## Chapter 1

## The Rewards and Responsibilities of Raising Beef Cattle

In This Chapter<br>Surveying the benefits of owning beef cattle<br>Taking care of your cattle's basic needs<br>$>$ Creating a budget for your finances and time<br>- Putting together your advisory team<br>$>$ Contemplating safety and legal concerns

$R$aising cattle can be fun, educational, profitable, and downright entertaining. Cattle provide you and your family with wholesome food, and they can put a few extra dollars in your pocket as well. But before you get too wrapped up in all the different opportunities that come with raising cattle, you need to take a moment to look at the investments you need to make in order to properly care for your animals.

This chapter helps you understand what it takes to raise cattle. We show you the positives associated with owning cattle, and we also explain what's involved in meeting their basic needs. Next, we discuss how much money and time you need to raise cattle. Fortunately, you don't have to go it alone when caring for cattle, so we also give you pointers on how to put together a bovine advisory team. Of course, safety should be your paramount concern when raising cattle, so we conclude with some ideas about how to keep yourself and your cattle safe and on the right side of the law.

## Burgers and Beyond: Examining the Benefits of Owning Beef Cattle

For more than 30 years, we've had the privilege of caring for cattle. These amazing creatures continually impress us. They have provided so many
opportunities and benefits for our family. And they can do the same for yours. Consider some of the main benefits:
$\checkmark$ They produce food and income.
$\checkmark$ With proper grazing management, they improve the health and productivity of your soil.
$\checkmark$ They teach you a lot about animal husbandry.
$\checkmark$ They give you the opportunity to develop friendships with other cattle farmers and beef customers.

It's exciting to think about what owning cattle can mean for you and your family! We discuss these benefits in the following sections.

## Becoming more self-sufficient

Producing the very food that's served at your kitchen table is a noble goal and one that's shared with an ever-increasing number of people. A single beef animal can yield from 300 to 550 pounds of meat depending on its size. Speaking from personal experience, knowing you have plenty of food in the freezer for dinner every evening is a good feeling. Just as important, raising your own beef cattle gives you peace of mind and a sense of pride by knowing where your food came from and that you raised it yourself.

Can you raise your own beef at a price comparable to what it would sell for in the grocery store? It depends. If you're starting from scratch with your cattle enterprise and need to build fences and shelter and purchase supplies, it may take you some time to recoup those costs. Having some of the basic infrastructure in place reduces your expenses.

If you're a big bargain shopper, producing your own beef costs more than buying everything on sale at the store. However, if you're willing to pay extra for beef raised in a certain manner (without antibiotics or on pasture, for example) and like the higher value cuts of meat (such as steaks or extra-lean ground beef), producing your own beef can be comparable in cost to buying similar quality products at the grocer.

## Producing extra income

If you're already raising a beef animal or two for your family and have the space and feed resources, it doesn't take much more effort to raise a few more animals to sell at a profit. You'll find that it doesn't take any additional time to open the gate and rotate eight head of cattle to a new pasture than it does to open the gate for five animals!

Raising additional cattle helps reduce the per-head production cost. Spreading the fixed costs of things - such as taxes, insurance, and (to a certain extent) fences and facilities - over more animals enables you to raise each animal at a lower cost.

In Part IV of this book, we provide more details on ways to make money with cattle.

## Improving the land naturally

Well-managed cattle-grazing can improve the soil and diversity of plant species. Research and on-farm experience has shown that controlled grazing by cattle herds
$\checkmark$ Increases the number of earthworms and the amount of organic material in the soil
$\checkmark$ Leads to a balanced mix of plants
$\checkmark$ Increases the production of nutritious edible material per acre
And guess what? A pasture that has been properly grazed is also pleasing to the eye and can help increase the value of your property. For more on working with your land and cattle, head to Chapter 6.

## Providing a fun and educational family project

Many families enjoy working together on their beef projects. Caring for cattle has many different facets, so people of all ages and skills can play a role. Because cattle shows occur all over the country, raising cattle also provides your family a chance to exhibit your animals and see the country together. The opportunity to travel with your family and work together can make for some wonderful memories and learning experiences. Check out Chapter 14 for more about showing cattle.


