

HOW TO CALCULATE Potential Fermentable Fiber (pFF or pfNDF)

pFF = potential Fermentable Fiber =
 NDF – Indigestible Fiber = NDF – (100 - TDN) - FML

Note - calculate NDF(Neutral Detergent Fiber) and TDN (Total Digestible Nutrients) on a dry matter basis from hay or feed analysis

FML = Fecal metabolic loss, plug in around 10% for grain, 12% for byproduct feeds and 15% for forages

Indigestible Fiber is (100 - TDN) - FML

SUMMARY OF HAY SAMPLES AND HOW THEY MEET SMALL RUMINANT REQUIREMENTS

| Hay Samples | NDF | TDN | FML | Indigest. Fiber | pFF | CP | |
|--------------------------------------------------------------------------------------|------|-----|-----|-----------------|------|------|------|
| Cornell Sheep Farm (CUSF) – “ 1 st ” Cut Late (after one grazing) - Grass | 60.1 | 58 | 15 | 27 | 33.1 | 18.2 | DAMP |
| Cornell Sheep Farm (CUSF) – 2 nd Cut - Grass | 60.4 | 59 | 15 | 26 | 34.4 | 14.9 | |
| SwantonFarm – 1 st Cut – mostly Grass | 67.9 | 56 | 15 | 29 | 38.9 | 7.8 | |
| SwantonFarm – 2 nd Cut – Grass/Clover | 52.6 | 59 | 15 | 26 | 26.6 | 12.7 | |
| HH Farm – 1 st Cut Late (no grazing) – Grass, Forbs, Legumes | 58.3 | 57 | 15 | 28 | 30.3 | 8.6 | |
| HH Farm– 2 nd Cut – Grass/Alfalfa | 53.7 | 59 | 15 | 26 | 27.7 | 13.5 | |
| LR Farm– 2 nd Cut – Trefoil/Grass | 58.9 | 58 | 15 | 27 | 31.9 | 11.9 | DAMP |

| Total Diet Requirements for Ewes/Does | Early Pregnancy | | | Late Pregnancy | | | Early Lactation | | | Late Lactation | | |
|-------------------------------------------|-----------------|-----------|-----------|----------------|-----------|-----------|-----------------|-----------|-----------|----------------|--|--|
| # of lambs/kids | | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | | |
| Digestible Dry Matter % - use TDN figures | 55 | 60 | 63 | 65 | 65 | 70 | 75 | 60 | 65 | 70 | | |
| Dry Matter Intake, lb | 3 | 4 | 4.2 | 4.4 | 6 | 7 | 8 | 5 | 5.5 | 6 | | |
| Crude Protein% | 10 | 11 | 11.5 | 12 | 14 | 15 | 16 | 12 | 13 | 14 | | |
| INDigestible Fiber | 30 | 25 | 23 | 20 | 20 | 15 | 10 | 25 | 20 | 15 | | |
| Fermentable Fiber | 20 | 22 | 22 | 22 | 22 | 26 | 30 | 21 | 25 | 28 | | |