

## BEEF RANCHING IN WESTERN CANADA

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These are exciting times for forage and livestock producers of Western Canada. With the current expansion in the beef industry the key to success for cow-calf operations is more economical production. There are now greater opportunities to utilize high quality forages and the use of grain by-products to cut these production costs.

### FACTORS THAT INFLUENCE BEEF PRODUCTION

**1. "Crow" Grain Rate.** The "Crow" refers to the subsidized transportation of prairie grain to the nearest shipping point. The elimination of these subsidized freight rates has affected the grain and livestock industries in Western Canada.

With higher freight rates, which the producer must now pay, the traditional production of small feed grains has decreased in value. This encourages more local usage of these grains. The result is a growing livestock industry and value-added grain industry (more crops are processed at home and the finished-product is shipped). This has produced more types of by-products suitable for livestock usage.

**2. Packing Plants.** The development of the Western Canada "Beef Circle" (which is the locating of large packing plants with the sizeable feedlot operations encircling them, fringed by the cow-calf operations to supply them with animals) has affected the industry. Previous locations for these mega-plants were the central United States. Two new plants in Southern Alberta have been developed which can process 7,500 head per day. Alberta produces 67% of the finished feedlot cattle in Canada. Feeder cattle are shipped up to 1,000 miles from all points in Western Canada and from some northern states.

Three factors have led to the development of the mega-plants in Western Canada. They are the availability of high quality cattle, the accessibility of feed grains and forages, and the feasibility of increased sales to the emerging Pacific Rim market.

The feedlot sector is very competitive in the North American market because of the cheaper source of feed grains. However, the cow-calf sector's costs of production are too high, mainly because of our high wintering costs (between 1/3 and 1/2 of the value of the weaned calf). For the cow-calf operations of Western Canada to be competitive in global markets we must find ways to lower costs of production.

### OUR RANCHING OPERATION

Our ranch is located in the dark brown soil zone of East Central Alberta. Average rainfall is about 8 to 10 inches (20-25 cm) annually. We operate a commercial cow-calf operation (1,200 cows) and a small feedlot (2,000 head) on a total of 6,000 acres. Of this 2,500 acres are cultivated suitable for grain production and is presently in alfalfa production. Some additional land is leased for summer pasture.

Areas where the management of our cow-calf operation have been stream-lined for cost efficiency are indicated in the following seasonal notations.

**1. Winter.** We are developing a method of utilizing the by-products of the grain industry to winter our cow herd at a much lower cost. Some of the by-products used are: straw and chaff residue from local

grain farmers, oat hulls, and screenings from value-added grain industries (such as oat, malt barley, or canola processing plants). Also, the feedlot uses sawdust and shavings from a plywood plant for bedding.

We must, however, supplement these lower protein by-products with high quality forages. We currently use high quality alfalfa silage which we can produce on our own land.

A system of portable corrals and feeders has allowed us to continually move the cow herd. This enables the nutrients from the cow herd to be spread evenly over the land, completing the nutrient cycle. This eliminates the costs of manual manure spreading and commercial fertilizers, thereby greatly reducing expenditures.

**2. Spring.** Traditionally, spring provides about six weeks of grazing opportunity. Since forage production does not begin until early June, there is nothing to graze. We have, therefore, stockpiled a portion of the needed forages for our herd to graze. This has helped to reduce the expensive costs of winter/spring feeding. Since this is our calving season, the cows need a high protein forage so we must supplement with alfalfa silage.

**3. Summer.** Our summer alfalfa grazing program has allowed us to raise our stocking rate by two to three times the normal rate. The rate of gain on calves has also increased by an extra pound per day. Cows, too, gain 200-250 pounds over the summer.

This alfalfa grazing program has been developed locally by the East Central Alberta Forage Association (ECAFA). I am currently the president of this 15-year old organization. The basis for developing this alfalfa grazing program is shown in the following findings:

#### Why Graze Alfalfa?

	Plot History
15 year data:	
- alfalfa average	2.46 ton/ac
- grass average	1.01 ton/ac
- rainfall average	6.72 inches

Alfalfa out-yields grass by between two and two-and-a-half times.

#### Grazing Trial Comparison

1 year data (calf gain):	
- alfalfa-grass (24 calves)	2.9 lb./day
- native pasture (24 calves)	1.9 lb./day
- 184 calves on alfalfa-grass pasture	gain 2.8 lb./day

An extra 1 lb/day was gained by the calves in the cow/calf pairs grazing alfalfa-grass as opposed to those grazing native pasture.

Bloat control is essential to the success of the grazing program. Proper grazing systems which utilize the growing alfalfa plant at the correct time allows enough fibre to prevent bloat.

**4. Fall.** Due to the summer grazing program, we can wean calves earlier than normal. This allows cows to retain the summer's weight gain, and to maintain it using low quality forages until winter-feeding is necessary.

## Farmers' Forum

In our own operation the role of high quality forages has proven its economic value and has greatly increased the viability of our livestock operation.

A sustainable agriculture system is essential for the future of the industry. High quality forages and their utilization must play a greater role in the future. Scientific and extension personnel must develop a better system of communication to transfer the information to the producer. Producer-driven organizations are the key to this transfer. The producer must be more receptive to new concepts in the industry in order to remain competitive in growing global markets.