Even if your family doesn't become involved in showing, raising cattle still provides the chance to develop dependability and a good work ethic. Cattle need consistent care everyday - rain or shine. Your family can learn about animal husbandry and develop a greater appreciation for other living creatures. Watching your budget and making decisions about purchases can also help teach important money management skills.

The chapters in Part II delve into the daily chores and animal husbandry routines you take on when raising cattle.

## Providing the Basics for Your Cattle

To get off to a good start with your bovine adventure, you need to supply your cattle with a few basic needs: wholesome feed and water, shelter, and a safe environment. Be sure you can fulfill these minimum requirements before you begin or add onto your herd. We explain these requirements in the following sections.

## Wholesome feed and water

Your cattle depend on you every day to provide them access to good, clean food and water. The nutrients your cattle need include protein, energy, minerals, and vitamins. The amount of nutrients your animal requires depends on its age, stage of production (growing, reproducing, lactating, or maintaining), performance level, and weight. It also depends on the weather in your region.

A quality pasture can provide most of what your animal needs, but you may have to provide a free-choice vitamin/mineral mix as well. Cattle with high nutritional requirements, such as finishing market animals or cows in late gestation or early lactation, may need more energy or protein than what a pasture can supply. In those cases, you may also need to feed them highquality hay or some grain.


As a general rule of thumb, figure that your cattle will eat an amount equal to $2.5-3$ percent of their body weight in dry feed a day. So a 1,200-pound cow consumes about 30 to 36 pounds of feed daily. If the feedstuff has a high water content like wet, lush pasture, the animal needs to eat even more to get the required level of nutrients.

The water source you provide your cattle can be a natural one like a spring, stream, or pond, or it can be a man-made one like a stock tank or automatic waterer. Whatever you use, just make sure the water is clean and fresh at all times. It needs to be cool and plentiful in hot weather. A nursing cow can drink up to 18 gallons a day. During the winter, don't count on the cows consuming enough snow to account for their water needs. Provide them with a temperate supply of water also.

We get into the specifics of feeding and watering your animals in Chapter 5.

## Clean, spacious living and eating areas

Cattle don't need fancy living accommodations, but their facilities should be tidy and not too crowded. They should protect the animals from winter weather and shade them from the sun in the dog days of summer.


#### Abstract

$\checkmark$ Winter: Because they have thick coats, a simple three-sided shed should be sufficient to protect them from wet, winter weather. Weak calves may need additional shelter, however. Plan to provide 75 to 100 square feet of barn per adult animal. Make sure the floor is clean and dry and bedded with straw, sawdust, or woodchips. $\checkmark$ Summer: The same type of barn described in the preceding bullet can serve as a shade source during the summer. Well-positioned trees in the pasture are another great shade option. If you plan to confine the animals to an earthen pen along with their barn, provide 250 to 500 square feet of pen space for each animal.


We talk more about setting up shelters for your cattle in Chapter 4.
The amount of pasture your cattle need varies depending on your management, the season, the type of grass you grow, and the amount of precipitation you receive. Pastures that are continually grazed usually can't support as many animals per acre as pastures that are rotationally grazed (animals are in a section of the field for a day or two and then moved to another section). Rotational grazing encourages the cattle to eat a wider variety of forages and gives the pasture time to regrow and recover before being eaten again.


During the peak growing season of May and June, a 12 to 34 acre of pasture may be sufficient for a 1,000-pound animal. But as grass and legume growth slows in July and August, you may need to provide 2 to 3 acres per animal. During the beginning (April) and ending (October) of the growing season, perhead acreage requirements may increase to anywhere from 5 to 10 acres per head if you don't plan on supplementing your pastures.

Keep in mind that different types of feedstuffs yield varying pounds of product per acre. One acre of stockpiled fescue grass may be enough for a mature cow in early winter, but as its quality declines over time, she may need twice that amount in early spring. You want to select the forages that perform best for your specific soil, weather, and grazing needs. For details on managing your pasture, head over to Chapter 6.


