

From
START *to*
FINISH

An Illustrated History of Cattle Feeding in Alberta



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By Kris Nielson and John Prociuk

Published by:

Alberta Cattle Feeders' Association

Calgary, Alberta, Canada

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◀ Cover Photo
W.C. Ranch near Pincher Creek.
Photo Courtesy of Laura Leyshon-Thuresson

◀ Preceding page
The A7 Ranche near Nanton.
Glenbow Museum / NA-857-1

▶ Following page
W.C. Ranch near Pincher Creek.
Photo Courtesy of Laura Leyshon-Thuresson

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Foreword

Alberta's history, it seems, is irrevocably woven into that of the cattle industry. The early open range activities provided the first basis for the Province's economy, and over the years ranchers from the southern grasslands to the central park belt and on to the Peace River area utilized the abundant grasses and forages to produce the cattle which became the world-renowned Alberta beef.

Probably because of its romanticism, the early era of the open range, with its round-ups and traditional cowboy lifestyles, has been used to define the essence of the cattle industry. Somehow, the unending, rippling grasslands seem to place cattle in a more appropriate setting than a farmyard or even an enclosed pasture. This mystique of the open range which suggests that cattle are best suited to year round range grazing downplays and even ignores the overriding importance of a crucial and vibrant component of the industry. More than anything else, the development of a sophisticated feeding industry has enabled Alberta cattle to keep pace in the race to satisfy an increasingly discriminating global market.

The lesson that cattle needed winter supplemental feeding was learned the hard way in the late 1880s. The belief that grain finished cattle gave a market advantage led Alberta ranchers to probe the tariff-free United States mid-West market with their feeders and stockers between 1914 and 1920. The final realization that Alberta could and should finish her own cattle on a large-scale basis was much later in coming, and in part owed its growth in the late 1920s to informal agreements between ranchers and farmers. Subsequent efforts by feeder associations in the 1930s simply evinced the growing knowledge that the economics of cattle raising and grain growing were inextricably entwined. The modern custom feedlot of the post World War Two era was the logical result.

The cattle feeding industry in Alberta has evolved through an integration of agriculture and ranching. It is also both technologically refined and sensitive to market and consumer variables. The following discussion places this development into meaningful historic context. Supplemented by informative visuals, the narrative makes a worthwhile and much-needed contribution to the historiography of Alberta agriculture. 🐮

- Max Foran

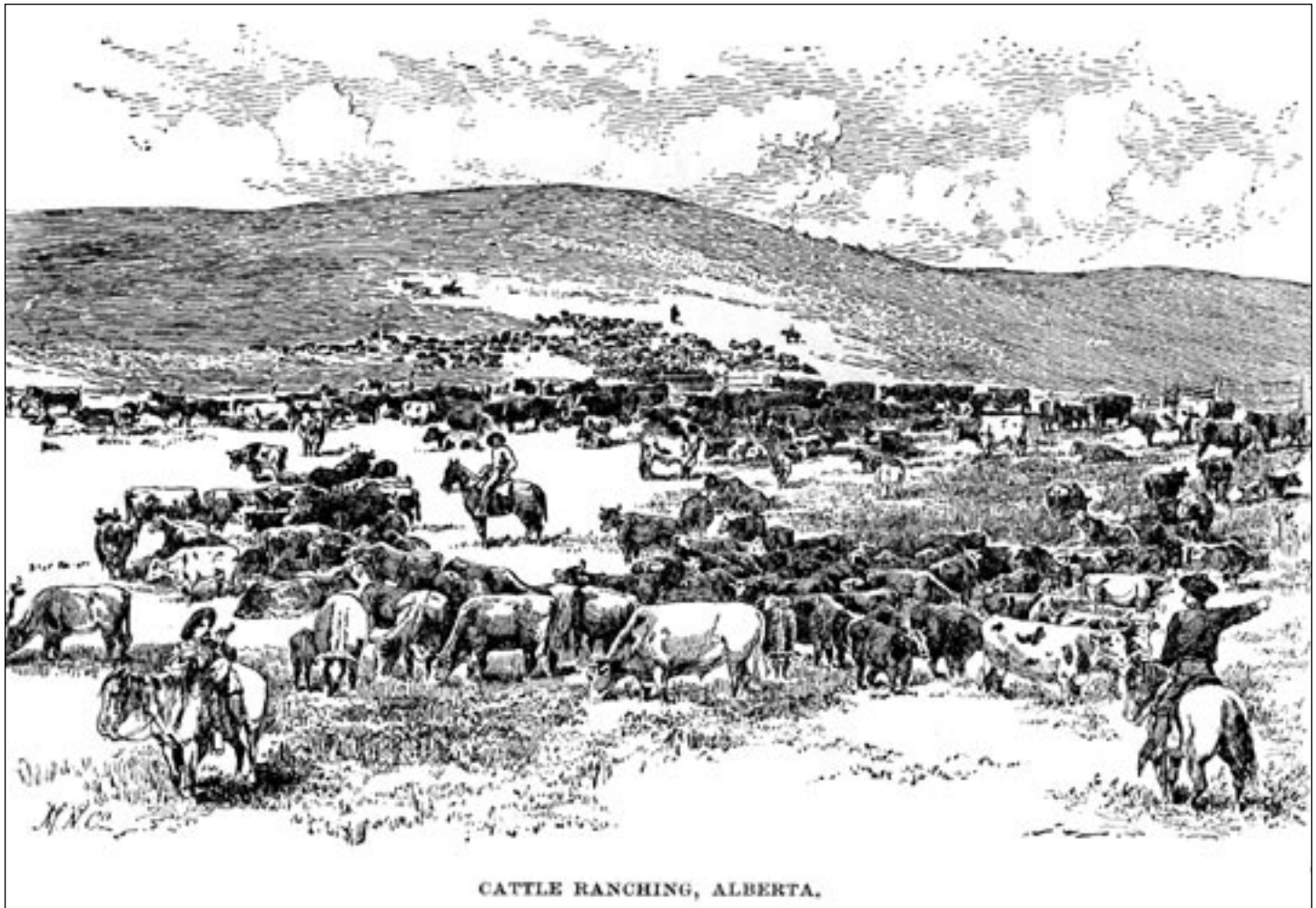
chapter one



THE GOLDEN ERA OF LARGE RANCHING







The Early Years of the Free Range in Western Canada

The roots of the cattle industry in Alberta extend back to the sixteenth century when Spanish explorers introduced cattle and horses to the Americas. Cattle raising became an important part of Mexican life, but it was in Texas that the true cradle of the cattle kingdom developed. By 1850 ranchers in the Lone Star State discovered a demand for feeder cattle as far away as Illinois. Soon cattle drives could be seen winding their way to northern markets. Smaller-scale cattle owners in Carolina, Massachusetts and Pennsylvania had been feeding livestock decades earlier, sending their finished product to eastern markets. In the 1840s cattle were fed corn on the Illinois prairies, and by the middle of

the century Ohio cattlemen fattened their small herds on grass and corn for the Chicago and New York markets.

The livestock industry continued to expand after the American Civil War because of the industrial revolution and increasing population. Great trail drives beginning in Texas and covering hundreds of miles north are part of American legend. Ranges in Colorado, Wyoming, Montana and North Dakota were opened to the cattle rancher in the 1870s, offering an abundance of free grass that could be claimed with relative ease. Overseas markets would soon develop to help the industry even more, and technological advances made it possible to ship meat over long distances. In the span of a few years,

▲ **A sketch of cattle ranching in Alberta as found in "The Western World Illustrated". (c. 1892)**

Glenbow Museum / NA-727-2

◀ **The A7 Rancho near Nanton.**

Glenbow Museum / NA-857-1

◀ **Preceding page
Cattle grazing on the Highway Range. (c. 1900)**

Glenbow Museum / ND-8-107

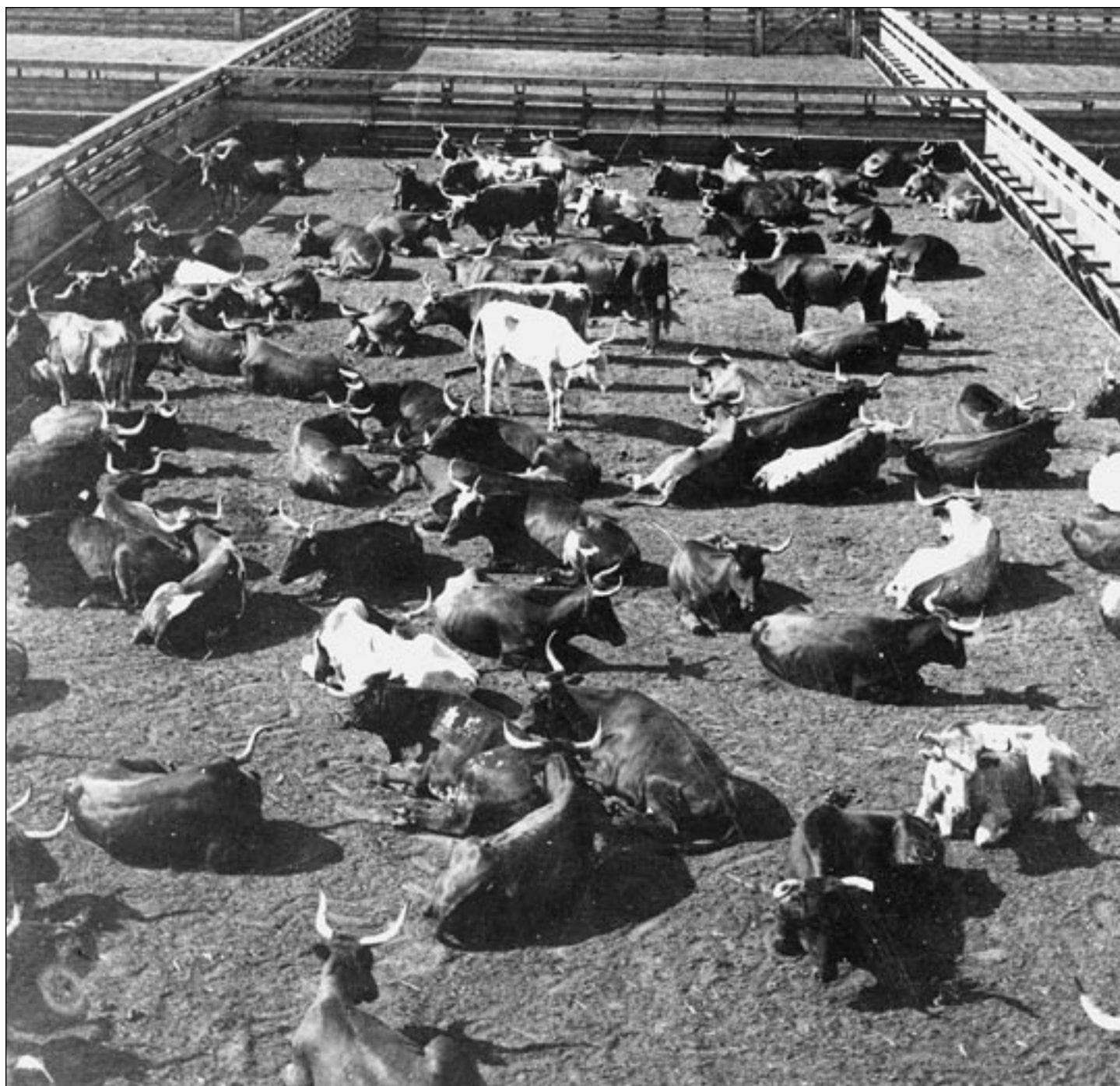
the Canadian West would become yet another frontier for the expanding cattle business.

Cattle raising and feeding east of the foothills of western Canada owes its origin primarily to a geography and climate that combined to provide adequate grassland grazing for livestock. Some areas in the British Columbia interior and southwestern Saskatchewan also featured appropriate conditions. When these regions began to populate, investors immediately saw an opportunity for success in the

livestock business. Cattle were introduced into British Columbia's Nicola and Thompson valley regions during the gold rush of the 1850s. This was followed by the appearance of cattle on the plains of southern Alberta and southeastern Saskatchewan. Of all these areas, the foothill country of southern Alberta was a natural heartland for the early ranching frontier. Nature had provided sheltered and well-watered valleys, and welcome chinook winds tempered the effects of winter and exposed grass for grazing.

