 0.26  | 1.2 | 0.17 | 0.16 | 39     |
| Corn Grain Whole                   | 88     | 88    | 98              | 65                             | 91              | 9       | 58    | 2     | 3     | 9     | 60     | 4.3  | 2     | 0.02  | 0.30  | 0.4 | 0.05 | 0.14 | 18     |
| Corn Grain Rolled                  | 88     | 88    | 98              | 65                             | 91              | 9       | 54    | 2     | 3     | 9     | 34     | 4.3  | 2     | 0.02  | 0.30  | 0.4 | 0.05 | 0.14 | 18     |
| Corn Grain, Steam Flaked           | 85     | 93    | 104             | 71                             | 97              | 9       | 59    | 2     | 3     | 9     | 40     | 4.1  | 2     | 0.02  | 0.27  | 0.4 | 0.05 | 0.14 | 18     |
| Corn Grain High Moisture           | 74     | 93    | 104             | 71                             | 97              | 10      | 42    | 2     | 3     | 9     | 0      | 4.0  | 2     | 0.02  | 0.30  | 0.4 | 0.06 | 0.14 | 20     |
| Corn Grain, High Oil               | 88     | 91    | 102             | 69                             | 95              | 8       | 54    | 2     | 3     | 8     | 60     | 6.9  | 2     | 0.01  | 0.30  | 0.3 | 0.05 | 0.13 | 18     |
| Corn Grain Hi-Lysine               | 92     | 87    | 96              | 64                             | 90              | 12      | 58    | 4     | 4     | 11    | 60     | 4.4  | 2     | 0.03  | 0.24  | 0.4 | 0.05 | 0.11 | 18     |
| Corn and Cob Meal                  | 87     | 82    | 89              | 59                             | 85              | 9       | 52    | 9     | 11    | 26    | 56     | 3.7  | 2     | 0.06  | 0.27  | 0.5 | 0.05 | 0.13 | 16     |
| Corn Cobs                          | 90     | 48    | 48              | 9                              | 47              | 3       | 70    | 36    | 39    | 88    | 56     | 0.6  | 2     | 0.12  | 0.04  | 0.8 |      | 0.27 | 5      |
| Corn Screenings                    | 86     | 91    | 102             | 69                             | 95              | 10      | 52    | 3     | 4     | 9     | 20     | 4.3  | 2     | 0.04  | 0.27  | 0.4 | 0.05 | 0.12 | 16     |
| Corn Bran                          | 91     | 76    | 81              | 52                             | 78              | 11      |       | 10    | 17    | 51    | 0      | 6.3  | 3     | 0.04  | 0.15  | 0.1 | 0.13 | 0.08 | 18     |
| Corn Germ, Full-fat                | 97     | 135   | 198             | 160                            | 198             | 12      | 55    | 6     | 11    | 36    | 20     | 44.9 | 2     | 0.02  | 0.28  | 0.1 | 0.02 | 0.17 | 60     |
| Corn Gluten Feed                   | 90     | 80    | 86              | 56                             | 83              | 22      | 25    | 9     | 12    | 38    | 36     | 3.2  | 7     | 0.11  | 0.84  | 1.3 | 0.25 | 0.47 | 84     |
| Corn Gluten Meal 41% CP            | 91     | 85    | 93              | 62                             | 88              | 46      | 63    | 5     | 9     | 32    | 23     | 3.2  | 3     | 0.13  | 0.55  | 0.2 | 0.07 | 0.62 | 35     |
| Corn Gluten Meal 60% CP            | 91     | 89    | 99              | 67                             | 93              | 67      | 65    | 3     | 6     | 11    | 23     | 2.5  | 2     | 0.06  | 0.54  | 0.2 | 0.10 | 0.90 | 40     |
| Corn Cannery Waste                 | 29     | 68    | 70              | 41                             | 69              | 8       | 15    | 28    | 36    | 59    | 0      | 3.0  | 5     | 0.10  | 0.29  | 1.0 |      | 0.13 | 25     |
| Cottonseed, Whole                  | 91     | 95    | 107             | 73                             | 99              | 23      | 38    | 27    | 37    | 47    | 100    | 19.4 | 5     | 0.16  | 0.64  | 1.0 | 0.06 | 0.24 | 34     |
| Cottonseed, Whole, Delinted        | 90     | 95    | 107             | 73                             | 99              | 24      | 39    | 19    | 28    | 40    | 100    | 22.9 | 5     | 0.12  | 0.54  | 1.2 |      | 0.24 | 36     |
| Cottonseed, Whole, Extruded        | 92     | 87    | 98              | 67                             | 91              | 26      | 50    | 32    | 44    | 53    | 33     | 9.5  | 5     | 0.17  | 0.68  | 1.3 |      | 0.24 | 38     |
| Cotton Gin Trash (Burs)            | 91     | 42    | 43              | 0                              | 40              | 9       |       | 35    | 50    | 70    | 100    | 2.0  | 14    | 1.40  | 0.18  | 1.9 |      | 0.14 | 25     |
| Cottonseed Hulls                   | 90     | 45    | 45              | 3                              | 44              | 5       | 45    | 48    | 70    | 87    | 100    | 1.8  | 3     | 0.15  | 0.08  | 1.0 | 0.02 | 0.05 | 10     |
| Cottonseed Meal, Solv. Ext. 41% CP | 90     | 77    | 82              | 53                             | 79              | 47      | 42    | 13    | 18    | 25    | 23     | 1.5  | 7     | 0.22  | 1.23  | 1.6 | 0.05 | 0.44 | 66     |
| Cottonseed Meal, Mech. Ext. 41% CP | 92     | 79    | 85              | 55                             | 81              | 46      | 50    | 13    | 19    | 31    | 23     | 5.0  | 7     | 0.21  | 1.18  | 1.6 | 0.05 | 0.42 | 64     |
| Crab Waste Meal                    | 91     | 29    | 37              | 0                              | 30              | 32      | 65    | 11    | 13    |       |        | 3.0  | 43    | 15.00 | 1.88  | 0.5 | 1.63 | 0.27 | 107    |

# 2012 Feed Composition Tables

| FEEDSTUFF                               | ENERGY |       |                 |                 |                 | PROTEIN |       | FIBER |       |       |        |      |       |       |       |      |      |      |        |
