NORTH DAKOTA - NDSU Extension Service Ditch Hay Evaluation Project

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Livestock producers across North Dakota cut and bale hay within road ditch rights-of-way. Some producers within the state utilize ditch hay as their primary source of hay fed during the winter. Currently, there is no baseline data assessing the quality of ditch hay. This past June, an effort to ascertain the quality and quantity of ditch hay harvested in North Dakota was initiated by researchers at North Dakota State University.

Extension specialists are working with county agents across the state to collect forage samples from ditch hay put up during the 2015 growing season. A minimum of 200 samples will be collected from producers. County agents will have producers complete a survey for each sample collected that will help quantify the amount of ditch hay put up in the state, how producers are utilizing ditch hay, and identify potential factors influencing the quality of a sample (Figure 1).

Figure 1. Survey to be completed by producers about ditch hay.

Sample Label: *Leave Blank*

Sample ID:_____ Collected by:_____ Date:___/___/___

Client:_____ County:_____

Harvest date:___/___/___ Rained on: **Y / N** If yes, days wet:____

Sample location: **Ditch / Lot** **Paved / Unpaved** **Upland / Lowland**

How many miles of ditch hay do you put up?_____

Sisal/ Plastic/ Net wrap **Selling / Feeding**

If feeding, what percent of your forage is ditch hay?_____

Fed to: **Cattle / Horses / Sheep / Goats** Age class:_____

Feeding method: **Ground / Feeder / Mixed ration**

Comments:

After collection, all samples will be analyzed for crude protein (CP), dry matter (DM), acid detergent fiber (ADF), neutral detergent fiber (NDF), and in vitro dry matter digestibility (IVDMD). Total digestible nutrients (TDN) will be calculated based on ADF. Samples will also be analyzed to determine select mineral composition, specifically calcium and phosphorus.

Results of the analysis will identify variables that influence quality of ditch hay, enabling NDSU Extension personnel to make recommendations on management practices for harvesting and feeding ditch hay to obtain optimal forage nutrition.