Mud can be one of your biggest challenges when raising cattle. For areas where cattle congregate, such as around water troughs, feeders, or walkways, a heavy use area protection (HUAP) ground covering can make for a cleaner and more pleasant environment. For more on HUAP zones, see Chapter 4.

## A low-stress environment

One of the best things you can do for your cattle's health and well-being is to provide them with a calm environment. The good news is that such an environment is good for the herdsman as well! Cattle like predictable, positive routines. Feed and check your cattle at about the same time every day so they know what to expect.
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You want your cattle to associate you with good experiences. You can achieve this rapport with your animals by moving them to a new pasture regularly, giving them corn or alfalfa hay treats, or, for very tame animals, giving them a scratch under the chin. Use a quiet voice or remain silent when working with your cattle. Loud noises and quick movements upset them. Be patient when handling cattle as well.

Refer to Chapter 8 for tips on interpreting cattle behavior and handling them properly.

## Planning for the Labor and Financial Commitments

Raising cattle can be a rewarding and profitable experience, but you shouldn't take the responsibility involved lightly. Do plenty of thinking to make sure you're ready for the daily care of these living, breathing animals that depend on you for their well-being. You also want to be sure you have the money to maintain your herd, including a financial cushion to handle a large, unexpected vet bill or a big spike in feed prices. The following section highlights some of the obligations you may encounter.

## Reviewing daily chore commitments

The amount of time you spend with your cattle for routine care can be as little as a few minutes a day to several hours a day. It just depends on your management style and your situation.

For instance, if your cattle are on pasture or a self-feeder, you may just need to do a quick inventory count, look for any signs of illness or injury, and check that clean, fresh water is available. If, on the other hand, you're preparing cattle for exhibition, you need to take more time to feed them individually and attend to their grooming needs.

Whatever management style best fits your situation is fine, but the key is to regularly observe your animals so any small issues with their health, feed, water, or housing can be fixed before they become big problems.

## Planning for big projects and emergencies

To give your cattle the best of care, be sure to make arrangements for largescale projects. Some tasks, such as annual healthcare work or barn cleaning, need to be on your to-do list every year and may take half a day or more.

Other big projects, such as building or repairing fences, occur less frequently and may involve several days or weeks of work.

Also, if you have commitments other than your cattle (and even the most dedicated herdsman does), have a trusted helper on hand in case of emergency. This person can care for your cattle if you're unavailable.

Similarly, exchange cellphone numbers with your neighbors, and make sure they have yours so you can be in contact if problems arise. You may even find it helpful to post signs on your fences and barns with your contact numbers so if someone runs into your fence and leaves a big gaping hole they can reach you. (This advice may sound silly, but we've had this exact situation happen to us on more than one occasion, so take heed, my friend!)

## Looking at purchase prices

As is the case with most anything you buy, you can pay a little or a lot for cattle, and most often you get what you pay for. Here are some of the options available to you:

Bottle calves: One of the least expensive ways to get into the cattle business is with a bottle calf. However, keep in mind that you'll have a bigger investment in terms of your time commitment in feeding and caring for the youngster. Bottle calves usually sell on a per-head basis and can be anywhere from $\$ 50$ to $\$ 200$.
$\checkmark$ Older, weaned calves or yearlings: These animals sell by the pound, and the price varies greatly depending on the time of year, the quality and weight of the cattle, and the overall demand. In the last ten years, prices for healthy animals have ranged from $\$ 0.80$ a pound up to $\$ 1.60$ per pound.
$\checkmark$ Breeding and show stock: These bovines sell by the animal. A young show heifer or steer may cost a bit more than a commodity market animal or may go up in cost to several thousands of dollars if you want an animal that has a chance of being a state fair grand champion. You can find a quality bred, middle-aged cow for around $\$ 1,100$ give or take several hundred dollars, depending on market conditions.

Check your local agricultural publications or visit a local auction to get a feel for fair prices in your area.