Texas Longhorns at Union Stockyards in Chicago. During the late 1800s, the largest cattle markets in North America were found in the eastern portion of the United States. (c. 1896)

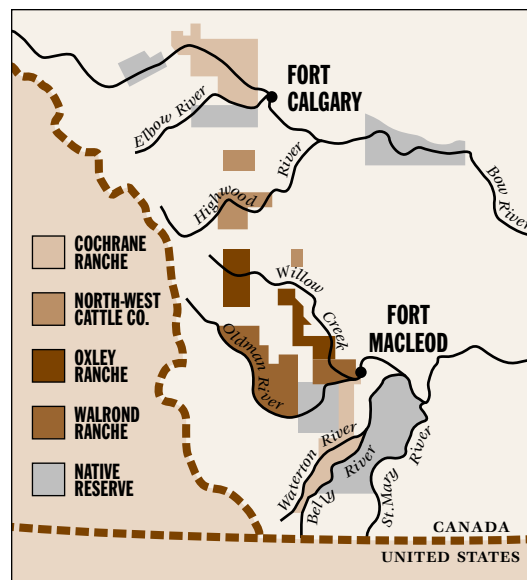
Glenbow Museum / NA-1741-1





By the 1880s the Dominion government was encouraging entrepreneurs like Montreal's Matthew Cochrane to put money and cattle into the Canadian North West. John A. MacDonald's government was eager to carry out its National Policy by developing the West, and feared American expansionism into the region. This led to the amending of the Dominion Land Policy to allow large-scale land leasing in western Canada. With the government promoting cattle trade with Britain, that initiative was enough to lure businessmen from eastern Canada and Great Britain to invest in the new frontier. The early old-world British influence on the industry would become recognizable by the frequent spelling of the word ranch with an "e" at the end, as in the Cochrane Ranche.

However important the large businessmen-ranchers of the 1880s were in expanding and promoting the livestock industry, the very first cattle to make their appearance in the West actually predated them by many years. In 1812 Lord Alexander Selkirk funded



a small farming settlement in British North America along the Red River in what is southern Manitoba today. The little colony of a few hundred people was appropriately called the Red River Settlement. They purchased a yearling and heifer from the Hudson's Bay Company and optimistically named them Adam and Eve. This settlement represented the first independent agricultural community in the West.

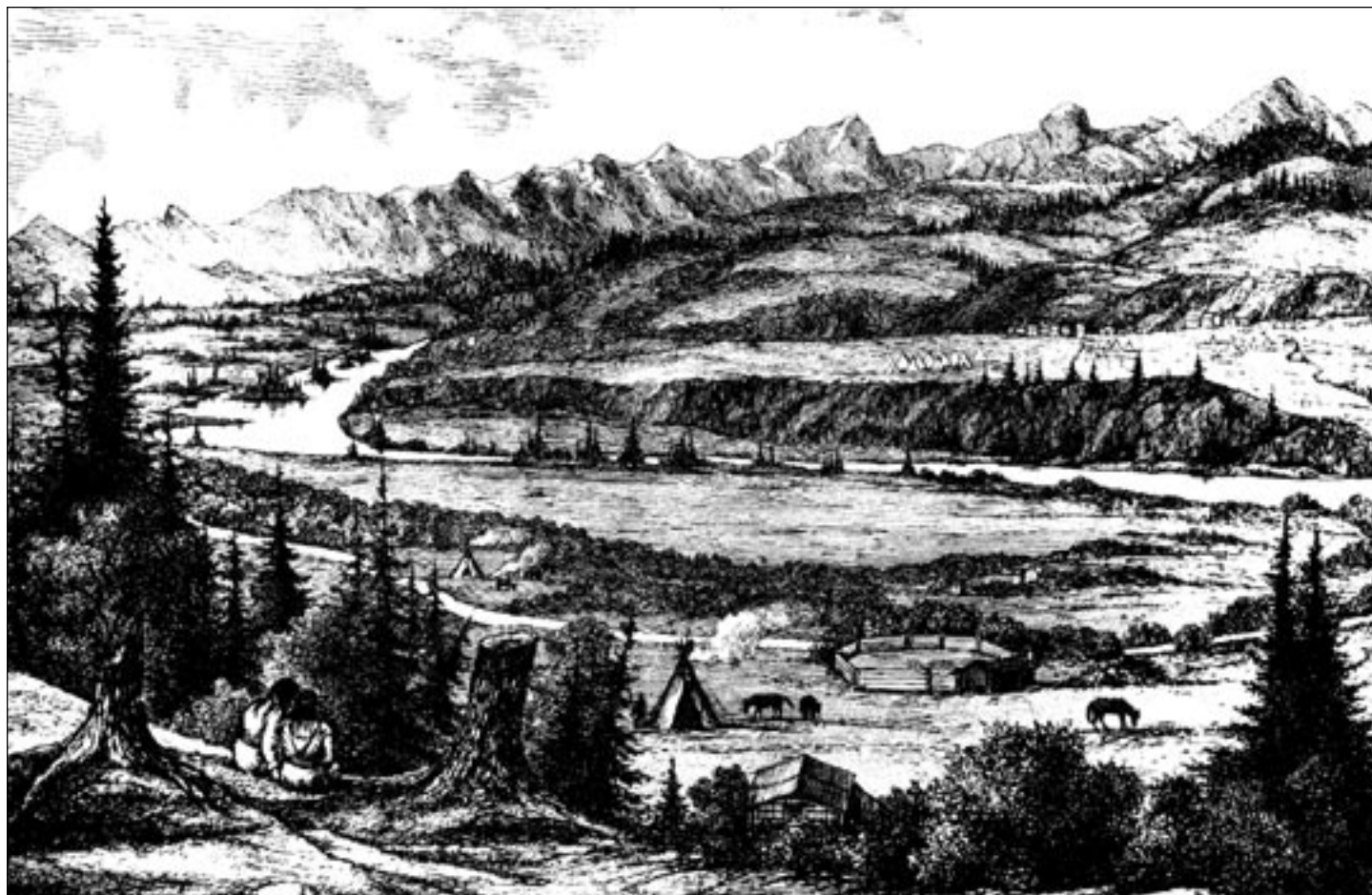
▲ Cowboys preparing to drive cattle to southern Alberta from the Okanagan Valley in British Columbia. (c. 1882)

Vernon Museum and Archives / 5021

◀ Cattle company leases as of 1884.

"..For the purposes of the stock-raisers it suffices to know that for a great part of the winter, much of the surface is free from snow, and that it seldom or never attains a depth sufficient to prevent animals from feeding....in less than ten years all will be changed, and the plain and hills...will be covered with cattle and dotted with ranches."

-G.M. Dawson, Dominion Land Surveyor in the Montreal Gazette, November 17, 1881



▲ **Missionary John McDougall is credited as the first person to attempt to raise cattle in Alberta at this Methodist Mission on the Bow River near Morley in 1873. A year later Kenneth McKenzie drove approximately 500 head of cattle from Montana and wintered them in the same vicinity.**

Glenbow Museum / NA-1406-182

Cattle were introduced gradually into the southern Alberta area from the early 1860s to 1882. This time period was called the “free grass” years because the newly-formed Canadian government was yet to impose strict legislation regarding settlement. Methodist missionary John McDougall and his trader brother David brought the first breeding herd south from Fort Edmonton to their mission near Morleyville on the Bow River in 1873. A year later Kenneth McKenzie drove a larger herd to the same mission centre from Montana. Also in 1874, the North West Mounted Police brought a moderately large herd of cattle to their headquarters in Fort Macleod. An increasing number of people were getting into the cattle business and larger herds from Montana would soon be on their way. The first true “range” herd of twenty-one cows and one bull was let loose by Fred Kanouse near Fort Macleod in 1877. Kanouse simply allowed his cattle to feed on their own

throughout the winter, trusting in the rich and nutritious supply of grasses. The following spring he collected his cattle without any loss.

The sight of all the grass along the Highwood and Bow Rivers, with only a few buffalo foraging, stimulated Montana trail riders like Tom Lynch and George Emerson to move in more cattle. Together they drove a thousand head (the biggest to cross the international boundary at the time), north to the Highwood river in 1879. Some members of the North West Mounted Police, like Captain John Stewart, who finished their three-year service requirement also concluded that the cattle business could be profitable and ventured into ranching. By the end of the 1870s a small cattle industry had been established in the foothills region along the Bow River and around Fort Macleod. These included two government-run operations that were established to serve the needs of the police and native Indians.



▲ **Driving cattle along the South Saskatchewan River. (n.d.)**

Photo Courtesy of Grant MacEwan



◀ **Cattle crossing the Milk River near Medicine Hat. With well-watered valleys and welcome chinook winds, southern Alberta earned an undisputed reputation as prime cattle country. (n.d.)**

Medicine Hat Museum & Art Gallery Archives / PC 88.2

Though they would be overshadowed by the bigger ranches and business tycoons that followed, these small stockmen and early farmers played an important role in paving the way for their more famous successors. By admirably managing even a small number of cattle in the early years, they demonstrated the suitability of the plains for the feeding and raising of cattle on a year-round basis.

To no one's surprise, businessmen in Britain and eastern Canada with available money soon jumped at the potential for larger and more lucrative cattle operations. Their interest was buoyed by the success of farmers and glowing reports of the land's potential delivered by resident North West Mounted Police officials. Perhaps the most compelling voice was that of the Marquis of Lorne, Governor-General of Canada, who made an official tour of the West in 1881 to evaluate its

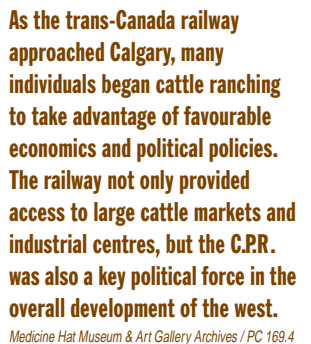
agricultural potential. He concluded that the soil was good for grain, and the land so admirable for summer pasturing that many farmers would never think of having to cultivate hay, seeing that cattle fed and fattened to their heart's delight on the boundless natural grass. He provided the example of Fish Creek farmer John Glenn, whose steers grazed all winter, and proved to be the fattest animals he ever had, despite not having eaten a mouthful of cured hay. The Governor-General judged it to be good insurance to have hay stored in the valleys as a feeding strategy, but he extended himself in his eagerness to convey the richness of the natural resources in Alberta by saying that the thickness of animal dung on choice feeding grounds reminded him of a lush English farm-yard!

Supported by that ringing endorsement, the government quickly

Cattle grazing on the Cochrane Ranch lease. As the spokesman for a number of potential investors, Senator Matthew Cochrane worked with the MacDonald government to amend the Dominion Land Policy, allowing large-scale leasing in western Canada. The flood plain of the Bow River west of Fort Calgary was an ideal grazing location and the Big Hill Creek coulee provided shelter from the winter storms. (c. 1882)

Glenbow Museum / NA-239-5





A black and white photograph of a steam locomotive, number 576, with two young boys. One boy is standing on the gravel next to the tracks, pointing towards the locomotive. The other boy is sitting on the front of the locomotive, near the large circular headlight. The locomotive is pulling a train of freight cars.

of feeding on free grass. So once the leasing policy was passed, and the trans-Canada railway approached Calgary in the early 1880s, entrepreneurs were lured by the “beef bonanza” in the West and major cattle companies were quickly formed. Leases granted in 1882 covered some four million acres, and by 1884 ten companies established a hold over the grazing land of the chinook belt. Not one of these outfits were American, even though Montana interest and influence remained through supply contracts and the import of cattle. Because investors in the larger ranching ventures were political and economic heavyweights from eastern Canada and Great Britain, the Canadian range was never in the hands of wild and woolly American Westerners. These educated, well-heeled owners preferred tailored waistcoats to six-shooters and chaps, and their homes and lifestyle on the newly settled land had a decidedly Victorian look and feel.

As large ranches were established in the West, some of the smaller free grass stockmen of the pre-1881 period disappeared, others were absorbed by the big ranchers, and still others moved further north to avoid problems

associated with leases. Associations like the South-West Stock Association were eventually formed to protect the interests of farmers, but these associations usually favoured the large-scale ranchers. By 1886 the large cattlemen had assumed the status of a regional elite, bolstered by common vocational interests, social background and political connections. Next to the Canadian Pacific Railway, the “cattle compact” held more political power than any other force in the West.

The effect of these first cattle owners on the development of the province of Alberta, especially its southern half and the city of Calgary, was profound. They provided both the market and investment capital upon which the region's growth depended. Calgary gradually became the administrative headquarters of the cattle industry and ranchers had tremendous influence over political decision making. The exclusive Ranchmen's Club, established in 1891, survives as a visible reminder of their influence. The charter membership included some of the most influential businessmen in the area and reads like a “who's who” of the region's early social, economic and political elite. 🐮

Shipping cattle out of the Calgary stockyards. (c. 1890s).

Glenbow Museum / NA-2407-5



FROM START TO FINISH



◀ The Ranchmen's Club in Calgary was originally located above a restaurant on Stephan Avenue. It briefly found a home in a railway boxcar and on McIntyre Avenue before finding a home on 6th Street S.W. The founders of the club included some of the most prominent ranchers and businessmen in the area. (c. 1914)

Glenbow Museum / NA-1469-6

As Calgary continued to grow, it became a major centre of economic activity. Noted for its sandstone architecture and cattle ranching, this view of Stephan Avenue typifies "Cow Town".

