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RAISING BEEF CATTLE ON A FEW ACRES

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September 1999 AG-505

INTRODUCTION

If you are living on a few acres you may have the resources to raise a few beef cattle. There are four different enterprises to consider.

1. ***Cow calf enterprise***: keeping a few mother cows and raising calves from them. The calves normally would be weaned at about 6 months of age and weigh approximately 500 pounds.
2. ***Dairy beef enterprise***: purchasing new born dairy calves and raising them until they weigh 300 to 500 pounds.
3. ***Feeder or stocker calf enterprise***: purchasing calves that weigh between 400 and 500 pounds and feeding them until they weigh from 700 to 900 pounds. (Stockers are placed on pasture or on diets high in forage.)
4. ***Market beef enterprise***: purchasing 700 to 900 pound calves and feeding them to market weight (1100 to 1200 pounds).

The resources available will determine which of these enterprises is appropriate for your situation. It may be possible to use a combination of two or three of these enterprises. In this fact sheet we will discuss implementing a feeder or stocker enterprise and a market beef enterprise.

WHAT RESOURCES ARE AVAILABLE?

Location- One of the first things to consider is if the enterprise is compatible with the community. Is the property zoned for large animal production? How many animals can you have? How will neighbors react to the project?

Land- Some acreages are suitable for pasture production. Is irrigation water available? When is the water available? What kind of an irrigation system is in place? Contact your irrigation company to find answers to these questions. A corral or dry lot must be available to keep the animals in when irrigating and when the pasture needs a rest from grazing. Corrals are also essential if finishing cattle on grain rations. If there is adequate acreage you may consider farming and raising some of your own feed. Realize that it is expensive to own and maintain

equipment. It may not be economically feasible to own equipment, although custom operators are an option.

Forage Production and Carrying Capacity- There are several factors that affect forage production in a pasture: season, rainfall, availability of irrigation water, soil conditions, soil fertility, plant varieties, and grazing management. In Utah, pastures are normally grazed from the first part of May through the end of September. Note that this is only a five month period. Nevertheless, during some years grazing will be available in April and October. The greatest forage production and quality on grass pastures usually occurs from May 15 until July 15.

Cattle performance and carrying capacity are related to and affected by forage production and quality. Carrying capacity and cattle performance are not simple to predict and will change from month to month. For example, during the month of June you may be able to graze five, 500 pound calves per acre and have them gain two pounds per head per day. However, during the month of August you may only be able to graze three, 500 pound calves per acre and have them gain one pound per head per day. Contact your county Extension office for more information on pasture management.

The Human Resource - You and your family may gain a lot of satisfaction from raising a few cattle. Children can benefit from the added responsibility and families can be strengthened as they work together. However, the project will require a commitment of time. Even when cattle are on pasture they need to be observed daily to make sure that they have adequate feed and water and to assure that they are healthy.

Facilities - In the production of cattle on small acreages it is not necessary to provide more than the basic facilities. Some necessary facilities would be a means of constraint (such as a headgate and side panel), trough or feeder for supplemental feeds, and proper fencing. There must also be available a clean and continual source of water to the animal.

Humane care of animals is legislated and must be adhered to so provide facilities that will accommodate animal welfare. These would include care for the animal in all aspects of its life, such as proper feed, handling facilities, shelter and the removal of any or all conditions which may inflict stress on the animal. If unsure of any of these principles consult with your Extension Agent or local veterinarian.

When cattle need to be treated or handled it is necessary to restrain them for their safety and the safety of the people handling them. Commercially manufactured squeeze chutes offer excellent restraint, however, they are expensive. Plans are available from the Extension Service for building homemade chutes constructed of metal or lumber. These are generally adequate when handling a small number of cattle.

Good fences are important to insure safety and good relationships with neighbors. Electric fences are useful for pasture management, and perimeter fences should be sufficiently strong, high and tight to contain the animals. A four and a half foot fence made of woven wire, six strands of barbed wire, or a combination of the two is adequate. Corral fences should be at least five feet high and constructed of wood or metal. Woven wire and barbed wire are not recommended in areas where cattle are being crowded or handled

Troughs are necessary if cattle are being fed grain. A feed bunk or commercially available feeder is necessary to minimize waste when cattle are fed hay in a confined area.

Cattle do well in the cold of winter in Utah if they have a wind break and a dry place to bed down. Corrals tend to get wet and muddy in the winter and spring. Cattle either need some high dry ground or a shelter.

CONSIDERATIONS WHEN PURCHASING ANIMALS

Condition - If you are purchasing cattle to put on pasture avoid cattle with excess fat as they gain poorly for the first month. Cattle should be healthy but lean and avoid cattle that may not have performed well elsewhere. You may be able to purchase them for less money but they probably won't achieve an acceptable performance.

