

## The basics of caring for cows



### Physiology

The average lifespan for cattle is 18 to 22 years, although they can live in excess of 25 years. On average, adult males (“bulls” if not castrated; “steers” if castrated) of breeds such as Angus, Jersey, and Hereford weigh between 550 and 820kg, and adult females (“cows”) of the same breeds weigh between 500 and 680kg. Males and females of larger breeds, such as Brahman, Brangus, Charolaise, and Holstein, can weigh 900 to 1270 kg and around 900 kg, respectively. Many of the larger cattle, such as Holsteins, rarely reach their full weight and height before they are slaughtered. The normal body temperature for cattle is around 38°C.

### Nutritional Needs

**Water.** Clean, fresh water must always be available to cattle. Generally, a mature animal consumes between 30-70L of water a day, so be sure to use a container large enough to hold that quantity, or have an automated refill set-up. Consumption is based on weather, so more water should be available in hot weather. We recommend investing in an automatic watering system (available through farm supply stores or the catalogs below) because it will greatly reduce waste and labour.

**Salt and Minerals.** Salt and mineral licks should always be available to your cattle. Salt blocks and specially designed holders for them can be purchased at most feed stores. If you are in an area that has selenium-deficient soil, a salt block with selenium is necessary. Trace mineral blocks are also available and, depending upon the soil in the region where you live, may be advisable. Talk to others in your area to see what people generally do locally.

**Feed.** As ruminants (animals with stomachs that have four chambers), cows rely mainly on hay or pasture (fiber) to fulfill their dietary needs. Grain is very high in energy and fat, and not what cows evolved to eat. Pasture should be of a good quality and plentiful because it provides the bulk of the cow's dietary needs in the seasons it is available. Be sure to familiarize yourself with the species on your land and check for poisonous plants. If adequate pasture is not available, you will need to supplement with hay.

Adult cattle need up to 4% of their body weight in grass type hay daily; in severe winter weather this will be at its highest. To avoid hay waste, we suggest the use of a hay feeder. If you are feeding your cattle outdoors, place hay under cover to prevent feed from getting wet, a problem that can be expensive and hazardous to your animal's health. Because hay is less expensive per bale when purchased in large quantities, building some type of hay storage structure or loft is well worth the investment. If you have multiple cows or animals to feed hay to in winter, it is much more cost-effective to use large-bales. Bear in mind the handling logistics that come along with this saving. Stockpiling winter grazing and feeding in the field may present a good cost and labour saving.

## **Handling Cows**

It is important to be careful when working around any large animal. Although cattle are not usually aggressive, they are very strong and can injure you accidentally when they are performing normal movements such as swinging their heads to the side to swat at flies. Also be alert to where your cows are stepping so they don't accidentally crush your feet. Cows may feel threatened when confined, and some do kick or throw their heads. Do not ever allow yourself to be cornered without an easy way out. A frightened animal or one who feels threatened will often run you into a wall or gate, so always be very aware of your location.

If you are working with a small number of beasts we recommend that you halter-train your cattle and use halters regularly for grooming and check-ups so that the cattle become used to them. Cattle are relatively easy to halter-train if you start when they are young, and this is great if you are going to milk them.

By regularly brushing your cattle and running your hands over their bodies and legs, you will get them accustomed to being handled, leading to less stressful handling in the future. One of the most important ways to keep yourself and your animals safe is to know each individual animal and how they react in stressful situations. When keeping a small amount of cows you really learn a lot about their individual needs and temperament. In a large herd this is still possible, but a true herd behaves quite differently from a small number of individuals. Handling an aggressive or even frightened animal can be extremely dangerous and is not something that should be attempted without years of experience.

## **Shelter Requirements**

**Building.** Cattle shelters need not be elaborate, but they must be waterproof and

draft-free. Depending on the climate in your location, you may need only a three-sided structure with the open side facing away from the prevailing winds.

If you have a totally enclosed barn, be sure it is well ventilated. This is extremely important for both hot and cold weather. If the barn is much warmer than 10°C during cold weather, humidity from urine, manure, and body moisture may rise and can cause pneumonia as well as moulds to form on the structure.

Allow at least 3.5m<sup>2</sup> for each animal, but check your local regulations. Always provide your cattle with plenty of clean, dry bedding. Straw or woodchip is suitable, cows should not stand on hard surfaces like concrete. Remove damp and soiled straw daily, replacing it with fresh bedding. You can add biochar to help absorb nutrients and control odour. We use a deep litter system, adding material continuously over the winter, allowing the pigs to turn it and aerate it in the spring before taking it out to mulch the tree lanes.