|---|--------|-------|-----------------|-----------------|-----------------|---------|-------|-------|-------|-------|--------|------|-------|-------|-------|------|------|------|--------|
|   | DM %   | TDN % | NE <sub>m</sub> | NE <sub>l</sub> | NE <sub>i</sub> | CP %    | UIP % | CF %  | ADF % | NDF % | eNDF % | EE % | ASH % | Ca %  | P %   | K %  | Cl % | S %  | Zn ppm |
| Crambe Meal, Solv. Ext.                 | 91     | 81    | 88              | 58              | 84              | 31      | 45    | 25    | 35    | 47    | 23     | 1.4  | 8     | 1.27  | 0.86  | 1.1  | 0.70 | 1.26 | 44     |
| Crambe Meal, Mech. Ext.                 | 92     | 88    | 98              | 65              | 91              | 28      | 50    | 24    | 33    | 42    | 25     | 17.0 | 7     | 1.22  | 0.78  | 1.0  | 0.65 | 1.18 | 41     |
| Cranberry Pulp Meal                     | 88     | 49    | 49              | 11              | 48              | 7       |       | 26    | 47    | 54    | 33     |      |       |       |       |      |      |      |        |
| Crawfish Waste Meal                     | 94     | 25    | 36              | 0               | 29              | 35      | 74    | 12    | 15    |       |        |      |       | 42    | 13.10 | 0.85 |      |      |        |
| Curacao Phosphate                       | 99     | 0     | 0               | 0               | 0               | 0       |       | 0     | 0     | 0     | 0      | 0.0  | 95    | 34.00 | 15.00 |      |      |      |        |
| Defluorinated Phosphate                 | 99     | 0     | 0               | 0               | 0               | 0       |       | 0     | 0     | 0     | 0      | 0.0  | 95    | 32.60 | 18.07 | 1.0  |      |      | 100    |
| Diammonium Phosphate                    | 98     | 0     | 0               | 0               | 0               | 115     | 0     | 0     | 0     | 0     | 0      | 0.0  | 35    | 0.52  | 20.41 | 0.0  |      | 2.16 |        |
| Dicalcium Phosphate                     | 96     | 0     | 0               | 0               | 0               | 0       |       | 0     | 0     | 0     | 0      | 0.0  | 94    | 22.00 | 18.65 | 0.1  |      | 1.00 | 70     |
| Distillers Grains, Wet                  | 25     | 90    | 100             | 68              | 94              | 28      | 52    | 8     | 18    | 40    | 4      | 9.6  | 5     | 0.10  | 0.70  | 1.0  | 0.20 | 0.60 | 95     |
| Distillers Grain, Barley                | 90     | 75    | 79              | 50              | 77              | 30      | 56    | 16    | 20    | 44    | 4      | 8.5  | 4     | 0.15  | 0.67  | 1.0  | 0.18 | 0.43 | 50     |
| Distillers Grain, Corn, Dry             | 91     | 99    | 113             | 75              | 105             | 29      | 58    | 8     | 16    | 39    | 4      | 10.0 | 5     | 0.09  | 0.75  | 0.9  | 0.14 | 0.70 | 65     |
| Distillers Grain, Corn, Wet             | 36     | 101   | 115             | 77              | 108             | 29      | 54    | 8     | 16    | 39    | 4      | 10.0 | 5     | 0.09  | 0.75  | 0.9  | 0.14 | 0.70 | 65     |
| Distillers Grain, Corn with Solubles    | 89     | 98    | 111             | 76              | 103             | 29      | 52    | 8     | 16    | 38    | 4      | 11.9 | 6     | 0.10  | 0.84  | 0.9  | 0.18 | 0.80 | 85     |
| Distillers Dried Solubles               | 93     | 87    | 96              | 64              | 90              | 29      | 0     | 4     | 7     | 22    | 4      | 13.0 | 8     | 0.35  | 1.20  | 1.8  | 0.28 | 1.10 | 91     |
| Distillers Corn Stillage                | 7      | 92    | 103             | 70              | 96              | 22      | 55    | 8     | 10    | 21    | 0      | 8.1  | 5     | 0.14  | 0.72  | 0.2  |      | 0.60 | 60     |
| Distillers Grain, Sorghum, Dry          | 91     | 84    | 92              | 61              | 87              | 33      | 62    | 13    | 20    | 44    | 4      | 10.0 | 4     | 0.20  | 0.68  | 0.3  |      | 0.50 | 50     |
| Distillers Grain, Sorghum, Wet          | 35     | 86    | 95              | 63              | 89              | 33      | 55    | 13    | 19    | 43    | 4      | 10.0 | 4     | 0.20  | 0.68  | 0.3  |      | 0.50 | 50     |
| Distillers Grain, Sorghum with Solubles | 92     | 85    | 93              | 62              | 88              | 33      | 53    | 12    | 18    | 42    | 4      | 10.0 | 4     | 0.23  | 0.70  | 0.5  |      | 0.70 | 55     |
| Elephant (Napier) grass hay, chopped    | 92     | 55    | 55              | 21              | 54              | 9       |       | 24    | 46    | 63    | 85     | 2.0  | 10    | 0.35  | 0.30  | 1.3  |      | 0.10 |        |
| Fat, Animal, Poultry, Vegetable         | 99     | 195   | 285             | 230             | 285             | 0       |       | 0     | 0     | 0     | 0      | 99.0 | 0     | 0.00  | 0.00  | 0.0  |      |      |        |
| Feather Meal Hydrolyzed                 | 93     | 67    | 69              | 40              | 68              | 87      | 68    | 1     | 14    | 42    | 23     | 7.0  | 3     | 0.48  | 0.45  | 0.1  | 0.20 | 1.82 | 90     |
| Fescue KY 31 Fresh                      | 29     | 64    | 65              | 36              | 65              | 15      | 20    | 25    | 32    | 64    | 40     | 5.5  | 9     | 0.48  | 0.37  | 2.5  |      | 0.18 | 22     |
| Fescue KY 31 Hay Early Bloom            | 88     | 65    | 66              | 37              | 66              | 18      | 22    | 25    | 31    | 64    | 98     | 6.6  | 8     | 0.48  | 0.36  | 2.6  |      | 0.27 | 24     |
| Fescue KY 31 Hay Mature                 | 88     | 52    | 52              | 16              | 51              | 11      | 30    | 30    | 42    | 73    | 98     | 5.0  | 6     | 0.45  | 0.26  | 1.7  |      | 0.14 | 22     |
