

NUTBAL PRO CHECKLIST

Before starting an analysis follow this checklist to make sure you have considered all the critical elements of a case and that you have developed skills in body condition scoring, assessing forage standing crop, and recognizing breeds.

1. Interview the rancher and gather enough information to understand the production system (eg. breeding season, percent births by month, weaning dates/weights/ages).
2. Establish the target pregnancy rates or sell weights and the associated body condition score by various stages of production.
3. Determine which herds you will profile and establish a name that the rancher will understand and accept.
4. Establish a sampling schedule for each herd that the rancher wants to monitor and determine who will collect the sample, who will mail and receive the data and who will analyze the information.
5. Look at the breed composition, physiological groups and classes in the herd and determine how you are going to characterize the sub-groups (profiles) in that herd. Recognize dairy, dual purpose, *Bos indicus* and other beef breeds. Recognize differences in age groups (2yr, 3yr, mature cows) as well as physiological stage (early, late calvers) or pre/post puberty status.
6. For each group establish the appropriate frame score (use COWSCORE) that is consistent through a range of body condition score-weight relations for a given age group, compute net energy adjustment factor, and peak milk with PKMILK in that order. Be sure to review other breedtype attributes for possible adjustment.
7. Select a breed in the database that is similar to the one to be entered and ADD the new breed frame, peak milk and net energy metabolism adjustment as well as other adjustments.
8. Review the current feeding program of the rancher. Make sure that you have captured amount of feeds allocated and type, recognize if grain is fed, if ionophores are in the feed or if minerals are fed and does the minerals have protein or energy value.
9. Make sure the feeds are in the database and if not input them on a dry matter basis. Use only feed values represented by the company selling the feed. Lot numbers on the tags can be referenced for more complete analysis by the company.
10. Establish the client's information and longitude/latitude in NUTBAL PRO.
11. Establish the herd data record with the name agreed to by rancher.
12. For each recognized group identified in step 6, set up a PROFILE for the date that the fecal sample was collected. PROFILE names are static and should be stable names that will not likely change through time.
13. Even if you have a gain requirement for a profile, initially set up the profile with a 0.0lb gain goal. Then come back after evaluating the standard report to type in the gain goal.
14. Set up a case by selecting ranch, herd and date. Name the case by month, year, and some identifier of animal class and maybe lab id. It is important to have date information in the case name.
15. Input case information with a minimum of diet quality and environmental conditions. Remember that fecal samples are a composite of all fiber based parts of an Animal's diet (that is grazing and hay, but not concentrates). Take special care to get the temperature, humidity and wind expressed as an average of 4-7 days. If you have longitude and latitude coordinates, see our web site <http://cnrit.tamu.edu/cgi-bin/nutbalweather>.
16. Input the name of the pasture and the vegetation type (be careful to use a consistent name). If stock density is less than 5 ac/au or standing crop less than <1000 lb/ac, it is advised to check if intake is restricted.
17. Reflect the feeding regime, particularly concentrates. Do not double represent roughages if reflected in the fecal sample.
18. Input metabolic modifiers if used.
19. Make adjustments due to grain, bad insect problems, stress conditions, etc.
20. Either ADD or UPDATE the case to store all input values in the ACCESS database.
21. RUN CASE ANALYSIS to run the model to store output in the ACCESS database.
22. Click REPORT tab, select ranch, herd, case and profile of interest.
23. Select CASE REPORT for CP/NE or MP/NE, depending on which value is most accurate. Remember that case reports can have many profiles (pages) if 1 to 1+ is showing in upper right window.
24. Review results, and write advisory. Read how to write an advisory. Be thorough.
25. If mediation is required, make sure the case has been run, select the profile of interest and MEDIATE. Review results and add comments to advisory.