(c. 1889) *Glenbow Museum / NA-2864-13233*







Significant Ranches of the Golden Era

The first of the large cattle organizations to be established was the Cochrane Ranche. Three other large companies quickly followed: the North-West Cattle Company, the Walrond Ranche Company, and Oxley Ranche Company. At their height of influence in 1884, these four had control of roughly half the leased stock country of south-western Alberta. The severe winter of 1886-87 ended the cattle boom and caused big ranchers to make decisions more cautiously, these early years were truly golden ones for many ranchers. The number of stock on the Canadian range grew from 15,000 to 110,500 between 1881 and 1889. The romantic element associated with this time period has much to do with the relatively carefree manner in which cattle were managed and fed.

The first of the cattle barons of western Canada was Senator Matthew Cochrane of Quebec. Cochrane played

a central role in influencing the MacDonald government to make the necessary lease regulations to open up the West. Before the Dominion Land Policy was even in place, he had selected a 100,000 acre lease along the Bow River west of Calgary. The first big Cochrane Ranche herd was purchased in Montana and, on orders from Cochrane, three thousand cattle were hurriedly driven to their new home in 1881. Thirty cowboys and 300 horses, working from dawn to dark, moved cattle from fifteen to eighteen miles a day. This pace did not allow for adequate rest and feeding, which took place strictly by grazing. A hungry, thin, and fatigued group of cattle finally arrived at the ranch headquarters, many having died en route. A year later another herd of about five thousand was added. By the spring of 1883 the Senator became disillusioned with the severe weather of the region near the

▲ **The British American Ranche headquarters. William Kerfoot, manager of the sheep operation, is on the right. (c. 1885)**

Glenbow Museum / NA-239-1

◀ **3100 head of cattle and 2600 sheep from the Murray Ranch crossing the South Saskatchewan River near Ronalene, Alberta.**

Medicine Hat Museum & Art Gallery Archives / PC 88.26



▲ Winter shelter for cattle on the Upper Cochrane Ranche in southern Alberta. (c. 1892)

Glenbow Museum / NA-4461-14

►► The last big general cattle round-up shown here at Cochrane Lake on the old Cochrane Ranche lease. (c. 1908)

Glenbow Museum / NA-381-1

► As the resident manager of the Cochrane Ranche, Major James Walker made this estimate of livestock as of April 1st, 1882. Walker resigned after the devastating winter of 1882-83.

Glenbow Museum / NA-1743-3

present-day town of Cochrane, and took a new lease further south, between the Waterton and Belly Rivers. He renamed the first lease the British American Ranche Company, turned it into a sheep ranch, and hired William Kerfoot and A.E. Cross to provide leadership. A series of economic problems in the sheep market led to the company selling off stock and transferring land holdings to other ranchers.

Down south, the new Cochrane Ranche prospered under the direction of the senator's son William. Their hope for milder weather never materialized. Though the winter of 1886-87 was severe and cattle losses high, the operation survived and grew. Inclement weather actually served the good purpose of convincing Cochrane that hay needed to be stored for winter feed and by the early 1890s corrals, wind shelters and feeding areas could be seen on the ranch. The Cochrane spread eventually boasted 13,000 cattle and continued to profit until the Senator's death in 1903. It was sold to the Mormon Church in 1906. Thus the life of the biggest southern Alberta ranches ended, but at its height Cochrane's empire totalled over 330,000 acres.

Cattle	
Major Walker's estimate of Stock as of Apr. 1 st 1882.	
Cows	3330
Heifer calves	405
Yearlings	692
Steeves 3 yos.	533
2 "	788
1 "	693
Bull calves	705
One Lam Bulls	5
Hereford "	41
Polled Angus "	9
Prizes	135
Wool Oxen	10
	7639
and	212
	7851
deduct	597
Approximate number on hand 7,254	

As impressive as the Cochrane operation was, the North-West Cattle Company exceeded the Cochrane Ranche in life span and fame. Fred Stimson, a successful farmer and stockman from Quebec, registered the

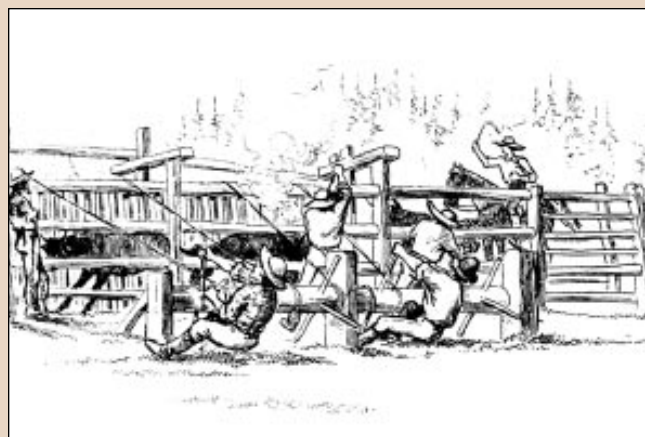


24 October, 1882

"...got through with 132 head. Squeezing gate and outside gate worked very badly."

- Frank White's Diary

Glenbow Museum / NA-2951-1



30 October, 1882

"Finished new squeezer and commenced branding at 11 AM. Branded 443 head."

- Frank White's Diary

Glenbow Museum / NA-2951-2



▲
George Lane's Bar U Ranch
headquarters southwest of
present day Longview, Alberta.
Glenbow Museum / ND-8-61

Bar U brand in the autumn of 1881, about the same time the first Cochrane herd was arriving in southern Alberta. Stimson acquired the financial backing of Montreal businessman and steamship line owner Sir Hugh Allan, and in the spring of 1882 rode to Idaho with cattleman Tom Lynch. There he bought his first herd of three thousand cattle and together the two men led the drive up to ranch headquarters located along the Highwood River.

The Stimson and Lynch drive was much different than the hurried one undertaken by the Cochrane outfit the previous year. Lynch knew the country well, and carefully led the cattle through adequate grazing and watering areas. Helped by the great cowboy John Ware, the Bar U crew divided the cattle into three units of a thousand each, and

paced them to ensure adequate feeding and rest. The day's routine allowed for two hours of leisure grazing in the morning, a drive until noon, two or three more hours for grazing, and then a few more hours of travel before camping for the night. It took longer to arrive at the ranch, but the cattle kept their health and weight.

The Bar U was perhaps the best managed of the great early cattle ranches. The operation survived tough winters, prospered, and eventually became nationally and internationally known. In 1886 alone it declared a profit of over \$133,000. Many excellent ranchers and stockmen rode for the Bar U including John Ware, Herb Millar, and George Lane. In addition to being a good manager, owner Fred Stimson was a bombastic individual and colourful



"At Pekisko, the headquarters of the Bar U, the buildings are arranged on both sides of the roadway like the street of a small village. At the west end, on the bend of the little river, where tall cottonwoods grow here and there, stood the main dwelling house, built in Stimson's time for his residence and used by the Lanes as such when there. The Lanes lived chiefly at their Willow Creek ranch, the Flying E, and they had a house in Calgary. On his first trip to Alberta our present King [Edward], then Prince of Wales, came to this modest house as guest. A story is told of how, on the morning of his visit, His Royal Highness wanting badly to explore about by himself and not

wanting to awaken the household, made his exit through his half story window. Dressed in running shorts, he dropped to the ground to find himself in the presence of Miss Lane who was picking flowers to decorate the breakfast table. We heard that this informal encounter served to break the ice and remove whatever tension was felt between the family and their Royal guest. Unfortunately, since this visit which made it famous, the little house has burned down."

- Frederick William Ings



Looking west at the Bar U Ranch headquarters. The main dwelling house is at the end by the cottonwood trees. (c. 1890) City of Lethbridge Archives / P19770261001



► **Cattle grazing on the Bar U Ranch near High River. (c. 1930)**

Glenbow Museum / NA-67-6

storyteller. He left Alberta in 1902 after the last of the Allan brothers died. The North-West Cattle Company was eventually sold to a firm established by George Lane. When Lane died in 1925, ownership of the ranch was purchased by Pat Burns.

Probably more than any of the other “big four” ranches, the Bar U had a distinctly British look and feel. It featured massive and sumptuous houses, hosted formal occasions and had many English “gentlemen” participating in various sports such as polo. One highlight was a 1919 visit from Edward, Prince of Wales, who would later become King of England.

The Oxley Rancho Company was started in 1882 by John Craig, an Ontario farmer and Shorthorn breeder. Craig secured the interest and investment of Alexander Staveley Hill, a British Member of Parliament (and close friend of John A. MacDonald) and the Earl of Lathom, a prominent English cattle breeder. These two became major shareholders of the ranch which was named after Hill's summer home. It was established on two separate locations along Willow Creek north of Fort Macleod, with

headquarters just north-west of present-day Claresholm.

With Craig serving as manager, the first purchased stock arrived from Montana in the summer of 1883. During that first cattle drive, Craig noted how important it was to let cattle drift in order to find adequate feeding, even as they moved. He concluded that ten to twelve miles of travel a day could be accomplished with little exertion and virtually no loss to animal flesh or numbers. When it was time to stop for the night, a very effective strategy of herd control involved a simple feeding technique. The cattle at the front were led to a particularly lush area of grass where they would come to a complete stop to indulge on nature's provisions. When the rest of the animals arrived and caught sight of the banquet it would take little effort on the part of cowboys to control the entire herd and settle them down for the night.

Although the Oxley Rancho Company was well located and moderately successful, it was beset by internal conflict. Craig had difficulty getting funds from his directors, and Hill and Lathom questioned Craig's managerial skills and decisions



◀ The Oxley Ranch riders and round-up crew by the cut banks of the Oldman River near Fort Macleod. (c. 1898) Glenbow Museum / NA-620-1

► **Oxley Ranch house. (n.d.)**

Glenbow Museum / NA-3535-216

**Men of the Oxley camp during a
general round-up of southern
Alberta on June 13, 1901.**

Glenbow Museum / NA-365-3





regarding stock acquisition. The troubles and tensions hit the newspapers and Craig eventually resigned from his leadership position in 1885. In 1903 he wrote a book entitled *Ranching With Lords and Commons*, articulating the tribulations of managing a ranch for British aristocracy. Hill's nephew Stanley Pinhorne succeeded Craig as manager and in 1886 the operation was reorganized under the new name of the New Oxley (Canada) Ranche Company. It was eventually sold to William Roper Hull in 1903.

The fourth large early ranch in southern Alberta was established in 1883. Officially named the Walrond, locals called it the "Waldron" for ease of pronunciation. The driving force and first general manager of the Walrond Ranche organization was a Dominion Veterinary surgeon named Duncan McEachran, an original shareholder in the Cochrane Ranche. The Walrond was named after principal stockholder Sir John Walrond, a British Conservative.

The original Walrond Ranche land lay along the North Fork of the Oldman River on the west side of the Porcupine Hills, extending southward along the river. The first herd of three thousand Montana cattle was purchased in 1883 and the operation was running the following year. Land was gradually added, purebred animals imported, and a lucrative export business to Britain developed. Sir John Walrond's death in 1889 and a company reorganization in 1897 did not adversely affect the business. The disastrous winter of 1906-07 resulted in serious losses, however, and the herd was eventually sold to Pat Burns in 1908. In its heyday, much of Britain's finest blue blood and accompanying social prestige was part of the Walrond's fraternity.

So significant was the dominance of these four large early ranches on Alberta's fledgling cattle business that by 1884 they controlled roughly one-third of the leased ranchland in Alberta. The strong eastern Canadian and British influence also made the western

▲
Cutting out cattle on the Willow
Creek range near Claresholm.
(c. 1898) Glenbow Museum / NA-365-1



▲
**Haying on the Walrond Ranche
after a bad winter. (c. 1893)**

Glenbow Museum / NA-237-14

▲▲
**The Upper Walrond Ranche and the
Rocky Mountains. (c. 1893)**

Glenbow Museum / NA-237-11

Canadian ranching frontier distinct from that of the American north-west.

By the mid-1880s practically all the foothills region south of Cochrane had been assigned in some way, with many ranches holding leases from the mountains eastward. They featured a

variety of owners and each displayed a unique character. By so doing they reflected some of the early specialization that was a precursor to the later market trend of serving specific consumer needs. Some lasted longer than others, but they stood or fell on the basis of whether they could adequately meet enduring needs while surviving the weather and the challenges of cattle management.

The Quorn Ranch was started in 1886 by Englishman C.W. Martin, who interested a group of well-to-do sportsmen in Leicestershire, England in establishing a ranch in the Foothills region between the Sheep and Tongue Creeks. The primary purpose was to raise horses for the English hunting market. Martin would often entertain investors at the ranch and it was not uncommon to see a western version of the popular British fox hunt take place with coyotes serving as the prey. Eventually, the ranch became known



for its stallions and Polled Angus cattle. The lucrative English market for highly bred horses was never realized however, and financial constraints reduced the ranch's fine stallions to working farm animals. The ranch declined until its closure in 1906.

The Winder Rancho Company began as a 50,000 acre operation in 1883, started by William Winder, former North-West Mounted Police superintendent and brother-in-law to Fred Stimson of the Bar U. It was later run by longtime Alberta cattleman Fred Ings. American influence was felt in the establishment of the McIntyre Ranch in southern Alberta, named after the Texas family who started it. Railway men were behind the establishment of the Glengarry Ranch in 1885. It was nestled in the Porcupine Hills and owned by railway contractors William MacKenzie and Donald Mann, who worked closely in later years with Pat Burns to diversify the cattle business and begin some of the early intensified cattle feeding.

