



## Animal Enhancement Activity – ANM65 – Monitoring nutritional status of ruminant livestock using the NUTBAL system

### State Criteria (same as NATIONAL CRITERIA) with the following clarifications:

Implementation of this enhancement **requires** the collection and laboratory analysis of forage or fecal samples to determine the nutritional value of grazing forages following these steps:

1. Collect a minimum of 6 fecal or forage samples per year:
  - a. Samples will be taken at different time periods throughout the grazing period.
    - i. When grazing season is 6 months, samples will be taken each month or during six different periods when the forage conditions are changing.
    - ii. Sampling should focus on transition periods, or when seasonal changes occur. For example, the period from mid-summer to late summer means that forage is drying out and losing nutritional value. Fecal samples analyzed at this time would indicate whether the herd's nutritional needs were being met or not.
    - iii. When grazing season is year round, samples will be taken in throughout the year when forage quality is subject to change due to the maturity of forage or when animals are under nutritional stress.
  - b. Samples can be either fecal or forage tissue.
2. Sample Collection Process (samples can be either fecal or forage tissue):
  - a. Fecal Samples:
    - i. Contact the GAN Lab Blackland Research & Extension Center 720 E. Blackland Road Temple, TX 76502-9622. Phone: 254-774-6134, (254-774-6150 fax) 9am - 4pm Weekdays, [ganlab@cnrit.tamu.edu](mailto:ganlab@cnrit.tamu.edu), or <http://cnrit.tamu.edu/ganlab/index.php> to obtain a starter kit.
    - ii. Follow the instructions to collect samples and submit for analysis. An overview of the process is found at: [Getting Started - GanLab](#).
  - b. Forage Tissue Samples:
    - i. Contact your selected forage analysis laboratory for proper sampling procedures.
3. Analysis:
  - a. The laboratory will complete a forage analysis report using near infrared reflectance spectroscopy (NIRS) technology for your submitted sample.
  - b. The NIRS analysis results must be entered into the online application along with other herd information.
    - i. Online NUTBAL is available [at NUTBAL Online Nutrition Balance Analyzer](#).
    - ii. Check with your chosen laboratory, as they may provide NUTBAL results for you.
  - c. NUTBAL reports must be generated.
4. Management Decisions:
  - a. Within 14 days from receiving reports, management decisions must be documented and completed.



United States Department of Agriculture  
 Natural Resources Conservation Service

NE-ANM65 2015 Ranking Period 1

**Documentation Requirements (SEE NATIONAL ENHANCEMENT ACTIVITY JOBSHEET)**

**Example NUTBAL Standard Balance Report Results Decision Documentation:**

Sample Location & Date	Livestock	Nutrient Balance Met?	Performance Limited by:	Decisions/Any Changes Implemented/Dates
North Pasture June	Cow/Calf	Yes	Crude Protein	Cows are gaining weight ok for now (June report). When we move to next pasture in July we will want to supplement with protein as forage condition will drop. Moved on 7/4/12, added protein block. Will sample again next week.

**EXAMPLE**

Complete the Table below:

Sample Location & Date	Livestock	Nutrient Balance Met?	Performance Limited by:	Decisions/Any Changes Implemented/Dates

**I certify that the following information meets specifications and has been provided to NRCS:**

1. Copies of dated forage analysis reports (6 individual reports minimum required).
2. NUTBAL reports generated results for each forage analysis report.
3. Written documentation of the management decisions made as a result of each analysis, any changes implemented and dates.

I understand that it is my responsibility to obtain all necessary permits and to comply with all laws, regulations and ordinances pertaining to the application of these activities.

**Certified by:** \_\_\_\_\_ **Date:** \_\_\_\_\_