

Reason Highland heifers and bulls from weanings to yearlings is a subject not often discussed but one that is extremely important. From birth to weaning the cow is mostly responsible for the calf, after that it's your job to make sure it gets the right nutrition to continue its growth and develop into a useful and productive cow, steer or bull. With the meteoric rise in feed prices, it is now more important to come up with a strategy to get optimal performance from your cattle and available feeds.

## Weaning

Why wean your calves? Some people feel it is an unnecessary process that just stresses both cows and calves. While weaning does result in a few stressful days (and nights for the owners), it is best for both the cow and the calf. As Figure 1 and 2 show, once the calf is 180 days or more (6 months old) more than 2/3 of its nutrition is coming from pasture or feed.



**Figure 1.** Pasture requirements of a calf relative to its total feed requirement and relative to the total pasture requirement of the cow and calf. This is for a calf born at 70 lbs. and gaining 1.76 lbs./day to wean at 500 lbs. at 244 days of age with the cow weighing 950 to 1000 lbs. after calving and producing 15 lbs. of milk/day during the eight month period.



**Figure 2.** Pasture requirements of a calf relative to its total feed requirement and relative to the total pasture requirement of the cow and calf. This is for a calf born at 70 lbs. and gaining 1.76 lbs./day to wean at 500 lbs. at 244 days of age with the cow weighing 950 to 1000 lbs. after calving and producing 15 lbs. of milk/day at her maximum, then tailing off to 4.5 lbs./day at weaning.

In a spring calving program, if one were not to wean their calves in the fall, you would increase the cow's nutritional requirement in the winter (see previous article) plus you would still have to creep feed the calf to meet its needs. By weaning your calves at 200-260 days, you then reduce the cow's needs over the winter and then can easily meet your calves' needs.

Different weaning schemes can be used. Sue Dyke of Almosta Farm in Magnet NE, states two weeks before weaning, the calves are brought in and given their pre-weaning shots, wormed, tattooed and the heifers are given their bangs vaccinations. "At the time of weaning, we move the cows to an adjacent pasture and keep the calves in the one they are used to. They can still see each other but there is a 3 strand electric fence between them (learned that at the convention in Ft. Collins; works great). In four weeks the calves are brought in and given a booster shot." They also bring their calves in as early as 2 months to give them grain so they are used to eating grain at weaning.

Max Van Buren of Buckeye Highlands in Lisbon OH has a different program. They have an organic program and feed no grain. They calve from mid May to mid July. The cows rotationally graze stockpiled feed throughout the winter, with the calves being allowed to creep graze ahead of the cows. "While we have the entire cow herd corralled for weaning purposes in March, we vaccinate everyone except the weaned calves for IBR, BVD, PI3, 5 way Leptospirosis, 8 way Clostridium, and Pinkeye. When weaning this late there is very little stress on mothers and calves. After the weaned calves are segregated for two-four weeks we vaccinate all of the calves for the same diseases their mothers were vaccinated for and deworm them."

## Post Weaning to Yearling

Since most Highland heifers are not bred until two, the first winter is not as critical as in some breeds but it is still important to keep them growing. A target gain of .5-1 lb. per day should be considered and those that show might look at a higher weight gain. Sue Dyke feeds her calves grain twice a day with free choice prairie hay.



A properly preconditioned, weaned and fed calf will lead to a well developed heifer or steer to go out on pasture the next spring. Photo courtesy of Black Watch Farm

Max Van Buren returns his calves to graze the stockpiled pastures till they start to grow in the spring. He has seen an average of 1.2 lbs. per day gain.

Bull calves will have greater needs. Many bulls will be used as yearlings (15 months old or more) so they will need to grow faster. The Central Bull Test feeds a ration balanced for 2 lbs. of gain per day with the bull's actual weight gain ranging from 1.5-3 lbs. per day. At the test this ration is made up of corn silage, a grain mixture of corn and soybean, and hay.

Steers also need extra attention their first winter. There are some who advocate minimal winter feeding and then looking for compensatory gain on the pasture in the summer. The problem with such a program is that it has been discovered that marbling is put on throughout the steers life, not just at the end, so it is important to keep them on a positive plane for growth. Again one should look at target goals for weight gain and growth, then figure a ration to reach those goals. If you are grain finishing and would like to see the steer finished at 16-20 months at 1000+ lbs. then you probably need 1.5-2 lbs. gain through the winter. If you are grass finishing and looking at 24-32 months finishing age then your first year rate of gain would be lower .5-1 lb. per day. This can be accomplished with high quality forage.

Picking a program that works for you depends on your goals and available feeds but should always meet the calves growing nutritional needs. Protein requirements for a 500 lb. calf gaining 1-2 lbs. a day will be 9.5%-11.5%, while TDN requirements will range from 58% to 68%. Dry hay, even high quality dry hay, will at best meet the lower end of these requirements (protein may not be a problem, but TDN may be). Work with your extension agent or feed dealer to have your feed tested and rations balanced to ensure the most economical and sensible ration.

Your weaned calves – bulls, heifers or steers – are the future of your cattle business. Make sure to "raise 'em right" so that your future will be bright!