The EP Ranch was homesteaded in 1886 by Mrs. A.K. Bedingfeld, an English widow, and her son Frank. It was 1600 acres in size and situated near Pekisko Creek. After Edward, Prince of Wales, visited the Bar U in 1919 he was



so impressed with the ranching community that he bought the EP, extended its size, and began a purebred horse and sheep business. The Prince made a number of visits to his ranch over the years and his status as owner made the EP world renowned.

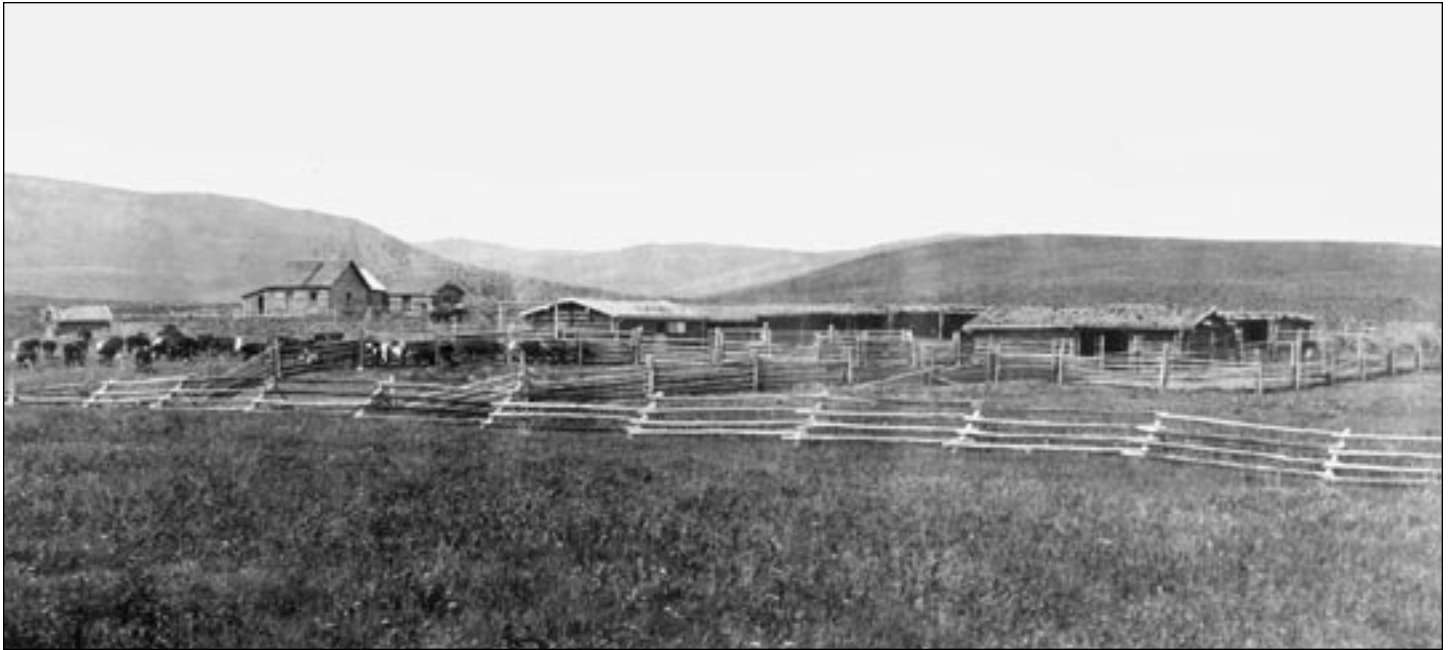
Another famous cattleman of the first half of the twentieth century was Joseph Harrison "7 U" Brown. He began as a horseman for the Bar U, and later purchased 50 heifers in 1886 and went into partnership with Frank Bedingfeld.

▲
Barn on the E.P. Ranch near the Pekisko Creek. (c. 1920)

Glenbow Museum / ND-8-42

▲ ▲
Round-up on the McIntyre Ranch in southern Alberta.

Glenbow Museum / NA-4510-840



▲
John Lister Kaye of the 76 Ranch.
(c. 1884) *Glenbow Museum / NA-967-37*

▲ ▲
The Hay Creek Ranch. (c. 1888)
Note the hay-roofed log sheds and the fencing in the foreground. The cattle shown here were the first registered Herefords brought into Alberta in 1886.
Glenbow Museum / NA-2278-1

Taking leases beside the Highwood River, he began what would be a fifty-three year career working with cattle on the foothills rangelands. Building his house on Hay Creek, “7 U” Brown (nicknamed after his brand) ran a thrifty and hardy herd of Herefords and Shorthorns. Brown’s fame arose partly because he became personal friends with the Prince of Wales.

Two other prominent ranches had somewhat unique ownership schemes. The Military Colonization Ranch, started by Major-General Thomas Strange in 1883 on the north side of the Bow River, raised horses for the British army and served as a haven for retired officers. It was eventually absorbed into the Canadian Agricultural Coal and Colonization Company. This CPR-initiated colonization scheme tested land suitability for farming across the prairies. Dry conditions ended the plan in two years, but farmer John Lister-Kaye from Qu’Appelle Valley took over the operation, establishing ten farms from Swift Current to near Calgary on what became known as the 76 Ranch. It was successful until the terrible winter of 1906-07.

Many other ranches gained prominence further eastward at the turn of the century. The Circle Ranch was concentrated in the Medicine Hat area and owned by the Conrad brothers of Montana. Texas rancher A.J. “Tony” Day brought his 25,000 cattle and 600 horses in 1902 to several leases stretching from Swift Current to Maple Creek. It was called the Turkey Track Ranch because of the distinctive brand the animals carried.

When both the weather and political winds (ranchers’ water reserves were withdrawn in 1901) turned against the big cattle companies,



the era of the great ranches began to end. Certainly ranching did not cease entirely, and overall cattle numbers actually increased, but the West's second generation cattle entrepreneurs usually operated on a smaller scale alongside homesteaders. This new generation of cattlemen often picked

off chunks of land that had been part of the huge monoliths in order to begin their own operations. In many ways it was tougher to ranch in the new era, but a half-dozen or so clans endured well into the 20th century and represented well-known modern ranches, some of which were highly successful and long lasting.

One such ranching dynasty in this century was begun by Alfred E. Cross, who learned his trade as a manager and a veterinary surgeon on the early Cochrane Ranche. In the late 1880s he took up a quarter section on Mosquito Creek west of Nanton and purchased a herd of over 400 Shorthorn cattle. Cross began a breeding program combining the qualities of Shorthorn, Hereford and Galloway to gain an international reputation for quality beef. After losing 60% of his stock in the terrible winter of 1886-87 he was able to rebuild his herd and, with the financial backing of his family, he eventually established the A7 Ranche which grew to a 60,000 acre grazing lease. The ranch was named the A7 to represent the number of sons in the Cross family.

◀ **Bunkhouse on the Turkey Track Ranch. (c. 1914)**

Saskatchewan Archives / R.A2723

Cattle in the feed yards on A.E. Cross' ranch near Nanton.

Glenbow Museum / NA-3047-6



CHAPTER ONE

►
John Ware and family in 1896.
(Left to Right) Mildred, Robert,
Janet, and John.

Glenbow Museum / NA-263-1



John Ware's Ranch on the north
fork of the Sheep Creek (now
called Three Point Creek) near
Millarville. (c. 1890s)

Glenbow Museum / NA-266-1

One of the most notable personalities during the golden era of Alberta ranching was the legendary John Ware. While living in Idaho he was hired on as a night herder by the Northwest Cattle Company's Tom

Lynch in preparation for the Bar U's inaugural cattle drive in 1882. Believing Ware to be an inexperienced cowboy, Lynch gave him an old nag of a horse and a seemingly befitting saddle. Soon into the drive, Ware asked Lynch for "a little better saddle and a little worse horse." Always looking for a good laugh, the cowboys sifted through the horses and saddled up the wildest bronc of the bunch. With the poise and confidence of a seasoned veteran, Ware swung up on the unsettled steed and rode him into submission gaining immediate respect and admiration. Ware's integrity and unmatched work ethic eventually earned him the position of top cowhand for the Quorn Ranch before he bought his own spread on the north fork of Sheep Creek near Millarville. He started off with only nine head of cattle which carried the unusual brand of "9999", on account that nine was his lucky number.

The Hargrave Ranching Co. Inc. was started by former fur trader James Hargrave near the town of Medicine



"When the cattle almost perished in the hard winter of 1886-7, James [Hargrave] knew he had to find a better place for winter grazing. He moved them fifteen miles south on Little Plume Creek, but here prairie fires twice burned out the hay crop. Indian friends then told him about a good area 35 miles east when thousands of buffalo used to winter along creeks near Walsh with good grass and shelter. James took a homestead ten miles north of Walsh...[and] trailed the cattle to this place late in the fall of 1888. In early years, the foreman ran the ranch, with Hargrave boys working there in summers. James raised mostly shorthorns, selling four-year-old steers off the grass."

- Hope Hargrave Michael



▲ **Cattle herd near Medicine Hat owned by Hargrave and Sissons. (c. 1887)**

Glenbow Museum / NA-4061-2



◀ **The James Hargrave family in Medicine Hat, Alberta. (c. 1887)**

Glenbow Museum / NA-4061-3

Hat and extended into Saskatchewan. In 1888, on the advice of a Cree Indian, he moved his herd to the Many Islands Lake district. It was still being run by Hargrave's grandson over 100 years later.

Walter Ross brought his 400 Shorthorn heifers to the Magrath area in 1885. Over the years the Ross ranches expanded to encompass 12,000 head of cattle on half a million acres in southern Alberta, southwestern Saskatchewan, and Montana. One hundred years after Walter got his start the Ross family remained strongly

represented in the southern Alberta cattle industry. As the 1990s began, Walter Ross' descendants Jack, John and David were operating the Milk River Cattle Company south of Lethbridge, and George had the Flying R south of Cypress Hills.

A number of ranches in this century have been owned by the Copithorne family, clustered around the Cochrane area. John Copithorne ran the Lazy J Ranch, and brother Richard herded Herefords and over 300 Clydesdales at Jumping Pound Creek,

► **Cattle on the CL Ranch near
Jumping Pound Creek. (c. 1900)**

Glenbow Museum / NA-3017-5



west of Calgary. A third brother, Sam, built up his own Hereford ranch in the Springbank area. Marshall Copithorne runs a cattle and grass operation called the CL Ranch west of Calgary.

In 1914 the Gilchrist brothers – Joe, Rube, Chay, Jack and Sandy – formed a ranching partnership that spread across southern Alberta and continues today

through their descendants. They first bought the Whitemud Ranch south of Maple Creek, Saskatchewan. By the end of the thirties, they owned a number of ranches totalling thousands of acres in southeastern Alberta including the Q Ranch, the Cross Z Ranch, the Lost River Ranche, and the Deer Creek Ranch. The brothers wound up their

“When I was a kid, my dad, Percy, was raising “commercial” [meaning unregistered] Herefords. They were about as close to purebred as you could get; we were ashamed to put our brand on an off-colour cow. But that was a recent development. The CL cow of Grandad Richard’s day was another matter a multicoloured, dual purpose Durham. But, soon after the Calgary Bull Sale started in 1910, he began buying Hereford bulls and slowly our herd became “white-faced and feather necked” – typically Hereford. But, whatever the breed or cross, we were always meat producers as opposed to breeders.”

- Marshall Copithorne



▲ **Hereford bulls with shelter and bedding.**
Photo Courtesy of Ted Pritchett

huge cattle business in 1945 but the Deer Creek and Whitemud Ranches were retained.

Lachlin McKinnon, who began as a foreman on the 76 Ranch, started his own small cattle business in 1894. Though faced with much misfortune in the early years, he persevered and the LK Ranch prospered. Subsequent generations of the McKinnon family would expand into the oil and packing industries while remaining in the beef and horse businesses. They would also be progressive cattle feeders, being among the first larger cattle owners to make grain a standard addition to livestock diet at the turn of the century.

As a rancher, horseman and meat dealer, William Roper Hull was another successful cattle owner and businessman. He operated large ranches like the Walrond, the Bow Valley in the Midnapore area in 1896, and the Pine Coulee fifty miles southwest of the city. The Bow Valley was originally a 4000 acre government supply farm. Under William and John Hull's guidance, the ranch became a showplace for many visitors.