Health - Does the animal look healthy? Is it alert and bright eyed? Is its breathing normal and does it move about vigorously? Does it have a dull hair coat and look emaciated? What has it been vaccinated for and when?

Frame Size - Cattle with a small frame will finish at a light weight while cattle with a large frame will finish at a heavy weight. Cattle with different frame sizes require different feeding programs. Since you will want to manage your cattle as a group, purchase cattle that are uniform in frame size.

Breed - In most situations frame and conformation are more important than breed in relation to cattle performance. However, there are some things to consider. Holsteins will work well in a feeder or finishing enterprise. They require different management and sell in a different market category. Animals with a high percentage of Brahman genetics do poorly in cold winter conditions. The disposition of the cattle can be an important factor which can be a breed characteristic. Avoid cattle that are high-strung or aggressive.

SOURCES

As with any purchase it is important that you get value for your money. If you are uncertain about how to purchase a beef animal then it would be best to deal with someone who is ethical and understands this side of the business. This could include a family member, friend, neighbor, local farmer or County Agent. The idea is to not go into a purchase with little or no information or background.

Cattle can be purchased directly from beef producers with the price based on local market conditions. The local market is established primarily in commodity markets many miles away from where you live. These are then modified for each specific region of the country based on transportation costs to markets and local conditions. These local conditions could be such variables as abundance of feedstuffs, moisture conditions and supply and demand. Markets will change through the seasons and from year to year.

Within Utah there are also livestock auction markets in certain municipalities. Here livestock producers bring their animals and exhibit them through an auction ring and sold to the highest bidder. It is a system where potential buyers and sellers are brought together and a fair price established. In order to determine what may be fair, however, the potential buyer must have some idea of local market conditions and a predetermined animal type that they wish to purchase.

Market reports are provided on the radio and can be checked on a daily basis, along with local auction market prices on the Internet. Following the market for a couple of weeks before you purchase will help you insure that you are paying a fair price for your cattle. If you have done your homework it will assist you in purchasing at a fair price whether you purchase from a local auction or an individual.

Market prices are quoted on the basis of the weight and sex of the animal sold. Generally nothing is reported about the condition or quality of the animals.

The correct size for your enterprise - If you want stocker cattle to put on grass, calves that weigh less than 450 pounds perform poorly on grass pasture. If cattle weigh over 750 pounds in the spring, they should not be fed on pasture. It is recommended that they be placed in a confined situation and fed a higher proportion of concentrate feeds, such as barley or corn. Make sure you have animals that fit your enterprise.

MANAGING YOUR CATTLE ENTERPRISE

Nutritional Management on Pasture

When cattle are on grass the amount of forage consumed will determine how well they will perform, usually expressed in average daily gain (ADG). Growing beef cattle will consume approximately 2.5 percent of their body weight each day (dry matter pounds) depending on forage maturity and palatability. It requires approximately 8 to 10 pounds of roughage (dry matter) for every pound of gain. Thus a 600 pound growing calf consuming 15 pounds of dry matter may gain approximately 1.5 to 2.0 pounds each day (depending on forage quality). This level of ADG can be increased when a concentrate, such as barley or corn, is fed to the cattle on grass. This will also increase the number of animals that can be placed on a pasture. If concentrate is fed it should be fed at relatively low levels (2 to 4 pounds per day) in a feed trough while cattle are on pasture. The prices of the various commodities will dictate for any given year if this is economically advantageous. Vitamins and minerals must also be provided.

Nutritional Management in Confinement

If cattle are confined, all nutrients required for growth and production must be supplied. Normally growing cattle over 700 pounds will receive rations relatively high in concentrates to gain faster. The concentrate should be processed for maximum benefit to the animal. If possible it is best to mix all feedstuffs together and fed in a fence line bunk, however, forages can be fed separate from the concentrate. Supplements containing vitamins and minerals and perhaps additional protein (dependent on the amount of protein in the forage), should also be included at manufacturers recommendations. The supplement can be obtained from any feed supply store. Check nutrient levels through feed analysis (see your County Agent) of your forage to determine the appropriate supplement.

A typical **growing ration** for a 650 pound steer gaining 2.5 pounds per day may contain the following (subject to nutrient analysis):

Alfalfa hay - 11 pounds
Rolled barley - 6 pounds
Supplement - 1 pound (10 % protein with recommended levels of vitamins and minerals)
If grass hay is used the supplement should contain 14 to 16 % protein.

An acclimation period is necessary to adapt the animal to the concentrate. Feed the ration to appetite or as much as they will consume maintaining the forage to concentrate ratio.