## Calculating feed expenses

After the initial purchase price, feed is your biggest variable expense in raising cattle. So you need to set aside enough funds to be able to properly feed all of
your cattle. You may have feed expenses associated with grain rations and forages like hay or pasture as well as minerals, vitamins, and supplements.

The cost can vary greatly depending on your resources, the type of cattle you're raising, and the weather. Traditionally, allowing cattle to graze is less expensive than feeding hay. Higher-producing animals like nursing cows or finishing market animals have higher feed expenses. Usually the feed bill for winter cattle feeding is the biggest because the animals are consuming more harvested feeds. But in spring and summer, your direct costs may be limited to the cost of pasture plus minerals and vitamins.


If you're growing yearlings out on your excess pasture, realize that you have an opportunity cost associated with the pasture: You could be getting paid rent by another cattle producer for the use of that pasture. Custom grazers are cattle producers who care for cattle belonging to someone else. They charge anywhere from $\$ 0.50$ to $\$ 1.50$ per day to graze yearlings or cows, so for a true accounting of your feed costs, you need to "charge" your grazing animals a comparable rate when figuring your profitability.

Since the turn of the century, the feed cost for an animal eating a grain-based ration to gain 100 pounds has been as low as $\$ 40$ and as high as $\$ 100$. The overall trend has been for the cost of feeding cattle to continue to climb higher.


Your best course of action to determine your feed costs is to keep excellent records of your feed expenses and animal production so you can figure how much money it takes for your particular situation. Until you have an opportunity to collect the data, estimate your feed costs on the high side so you don't come up short financially.

## Figuring the cost of healthcare

Healthcare falls into two main categories: preventive care and emergency care. Depending on the routine needs of your herd, you can spend $\$ 7$ to $\$ 20$ per animal on vaccinations and parasite treatments every year whether you do it yourself or have the vet do it for you. If you hire the vet to do any castration, dehorning, or pregnancy checking, add another $\$ 5$ to $\$ 15$ per animal.

Expenses associated with emergencies such as illness, injury, or pregnancy complications can mount up quickly. Some of the older antibiotic treatments for infections cost less than a dollar per animal but newer medicines can be $\$ 10$ to $\$ 20$ to treat one animal. It's also important to plan for emergency vet charges.

Most vets have a flat fee for visiting your farm, and then they charge an hourly rate in addition to that fee. Inquire about the amount your vet charges for services so you can allocate funds for unexpected healthcare needs.

## Budqeting for facilities and land

The main housing costs are for the pasture, shelter, and fencing, and they can vary tremendously depending on what you already have and what you're looking to have.

If, for example, you already have a few fenced acres with a shelter, your start-up costs for facilities and land will be nil. For brand new endeavors, on the other hand, your pasture rental could range from $\$ 10$ to $\$ 60$ an acre. Of course, if you have the time and skills, you may be able to trade some sweat labor for access to pasture and improve a neglected piece of land into a picturesque bovine smorgasbord.

After you have your land, you then have to figure out what types of facilities and fencing you want for your cattle. You can build a basic three-sided barn for around $\$ 400$ to $\$ 600$, or you can buy a small, prefabricated structure for around $\$ 1,000$. Installing barbed-wire, high-tensile, or woven-wire fencing costs anywhere from $\$ 1$ to $\$ 3.50$ a foot depending on the terrain, the type of fence you need, and whether you do the work yourself or hire someone else to do it.

Chapter 4 has more information on shelter and fencing options.

# Developing a Herd Mentality: Assembling Your Team of Experts 

When it comes to giving your cattle the best of care, be proactive about networking and learning from others. Even the most experienced cattle farmer hasn't encountered every possible bovine problem or had the chance to use all the newest products. Consulting with a mentor, vet, extension agent, or feed salesperson can greatly contribute to your knowledge base and help make you a better herdsman or herdswoman. We clue you in on your possible support system in the following sections.

## Making friends with a mentor

A mentor can help you learn more about raising cattle without going through the stress of trial and error. He or she can help you network with other producers and potential customers. Find someone who meshes well with your personality and has a similar way of doing business.