In 1902 Hull's Bow Valley farm was purchased by Pat Burns, leading



Calgary businessman, rancher and meat packer. Burns also gradually acquired adjacent sections of land. Eventually his Bow Valley Ranch included 20,000 acres bounded on the north by what is Stampede Park in Calgary today. That was really only a fraction of Burn's total ranching empire of 450,000 acres, which was spread over a number of locations. After 1900 he purchased a series of ranches including the CK, Ricardo, Kelly and Palmer, the Q, and Walrond. Many ranchers after the World War I were willing to sell their land because of financial troubles

▲
View of the Rawlinson Brothers Ranch in the Calgary area.
(c.1900) Glenbow Museum / NA-963-3

Bert Sheppard's ranch near High River. (c. 1934)
Glenbow Museum / NA-67-9
▼





▲ The Burns Feedlot, also known as the Gordon Ranch, with the packing plant in the background. Cattle from all over Alberta were brought here and grain fed for customers who demanded the finest quality beef. Generally the cattle were sorted in southeast Calgary at the Bow Valley Ranch (present day Fish Creek Park), then sent to the feedlot for finishing. The feedlot was located where Deerfoot and Glenmore Trails now intersect. (c. 1910s)

Glenbow Museum / NB-16-372

► The Rio Alto Ranch house on the right and the High River R.N.W.M.P. detachment. The ranches' OH brand was originally registered by Oliver Henry Smith in 1881. (n.d.)

City of Lethbridge Archives / P19754432000





caused by lowered cattle prices. At one time or another, the Pat Burns empire controlled the Bar U Ranch, the Bow Valley Ranch, the Ricardo Ranch, the Ten Ranch, the Gordon Ranch, the Sheriff King Ranch, the Ross Ranch (Calgary), the Ross Ranch (Milk River), the Reid Ranch, the Imperial Ranch, the C.K. Ranch, the Neilson Ranch, the Nose Hill Ranch, the Lineham Ranch, the Quirk Ranch, the Buffalo Head Ranch, the Kuck Brothers Ranch, the Minto Ranch, the Flying E Ranch, the Glengarry Ranch, the Walrond Ranch, the Mackie Ranch, the Lazy H Ranch, the Circle Ranch, the 76 Ranch, and the Rio Alto Ranch, just to name a few. The Bow Valley Ranch still remained in the family after his death in 1937. At the height of his prosperity, Burns' landholdings approached half a million acres and it was said that one could ride from the United States border to Calgary without ever leaving his land. Burns thus became one of the major ranching forces in Alberta during this

century, purchasing large herds of purebred Herefords and expanding his horizons to be a freighter, trader, dealer and meat packer. Together with George Lane, A.E. Cross and A.J. MacLean, Burns helped spearhead the first Calgary Stampede in 1912.

Family ownership has clearly been and continues to be a strong feature of the cattle community since it began over one hundred years ago. Although mixed farming eventually became an important component in the agricultural fabric of the western Canada in this century, cattle operations have maintained a strong presence in southern Alberta. 🐮

▲
Cattle ranchers and their families gathering at the Davies Ranch in the Crawling Valley area of Alberta after a cattle dip. Family ownership has always been a strong feature in the cattle community. (c. 1909)

Glenbow Museum / NA-2142-2





Life on the Ranch in the Early Years

Cattlemen in the early 1880s enjoyed the benefits of a vast and seemingly endless range where their livestock could roam and feed almost at will. With a good corral, a branding iron, and a few cowboys, cattle owners could easily convert the Queen's abundant and practically free grass into a substantial return in beef. Overhead was low, so most of the early ranchers simply fed their animals for four or five years on the virgin prairie. It was a relatively straightforward enterprise. Ranching practises in the northwestern United States were similar, so much of the work tradition on Canadian ranches was inherited from the south, though somewhat modified due to differences in climate and geography. That meant a fairly predictable cycle of seasonal activities undertaken in close step with the rhythms of nature.

Work was the common bond that all cowboys on the Canadian range shared. The busiest times of the year were spring and autumn when cattle were rounded up for branding, dipping, and shipment to market. Summer and winter chores consisted primarily of maintenance activities.

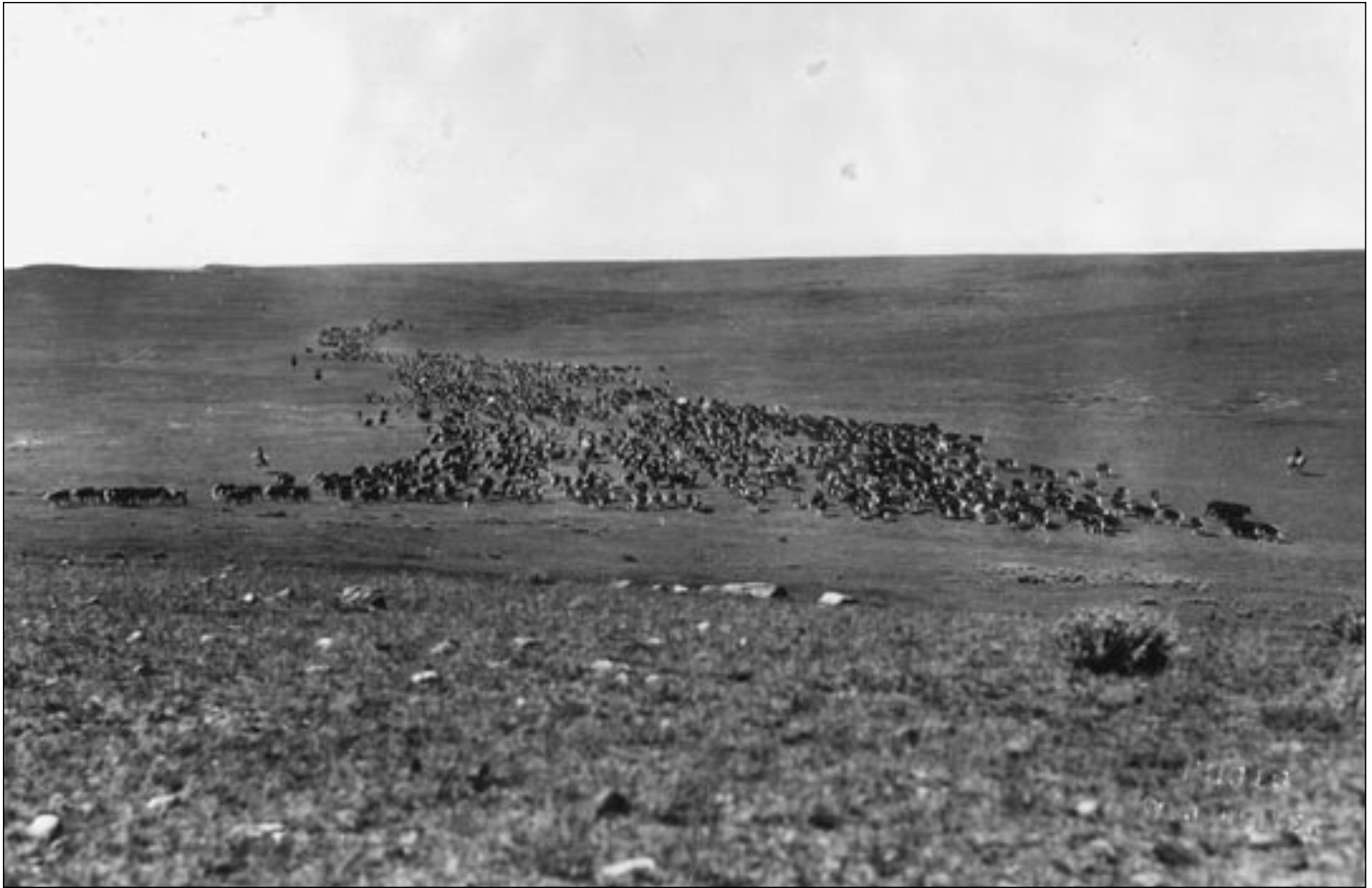
Spring work generally started in late May or early June with the ranch hands or cowboys entering a period of intense activity. It was centered around the spring "round-up" which focused on gathering and branding newborn calves. These round-ups were often community or joint affairs involving more than one ranch. It was not uncommon in the early days to have a number of ranches pooling their cattle in order to expedite the work and ensure that stock was carefully separated during branding.

▲ **Branding on the Deer Creek Ranch in the Milk River area. (c. 1912)**

Glenbow Museum / NA-774-7

◀ **Cowboy riding a bucking bronc on the CC Ranch. Mosquito Creek, Alberta. (c. 1901)**

Glenbow Museum / NA-4571-11



▲
Montana cook, "Mexican John"
preparing grub from the back of
his chuckwagon. (c. 1880s)

Glenbow Museum / NA-207-108

▲ ▲
Cattle round-up on the Brower
Ranch near Wild Horse, Alberta.
Note the point riders.

Glenbow Museum / NA-2489-2

In a typical spring round-up the largest ranch in the outfit would provide the foreman or "range boss", the chuckwagon and cook, and a horse wrangler to "break" or calm the more unsettled horses brought along for the work. Often smaller ranches could only provide one or two riders or "reps" who would pay the cook and accept orders

from the foreman. When the round-up crew was gathered, the range boss would give the orders for the day and different men would ride circle routes to bring the cattle into a predetermined location for branding. While riding the range, cowboys would often need to husband or rescue cattle or calves experiencing various needs. The rider could find himself pulling a calf out of mud, helping a cow give birth, or otherwise treating an animal that was ill or underfed. Once in camp, the cowboy's skill in riding, roping and tying calves served him well as animals were branded and then released to join the herd for summer grazing.

Stories about cowboys and their lifestyles on the western Canadian range are legendary. In the early years these ranch hands often had little need to use watches or even calendars to do their work. Old-time Alberta cowboy Billy Henry admitted not being able to pinpoint exact dates of early events because cowpokes on the range sometimes did not even know what month it was!

Summer work could involve fencing and making hay, especially in the later years when putting up feed for the winter was found to be the wise thing to do. Cowboys were notorious for not enjoying haying and other “farming” tasks such as fence and windmill maintenance, so new developments in feeding were not strictly associated with the heyday of the Canadian cowboy. Feeding activities which the historical cowboy did participate in involved riding the range and driving cattle to new or better areas of grass and water.

The autumn brought with it the “beef work”, where cattle were rounded up again, but this time for shipment to market. Summer calves or those overlooked in the spring were branded. Large companies, which had significant



◀ **Fencing crew in the Groton area. Cowboys were notorious for not enjoying “farming” tasks such as fencing, haying and ranch maintenance work.**

Glenbow Museum / NA-2616-16



◀ **Cowhand from the Leslie Ranch near Picture Butte leading a cow and calf across the Milk River to summer pasture.**

Harry Rowed / Public Archives of Canada / PA 133635



▲ **Dipping cattle on the Circle Ranch near Queenstown, Alberta. When mange became an issue in animal health and safety, dipping vats were built. Cattle were forced to swim through a special solution to kill the disease. The federal government built vats at various locations to enable all ranchers to protect their cattle. Larger ranches had enough resources to build their own and avoid the hassle of trailing their cattle to a community vat.**

Glenbow Museum / NA-761-4

numbers of cattle ready for market, would sometimes drive and load their stock until the snow fell. When diseases like mange appeared in the late nineteenth century, fall work included dipping the animals in a special solution to control the problem.

An eventful roundup occurred in 1884 when cowboy J. Montagu Leeds participated with eight others in moving four thousand head from Montana to the Claresholm area. That drive alone took the better part of the summer, and on October 16 Leeds joined with four other riders and a cook to begin a long autumn drive of 150 miles to the Medicine Hat railhead. The herd headed for market and consisted of 350 four year-old steers. Upon arrival at the "Hat", they had to hold the herd seven miles from town and divide them for loading in two stages. There were no stockyards and the cowboys found only a small pen with an chute used to unload a cow or gentle horse, so with the help of some CPR men they built a makeshift loading yard using heavy square timber.

► **Cattle being herded up the ramp to a box car for shipment east. Southern Alberta. (c. 1901)**

City of Lethbridge Archives / P19640355002

Loading the first shipment of a hundred head was relatively easy, but unexpected problems then arose. The townspeople of Medicine Hat had never seen cattle being loaded before, and came out in full force to view the event. The mass of spectators frightened the animals and the temporary corral was scattered like matches as the cattle stampeded north of the town. Miraculously, no one was hurt as the spooked herd went through the people like a charge of cavalry. Shipping them that day was no longer possible. The cattle did get loaded eventually, but only after the corral was rebuilt from scratch and a sudden snowstorm discouraged onlookers from coming back out of their homes!

Most cattle drives were not so eventful; the majority were smaller in scale and carried out more smoothly. In the winter of 1884-85, the Stewart and Halifax ranches near Pincher Creek moved two hundred head of cattle to Calgary. This trip of almost two hundred miles was made in twenty days. Driving the herd carefully, the cowboys allowed the animals to find their own feed along the trail. At this time there were recognizable "feed





areas" where cattle could rest and replenish themselves on grass and hay. The feed had been bought from farmers who also made the delivery on hayracks pulled by horse teams. The well fed animals maintained weight, and the dressed carcasses averaged nine hundred pounds. The skill of the cowboys in quickly moving cattle, while at the same time allowing for adequate feeding, made itself evident in dollars and cents.

