Cow Care

Cows are clever, inquisitive, playful, and sweet. Their natural curiosity and large size can make them challenging to keep, but a little extra knowledge will help you and your cows live harmoniously together. Read on for more information about how to keep your cows happy and healthy.



Basics

The average life span for cows is about 15-22 years and their normal body temperature ranges from 101-102°F. Size and weight vary broadly depending on breed and sex. The males (called "steers" if castrated; "bulls" if not) of smaller breeds (e.g. Angus, Hereford, Jersey) range in weight from 1200-1800lbs, while females (called "cows) typically weigh between 1100-1500lbs. Males of larger breeds (e.g. Brahman, Charolaise, Holstein) can weigh between 2000-2800lbs, while females weigh about 2000lbs.

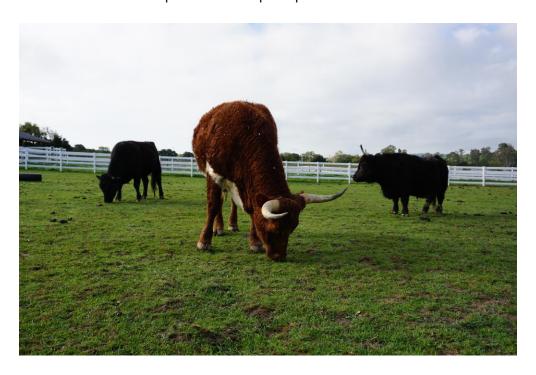
Behavior

Cows are herd animals and require the company of other cows to be happy and healthy. By nature, cows are grazers, meaning that that tend to eat low-growing vegetation. Cows have an incredible memory, and can remember things for a very long time – they even hold grudges against people and other cows who have crossed them! Because of their memory, they also form social hierarchies and close friendships. They can recognize faces of both humans and other cows, even after long periods of time have passed. Cows are also highly emotional animals – they are loyal to herd mates and human companions, and have even been known to grieve the loss of calves, mates and friends.



Space

Your cow herd will need a shelter that offers protection from the elements. This can be a simple three-sided structure with the open side facing away from prevailing winds, or a fully enclosed barn. Cow shelters must be properly ventilated; cold, wet or hot, moist conditions indoors can result in pneumonia. Remove soiled bedding daily, and replace it with plenty of clean, dry materials to keep your cows comfortable. Shelters should allow at least 35-40 square feet of space per cow.

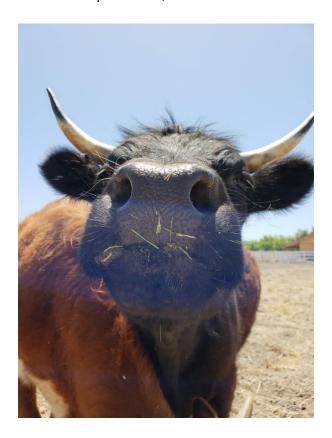


Your herd's outdoor area should provide about 5-10 acres per cow, but this can vary depending on the quality of the pasture, local weather, and seasonality, and the amount of supplemental hay you feed. Fencing and gates that can stand up to the strength and tonnage of cows are a must. Wood planks and posts and/or woven or high tensile wire are the most common materials used. Fences should be at least four feet high, with vertical posts every 8-10 feet.

Diet

Cows are ruminants, meaning that instead of one simple stomach, they have four stomach chambers – the rumen, reticulum, omasum, and abomasum – each of which has a specialized purpose. The rumen is the largest chamber and fills virtually the entire left side of the body cavity. The rumen and reticulum together act as a fermentation vat where microbes start the digestive process. When a cow eats, partially chewed material is swallowed and sent to the rumen where it ferments. The cow then burps this material ("cud") back into the mouth to chew and swallow it again. This process is repeated until the microbes in the rumen and reticulum have digested the material enough for it to pass to the omasum. The omasum further breaks down food particles and absorbs water and other nutrients. The abomasum is the final chamber, where digestive enzymes are produced and help prepare nutrients for absorption in the intestines.

The microbes in your cows' guts require the cellulose fiber found in forage (i.e. grass, and hay). We do not recommend commercial cow feeds because they often include corn and grain – these ferment faster than forage and disrupt normal digestive function (which can result in death). Access to adequate pasture and/or good quality grass hays such as timothy will help keep your cow happy and healthy (alfalfa and other high-protein hays can lead to health problems).



Cows often also require mineral supplements, which come loose or in block form, and can be free-fed. Here at Charlie's Acres, we provide trace mineral salt blocks, and place them in a dry, easily accessible area (inside the barn or under an awning). Provide salt, and a mineral blend appropriate for your region (check with your local large animal vet or extension office to learn more about possible mineral deficiencies in your area). Any changes to your cows' diet should be made gradually over time, as a sudden switch can cause serious digestive issues. Clean, fresh water should always be available to your cows.