**Fencing.** Permanent fencing for cows should be approximately 1.2m high, stretched taut, and secured to posts at every 2.5-3m. Single strand electric mobile fencing is totally adequate if the animals are trained and respectful of the wire. Training young animals is important. We run all our animals in portable electric fences, but also have a permanent perimeter fence for elk and deer, minimizing the risk of animals getting out of the farm even if the mobile fencing failed.

## Health Care

**Basic Maintenance.** Cattle are relatively easy to take care of, and sanitary housing, good quality pasture, nutritious food, and plenty of sunshine will greatly reduce health problems. Having somewhere to scratch is important. We pull around a 'mobile tree' in the pasture to give them shade, hold the salt licks and give us somewhere to tie the cows when we milk.



Keeping your cattle's feet properly trimmed and checking for cracks and other problems is imperative to their overall well-being; examine your cattle's hooves to determine if they need trimming or any other care every six months. Hoof trimming should always be done by a professional to avoid injury to the cattle and yourself, but also so that the hooves are trimmed properly. Hoof trimming should be done annually, or bi-annually if your cattle are prone to hoof problems. Maintenance trimming may be needed in between these scheduled times. If you intend to do maintenance trimming yourself, get advice and instruction from a professional beforehand.

**Vaccines.** Cattle may need to be vaccinated for contagious diseases. Consult your veterinarian for advice.

During your daily contact with your cattle, always be on the lookout for any physical or behavioral changes. Symptoms indicating illness include listlessness, pale coloring, limping, loss of appetite, teeth grinding, coughing, and abnormal temperature. If any of these symptoms occur, consult your veterinarian immediately.

## **Common Health Problems**

**Bloat.** This is a serious condition commonly caused by particularly lush pasture or overeating grain. When introducing cattle to new pasture, acclimate them slowly by bringing them some of the pasture for a few days. Then, turn them out for only a few hours at a time for the first week. The first obvious symptoms of bloat are distension of the rumen (the area beside the hip bone on the left side), labored breathing, and signs of discomfort such as kicking, grinding teeth, groaning, bawling, and profuse salivation. Any evidence of bloat *should be deemed an emergency*, and your vet should be contacted immediately. We tend to supplement hay for a week as cows come out in spring, and the new growth is not particularly lush. As with any change in diet, slowly changing over time is best.

**Mastitis.** Mastitis is an inflammation of the mammary glands caused by bacteria. Acute mastitis symptoms include an elevated temperature and a hot, hard, swollen udder that is very sore. Mastitis most often affects cows who have been lactating, but even cows who are not lactating are susceptible. Seek veterinary advice if you notice any of the above symptoms because treatment with antibiotics is crucial.

**Parasites.** Although good sanitation will greatly reduce parasite problems, you should still have your cattle checked regularly. Fecal tests should be carried out every six months and cattle treated according to the results.

**Foot Rot.** Foot rot is a bacterial infection of the hoof. One or more hooves can be infected at any time. Typically, the first symptom of foot rot is lameness. Check the hoof for signs of swelling, odor, or pus/discharge, and consult your veterinarian for

treatment. The risk of foot rot is greatly minimised by proper hoof care and maintenance of living areas. Keep cattle off excessively muddy pasture and rough walking surfaces, which can cause injury to the hoof.

**Respiratory Problems.** Coughing, nasal discharge, watery eyes, sneezing, lethargy, and loss of appetite are all symptoms of respiratory infection. Consult your veterinarian if you notice any of these symptoms.

**Johne's Disease.** Johne's disease is a chronic bacterial infection that primarily affects the lower small intestine of ruminants (e.g., cattle, goats, sheep) Clinical signs include weight loss and diarrhea with a normal appetite. Johne's disease typically does not present until two to six years after initial infection, which usually occurs at birth. Conventional medicine offers no treatment for Johne's disease. Some homeopathic treatments or herbal supplements may help keep your cattle comfortable and may extend life, although this is not often the case. Keep in mind that even cattle coping well with Johne's disease may still be shedding bacteria, which can persist in the environment for months.

**Eye Infections and eye cancer.** Check your cattle daily for signs of eye infections. Symptoms include discolored or cloudy eyes, unusual discharge, and swelling. Pinkeye is a very serious condition in cattle and can lead to blindness if not discovered and treated early. Contact your veterinarian immediately if you find signs of an eye infection. Pinkeye vaccines are also available and should be used if pinkeye is common in the area where you live. Cattle, especially the lighter-skinned breeds such as Hereford, are very prone to eye cancers. If detected early, these can be treated. Left untreated, however, these cancers spread rapidly, becoming quite costly to treat, or even fatal.