Despite all the hard work, cowboys did have time to relax from this hectic and unpredictable schedule. Winter was the slow time, and while many cowboys were laid off, others who were more well-established were retained. In this season they often rode the ranch in order to "troubleshoot" or simply keep cattle from roaming. Although their work also included inglorious tasks such as breaking ice for water and hauling firewood, winter was also a time for rest, reading and more creative and extended social activities. 🐮



▲ **Bruce and Jim Hunter in their house near Dog Pound Creek. Bruce is taking the picture using a string tied to the camera.**
(c. 1897) *Glenbow Museum / NA-1097-5*

◀ **Cowboys providing entertainment in Cochrane, Alberta. (c. 1890s)**
Glenbow Museum / NA-1130-15



◀ **Cutting ice on the Milk River for use at the Spencer Ranch in southern Alberta. (c. 1900)**
Glenbow Museum / NA-2436-21





Hardships, Challenges and Lessons Learned

The establishment and early life of the Cochrane, Bar U, Walrond and Oxley enterprises represented what is often considered a romantic period when cowboys rode the range and fences were few and far between. These operations enjoyed a fairly unrestricted choice of land that featured bountiful grazing territory, but the brutal winter of 1886-87 put some operations out of business completely and drove home the reality that year-round grazing could not be taken for granted by anyone.

Before that time, almost all feeding on large ranches was done on the open range. Managers like the Oxley's John Craig may have occasionally put up some grass when heavily grazed areas

were in need of rejuvenation, but that was strictly the exception. Most cattle feeders on the large spreads marvelled at how cattle could eat, live and flourish with no shelter to cover them and no food other than standing grass.

Hindsight would eventually reveal that this somewhat carefree practise of feeding reflected a lack of judgment, because it resulted in the overcrowding of choice ranges and overdependence on chinooks to bring cattle through winter. When turned loose on the range in summer, cattle would instinctively locate to areas offering the richest and thickest grass, abundant water and the best natural shelter. The result would be a depletion of ranges that were most vital for winter feeding. Feeders soon

▲
Dead cattle on the Bow River Ranch near Cochrane on May 22, 1903 after a severe snowstorm.

Glenbow Museum / NA-2084-24

◀
During the golden era of large ranching in Alberta, thousands of calves died as a result of spring storms. Glenbow Museum / NA-2784-24



▲
**Stacking hay from the Blood
 Indian Reserve on the Cochrane
 Ranch. (c. 1905)**

Glenbow Museum / NA-451-7

realized that no less than thirty acres of range was required to carry a single animal for a year and that native grass, once grazed, would take a long time to reappear. When it did, it was fragile, less nutritious than before, and largely incapable of providing much food value in winter.

Farmers owning less cattle habitually fed their animals through the winter with gathered hay and kept them under adequate shelter, but the larger outfits were slow to learn the value of this practise. When A.M. Burgess, Deputy Minister of the Interior, suggested in 1884 that large ranchers should copy the practise of making hay, his words were not taken seriously. He surmised that the sometimes adversarial relationship between the farmers and ranchers may have been the cause of this, but the simple fact was that ranchers retained an unbounded optimism in the capacity of the land and climate to provide all that was necessary for cattle. Very few bothered to put up hay for winter feed because, though they recognized some

risk, they accepted it philosophically. Philosophy would soon give way to the bitter realities, brought on by severe Alberta winters.

Bad weather combined with some other factors to provide the first significant failure in the cattle industry. It occurred, ironically, to Matthew Cochrane, the first to take the risk of establishing a huge operation in cattle country. Cochrane had ordered his first large herd of cattle to be quickly driven from Montana to the Calgary in the autumn of 1881. The animals that survived the drive arrived in a fatigued and shrunken condition. An early snowstorm and a subsequent severe winter claimed hundreds more weakened animals. There had been no time for them to recover by grazing, or become accustomed to their new home.

The onslaught of cold weather also resulted in hasty and improper branding. This caused serious disputes with other farmers the following spring, as many claimed their cattle were conveniently rounded up with the Cochrane herds. It could not be

determined exactly how many Cochrane cattle had died over that first winter, but ranch manager James Walker estimated losses to be close to one thousand head.

More cattle were purchased in Montana in the summer of 1882, but the previous year's errors were virtually repeated. The drive to the Cochrane Rancho was as hurried and as merciless as the first one. It was an exhausted herd that arrived at Fish Creek in September of 1882. Another early snowstorm hit the area, followed by bitter cold. Rather than allowing the animals to rest in order to adequately feed and survive the storm, they were driven to ranch headquarters and many more died en route.

The winter of 1882-83 was also long and cold but Senator Cochrane (giving orders from eastern Canada) refused to allow the cattle to head east to better grazing area. Sufficient hay had not been stored and by the spring of 1883 dead cattle seemed to be heaped in every coulee, thousands of head having perished. Of the 12,000 stock purchased in the previous two years, only a third remained. The fact that other ranches had suffered no great loss during the same time period punctuated the



extent of the Cochrane calamity. Cochrane then move his cattle operation down south.

The Cochrane Rancho failed as a result of a number of factors. Uncontrollable ones included the early and harsh winters, the sheer distance from key markets in Montana, and slow communication between the owners in

◀ **Senator Matthew Henry Cochrane (1823-1903).** As president of the Cochrane Rancho, he managed it from his home in Compton, Quebec. He was called to the Senate on October 17, 1872, ten years prior to giving orders to move the ill-fated herd of cattle from Montana to the Cochrane lease west of Calgary. William Kerfoot's son once said that they [Cochrane and the other general managers] "...had the knack of getting together a lot of good men and then ignoring their recommendations, usually with heavy loss to themselves."

Glenbow Museum / NA-239-25



◀ **Burying dead cattle in a mass grave near Blackie, Alberta.**

Glenbow Museum / NA-2245-1

eastern Canada and the ranch management on the range. These would have been problems faced by any large operation of the time. The unfortunate manner in which the cattle were driven and fed was controllable. Cochrane did not have first-hand knowledge of western Canada, but he also did not heed the advice of locals like Kootenai Brown or experienced stockmen like W.D. Kerfoot when they warned him of harsh winters and the need to store hay. He also rigidly followed the practise (common in his native Quebec) of not allowing cattle to wander freely to instinctively find food in winter.

In fairness to Cochrane, he was not the only absentee owner that attempted to run a ranch from afar. The participation of distant investors in the livestock industry was commonplace in the early years. It was standard to have owners and a Board of Directors make decisions far from ranch headquarters and rely on managers who oversaw the long term development of the operation. Day-to-day supervision of the operation then fell to the resident ranch foreman. This awkward and often inefficient setup would inevitably change because, as the case of the Cochrane fiasco made clear, more experience at the top would have allowed freedom for experienced foremen to make more adequate decisions concerning management and feeding of cattle. These were painful but necessary lessons to be learned.

Though many cattlemen arriving later were spared the ravages of the winter of 1882-83, the devastating winter of 1886-87 was a brutal experience causing the first major setback on a large scale basis, driving more large ranchers completely out of business. Despite the losses, it convinced other cattlemen of the need for adequate winter feeding preparations. Eye-witness accounts of the effects of that winter have been well-recorded, and a classic presentation was published by L.V. Kelly in his historic masterpiece *The Range Men*:

"The old North Wind, thinking that Alberta had enjoyed too many chinooks and mild seasons, produced from the darkest corner of his varied storeroom the bitterest weather in stock, and poured it down on the herds of Alberta, keeping it up from before Christmas till the end of February, and then changing to wild floods and fierce snowstorms ...deep snows had fallen and drifted, crusting so heavily that no steer could "muzzle" through to the hidden grasses, though the wiser horses managed to make pretty good shift with their hoofs. Very little hay had been put up owing to the ranchers' belief that it was unnecessary and also to the fact that so much good hay-land had been grazed over during the summer and fall. Only a few stacks of tame grasses were in the whole country, and very little wild hay. John Herron of Pincher Creek had a few stacks of millet and other tame hay, the first grown in the district, but as a rule every rancher was woefully short on feed.

The storms and drifted, crusted snows were a terrible blow, especially among the new or "pilgrim" stock that had been brought into the ranges in vast herds...When the bitter weather was at its worst, there were forty thousand starving horned creatures within a radius of twenty-five miles of Macleod.

The rabbits died, the lynx left, the herds of antelopes starved in hundreds. The I.G. Baker Company's cattle, the first "beef" herds in Alberta, were scattered widely through the south and suffered frightful loss. Sixty per cent of this first beef herd was wiped out in the winter of 1886-87.

All over the ranch country the price of hay soared to phenomenal prices, ranchers standing willing to pay forty dollars a ton for all they could get and being unable to secure a single wisp. Those fortunate enough to possess a few stacks hoarded it like gold and stood ready to fight to save a single forkful.

Clustering in the coulees or huddling on the open, animals suffered and died in enormous numbers. Some, breast-high in packed and crusted

banks, died as they stood; some who were sheltered somewhat by bluffs or coulees starved pitifully, ravenously searching for food until the frost had reached their vitals. The bodies of great steers were found in the spring, heaps of them, and their throats and stomachs punctured and torn by sharp splinters from dried and frozen branches and chunks of wood which they had swallowed in their anguish."

Kelly reported that the average cattle losses in the Province were about twenty-five per cent in the Calgary district, fifty to sixty per cent from High River to the Old Man's River, twenty to twenty-five per cent in the Pincher Creek country, and fifty per cent in

Medicine Hat. It was painfully clear that cattlemen simply did not adequately prepare to feed their cattle through a difficult winter. Ranchmen in the future would have to be more respectful of the realities of southern Alberta's weather and more aware of the type and amount of feed required to husband their stock.

Early cattle owners and feeders faced more than just unpredictable weather and managerial shortcomings in their work. Another destructive element in the early days was prairie fire. Early spring and late fall were the worst times, when grass was parched dry and the snow had disappeared. A typical prairie wind would function as a



◀ Fighting a prairie fire at Ghost Pine Creek near Elnora, Alberta. (c. 1906) Glenbow Museum / NA-1502-1

"All ranchers, no matter what class of stock is their speciality, now cut large quantities of hay, and nearly all have shelter of some description for weak stock. Some of the more advanced cow-men are now yarding up their calves in the fall and feeding all winter. It will be found most beneficial to both calves and cows, and the calves of the following season will also be stronger."

**-Commissioner L.H. Herchmer
North West Mounted Police
1888**



▲ Stacking hay from racks on the Peigan Reserve in Southern Alberta. (c. 1892) Glenbow Museum / NA-4461-4

powerful and devastating fan for the blaze. In 1884 the Military Colonization Company was destroyed by fire, and in 1887 the town of Fort Macleod was seriously threatened by a blaze. Causes of a fire could range from hot weather, sparks from a train or gunfire, and other forms of human carelessness. In 1901 one fire that killed or maimed many cattle in the Gleichen area had its source in a cowboy clumsily lighting his pipe.

Predators were also a problem, and the biggest culprit was the full-grown timber or grey wolf. This cunning and powerful animal could cause hundreds of dollars of losses every year, and A.E. Cross once estimated that he lost up to twenty-five colts a year to these predators. The most damage occurred in and around the wooded foothills of Alberta, where the wolves could hide

Cowboys with a dead wolf in the Dorothy area of Alberta. The wolf was preying on cattle that were just being released from dipping. Riders chased down the wolf and ended up killing it with a stone.
(c. 1905) Glenbow Museum / NA-2157-3

"In a letter dated January 5, 1900, it is stated that wolves preyed on young stock. They had killed 50 calves at the M.H.R. ranch and had killed their best bull. George (Armstrong) wrote Peter to send what traps they could spare. In the spring of 1924, George's dog, Dan, an Irish Retriever, was killed by wolves. In April, a light snow enabled them to track the wolves to Battle Creek where they found two dens. George crawled down into the dens and shot the females and saved the pups, which were sent to the Zoo in London."

- Betty Anne Burrows & Mrs. George Armstrong





"A cow bearing the distinctive "WR" (Waldon) brand was seen on the range lavishing huge affection on a calf that carried a "77" hair brand, and returned the affection of the mature mammal with great vigour, wiggling his tail and gambolling around in the excess of great family joy. Anyone seeing these two beasts would have jumped to the conclusion that they were undoubtedly mother and child, despite the man-made evidence to the contrary in the shape of dissimilar brands. A brand, judged the police, can be placed on any animal, but affection is born in them. The result of these quite natural deductions was that John Mitchell, who owned the "77", was arrested and tried on the charge of stealing the calf, but was acquitted. Hence the desire of the police for more satisfactory branding laws."

- Leroy Kelly



Branding cattle in a corral on the Jumping Pound Creek. (c. 1900s)

Glenbow Museum / NA-1939-3

Notice to Cowboys (Advertisement)

"Now that the cattle round up north of the Bow is about to start and that it is the general practice of the men, year after year, when they come into this valley, to sweep everything clean before them....Now I wish it to be distinctly understood that any party or parties whatever, who remove any of my stock, either cattle or horses, from this valley, or are known to do so, will be arrested and tried in the Supreme Court....Stockmen that are obliged to hire help at this particular time would be their own friends if they would avoid these ten and fifteen dollar men, who cannot read a brand when they see one."