| Fescue (Red) Straw                      | 94     | 43    | 44              | 0               | 41              | 4       |       | 41    |       |       |        | 1.1  | 6     | 0.00  | 0.06  |      |      |      |        |
| Fish Meal                               | 90     | 74    | 78              | 49              | 76              | 66      | 60    | 1     | 2     | 12    | 10     | 9.0  | 20    | 5.55  | 3.15  | 0.7  | 0.76 | 0.80 | 130    |
| Flax Seed Hulls                         | 91     | 38    | 40              | 0               | 36              | 9       |       | 32    | 39    | 50    | 98     | 1.5  | 10    |       |       |      |      |      |        |
| Garbage Municipal Cooked                | 23     | 80    | 86              | 56              | 83              | 16      |       | 9     | 50    | 59    | 30     | 20.0 | 10    | 1.20  | 0.43  | 0.6  | 0.67 |      |        |
| Glycerol (Glycerin)                     | 88     | 90    | 100             | 68              | 94              | 0       | 0     | 0     | 0     | 0     | 0      | 0.0  | 6     |       |       |      | 4.00 |      |        |
| Grain Screenings                        | 90     | 65    | 66              | 37              | 66              | 14      |       | 14    |       |       |        | 5.5  | 9     | 0.25  | 0.34  |      |      |      | 30     |
| Grain Dust                              | 92     | 73    | 77              | 48              | 75              | 10      |       | 11    |       |       |        | 2.2  | 10    | 0.30  | 0.18  |      |      |      | 42     |
| Grape Pomace Stemless                   | 91     | 40    | 42              | 0               | 38              | 12      | 45    | 32    | 46    | 54    | 34     | 7.6  | 9     | 0.55  | 0.07  | 0.6  | 0.01 |      | 24     |
| Grass Hay                               | 88     | 58    | 58              | 26              | 58              | 10      | 30    | 33    | 41    | 63    | 98     | 3.0  | 6     | 0.60  | 0.21  | 2.0  |      | 0.20 | 28     |
| Grass Silage                            | 30     | 61    | 62              | 31              | 61              | 11      | 24    | 32    | 39    | 60    | 61     | 3.4  | 8     | 0.70  | 0.24  | 2.1  |      | 0.22 | 29     |
| Guar Meal                               | 90     | 72    | 75              | 47              | 74              | 39      | 34    | 16    |       |       |        | 3.9  | 5     |       |       |      |      |      |        |
| Hominy Feed                             | 90     | 89    | 99              | 67              | 93              | 11      | 48    | 5     | 8     | 21    | 9      | 6.5  | 3     | 0.04  | 0.55  | 0.6  | 0.06 | 0.10 | 32     |
| Hop Leaves                              | 37     | 49    | 49              | 11              | 48              | 15      |       | 15    |       |       |        | 3.6  | 35    | 2.80  | 0.64  |      |      |      |        |
| Hop Vine Silage                         | 30     | 53    | 53              | 18              | 53              | 15      |       | 21    | 24    |       |        | 3.1  | 20    | 3.30  | 0.37  | 1.8  |      | 0.22 | 44     |
| Hops Spent                              | 89     | 35    | 39              | 0               | 33              | 23      |       | 26    | 30    |       |        | 4.6  | 7     | 1.60  | 0.60  |      |      |      |        |
| Kelp Dried                              | 91     | 32    | 38              | 0               | 29              | 7       |       | 7     | 10    |       |        | 0.5  | 39    | 2.72  | 0.31  |      |      |      |        |
| Kenaf Hay                               | 92     | 48    | 48              | 9               | 47              | 10      |       | 31    | 44    | 56    | 98     | 2.9  | 12    |       |       |      |      |      |        |
| Kochia Fresh                            | 29     | 55    | 55              | 21              | 55              | 16      |       | 23    |       |       |        | 1.2  | 18    | 1.10  | 0.30  |      |      |      |        |
| Kochia Hay                              | 90     | 53    | 53              | 18              | 53              | 14      |       | 27    |       |       |        | 1.7  | 14    | 1.00  | 0.20  |      |      |      |        |
| Kudzu Hay                               | 90     | 54    | 54              | 20              | 54              | 16      |       | 33    |       |       |        | 2.6  | 7     | 3.00  | 0.23  |      |      |      |        |
| Lespedeza Fresh Early Bloom             | 25     | 60    | 60              | 30              | 60              | 16      | 50    | 32    |       |       |        | 2.0  | 10    | 1.20  | 0.24  | 1.1  |      | 0.21 |        |
| Lespedeza Hay                           | 92     | 54    | 54              | 20              | 54              | 14      | 60    | 30    |       |       |        | 3.0  | 7     | 1.10  | 0.22  | 1.0  |      | 0.19 | 29     |
| Limestone Ground                        | 98     | 0     | 0               | 0               | 0               | 0       | 0     | 0     | 0     | 0     | 0      | 0.0  | 98    | 34.00 | 0.02  |      |      | 0.03 |        |
| Limestone Dolomitic Ground              | 99     | 0     | 0               | 0               | 0               | 0       | 0     | 0     | 0     | 0     | 0      | 0.0  | 98    | 22.30 | 0.04  | 0.4  |      |      |        |
| Linseed Meal, Solv. Ext.                | 91     | 77    | 82              | 53              | 79              | 38      | 36    | 10    | 18    | 25    | 23     | 1.7  | 6     | 0.43  | 0.91  | 1.5  | 0.04 | 0.47 | 60     |