Health care and maintenance

Consult your local large animal veterinarian to determine the best vaccines and vaccination schedule for your cow herd. Many farms and herds are different with disease risk, but your veterinarian will be able

to provide the best vaccination recommendations. Common vaccinations will protect against viral respiratory diseases, blackleg, and parasites such as worms. Utilize fly control and pink eye vaccine beginning late spring, or when warm weather returns. Again, consult your veterinarian for best practices regarding your specific herd.

It's recommended to castrate male calves in order to avoid the undesirable behaviors associated with amorous intact males. Many research leads to show that the earlier a calf can be castrated, the better, as it tends to be less stressful on them when they are young.

Perform regular health checks on your cows! Start when they are young, so they get used to being handled and having all parts of their body touched. At Charlie's Acres we check our cows head to tail once a month. Here are some of the things we look for:

Eyes: discharge, excessive tearing, foreign bodies

Ears: discharge (some dirt / wax is normal), foreign bodies, odors

Nose: unnatural discharge (some wetness is good!), foreign bodies, sores

Mouth: unnatural odors, scabs/sores (have a large animal vet check their teeth for safety)

Abdomen/udders: lumps/masses, fluid build-up, sensitivity, tautness, discharge/heat/swelling around

teats

Penis/vulva: discharge, lumps/masses, discoloration, swelling, odors

Butt/tail: cleanliness, lumps/masses, discoloration Legs: swelling, heat, joint enlargement/stiffness, sores Hooves: cracks, sores/wounds, odors, overgrown hooves



Common ailments

The ruminant digestive system supports a delicate balance of microbial life which can be easily upset. Bloat is a potentially fatal condition caused in cattle by overeating legumes in lush pasture, or eating too much grain and corn based feed. Prevention is key, which includes ensuring your pasture is seeded properly with safe grass for cattle. Signs of bloat include distention of the left side of the abdomen (indicating a buildup of gas in the rumen) and obvious discomfort – e.g. calling or crying, grinding teeth, kicking at the abdomen, salivation. Call your vet at the first indication of bloat, as it can kill animals quickly. Talk to your vet about bloat remedies that you can keep on hand in case help is not immediately available.

Bovine Respiratory Disease Complex (BVDC) is a common illness that can strike cattle, but is multifaceted and therefore requires some investigating to determine the cause. BVDC, which is essentially pneumonia, can manifest with very serious symptoms, but it's important to keep a close eye on cattle to recognize the early onset of any symptoms. Because cattle are often highly stressed during transportation, BVDC is also known as "shipping fever," although cattle who are not exposed to transportation and shipping are still susceptible. Other factors include, but are not limited to, weather, mixing cattle from multiple sources (without knowing if they had been properly vaccinated), nutrition, and the respiratory viruses. As pointed out previously, all cattle should be vaccinated for the respiratory viruses. In cases where cattle have not been transported or shipped, any other unusual highly stressful event or weather changes could lead to BDVC.

The most common and earliest recognizable symptom of BDVC / pneumonia is depression. Look for signs by noticing droopy ears, bowed back, or separating themselves from the herd. As symptoms progress, you will notice a lack and / or complete loss of appetite, increased respiratory rate, and fever. Most sick cows will have a high temperature of around 104-108 degrees – however, note that temperatures can be elevated (resulting in a false fever) in the afternoon due to increased outdoor temperatures. Best practice includes getting temperatures before 10:00am, particularly in the summer. There is a wide array of antibiotics and other medicines that can help treat BDVC – check with your veterinarian to develop the best treatment plan if needed for your cows.

Blackleg is a bacterial infection that can affect young cows ranging from 6-18 months old, however, it has been known to affect older cattle as well. Blackleg occurs when the bacterium, *Clostridium chauvoei*, is ingested, enters the bloodstream, and lodges in the muscle. This bacterium can remain dormant with no ill effect, however, when it germinates and multiplies, blackleg can occur. Growth of the bacteria causes localized, inflamed tissue – often resulting in blackish tissue, and often found in the leg muscles. Early signs of blackleg include depression and decreased appetite, locally inflamed tissue that is hot to the touch (swelling of the thigh), leg up, and tail raised. The affected cow may also develop a fever, and skin over the affected area may develop crepitation (sensation of air under the skin), making a crackling sound when touched. Unfortunately, very few cattle who are diagnosed with backleg survive, and many die within 48 hours of symptoms being noted. In some cases, very large doses of antibiotics can cure backleg, so early recognition and veterinary involvement is especially important. Vaccination is the only sure, effective way to prevent backleg.

Work with a cow-savvy veterinarian to put together the best strategic treatment plan.