

Increasing Efficiency By Using Beef Cow Feeding Behaviour To Reduce Uneaten Forages

Ruminants have an important place in the utilization of land and forages. Following the nutritional requirements of the beef cow throughout the year we see that while gestating she can thrive on forages that are of lower quality. This is something we need to continually remind our selves of when rations are designed for the lifecycle of the animal. Overfeeding nutrients is unnecessary and costly. Studies on real farm data that recorded feeding practices show consistently that the top third of beef producers can make an 'income over expenses' every year when they control amounts and quality of forages fed.

Fall grazing of standing forages generally illustrates this principle because these plants have stopped growing and when going into late fall have begun to deteriorate due to sun exposure, moisture and bacteria, also moulds and fungi activity. Nutrient analysis of stockpiled forage can show this nutritional scenario to test low in protein. Still this material is sufficient for energy and protein supply as long as there is sufficient volumes available for the animals. This happens because the animals select within the plants available to meet protein needs. Once harvested forages become the daily ration, cattle will continue to demonstrate selective eating behaviour and eat the most digestible portions of long forages fed to them. This sorting behaviour is what leads to waste of feed that is lower in energy and higher in fibre and is well understood by producers. This unconsumed fibrous material has nutritional value if the cow can be encouraged to eat it.

Highline® has promoted the use of the chopper option for its Bale Pro® forage processor to take away much of this sorting behaviour from beef cows accomplishing several desirable outcomes. The cow wants to eat the smaller cut length portions of the forages and so the chopper puts 80% to 90% of the ration into this cut length. Cow response is to consume the forage supplied to a greater extent reducing waste of the more coarse higher fibre material as a result of less sorting. Producers consistently report that this result brings more efficient use of their forage supply giving more feeding days over the fall and winter period. Secondly containment curtains on the discharge hood prevent the loss of the finer particles generated by the processing motion of flails and the chopper knives. Examination of the windrow shows the incorporation of finer particles distributed from the centre of the windrow outward to the edges so each bite contains a mix of cut lengths which are difficult to sort. The cow happily consumes the supplied forages quickly and returns to resting.

From a nutrition standpoint an important thing is accomplished. By chopping the forages the producer moves closer to feeding the diet formulated for the animal. Putting a ration together starts with a feed analysis then, using the information from the tests, to formulate for energy and protein requirements of the animals. It is then hoped that the animal actually eats the ration formulated and delivered. This does not happen when sorting of long forages is possible. Chopping all long forages forces the animal to eat a ration which is closer to the formulated numbers. Both financial and nutritional results are closer to what is predicted when this is accomplished. With high feed prices today and the more extensive use of crop residues consider the advantages the Highline Bale Pro® equipped with a Feed Chopper™ and Grain Tank can bring to your beef operation this year and for years to come.

CORPORATE RUMINANT NUTRITIONIST

John Maltman, M.Sc., P.Ag.