**-E. D. Mackay
Calgary Herald
June 9, 1898**

"Timber wolves were not the menace here that they were on the American range, but each year we lost quite a few head of stock. Young colts were their favourite prey, and they took their share as they could so easily hamstring them. They found cattle harder to kill. A cow on the range when attacked by a wolf would let out a bawl that brought cattle on the run from every direction. A wolf would attack from the rear, so that the cattle would form in a circle, head out, with the young in the centre. A wolf would have a hard time to break through the wall of tossing horns....Once George Lane had a nasty mix-up with wolves when he was foreman of the Bar U. He was riding between the forks of the Highwood River when he ran into a bunch of them. Lane was good with a six-shooter and managed to drop several, but one jumped right at him and nearly got him before he killed it."

- Frederick William Ings



Bronze: "George Lane Attacked by Wolves - 1886"

The wolf attack on George Lane has become one of the most revered stories to originate on the Canadian range. This event was portrayed by legendary cowboy artist Charlie Russell in his 1914 painting, and most recently perpetuated in a controversial 12 foot high bronze statue based on Russell's art. The statue, which depicts Lane fending off a pack of wolves, now stands on the Bar U National Historic Site southwest of Longview.

Photo Courtesy of Mac Elder.



▲
Police scouts at Fort Macleod in December of 1890. For many years, the police and aboriginal groups were the main consumers of beef in Alberta.

Glenbow Museum / NA-936-9

and prey more effectively. Some ranchers employed wolf hounds as a deterrent, but they proved to be no match for the wolves and were themselves in danger of being killed. Many ranchers had to eventually deal with the predators using human invention. Until the Alberta Stock Growers' Association introduced wolf bounties in 1891, ranchers sometimes agreed among themselves on rewards as much as \$75 per wolf.

Rustling and petty thievery was yet another early problem. Native Indians were often blamed for theft, especially after the disappearance of buffalo removed their historic source of food and other needs. The passing of treaty and reserve systems by the federal government eventually curbed that source of theft. Rustling also occurred amongst the ranchers themselves, especially in the early days when herds drifted, and before branding ordinances were applied. The few police officers in

the country were unable to cover the range thoroughly to insure security.

Though some of the early ranch companies paid careful attention to breeding quality, most cattlemen showed little interest in the process. The open range was, by its very nature, not conducive to the application of strict breeding control. Once a bull was released on the open range, he often became common property due to his inability to read and respect brands. There was also no incentive to import good bulls for herd improvement when they would only end up sharing the range with inferior animals. Such lack of control resulted in low breeding efficiency, and even though ranches like the Quorn experimented with new imported stock around 1890, the results were disappointing. At the turn of the century Mexican cattle were imported to the Canadian range, but this was also not the answer to improved stock. Eventually the conviction grew that



only by controlled breeding and good management would cattlemen achieve the quality and numbers most desired in their herds.

The western Canadian range actually proved to be home to a number of breeds. Traits of the Spanish-based Longhorns were conspicuous in the early cattle that had been herded up from Montana, but British breeds soon became predominant. Various stockmen featured Herefords, Shorthorns, Aberdeen Angus, Galloways, and West Highland, but it was the Hereford that became the dominant breed on the western Canadian range. They took well to prairie grass, grew large quickly, exhibited hardiness, and were reliable breeders and cross-breeders. The Hereford's popularity did not mean cattlemen would stop experimenting with other breeds over the years.

The early 1890s brought yet another major obstacle when Britain placed an embargo on Canadian cattle for fear of disease. Though western ranchers had the healthiest cattle in the world, disease soon became a real threat. Dipping vats to treat mange were introduced in the late 1890s, and since then veterinarians have applied the latest scientific and homespun knowledge to treat and prevent animal disease.

These various challenges in the early years provided important reasons for cattle owners to band together, for in doing so they could more effectively tackle common hazards as well as



▲
A Hereford bull at Victoria Park in Calgary. Known as "White Face" cattle, Herefords eventually dominated the beef markets in Alberta. (n.d.)

Glenbow Museum / NA-4571-13



▲ ▲
Longhorn cattle at the CC Ranch. (c. 1906) *Glenbow Museum / NC-26-68*

◀
Cattle swimming through a dipping vat in the Byemoor area. (c. 1906)

Glenbow Museum / NA-3596-172

address governmental issues. As the last century ended, the Dominion government received an increasing number of complaints from settlers about over-grazed range. The concerns of these newcomers rushing in would pose new problems for those feeding their cattle on the open range. Once the political winds turned and the lease system changed, livestock owners had to protect their access to the grass and water on the public domain. Roundups provided one way of cooperating in the early days, but as the population increased and the matrix of settlement became more complex, informal organizations could no longer do the required work, and more official associations formed.

The first stock association on the Canadian range was formed in 1882 near Pincher Creek and aptly named the Pincher Creek Stock Association. It was the first of a series of small, regional organizations which were limited in effectiveness. When

cattlemen had to face the reality of farming settlement after the Liberals came to power in 1896 the cattle compact could no longer rely on well-placed individuals in the government to take care of their needs. A more effective political lobby was needed, and it came in the form of Western Stock Growers Association (WSGA), formed in 1896 to consolidate the smaller, local stock associations. The activities of the Association had two main thrusts; the first pertained to range management and the day-to-day operation of the industry, and the second related to political involvement.

Through the Association's efforts, disease control was addressed in an effective manner. After mange made its first appearance in cattle country in 1898 the WSGA worked closely with the government to quarantine and prevent indiscriminate drifting of cattle. Dipping was made compulsory in 1904. The organization also agitated for improved standards of cattle transportation,

Members of the Western Stockgrowers Association outside the Assiniboia Hotel in Medicine Hat. Identified individuals include Duncan McEachren, William Roper Hull, Pat Burns, James Hargrave, Archie McLean, George Emerson, and A.E. Cross. (c. 1903)

Glenbow Museum / NA-2006-1

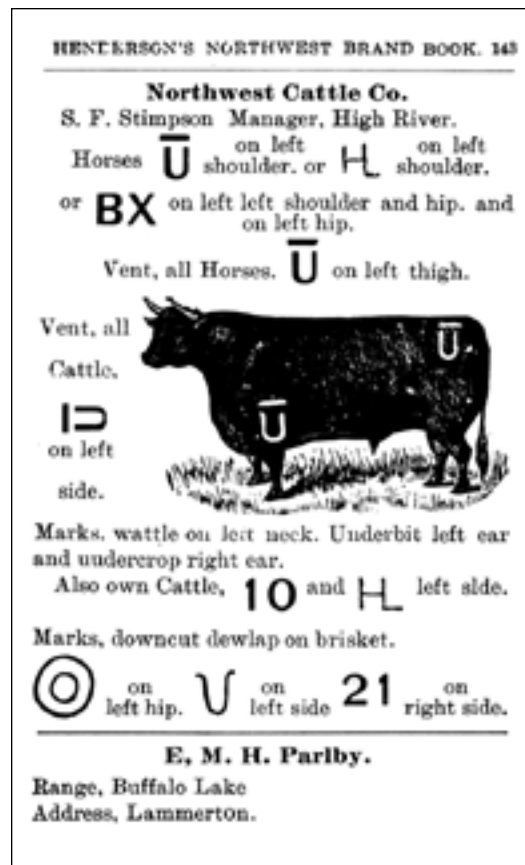




tackling the issues of shipping rates and adequate care of cattle on trips to the east. Although the railway companies in the West needed all the freight traffic they could get to run a profit, they were notoriously shoddy in how they accommodated and cared for livestock. Other contentious issues included compensation from railway companies when trains killed cattle or flying sparks from locomotives started prairie fires. The WSGA worked diligently to address these matters, and was given the power and authority to inspect ploughed fire guards and stockyards.

The Association also helped monitor and control the problem of rustling, offering generous rewards for information leading to the arrest and conviction of thieves. Cattle theft actually increased with the population growth and many smaller cattle owners, who maintained membership in the organization and did not otherwise have the power to protect themselves, were especially grateful for this service.

Perhaps the most important function of the WSGA was to persuade the territorial and federal governments to implement a proper method of stock inspection. A branding system that was binding across the entire cattle country was implemented by the government in 1898. This made it compulsory to



▲ Loading cattle onto a box car to be shipped by rail. (c. 1901)
Glenbow Museum / NA-3375-7

◀ The Northwest Cattle Company's Brand registration in Henderson's Northwest Brand Book. (c. 1901)

have brands registered with the Department of Agriculture. The association also demanded that the distributor of brands be a trusted and experienced member of the cattle industry. Regulations (which were also made into law in 1899) guaranteed that stock were inspected during loading before shipment out of the country. 🐮

CANADA WEST



CANADA - THE NEW HOMELAND



The End of the Early Ranching Era

The slowness of many cattlemen in adopting more adequate feeding requirements was one of a number of reasons the glory period of big time ranching ended. It resulted in considerable loss in cattle quantity and quality which eroded ownership confidence. A government decision in 1892, which stated that the old lease arrangement restraining homestead entry would be cancelled in four years, was another key factor. The election of Wilfred Laurier's Liberals in 1896 was the major political reason for the change in the shape of farming in the West. Laurier favoured homesteading over large-scale ranching, and the big operations became more localized as homesteaders moved in to begin smaller, mixed operations. Ranchers could no longer simply set their cattle free to wander and feed at will. Just as the weather devastated the first Cochrane Rancho operation in 1882-83

and dealt a blow to the entire industry in 1886-87, it wreaked havoc yet again for the southern Alberta ranchers in 1906-07. Thousands of cattle were lost, signalling the end of the open-range system of cattle management.

If the winter of 1906-07 was the exclamation mark that punctuated the era of the era of large ranching in southern Alberta, it was the arrival of the Canadian Pacific Railway way back in 1883 was the beginning of the end. Less than twenty years later, trains carried farmers into ranch country, forever changing both the nature of settlement in western Canada, as well as the face of the cattle industry. From a rancher's point of view, the CPR was a two-edged sword; it created the outlet to markets that lured entrepreneurs from the East to invest in the cattle business in the first place, but then it also was a major player in the more intensive agricultural settlement later on.

▲ **Homesteaders on a wagon loaded with their belongings. (c. 1909)**

Glenbow Museum / NA-3536-1

◀ **Front cover of a promotional publication issued by authority of the Minister of Immigration and Colonization in Ottawa.**

Glenbow Museum / NA-3818-6



▲
Barr colonists at the Saskatoon station with wagons and teams. (c. April, 1903)

Glenbow Museum / NA-118-27

Antagonism between the settlers and the larger leaseholders began in the 1880s and intensified as homesteaders arrived to share the land. Many ranchers felt the squatters and farmers were hindering their operations and, in the long run, endangering the whole industry. They complained that some were trying to establish bogus land claims, and even rustling stock to begin farms. The settlers had their complaints too, claiming that their stock often disappeared after cattle drives of the big ranches had swept through their territory. Several court cases involving the settlers and large leaseholders took place in 1884, and some featured

Single team of oxen ploughing a field near Wainwright, Alberta. (c. 1911)

Glenbow Museum / NC-37-43



packed courtrooms and widespread attention. Groups like the Alberta Settlers' Association, formed in 1885, vigorously lobbied the government on behalf of settlers.

Early in 1892 the Dominion government dealt a key legislative blow to the ranchers by stating that all old closed leases held by the large companies would be terminated in four years time. The cattlemen could purchase up to ten per cent of their leaseholds, but the effect of this decision was self-evident: the law that allowed for huge ranches was a thing of the past.

Cattlemen in the early years of the twentieth century also faced marketing problems and falling cattle prices. Confined to smaller landholdings and needing to spend increasing amounts on land, fences, buildings and winter feed for cattle, the once-large cattleman had difficulty competing with the cash grain farmer. Improved technology in chilling meat and keen competition from other countries placed Canadian beef in less demand. Dry farming

"It would not be profitable for stockmen, in view of the infrequency of severe winters, to make specific provisions against them every year, but in order to escape occasional disaster they must either do this or encourage the settlement of agriculturists in their districts. Antagonism between ranchers and settlers is purely theoretical, such antagonism being forced by small, independent speculators forcing themselves upon the leases of the ranchers and entering into competition with them, and then demanding restitution for being forced to move, or refusing to pay Government rent."

**- A.M. Burgess,
Deputy Minister of
the Interior, 1892**



◀ **Haying with an overthrow stacker on the T.G. Levins Ranch near Kneehill, Alberta. (c. 1906)**

Glenbow Museum / NA-3154-7

technology had also progressed to the point where most areas of the Canadian West were suitable for farming. As the winter of 1906-07 approached, it would meet a cattle industry which was weakened and vulnerable.

Whatever optimism cattlemen may have retained in the early 20th century was thrashed by the bleak winter that arrived exactly twenty years after the last one. Certainly there had been cold winters since 1887, but they paled in comparison to that of 1906-07. Nature sent out its warnings in the fall with beavers growing extra long caches, horses developing heavier-than-normal coats, and rabbits turning white earlier than usual. There was early cold followed by a severe November blizzard, and then bitter cold straight through to February.