Once growing cattle reach 800 pounds, more concentrate can be fed. An 800 pound steer will gain approximately 3.0 pounds per day and will consume approximately 20 pounds of dry matter. It is essential to increase the amount of grain in the ration slowly to avoid digestive upset. Increase the concentrate .5 pounds per day until the ration is approximately 65 % concentrate, 30 % roughage and 5 % supplement, fed 2 to 3 times per day.

Health Management

Cattle are susceptible to a variety of diseases. Good planning and management, along with use of common vaccines and pharmaceuticals will usually enable your cattle to avoid most disease problems. Find a local veterinarian who includes cattle in their practice and consult with that practitioner about a herd health program, based on your type of enterprise, prior to your obtaining any cattle. If in doubt consult with your Extension Veterinarian who has a list of Utah certified veterinarians by area and specialty.

Bloat may cause sudden death of an affected animal. Avoid grazing cattle on lush alfalfa. Other plants may also cause problems for cattle so it would be wise to have your County Agent or veterinarian visit your pasture and corral area and determine any potential plant problems that may be present. It is important that any supplemental feeds used be free of mold and spoilage. Avoid sudden feed changes; make gradual changes (over 10-14 days), especially when adding grain to the ration. Bloat may be considered a disease which can affect animals in confinement fed mixtures of alfalfa and concentrate. Symptoms are similar as well as treatment which should be discussed with a veterinarian.

Scours (diarrhea) is common in newborn calves and animals of a young age. Cows must receive adequate protein and energy during pregnancy, especially the last 60 days to provide immunity to disease for the newborn. The newborn calf must also receive colostrum (the first milk), within 1-6 hours of birth in order to develop immunity (antibodies) against disease. A clean environment is also essential for the cow just prior to and after calving. The basic treatment for scours is fluid and electrolytes to maintain hydration of the calf.

Respiratory Disease (pneumonia) stress, weather changes and infectious agents may all be involved and are most common in calves soon after weaning. Minimize stress at this time and provide protection from the elements, such as a shed and windbreak. Develop a vaccination program with your veterinarian including IBR (infectious bovine rhinotracheitis), PI3 (para-influenza type 3), BRSV (bovine respiratory syncytial virus) and BVD (bovine virus diarrhea). A minimal program for respiratory disease would include an intra nasal vaccination with IBR and PI3 at 2-3 months of age and a vaccination at weaning containing a modified live virus (MLV) for IBR, PI3, BRSV, and BVD.

Clostridial Diseases: a group of related diseases may cause sudden death, especially in young, growing cattle. These diseases are Blackleg, Enterotoxemia, etc. Good vaccines are available and cattle should be vaccinated early in life with boosters at appropriate times. Your veterinarian can help you select the proper vaccine and outline a time schedule. This would include a 7-way Clostridial vaccine at 2-3 months of age and a second booster at weaning.

Parasite Control: when cattle are grazed on the same pastures every year, internal parasites may become a problem. In this situation deworming is needed to minimize parasite load and allow proper gains. Specific products to use and the time are critical considerations and depend on your grazing program. Your local veterinarian is best prepared to provide advice. External parasites of concern include lice, (common in winter) and horn flies (common in summer). Both need to be controlled, and several pesticides and methods of application are available.

General: injections of any type may cause lesions if injected into the muscles. All injections should be given subcutaneously (under the skin) when possible. Muscles in the neck can be used if it is necessary that intramuscular injections be given. DO NOT make injections into the hind quarters (rear legs or hip). Be sure to keep records of all treatments and always follow the withdrawal times as directed. The directions on the product will indicate how long the animal must be withheld from slaughter after use of the specific product. Always follow all directions on the label.

MARKETING YOUR PRODUCT

If you have a feeder or stocker enterprise your product is one or more 700 to 900 pound calves. You may choose to keep the animals and feed them as a market cattle enterprise or if you do not have the desire or resources to do so, you will need to market them. If you only have a few cattle of this type your marketing options are limited. To ensure cattle are marketed optimally discuss your options with those experienced in the business and listen for market reports via newspaper or radio. You can sell them at a local auction or sell them by private treaty by advertising them in the paper, word of mouth or an add on bulletin boards at the local feed store or wherever cattlemen gather.

If you have a market cattle enterprise you can always have the finished product butchered for home consumption. You can, however, have them slaughtered by a custom packer and sell them to individuals cut and wrapped which is not always economical. Extension personnel can assist you in determining the economics of home-raised beef.

CONCLUSIONS

Those interested in growing and raising beef cattle on their acreage can find this very rewarding. Be informed, however, so that you do not become involved in an enterprise that you have little knowledge of or that is not economical. Consult with feed company personnel, Extension staff, local veterinarians or beef producers. Raising animals can improve quality of life and provide great satisfaction and responsibility for families. Explore your options and then decide.

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert L. Gilliland, Vice-President and Director, Cooperative Extension Service, Utah State University, Logan, Utah. (EP/09-99/DF)