| Linseed Meal, Mech. Ext.                | 91     | 82    | 89              | 59              | 85              | 37      | 40    | 10    | 17    | 24    | 23     | 6.0  | 6     | 0.42  | 0.90  | 1.4  | 0.04 | 0.46 | 59     |
| Meadow Hay                              | 90     | 50    | 50              | 12              | 49              | 7       | 23    | 33    | 44    | 70    | 98     | 2.5  | 9     | 0.61  | 0.18  | 1.6  |      | 0.17 | 24     |
| Meat Meal, Swine/Poultry                | 93     | 71    | 74              | 46              | 73              | 56      | 64    | 2     | 7     | 48    | 0      | 10.5 | 24    | 9.00  | 4.42  | 0.5  | 1.27 | 0.48 | 190    |
| Meat and Bone Meal, Swine/Poultry       | 93     | 72    | 75              | 47              | 74              | 56      | 24    | 1     | 5     | 34    | 0      | 10.0 | 29    | 13.50 | 6.50  |      |      |      |        |
| Milk, Dry, Skim                         | 94     | 87    | 96              | 64              | 90              | 36      | 0     | 0     | 0     | 0     | 0      | 0.9  | 8     | 1.36  | 1.09  | 1.7  | 0.96 | 0.34 | 41     |

## 2012 Feed Composition Tables

| FEEDSTUFF                             | ENERGY |       |                 |                                |                 | PROTEIN |       | FIBER |       |       |        |      |       |       |       |     |      |      |        |
|---------------------------------------|--------|-------|-----------------|--------------------------------|-----------------|---------|-------|-------|-------|-------|--------|------|-------|-------|-------|-----|------|------|--------|
|                                       | DM %   | TDN % | NE <sub>m</sub> | NE <sub>l</sub><br>(Mcal/cwt.) | NE <sub>i</sub> | CP %    | UIP % | CF %  | ADF % | NDF % | eNDF % | EE % | ASH % | Ca %  | P %   | K % | Cl % | S %  | Zn ppm |
| Mint Slug Silage                      | 27     | 55    | 55              | 21                             | 55              | 14      |       | 24    |       |       |        | 1.8  | 16    | 1.10  | 0.57  |     |      |      |        |
| Molasses Beet                         | 77     | 75    | 79              | 50                             | 77              | 8       | 0     | 0     | 0     | 0     | 0      | 0.2  | 12    | 0.14  | 0.03  | 6.0 | 1.64 | 0.60 | 18     |
| Molasses Cane                         | 77     | 74    | 78              | 49                             | 76              | 6       | 0     | 0     | 0     | 0     | 0      | 0.5  | 14    | 0.95  | 0.09  | 4.2 | 2.30 | 0.68 | 15     |
| Molasses Cane Dried                   | 94     | 74    | 78              | 49                             | 76              | 9       | 0     | 2     | 3     | 7     | 0      | 0.3  | 14    | 1.10  | 0.15  | 3.6 | 3.00 |      | 30     |
| Molasses, Cond. Fermentation Solubles | 43     | 69    | 71              | 43                             | 70              | 16      | 0     | 0     | 0     | 0     | 0      | 1.0  | 26    | 2.12  | 0.14  | 7.5 | 2.73 | 0.93 | 30     |
| Molasses Citrus                       | 65     | 75    | 79              | 50                             | 77              | 9       | 0     | 0     | 0     | 0     | 0      | 0.3  | 8     | 1.84  | 0.15  | 0.2 | 0.11 | 0.23 | 137    |
| Molasses Wood, Hemicellulose          | 61     | 70    | 73              | 44                             | 71              | 1       | 0     | 1     | 2     | 4     | 0      | 0.6  | 7     | 1.10  | 0.10  | 0.1 |      | 0.05 |        |
| Monoammonium Phosphate                | 98     | 0     | 0               | 0                              | 0               | 70      | 0     | 0     | 0     | 0     | 0      | 0.0  | 24    | 0.30  | 24.70 | 0.0 |      | 1.42 | 81     |
| Mono-Dicalcium Phosphate              | 97     | 0     | 0               | 0                              | 0               | 0       |       | 0     | 0     | 0     | 0      | 0.0  | 94    | 16.70 | 21.10 | 0.1 |      | 1.20 | 70     |
| Oat Hay                               | 90     | 54    | 54              | 20                             | 54              | 10      | 25    | 31    | 39    | 63    | 98     | 2.3  | 8     | 0.40  | 0.27  | 1.6 | 0.42 | 0.21 | 28     |
| Oat Silage                            | 35     | 60    | 60              | 30                             | 60              | 12      | 21    | 31    | 39    | 59    | 61     | 3.2  | 10    | 0.34  | 0.30  | 2.4 | 0.50 | 0.25 | 27     |
| Oat Straw                             | 91     | 48    | 48              | 9                              | 47              | 4       | 40    | 41    | 48    | 73    | 98     | 2.3  | 8     | 0.24  | 0.07  | 2.5 | 0.78 | 0.22 | 6      |
| Oat Grain                             | 89     | 76    | 81              | 52                             | 78              | 13      | 18    | 11    | 15    | 28    | 34     | 5.0  | 4     | 0.05  | 0.41  | 0.5 | 0.11 | 0.20 | 40     |
| Oat Grain, Steam Flaked               | 84     | 88    | 98              | 65                             | 91              | 13      | 26    | 11    | 15    | 30    | 32     | 4.9  | 4     | 0.05  | 0.37  | 0.5 | 0.11 | 0.20 | 40     |
| Oat Groats                            | 91     | 91    | 102             | 69                             | 95              | 18      | 15    | 3     |       |       |        | 6.6  | 2     | 0.08  | 0.47  | 0.4 | 0.10 | 0.20 |        |
| Oat Middlings                         | 90     | 91    | 102             | 69                             | 95              | 16      | 20    | 4     | 6     |       |        | 6.0  | 3     | 0.07  | 0.48  | 0.5 |      | 0.23 |        |
