



BEEF BRIEF

Stretching Feed Resources in Wyoming: Practical Alternatives for Cow/Calf Producers

Unpredictable hay supplies and high feed costs are a reality for Wyoming cow/calf producers. Long winters and dry summers only add pressure to feeding programs. This brief outlines proven strategies and locally adapted feed alternatives to maintain cow performance, support calf growth, and manage costs during tight forage years.

Begin with a Strategy

A sound feeding program begins with clear goals:

- Keep cows on track for rebreeding and calving on schedule.
- Maintain calf weight per cow.
- Minimize feed cost per pound of calf sold.

To meet these goals, consider the following Wyoming-adapted feeding principles:

- **Use what you've got:** Maximize the use of local feeds—grass hay, millet, corn stalks, straw, or whatever's affordable and available.
- **Test and balance:** Test all feed for nutrient quality and build rations to meet the cow's nutritional needs—not more, not less.
- **Supplement wisely:** Low-quality roughages like wheat straw or late-cut hay can work if paired with the right protein and energy sources.
- **Feed smart:** High-need animals like lactating cows or growing heifers should get your highest quality feeds. Save lower quality roughage for cows in mid-gestation.

Make the Most of Hay and Grain

Grain can be a valuable tool when hay is expensive or limited. Since most grass hay contains only 50 to 65% of the energy of grain, it can be partially replaced when carefully managed.

A good rule of thumb:

1 pound of grain can replace about 1.2 to 1.5 pounds of alfalfa or 1.5 to 2 pounds of grass hay.

While grain isn't always easy to feed on pasture or rangeland, Wyoming producers have found creative solutions using barrels, split pipe, old bunks, and even feeders mounted on trailers.



Moving cows to a dry lot during winter or drought can also simplify feeding and allow limit-feeding of high-energy rations. These diets reduce forage demand and cut feed costs but require careful oversight:

- Always provide at least 0.5 to 1.0% of body weight in roughage to support rumen health.
- Transition cows slowly to high-grain diets over 7–10 days.
- Start with 2–3 pounds of grain per head and free-choice hay, then gradually increase grain and reduce hay.
- Provide plenty of bunk space, feed twice a day if possible, and monitor body condition closely.

Alternative Feed Options

A variety of byproducts and crop residues can supplement or replace traditional feeds, especially when availability or cost is a concern:

- **Corn stalks, millet hay, wheat straw, and sorghum-sudan:** Often cheaper, but need protein supplementation. Note: millet hay and sorghum-sudangrass may have nitrate issues under drought—ask your Extension office about testing.

Related Tools

- **Hay Testing for Cattle: Understanding the Results:**
<https://wyoextension.org/agpubs/pubs/MP-159.pdf>
- **Wyoming Ranch Tools feed Value Calculator:**
<https://uwyoextension.org/ranchtools/relative-feed-value/>

- **Distillers' Grains:** 25–35% crude protein, high energy.
- **Condensed Solubles (Distiller's Syrup):** High in protein and energy.
- **Sugar Beet Pulp:** Highly digestible energy source, variable protein.
- **Soybean Hulls:** 10–16% crude protein, good energy, and can be fed with or without hay.
- **Wheat Middlings:** High in both protein (18%) and energy.
- **Corn Gluten Feed:** High protein (25%), works well with forage.
- **Cottonseed Hulls:** Low protein, energy-dense—pair with protein supplements. May be hard to source in Wyoming.

Always provide a good mineral mix, especially calcium and phosphorus, and consider adding Vitamin A during winter or when feeding low-quality roughages.

Keep in mind:

- By-product feeds are not uniform like commercial feeds. Energy and protein can vary widely between batches
- They may contain high levels of certain minerals (e.g., sulfur, phosphorus) that can interfere with absorption of others or become toxic at high levels.
- Sample and test each load of by-product feed.

Work with Extension educators to determine proper inclusion rates and feeding practices.

THINKING OUTSIDE THE BALE: “COW LASAGNA”

During extreme years, producers have turned to unconventional feeds like brewer’s grains, beet pulp, distillers grains, cull potatoes, and sweet potatoes. One creative solution that’s gained traction is “cow lasagna”—a layered, fermented feed made from low-cost hay and wet distillers’ grains (WDGs).

How to Make Cow Lasagna:

- Unroll a bale of low-cost forage (e.g., CRP hay, over-mature grass, or poor-quality alfalfa).
- Spread a layer of wet distillers grains (3–6 inches thick) over the hay.
- Repeat the layering process: hay, then WDGs.
- Pack the stack tightly using a tractor or loader to remove air pockets.
- Cover with heavy-duty plastic and weigh it down with tires, sandbags, or dirt.
- Allow to ferment for 30+ days before feeding.

Nutritional Benefits:

- High Protein & Energy: WDGs typically contain 25–35% crude protein and 85–90% total digestible nutrients (TDN).
- Balanced Ration: Combining with forage helps dilute excessive protein or sulfur.
- Improved Palatability: Fermentation enhances taste and digestibility.
- Extended Feed Life: Reduces spoilage of wet byproducts.

Pros	Cons
Cost-effective and customizable	Requires at least 30 days fermentation
Reduces feed waste	Needs tarps, loaders, and space
Simplifies bunk feeding	Risk of spoilage if not packed properly
Can be stored and fed over time	

TIPS FOR SUCCESS:

- Test WDGs for nutrient and sulfur content.
- Use dry hay to absorb moisture and improve fermentation.
- Keep layers thin (≤ 6 inches).
- Seal well and monitor covers regularly.
- Use within 3–6 months for best quality.

FINAL CONSIDERATIONS

If feeding root crops like cull potatoes, always process them to reduce choking risk, especially in group feeding situations. Gradually introduce all new feeds, and monitor cow condition closely during transitions.

Before committing to any alternative, assess both nutritional and economic value. A helpful resource for this is the University of Wyoming Ranch Tools feed calculator (check out the link on page 2).

BOTTOM LINE

Wyoming beef producers have weathered many tough feeding seasons. With creative strategies, local feed options, and support from Extension, you can maintain cow productivity while managing feed costs—even when the hay pile is low.

Need help building a feeding plan or interpreting forage tests?
Contact your local Extension office—we're here to help.

Extension Office Locations and Contact info can be found at:
<https://www.uwyo.edu/uwe/county-offices.html>



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