

**Drought and Fires:
Alternative actions to be considered and evaluated**

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Ranchers who have been affected by the recent drought or fires will generally have to consider some difficult decisions. Some of these decisions will primarily affect costs and revenues in the coming year while others will affect a ranchers “bottom line” for several years. The first thing that must be carefully evaluated by any rancher that has been affected is the need for and supply of forage. This evaluation involves not only the total *amount* of forage (tons, AUMs) that is needed but *when* it is available or needed. This evaluation will vary by firm or operation because the need for and the supply of forage is generally unique to a particular operation. After the need for and supply of forage has been evaluated, ranchers have one of two alternatives if forage demands are greater than the amount available at any point in time. They must either reduce demands or needs or increase the supply of feed available. This fact sheet outlines some of the alternatives that ranchers may want to consider and sources of information that can assist them in making these decisions.

Increasing the supply of forage

1. Purchase additional feed. This might include hay, straw or other storable feeds See the fact sheet by Zobel and Weidemeier as well as the following web sites that list hay and other forages for sale:

<http://utahagexchange.org>

<http://www.hayexchange.com>

2. Sending animals to areas where feed is relatively abundant
3. Rent pasture or rangeland (CRP, vacant allotments, private, etc)
4. Plant and harvest a crop of grain forage (e.g., oats) if time and water are sufficient
5. Plant forages in areas that have been burned (see ARS publications)

Reduce demands for forage

1. Wean calves early (see the fact sheet by Feuz)
2. Sell cows (see the fact sheet by Feuz)
3. Sell cows but retain additional heifers
4. Placing animals in a feed lot

All of these as well as other alternatives have tax as well as economic consequences. You can use a partial budget analysis to consider each of these alternatives. There is an on-line partial budget calculator at: <http://cattlemarketanalysis.org/partialbudget.html> . There is a supporting fact sheet that explains partial budgeting on that same website. Current cattle prices and Utah hay and grain prices to help in your planning can also be found at: <http://cattlemarketanalysis.org>

1. Feuz is a Professor and Head of the Applied Economics Department and Godfrey is a former Professor and Extension Specialist in the department.

Alternative Feeds for Over-Wintering Beef Cows
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Alternative feeds and/or feeding methods should be considered when feed costs increase substantially. However, all feeding practices must provide the daily nutrients required for optimal production, particularly energy and protein which not only benefit the mother cow but the developing fetus. This is particularly important in the first trimester of pregnancy during early embryonic development. If the mother does not receive a balanced diet at this critical time the calf's immune response at birth can be compromised, resulting in higher mortality and morbidity.

Below are alternatives to the more traditional feeds used for beef cattle. Producers need to determine the associated costs or if any of these methods fit into their operation. They may not be practical for their situation and not all feedstuffs mentioned are necessarily available in all areas of Utah and the Intermountain West.

1. Feeding alfalfa as a supplement to grass hay. Alfalfa can be used to extend the feed inventory of grass hay and can even be used as a protein and/or energy supplement. Most feeding operations easily accommodate the feeding of two roughage sources so this is an option that can be readily adopted. Although the price of alfalfa may seem high this year, compared to other feeds, on a unit cost of protein, alfalfa is relatively low.

2. Utilization of low quality roughages, such as straw or standing or baled corn stalks. Straw and corn stalks are not abundant in all areas of the region but are an alternative. Rations for beef cows can incorporate up to 1.5% of a cow's body weight as low-quality roughage. As an example, a 1200 lb cow ration can contain up to 18 lbs of straw or corn stalks. Additional protein and energy are required to balance these diets but alfalfa hay could be used to accomplish this at a relatively low price.

3. Supplementing hay and/or straw diets with alternative energy or protein sources such as grain, wheat mill run, dried distiller's grains or other supplemental feedstuffs. Feed grains and other high energy/protein feeds are easy to transport and feed and can be combined with just about any roughage source. They can also be fed in drylot, on pasture or on range. On a unit cost of energy and protein they are very competitive and cost effective.

4. Feeding ammoniated or molasses treated straw. The treatment of straw to increase digestibility and protein of low-quality roughage sources in beef cow diets is well documented. Utah State University research has shown savings of up to 30% through straw ammoniation. Additionally, straw can be treated with molasses-based liquid supplements to bring the quality of the roughage to that of grass hay. Expertise is available to guide producers through the steps necessary for these treatments.

For other ideas, costs for the various alternatives or more information on any of these alternative feeds or feeding methods, contact your County Agent or Dale Zobell at 435-797-2144.

2. Zobell is a Professor and Extension Specialist and Wiedmeier is a former Extension Specialist in the Animal, Dairy & Veterinary Science Department.

Cow-calf Producer Options to a Loss of Forage from Drought or Fire: Economic Advantages to Early Weaning and Early Culling of Cows

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Producers who have suffered and who are suffering a major reduction in available pasture and range forage due to on-going droughts or recent fires may want to consider early weaning of calves as well as selling cows to be culled earlier than normal. Both of these actions will reduce fall range and pasture needs and may also help reduce cow nutritional needs this winter. Research has consistently shown that early weaning of calves lowers the nutrient requirements of the cow. In years like this, when range conditions have deteriorated, cows with a nursing calf will likely lose weight and body condition between now and when the calf is traditionally weaned. That weight and condition will have to be replaced sometime before calving if acceptable reproductive performance is to occur.

Let's consider the cow culling and marketing decision first and then consider what to do with early weaned calves. If you have lost range resources and those will remain absent for 2-3 years, I would suggest a fairly aggressive culling of your cows. The first cows to be culled should be those that are open. You may also want to consider culling older and less productive cows. An 1,100 lb. cow that is in reasonably good condition, body condition score 5, is currently selling for around \$.80 per lb. or \$880 per head. If that same cow loses 50 pounds, and drops a body condition score, by November, the seasonal decline in cull cow prices and the price for lower body condition will likely yield a price of about \$.65 per lb. or only \$680 per head. If this occurs, the decline of \$200 per head results in a clear advantage to selling any cull cows now versus delaying sales until November. If some older cows are pregnant, they can currently be sold for about \$1,300-1,400 or more depending upon age and quality to buyers that have ample feed.

Early weaned calves do not have to be sold early. Removing the calf from the cow and putting it in a drylot reduces the pasture requirement. It is generally less expensive to feed a calf in a drylot than it is to feed a cow additional forage and maintain the calf on the cow when forage sources are limited. A ration of 13 lbs of alfalfa and 3 lbs. of corn grain per day, should have this calf gaining 1.75 pounds per day and result in the same 550 pound steer in November as keeping the calf on the cow. If alfalfa can be purchased for \$180 per ton and corn for \$7.50/bushel (\$13.40/cwt), feed cost would be \$1.57/day to get the calf to November. The added returns from selling cull cows now instead of November (\$250/cow) can be used to purchase the alfalfa and corn.

If you traditionally wean a 550 pound steer calf around November 1, that calf will probably weigh about 375 pounds in the latter part of July. A 375 lb. steer in Utah in mid-July is selling for around \$1.80 per lb, or \$675 per head. A 550 lb. steer in November will likely sell for about \$1.55 per lb., or \$852 per head. If calves are fed 100 days the cost per head would be \$157 (\$1.57 *100). The net from selling in November would be \$695 (\$852-157) compared to \$675 from a July sale.

3. Feuz is a Professor and Head of the Applied Economics Department.