| Oat Mill Byproduct                    | 89     | 33    | 38              | 0                              | 30              | 7       |       | 27    | 37    |       |        | 2.4  | 6     | 0.13  | 0.22  | 0.6 |      | 0.24 |        |
| Oat Hulls                             | 93     | 38    | 40              | 0                              | 36              | 4       | 25    | 33    | 41    | 75    | 90     | 1.6  | 7     | 0.16  | 0.15  | 0.6 | 0.08 | 0.14 | 31     |
| Orange Pulp Dried                     | 89     | 79    | 85              | 55                             | 81              | 9       |       | 9     | 16    | 20    | 33     | 1.8  | 4     | 0.71  | 0.11  | 0.6 |      | 0.05 |        |
| Orchardgrass Fresh Early Bloom        | 24     | 65    | 66              | 37                             | 66              | 14      | 23    | 30    | 32    | 54    | 41     | 4.0  | 9     | 0.33  | 0.39  | 2.7 | 0.08 | 0.20 | 21     |
| Orchardgrass Hay                      | 88     | 59    | 59              | 28                             | 59              | 10      | 27    | 34    | 40    | 67    | 98     | 3.3  | 8     | 0.32  | 0.30  | 2.6 | 0.41 | 0.20 | 26     |
| Pea Vine Hay                          | 89     | 59    | 59              | 28                             | 59              | 11      |       | 32    | 50    | 62    | 92     | 2.0  | 7     | 1.25  | 0.24  | 1.3 |      | 0.20 | 20     |
| Pea Vine Silage                       | 25     | 58    | 58              | 26                             | 58              | 16      |       | 29    | 44    | 55    | 61     | 3.3  | 8     | 1.25  | 0.28  | 1.6 |      | 0.29 | 32     |
| Pea Vine Straw                        | 89     | 51    | 51              | 14                             | 50              | 7       |       | 41    | 49    | 72    | 98     | 1.4  | 7     | 0.75  | 0.13  | 1.1 |      | 0.15 |        |
| Peas Cull                             | 88     | 85    | 93              | 62                             | 88              | 23      | 22    | 7     | 9     | 12    | 0      | 1.4  | 4     | 0.14  | 0.46  | 1.1 | 0.06 | 0.26 | 30     |
| Peanut Hulls                          | 91     | 22    | 36              | 0                              | 18              | 7       |       | 63    | 65    | 74    | 98     | 1.5  | 5     | 0.20  | 0.07  | 0.9 |      |      |        |
| Peanut Meal, Solv. Ext.               | 91     | 77    | 82              | 53                             | 79              | 51      | 27    | 9     | 16    | 27    | 23     | 2.5  | 6     | 0.26  | 0.62  | 1.1 | 0.03 | 0.30 | 38     |
| Peanut Skins                          | 92     | 0     | 0               | 0                              | 0               | 17      |       | 13    | 20    | 28    | 0      | 22.0 | 3     | 0.19  | 0.20  |     |      |      |        |
| Pearl Millet Grain                    | 87     | 82    | 89              | 59                             | 85              | 13      |       | 2     | 6     | 18    | 34     | 4.5  | 3     | 0.03  | 0.36  | 0.5 |      |      |        |
| Pineapple Greenchop                   | 17     | 47    | 47              | 7                              | 46              | 8       |       | 24    | 35    | 64    | 41     | 2.4  | 7     | 0.28  | 0.08  |     |      |      |        |
| Pineapple Bran                        | 89     | 71    | 74              | 46                             | 73              | 5       |       | 20    | 33    | 66    | 20     | 1.5  | 3     | 0.26  | 0.12  |     |      |      |        |
| Pineapple Presscake                   | 21     | 71    | 74              | 46                             | 73              | 5       |       | 24    | 35    | 69    | 20     | 0.8  | 3     | 0.25  | 0.09  |     |      |      |        |
| Potato Vine Silage                    | 15     | 59    | 59              | 28                             | 59              | 15      |       | 26    |       |       |        | 3.7  | 19    | 2.10  | 0.29  | 4.0 |      | 0.37 |        |
| Potatoes Cull                         | 21     | 80    | 86              | 56                             | 83              | 10      | 0     | 2     | 3     | 4     | 0      | 0.4  | 5     | 0.03  | 0.24  | 2.2 | 0.30 | 0.09 |        |
| Potato Waste Wet                      | 14     | 82    | 89              | 59                             | 85              | 7       | 0     | 9     | 11    | 18    | 0      | 1.5  | 3     | 0.16  | 0.25  | 1.2 | 0.36 | 0.11 | 12     |
| Potato Waste Dried                    | 89     | 85    | 93              | 62                             | 88              | 8       | 0     | 7     | 9     | 15    | 0      | 0.5  | 5     | 0.16  | 0.25  | 1.2 | 0.39 | 0.11 | 12     |
| Potato Waste Wet with Lime            | 17     | 80    | 86              | 56                             | 83              | 5       | 0     | 10    | 12    | 16    | 0      | 0.3  | 9     | 4.20  | 0.18  |     |      |      |        |
| Potato Waste Filter Cake              | 14     | 77    | 82              | 53                             | 79              | 5       | 0     | 2     |       |       |        | 7.7  | 3     | 0.10  | 0.19  | 0.2 |      |      |        |
| Poultry Byproduct Meal                | 93     | 79    | 85              | 55                             | 81              | 62      | 49    | 2     |       |       |        | 14.5 | 17    | 4.00  | 2.25  | 0.5 | 0.58 | 0.56 | 129    |
| Poultry Manure Dried                  | 89     | 38    | 40              | 0                              | 36              | 28      | 22    | 13    | 15    | 35    | 0      | 2.1  | 33    | 10.20 | 2.80  | 2.3 | 1.05 | 0.20 | 520    |
| Prairie Hay                           | 91     | 50    | 50              | 12                             | 49              | 7       | 37    | 34    | 47    | 67    | 98     | 2.0  | 8     | 0.40  | 0.15  | 1.1 | 0.06 | 0.06 | 34     |