You can look for a mentor in the area where you live or through a beef cattle or livestock trade association. More and more cattle producers are becoming active online, so you may even be able to build up an electronic relationship with someone who's not even in your town or state!

## Vetting your veterinarian

A good working relationship with your vet can be crucial to the success of your cattle-raising experience. A vet can guide you in developing a preventive health program for your herd, help figure out ways to solve problems with your cattle's health and well-being, and be a literal life-saver in emergency situations.

Qualities to look for in a good vet include the following:
$\checkmark$ Experience with and interest in working with cattle: Many vets specialize in caring for pets or horses. Your best bet is to have a vet whose main focus is cattle, because some things, such as pregnancy checking or abnormal birthing presentations, become easier to handle with lots and lots of practice. A vet with interest in cattle is more likely to remain up-to-date on all the latest treatments and issues in cattle production.
$\checkmark$ Easy to communicate with and willing to answer questions: If you are new to the cattle business or are interested in giving your cattle the best of care, you will have questions. You should be comfortable talking with your vet about these questions, and she should be able to discuss the issues with you in a patient, professional manner.
$\checkmark$ Accessibility: Does the vet come to your farm, or do you have to take your cattle to the clinic for care? Can you schedule appointments for routine care in a timely fashion? In case of emergency, can you reach your vet easily and get help within a reasonable amount of time? These are all good questions to explore with any vet you are considering. You can even ask the vet for some references so you can get answers to these questions.

## Relying on local extension agents

Extension agents are people affiliated with land-grant universities. They're available to provide useful, research-based information to agricultural producers and others. Most counties have a cooperative extension office; you can also find regional and state personnel. To find contact information for your local extension agent, go to www. csrees.usda.gov/Extension/ USA-text.html.

Your county extension staff may or may not be experts in beef cattle production, but they almost always can help you find someone to answer your questions about raising cattle. Usually the state level of the extension service has experts in the areas of cattle nutrition and health, pasture management, livestock evaluation, and agricultural/food rules and regulations. Most extension information is available at little to no cost.

## Asking for advice from your feed dealer

If you aren't pasture feeding or need to supplement with a commercial ration, you have some thinking to do. Deciding on an economical, balanced ration for your cattle isn't always an easy task. Luckily, feed dealers can help you sort through the options and develop a feeding program to fit the needs of your animals. Do an Internet search to find the national or regional feed companies and their local dealerships.

## Holy Cow! Important Safety and Legal Considerations

To properly care for the animals and the people involved in your cattle-raising endeavor, you need to be aware of potential safety and health issues. You also need to plan how you can be a responsible cattle owner and member of your community.

## Preventing physical injuries

For the comfort and well-being of yourself, your cattle, and your helpers, you must handle your animals correctly and provide a safe environment for all involved. Here are some ways to prevent human and bovine injuries:

[^0]$\checkmark$ Realize that cattle perceive their world differently than humans. They have good panoramic vision but can't see directly behind them, so they get spooked if you approach from the rear. Because of their limited vision, they also have poor depth perception and balk at shadows. They're sensitive to high-pitched noises or unexpected sounds as well. For more tips on handling cattle, see Chapter 8.
$\checkmark$ Avoid handling cattle during very hot or cold weather or if the footing conditions are slick due to ice or mud. Extreme weather conditions put stress on cattle, so you don't want to increase the chance of illness or injury by handling cattle in these less-than-ideal conditions unless absolutely necessary. Also, be sure to use nonslip flooring in all barns, handling areas, and walkways.
$\checkmark$ Construct sturdy handling facilities that capitalize on cattle's natural behaviors. By designing facilities that are in tune with their instincts, you put less stress on the animals when handling them. Also, leave yourself an escape route when working around cattle. Chapter 4 has numerous ideas on handling facilities.
$\checkmark$ Keep trash and loose items picked up. Debris tossed by the wind can cause cattle to spook. Pieces of garbage also can be lodged in the hooves or accidentally ingested.
$\checkmark$ Maintain your fences. Sturdy fences help keep cattle safely contained and off the road and out of crop fields. They also reduce the chance of injury due to cuts and scrapes from loose wire.

