



University of Idaho
Extension

HAY SAMPLING: TECHNIQUES AND EQUIPMENT

Carmen J. Willmore, Extension Educator
University of Idaho, Lincoln County
January 15, 2021

IDENTIFY A “LOT” OF HAY

- Single cutting from the same field of the same variety
 - Harvested within a 48-hour period
 - Same plant maturity
 - Similar amounts of weeds, rain damage or preservative treatment
- Different lots should be sampled separately with a separate analysis run

WHEN TO SAMPLE

- Collect samples as close to the time of feeding or sale as possible
- Sampling immediately before feeding accounts for any heating or weathering losses that may have occurred during storage



CHOOSE YOUR SAMPLING PROBE

- Probes should penetrate 12-18 inches and be $\frac{3}{8}$ to $\frac{3}{4}$ inch in diameter
- No angled tips!
- This can push some of the sample aside
- You can pick up probes from many extension, NRCS and laboratories
- Consult National Forage Testing Association (NFTA) for listing <https://www.foragetesting.org/hay-probes>



CHOOSE YOUR SAMPLING PROBE

- Push Type vs Drill Type



WHERE TO SAMPLE

- Taken from the end of rectangle bales, between strings/wires, so you get a good cross section of material.
- Round bales – sample on the rounded sides where the strings/wrapping are
- Insert the probe at a 90° angle



HOW MANY TO SAMPLE

- Sample at least 20 bales from each lot in different areas of the stack
- Should have about ½ lbs. of material when all samples are collected
- You can take more samples from more bales if you are concerned about moldy or “hot” hay
- Do not avoid moldy bales for composite samples

SUBMITTING SAMPLES

- All samples from the same lot should be composited into one well-sealed plastic bag
- The bag should be protected from heat, moisture and excess sun.
- Make sure to correctly label the forage variety and submit to the lab as soon as possible



KEEPING RECORDS



- Name
- Date the crop was harvested
- Date samples
- Identifier code or number for the lot on the bag

SAMPLING METHOD

- <https://www.youtube.com/watch?v=brXDU47Ww0U>

DON'T MAKE THESE MISTAKES



- Never send in flakes or grab samples
- Do not use a corer with an angled tip
 - Studies show these can push aside some components of hay, providing a non-representative sample
- Too small or too large of tip do not adequately represent leaf to stem ratio of hay
- Do not be bias when selecting bales to sample
 - Do not select for the “perfect” bales or avoid moldy/musty bales

THANK YOU!