| Pumpkins, Cull                        | 11     | 80    | 86              | 56                             | 83              | 15      |       | 14    | 21    | 30    | 0      | 8.9  | 9     | 0.24  | 0.43  | 3.3 |      |      |        |
| Rice Straw                            | 91     | 40    | 42              | 0                              | 38              | 4       |       | 38    | 47    | 72    | 100    | 1.4  | 13    | 0.23  | 0.08  | 1.2 |      | 0.11 |        |
| Rice Straw Ammoniated                 | 87     | 45    | 45              | 3                              | 44              | 9       |       | 39    | 53    | 68    | 100    | 1.3  | 12    | 0.25  | 0.08  | 1.1 |      | 0.11 |        |
| Rice Grain                            | 89     | 79    | 85              | 55                             | 81              | 8       | 30    | 10    | 12    | 16    | 34     | 1.9  | 5     | 0.07  | 0.32  | 0.4 | 0.09 | 0.05 | 17     |
| Rice Polishings                       | 90     | 90    | 100             | 68                             | 94              | 14      |       | 4     | 5     |       |        | 14.0 | 9     | 0.05  | 1.34  | 1.2 | 0.12 | 0.19 | 28     |
| Rice Bran                             | 91     | 71    | 74              | 46                             | 73              | 14      | 30    | 13    | 18    | 24    | 0      | 16.0 | 11    | 0.07  | 1.70  | 1.8 | 0.09 | 0.19 | 40     |
| Rice Hulls                            | 92     | 13    | 35              | 0                              | 8               | 3       | 45    | 44    | 70    | 81    | 90     | 0.9  | 20    | 0.12  | 0.07  | 0.5 | 0.08 | 0.08 | 24     |
| Rice Mill Byproduct                   | 91     | 39    | 41              | 0                              | 37              | 7       |       | 32    | 50    | 60    | 0      | 5.7  | 19    | 0.25  | 0.48  | 2.2 |      | 0.30 | 31     |
| Rye Grass Hay                         | 90     | 58    | 58              | 26                             | 58              | 10      | 30    | 33    | 38    | 65    | 98     | 3.3  | 8     | 0.45  | 0.30  | 2.2 |      | 0.18 | 27     |
| Rye Grass Silage                      | 32     | 59    | 59              | 28                             | 59              | 14      | 25    | 22    | 37    | 59    | 61     | 3.3  | 8     | 0.43  | 0.38  | 2.9 | 0.73 | 0.23 | 29     |
| Rye Straw                             | 89     | 44    | 44              | 1                              | 43              | 4       |       | 44    | 55    | 71    | 100    | 1.5  | 6     | 0.24  | 0.09  | 1.0 | 0.24 | 0.11 |        |
| Rye Grain                             | 89     | 80    | 86              | 56                             | 83              | 14      | 20    | 3     | 9     | 19    | 34     | 2.5  | 3     | 0.07  | 0.55  | 0.5 | 0.03 | 0.17 | 33     |
| Safflower Meal, Solv. Ext.            | 91     | 56    | 56              | 23                             | 56              | 24      |       | 33    | 41    | 57    | 36     | 1.3  | 6     | 0.35  | 0.79  | 0.9 | 0.21 | 0.23 | 65     |
| Safflower Meal Dehulled, Solv. Ext.   | 91     | 75    | 79              | 50                             | 77              | 47      |       | 11    | 20    | 27    | 30     | 0.8  | 7     | 0.38  | 1.50  | 1.2 | 0.18 | 0.22 | 36     |
| Safflower Hulls                       | 91     | 14    | 35              | 0                              | 34              | 4       |       | 58    | 73    | 90    | 100    | 3.7  | 2     |       |       |     |      |      |        |
| Sagebrush Fresh                       | 50     | 50    | 50              | 12                             | 49              | 13      |       | 25    | 30    | 38    |        | 9.2  | 10    | 1.00  | 0.25  |     |      | 0.22 |        |

## 2012 Feed Composition Tables

| FEEDSTUFF                            | ENERGY |       |                 |                 |                 | PROTEIN |       | FIBER |       |       |        |      |       |      |       |     |      |      |        |
|--------------------------------------|--------|-------|-----------------|-----------------|-----------------|---------|-------|-------|-------|-------|--------|------|-------|------|-------|-----|------|------|--------|
|                                      | DM %   | TDN % | NE <sub>m</sub> | NE <sub>l</sub> | NE <sub>i</sub> | CP %    | UIP % | CF %  | ADF % | NDF % | eNDF % | EE % | ASH % | Ca % | P %   | K % | Cl % | S %  | Zn ppm |
| Sanfoin Hay                          | 88     | 61    | 62              | 31              | 62              | 14      | 60    | 24    |       |       |        | 3.1  | 9     |      |       |     |      |      |        |
| Shrimp Waste Meal                    | 90     | 48    | 48              | 9               | 47              | 50      | 60    | 11    |       |       |        | 5.5  | 25    | 8.50 | 1.75  |     | 1.15 |      |        |
| Sodium Tripolyphosphate              | 96     | 0     | 0               | 0               | 0               | 0       | 0     | 0     | 0     | 0     | 0      | 0.0  | 96    | 0.00 | 25.98 | 0.0 |      | 0.00 |        |
| Sorghum Stover                       | 87     | 54    | 54              | 20              | 54              | 5       |       | 33    | 41    | 65    | 100    | 1.8  | 10    | 0.50 | 0.12  | 1.2 |      |      |        |
| Sorghum Silage                       | 32     | 59    | 59              | 28              | 59              | 9       | 25    | 27    | 38    | 59    | 70     | 2.7  | 6     | 0.48 | 0.21  | 1.7 | 0.45 | 0.11 | 30     |