## Watching out for zoonotic diseases

Zoonotic diseases are diseases that can be transmitted between humans and animals. They can be spread through the air, by direct contact, by touching a contaminated object, through oral ingestion, or by insect transmission.

Some of the zoonotic diseases of concern in the United States include brucellosis, campylobacteriosis, leptospirosis, ringworm, and tuberculosis. For a detailed description of each of these diseases, see Chapter 10.

To help prevent zoonotic diseases
$\checkmark$ Wash hands with soap and hot water after working with animals and before eating or drinking.
$\checkmark$ Wear disposable gloves when handling animals suspected to have disease.
$\checkmark$ Avoid unpasteurized milk and milk products.
$\checkmark$ Cook meat thoroughly.
$\checkmark$ Stress the importance of good hand washing and proper hygiene (no thumb sucking, please) to all children who spend time around cattle.

Pregnant women shouldn't assist with birthing or handling sick animals to avoid harming the pregnancy.

## Considering your insurance needs

The three types of insurance you should consider when raising cattle include the following:
$\checkmark$ Personal and farm liability insurance: This coverage provides payment for your legal liability for damages due to bodily injury or property damage. For example, farm liability insurance may protect you if your farm causes pollution of nearby properties due to pesticide or animal manure runoff. Additionally, if your cattle escape from their enclosures and injure another person's body or property, this type of liability insurance may provide coverage.
$\checkmark$ Farm personal property and building insurance: This insurance can be used to protect barns, farm equipment, and livestock. Be sure your coverage provides compensation if your animals are accidentally shot, drowned, attacked by wild animals, or electrocuted.
Liability insurance: If you're selling beef for human consumption, get insurance coverage for product liability issues. This coverage helps protect you against damages due to food quality and safety.

## Being a good neighbor

Even though you're excited about having cattle in your backyard, your neighbors may not share your enthusiasm. To avoid awkward and tense confrontations with the folks who live near you, take these steps to foster good neighborly relations:

[^1]$\checkmark$ Situate potential problem areas like animal corrals, feeding areas, or compost piles as far away and downwind from the neighbors as possible.
$\checkmark$ Keep your barns, fences, animals, and equipment clean and tidy to enhance the public impression of cattle farming.

## Complying with zoning requlations

Just because you want to raise cattle on your 10-acre ranchette on the edge of town doesn't mean you can. Where you farm depends on the zoning laws for your community. Before you even consider starting a cattle farm, visit your local zoning department to find out whether your property is zoned for agricultural use. If it is, find out about any specific laws regarding livestock, such as the number of animals you may have or the amount of land required.

If your land is zoned for some other use besides agriculture, you probably need to apply for a variance. When you apply for this variance, the zoning office personnel contacts your neighbors to notify them of the requested change and then publishes a notice in the local paper. You also have to present your case to the zoning board. It will either approve or deny your request. If you're rejected, you can file an appeal.


[^0]:    $\checkmark$ Don't take the good behavior of your cattle for granted or become complacent when handling them. All animals - including tame, domesticated cattle - are unpredictable, so always be on guard around them. Chapter 8 provides tips on recognizing cattle body language.
    Use extra caution around bulls, cows with calves, or animals that are handled infrequently. Because these animals can be quite territorial or unaccustomed to humans, they may act aggressively or in an unpredictable manner.

[^1]:    $\checkmark$ Obtain any needed permits or zoning changes before you build fences or barns or bring cattle to your property.
    $\checkmark$ Display any certifications you received that indicate you have taken steps to be a good environmental steward, including recognition for soil and water conservation efforts or certification in humane animal care and handling.
    $\checkmark$ Reach out to your neighbors to keep them informed of any activities you may need to do that temporarily cause an increased amount of dust, noise, or smell.
    $\checkmark$ Have an open house so your neighbors can see all the positive animal husbandry practices you use.