| Sorghum Grain (Milo) Ground          | 89     | 82    | 89              | 59              | 85              | 11      | 55    | 3     | 6     | 15    | 5      | 3.1  | 2     | 0.04 | 0.32  | 0.4 | 0.10 | 0.14 | 18     |
| Sorghum Grain (Milo) Flaked          | 82     | 90    | 100             | 68              | 94              | 11      | 62    | 3     | 6     | 15    | 38     | 3.1  | 2     | 0.04 | 0.28  | 0.4 | 0.10 | 0.14 | 18     |
| Soybean Hay                          | 89     | 52    | 52              | 16              | 51              | 16      |       | 33    | 40    | 55    | 92     | 3.5  | 8     | 1.28 | 0.29  | 1.0 | 0.15 | 0.24 | 24     |
| Soybean Straw                        | 88     | 42    | 43              | 0               | 40              | 5       |       | 44    | 54    | 70    | 100    | 1.4  | 6     | 1.59 | 0.06  | 0.6 |      | 0.26 |        |
| Soybeans Whole                       | 88     | 92    | 103             | 70              | 96              | 41      | 28    | 8     | 11    | 15    | 100    | 18.8 | 5     | 0.27 | 0.64  | 1.9 | 0.03 | 0.34 | 56     |
| Soybeans Whole, Extruded             | 88     | 93    | 104             | 71              | 97              | 40      | 35    | 9     | 11    | 15    | 100    | 18.8 | 5     | 0.27 | 0.64  | 2.0 | 0.03 | 0.34 | 56     |
| Soybeans Whole, Roasted              | 88     | 93    | 104             | 71              | 97              | 40      | 48    | 9     | 11    | 15    | 100    | 18.8 | 5     | 0.27 | 0.64  | 2.0 | 0.03 | 0.34 | 56     |
| Soybean Hulls                        | 90     | 77    | 82              | 52              | 79              | 13      | 28    | 39    | 48    | 62    | 28     | 2.3  | 5     | 0.60 | 0.19  | 1.3 | 0.02 | 0.12 | 38     |
| Soybean Meal, Solv. Ext. 44% CP      | 90     | 84    | 92              | 61              | 87              | 49      | 35    | 7     | 10    | 15    | 23     | 1.5  | 7     | 0.36 | 0.70  | 2.2 | 0.07 | 0.41 | 62     |
| Soybean Meal, Solv. Ext. 49% CP      | 90     | 87    | 96              | 64              | 90              | 54      | 36    | 4     | 6     | 9     | 23     | 1.1  | 6     | 0.28 | 0.71  | 2.2 | 0.08 | 0.45 | 61     |
| Soybean Mill Feed                    | 90     | 50    | 50              | 12              | 49              | 15      |       | 36    | 46    |       |        | 1.9  | 6     | 0.46 | 0.19  | 1.7 |      | 0.07 |        |
| Spelt Grain                          | 88     | 75    | 79              | 50              | 77              | 13      | 27    | 10    | 17    | 21    | 34     | 2.1  | 4     | 0.04 | 0.40  | 0.4 |      | 0.15 | 47     |
| Sudangrass Fresh Immature            | 18     | 70    | 73              | 44              | 71              | 17      |       | 23    | 29    | 55    | 41     | 3.9  | 9     | 0.46 | 0.36  | 2.0 |      | 0.11 | 24     |
| Sudangrass Hay                       | 88     | 57    | 57              | 25              | 57              | 9       | 30    | 36    | 43    | 67    | 98     | 1.8  | 10    | 0.50 | 0.22  | 2.2 | 0.80 | 0.12 | 26     |
| Sudangrass Silage                    | 31     | 58    | 58              | 26              | 58              | 10      | 28    | 30    | 42    | 64    | 61     | 3.1  | 10    | 0.58 | 0.27  | 2.4 | 0.52 | 0.14 | 29     |
| Sunflower Meal, Solv. Ext.           | 92     | 65    | 66              | 37              | 66              | 40      | 27    | 18    | 22    | 36    | 23     | 2.8  | 8     | 0.44 | 0.97  | 1.1 | 0.15 | 0.33 | 55     |
| Sunflower Meal with Hulls            | 91     | 57    | 57              | 25              | 57              | 31      | 35    | 27    | 32    | 44    | 37     | 2.4  | 7     | 0.40 | 1.03  | 1.0 |      | 0.30 | 85     |
| Sunflower Seed Hulls                 | 90     | 40    | 42              | 0               | 38              | 4       | 65    | 52    | 63    | 73    | 90     | 2.2  | 3     | 0.00 | 0.11  | 0.2 |      | 0.19 | 200    |
| Sugar Cane Bagasse                   | 91     | 39    | 41              | 0               | 37              | 1       |       | 49    | 60    | 86    | 100    | 0.6  | 4     | 0.90 | 0.29  | 0.5 |      | 0.10 |        |
| Tapioca Meal, Cassava By-product     | 89     | 82    | 89              | 59              | 85              | 1       |       | 5     | 8     | 34    |        | 0.8  | 3     | 0.03 | 0.05  |     |      |      |        |
| Timothy Fresh Pre-bloom              | 26     | 64    | 65              | 36              | 65              | 11      | 20    | 31    | 36    | 59    | 41     | 3.8  | 7     | 0.40 | 0.28  | 1.9 | 0.57 | 0.15 | 28     |
| Timothy Hay Early Bloom              | 88     | 59    | 59              | 28              | 59              | 11      | 22    | 32    | 39    | 63    | 98     | 2.7  | 6     | 0.58 | 0.26  | 1.9 | 0.51 | 0.21 | 30     |
| Timothy Hay Full Bloom               | 88     | 57    | 57              | 25              | 57              | 8       | 30    | 34    | 40    | 65    | 98     | 2.6  | 5     | 0.43 | 0.20  | 1.8 | 0.62 | 0.13 | 25     |
| Timothy Silage                       | 34     | 59    | 59              | 28              | 59              | 10      | 25    | 34    | 45    | 70    | 61     | 3.4  | 7     | 0.50 | 0.27  | 1.7 |      | 0.15 |        |
| Tomatoes                             | 6      | 69    | 71              | 43              | 70              | 16      |       | 9     | 11    |       |        | 4.0  | 6     | 0.14 | 0.35  | 4.2 |      |      |        |
| Tomato Pomace Dried                  | 92     | 64    | 65              | 36              | 65              | 23      |       | 26    | 50    | 55    | 34     | 10.6 | 6     | 0.43 | 0.59  | 3.6 |      |      |        |
| Triticale Hay                        | 90     | 56    | 56              | 23              | 56              | 10      |       | 34    | 41    | 69    | 98     |      |       | 0.30 | 0.26  | 2.3 |      |      | 25     |
| Triticale Silage                     | 34     | 58    | 58              | 26              | 58              | 14      |       | 30    | 39    | 56    | 61     | 3.6  |       | 0.58 | 0.34  | 2.7 |      | 0.28 | 36     |
| Triticale Grain                      | 89     | 85    | 93              | 62              | 88              | 14      | 25    | 4     | 5     | 22    | 34     | 2.4  | 2     | 0.07 | 0.39  | 0.5 |      | 0.17 | 37     |
| Turnip Tops (Purple)                 | 18     | 68    | 70              | 41              | 69              | 18      |       | 10    | 13    |       |        | 2.6  | 14    | 3.10 | 0.40  | 3.0 | 1.80 | 0.27 |        |
| Turnip Roots                         | 9      | 86    | 95              | 63              | 89              | 12      | 0     | 11    | 34    | 44    | 40     | 1.6  | 9     | 0.65 | 0.31  | 3.1 | 0.65 | 0.43 | 40     |
| Urea 46%N                            | 99     | 0     | 0               | 0               | 0               | 288     | 0     | 0     | 0     | 0     | 0      | 0.0  | 0     | 0.00 | 0.00  | 0.0 | 0.00 | 0.00 | 0      |
| Vetch Hay                            | 89     | 58    | 58              | 26              | 58              | 18      | 14    | 30    | 33    | 48    | 92     | 1.8  | 8     | 1.25 | 0.34  | 2.4 |      | 0.13 |        |
| Wheat Fresh, Pasture                 | 21     | 71    | 74              | 46              | 73              | 20      | 16    | 18    | 30    | 50    | 41     | 4.0  | 13    | 0.35 | 0.36  | 3.1 | 0.67 | 0.22 |        |
| Wheat Hay                            | 90     | 57    | 57              | 25              | 57              | 9       | 25    | 29    | 38    | 66    | 98     | 2.0  | 8     | 0.21 | 0.22  | 1.4 | 0.50 | 0.19 | 23     |
| Wheat Silage                         | 33     | 59    | 59              | 28              | 59              | 12      | 21    | 28    | 37    | 62    | 61     | 3.2  | 8     | 0.40 | 0.28  | 2.1 | 0.50 | 0.21 | 27     |
| Wheat Straw                          | 91     | 43    | 44              | 0               | 41              | 3       | 60    | 43    | 57    | 81    | 98     | 1.8  | 8     | 0.17 | 0.06  | 1.3 | 0.32 | 0.17 | 6      |
| Wheat Straw Ammoniated               | 85     | 50    | 50              | 12              | 49              | 9       | 25    | 40    | 55    | 76    | 98     | 1.5  | 9     | 0.15 | 0.05  | 1.3 | 0.30 | 0.16 | 6      |
| Wheat Grain                          | 89     | 88    | 98              | 65              | 91              | 14      | 23    | 3     | 4     | 12    | 0      | 2.3  | 2     | 0.05 | 0.43  | 0.4 | 0.09 | 0.15 | 40     |
| Wheat Grain Hard                     | 89     | 88    | 98              | 65              | 91              | 14      | 28    | 3     | 6     | 14    | 0      | 2.0  | 2     | 0.05 | 0.43  | 0.5 |      | 0.16 | 45     |
| Wheat Grain Soft                     | 89     | 88    | 98              | 65              | 91              | 12      | 23    | 3     | 4     | 12    | 0      | 2.0  | 2     | 0.06 | 0.40  | 0.4 |      | 0.15 | 30     |
| Wheat Grain, Steam Flaked            | 85     | 91    | 102             | 69              | 95              | 14      | 29    | 3     | 4     | 12    | 0      | 2.3  | 2     | 0.05 | 0.39  | 0.4 |      | 0.15 | 40     |
| Wheat Grain Sprouted                 | 86     | 88    | 98              | 65              | 91              | 12      | 18    | 3     | 4     | 13    | 0      | 2.0  | 2     | 0.04 | 0.36  | 0.4 |      | 0.17 | 45     |
| Wheat Bran                           | 89     | 70    | 73              | 44              | 71              | 17      | 28    | 11    | 14    | 46    | 4      | 4.4  | 7     | 0.13 | 1.32  | 1.4 | 0.05 | 0.24 | 96     |
| Wheat Middlings                      | 89     | 80    | 86              | 56              | 83              | 18      | 22    | 8     | 11    | 36    | 2      | 4.7  | 5     | 0.14 | 1.00  | 1.3 | 0.05 | 0.20 | 98     |
| Wheat Mill Run                       | 90     | 76    | 81              | 52              | 78              | 17      | 28    | 9     | 12    | 37    | 0      | 4.5  | 6     | 0.11 | 1.10  | 1.2 | 0.07 | 0.22 | 90     |
| Wheat Shorts                         | 89     | 78    | 83              | 54              | 80              | 19      | 25    | 8     | 10    | 30    | 0      | 5.3  | 5     | 0.10 | 0.93  | 1.1 | 0.08 | 0.20 | 118    |
| Wheatgrass Crested Fresh Early Bloom | 37     | 60    | 60              | 30              | 60              | 11      | 25    | 26    | 28    | 50    | 41     | 1.6  | 7     | 0.46 | 0.32  | 2.4 |      |      |        |
| Wheatgrass Crested Fresh Full Bloom  | 50     | 55    | 55              | 21              | 55              | 10      | 33    | 33    | 36    | 65    | 41     | 1.6  | 7     | 0.39 | 0.28  | 2.1 |      |      |        |
| Wheatgrass Crested Hay               | 92     | 54    | 54              | 20              | 54              | 10      | 33    | 33    | 36    | 65    | 98     | 2.4  | 7     | 0.33 | 0.20  | 2.0 |      |      | 32     |
| Whey Dried                           | 94     | 82    | 89              | 59              | 85              | 14      | 15    | 0     | 0     | 0     | 0      | 0.9  | 10    | 0.98 | 0.88  | 1.3 | 1.20 | 0.92 | 10     |
| Yeast, Brewer's                      | 92     | 79    | 85              | 55              | 81              | 47      | 30    | 3     | 4     |       | 0      | 0.9  | 7     | 0.13 | 1.49  | 1.8 |      |      |        |