By this time most ranchers and cattlemen had put up at least some hay for emergency purposes, but the sheer length of the cold period placed a strain on even the most well-prepared. Cattle on ranches with no stored hay had to fend for themselves, and the results were pitiful. Stock drifted instinctively



▲ **Haystacks near a Ukrainian home near Vegreville. (c. 1906)**

Glenbow Museum / NA-1000-8

to areas where they could protect themselves, but drifting and crusted snow made grazing impossible. The winter demanded a fearful toll from the range stock and cut in half the total number of cattle in the province.

When the spring thaw finally arrived, the devastation was clear. Thousands of dead cattle lay heaped on fields, in coulees, and against fences



"The Shaddock Ranch, which had lost all its hayland to the 1906 spring prairie fire, had the Indians put up several stacks of hay, by contract, on the open prairie east of Twelve Mile Coulee. These stacks were, of course, fenced and fire guarded but early November storms piled snow up around and over the fences. This caused the ranch to re-fence on top of the drifts; but more driving snow made even that job useless as, in turn, the second fences were themselves drifted over. Hungry cattle walked right over those drifts, double decked fences and all, and floundered in. More cattle followed piling in on the first animals. As a result a lot were smothered to death like

baby chicks as they piled in, one on the other, in their desperate attempts to get down to the hay. Now the Shaddock Boys found that they had not only to shovel away the snow drifts but had to haul dead and dying cattle away before they could get at the little hay that was left. (When the land was settled in 1909, and before it could be plowed, the bones of cattle suffocated in that terrible winter of 1906 had to be gathered. In some cases some piles of bones were bigger than some stacks of hay had been.)"

- Charles H. McKinnon



A pile of dead cattle on the Shaddock Ranch. Cattle were smothered to death after breaking into a fenced-off hay stack. (c. Spring 1907)

Glenbow Museum / NA-1636-1

"Lessees, have wholly or in part released their holdings. The cause is partly the dread of a Provincial tax, partly on account of the winter losses of 1906-7, but chiefly because the stockmen no longer fear the encroachment of other ranchers, as the ranching business does not appear to present the same attractions to the new

investor as formerly. The established rancher is not abandoning the business, but appears to be taking advantage of these conditions in order to curtail expenses."

**- Albert Helmer,
Government Ranch Inspector
1909**



and buildings. Some even hung on trees. The “carrion spring” of 1907 saw a rash of ranch sales and although some cattlemen were relatively unscathed, others lost up to seventy per cent of their stock. One cattleman counted 640 head in fall, and only thirty-three in the spring. The Calgary region showed a loss of some sixty per cent of cattle, and Lethbridge area cattle owners lost about half of their total stock.

In general, small farmers survived the winter better than the large ranchers because they were able to give more care to a smaller number of cattle. Those who had some excess grain, such as the LK’s Lachlin McKinnon, were able to feed their cattle more than just hay. The likes of Pat Burns, George Lane, and A.E. Cross not only pulled through without much loss, but they even expanded their operations the following year. The overall effect, however, was to make stock farmers out of many ranchers. Almost as suddenly as the disappearance of the buffalo altered life on the Alberta range in the late 1870s, this bitter winter forever changed the way of life of the region. As cattlemen



withdrew, homesteaders and the government continued to move in and settle Alberta’s cattle country. An isolated event in 1906 served as a potent symbol of the end of the early era of large ranching. When the prestigious Cochrane Rancho was sold to the Mormon Church, the era of the large ranches was over. Elements of early range life would certainly remain, but it would never be the same again. 🐮

▲
Dead cow and surviving calf in the Benyon area after the severe winter of 1906-07.

Glenbow Museum / NA-4035-22

▲ ▲
Cattle being fed on the Wineglass Ranch north of Brockett, Alberta on May 3rd, 1907.

Glenbow Museum / NC-43-32





New Developments in Feeding and the Beef Business

In the first years of ranching, and especially prior to the building of the Canadian Pacific Railway, western stockmen did not have access to many markets. These livestock pioneers sold their beef directly to the Department of Indian Affairs, the North-West Mounted Police, and new settlers. The construction of the railway provided new markets as literally thousands of men were put to work across the southern prairies. Pat Burns got much of his start by making beef accessible to railway construction crews. With the railway in place, livestock owners only needed to transport their cattle to the nearest railhead, and the train took their product to the desired destination, or to the necessary sea transport. A common scenario in the late 1880s saw southern Alberta ranchers sending their cattle by rail east to Montreal, where they were placed on a ship which took them to the stockyards of Great Britain.

One of the earliest and largest shipping points in the North-West Territories was located at Cayley, a small village a few miles south of High River. When the main line of the Canadian Pacific Railway was built, stockyards were constructed east of Calgary at Strathmore and east of Medicine Hat at Dunsmore. After the Calgary and Edmonton line was constructed in 1892, a new shipping point was set up at Cayley. This centre was a wonderful location for not only the large ranches, but for all the operations lying further south and west of Strathmore. Every fall in the 1890s thousands of cattle could be seen trailing to Cayley. A record number came in 1899, when five huge outfits including the Walrond, Oxley and Bar U ranches drove in approximately two thousand head each, totalling a staggering 10,000 cattle! The bawling herds had to be held at locations

▲ **Cattle in the stockyards at Alix, Alberta. Livestock owners only needed to transport their cattle to the nearest railhead and the train took their product to the desired destination. (c. 1910)**

Glenbow Museum / NA-205-11

◀ **Cattle eating grain from troughs in a feedlot operation.**

Photo Courtesy of Alberta Agriculture

►
Shelters and hay storage on the J.A.W. Fraser Ranch near Jumping Pound Creek. Cattle owners began to shelter and feed their calves and weaker cows over the winter resulting in virtually no winter loss. (c. 1910)

Glenbow Museum / NA-1292-1



outside Cayley as it took almost a week of work to complete the loading.

By the late 1880s virtually all cattle owners were cutting hay and putting up some shelters to house weak cows and calves. The more advanced operations were yarding all their calves and feeding them throughout the winter. The Bar U even brought all their weaker cows into home shelters, and by the end of the decade they reportedly fed seven hundred calves and two hundred cows in sheds. Even bulls were kept close to home. These strategies resulted in virtually no winter loss.

Adequately refrigerated stockcars, warehouses and steamships invented in the last decade of the nineteenth century soon made it possible to send dressed meat in excellent condition throughout the entire year. This progress would stimulate new strategies for feeding cattle so larger stockmen could finish their stock in a way that allowed for sales at times other than the fall. Cattle owners with not much stock faced the problem of not being able to fill an entire boxcar, and so access to adequate transport was difficult for them; but the large stockmen would thrive under these

new developments. In fact, the ranching region and livestock industry was dominated in the early years by relatively few individuals who owned stock numbering over 400 head, a number arbitrarily chosen to indicate a “large” ranch. Handling this number of cattle required an investment of about \$10,000, no small amount in those days. Compared to the smaller farmer or squatter, the men who could afford such investments were reaping the benefits of a considerable profit despite some fluctuations in market prices. In 1886 the Bar U reported a clear profit of over \$133,000, and the Walrond Ranch paid shareholders a 35% dividend in the same year. In 1888, one year after the disastrous winter, the Canadian beef market was in such a buoyant state that it was impossible to meet eastern Canada's demand for cattle. By 1890, cattle companies had firmly established themselves in the British market, and the livestock industry in Western Canada was flourishing.

Things changed significantly when the “middleman” entered the picture, visiting the individual cattle owners and offering them immediate payment for their stock. The cattle buyer then



combined his purchases to easily fill railway boxcars, while the producer settled for a smaller but guaranteed profit. By the end of the century some buyers also doubled as meat packers, with the large firms of Pat Burns and Company of Calgary and the Gordon, Ironside and Fares company of Winnipeg dominating the industry. Burns, whom Grant MacEwan termed the “master merchant of meat” also built abattoirs and packing houses near railway centres for easy access to market. His dynamic success resulted in the shifting of the country’s meat packing industry from eastern Canada to the West.

By the turn of the century fully half of the cattle shipped to Great Britain came from western Canada. Prices for choice four-year old steers, which reached \$45 in 1897 remained at that excellent level until 1905. Beef

exports from ranching country were steady and profitable in this time period, and revealed the domination of the export industry in the entire cattle business. The southern Alberta ranching district alone accounted for almost half the yearly exports.

Once the homesteader began arriving in cattle country, there was a shift from public grazing to leased acreages and direct ownership and, as a rule, herd sizes became smaller. The influence of the big companies declined. Many of the new ranchers who would flourish in the early part of the century, like A.E. Cross, had worked on large ranches in the early years and now bought their own smaller and more manageable spreads with an eye on adequate location. Reduced acreages meant that cattle owners had to pasture their cattle more carefully, and winter feed was often

▲
Interior of the Burns meat packing plant in Calgary. Burns, whom Grant MacEwan termed the “master merchant of meat” also built abattoirs and packing houses near railway centres for easy access to market. (c. 1900)

Glenbow Museum / NA-2351-4

necessary. Some planted forage crops for feed, and winter shelter for cattle went up on many operations.

The beef market began declining after 1906 with a beef surplus and falling prices. The picture that emerges during this period is one of an industry in decline with fundamental economic adjustment due to ongoing settlement. While many large ranchers left the business altogether, those that remained agitated for better conditions and would emerge as the leaders of the cattle industry's second generation.

A.E. Cross was a prime example of the new leadership in the ranching community. By the turn of the century

► **A.E. Cross (1861-1932)**
Owner of the A7 Ranche and
President of the Calgary Brewing
and Malting Company.

Glenbow Museum / NA-2307-21



**Calgary Malting and Brewing
Company delivery wagon. (c. 1900)**

Glenbow Museum / NB-28-24



his A7 Ranche was well-established, and he also founded and held the majority share in the Calgary Brewing and Malting Company. Until 1910 Cross shrewdly bought land from the government and railway in strategic locations that provided adequate access to water and were close to shipping cars. By 1911 many homesteaders, stung by the drought of the previous year, were offering to sell quarter sections to Cross. After the winter of 1906-07, Cross wisely kept his herd down to a size where he could adequately feed them through the winter. He also diversified as much as possible and generally received a top regional price for his cattle by stressing quality through efficient feeding. In producing several hundred head for export market every year he maintained a handsome business outside of Alberta. Cross exhibited a rare combination of entrepreneurial spirit and caution that helped him to avoid unmanageable debt loads and thrive in the uncertain times of the early twentieth century.

While A.E. Cross may have represented the new wave of successful cattleman in the twentieth century, Pat Burns was an absolute sensation as a buyer and businessman. From an industry point of view, Burns actually represented a transitional force, and his unique impact rested in the fact that he helped revolutionize the cattle business and then dominated the industry that he changed.

Burns' beef business took off in 1886 when his friend William Mackenzie of the MacKenzie and Mann railway firm contracted him to supply meat to railway construction camps in Maine. This began a long and lucrative career for Burns as a meat trader. Mackenzie worked the same business arrangement with Burns while building railways in Saskatchewan and also constructing the Calgary and Edmonton Railway in 1890. A year later, Burns won the contract to furnish beef for the Blood Indian Reserve while at the same time providing wholesale meats for markets in Calgary.

Burns' meat business did not stop there. By the turn of the century he was operating an abattoir near Calgary, and had long since been shipping cattle to the West Coast and mining towns in the British Columbia interior. The sheer number of cattle he moved was staggering. It was estimated that in 1897 alone his operation processed almost 10,000 cattle and averaged a healthy sum of \$40 per steer.

His business quickly required enlarged abattoir facilities, and he added necessary components such as a power plant and cold storage rooms to prolong the slaughtering season. In the early part of the new century Burns bought up William Roper Hull's string of meat shops and abattoir near Calgary. Over time, the "cattle king" expanded into hogs, sheep, the dairy business, poultry and eggs.



Patrick Burns (1856-1937)
The "cattle king" as a young man.

Glenbow Museum / NA-3965-65

Interior of Pat Burns and Company
butcher shop. (c. 1900s)

Glenbow Museum / NA-1149-4





▲ **Pat Burns' cattle herd near Olds, Alberta. Burns' holding herds became the forerunner of the modern feedlot and helped stabilize his beefs supplies and prices. (c. 1904)**

Glenbow Museum / NA-301-1

Burns changed the feeding industry after he joined forces with Cornelius Duggan to buy land and hold cattle near Olds. These "holding herds" became the forerunner of the modern feedlots, and helped Burns to stabilize his beef supplies and prices and move away from the old system of heavily marketing cattle for low prices in the fall. His system of cutting sufficient hay was not always copied by other ranchers who preferred leaving their cattle to graze on the range, knowing that the stock would lose weight in winter but regain it in the spring. By 1904 Burns was feeding about 30,000 three to five-year-old steers for spring

marketing, and had about 45,000 tons of stacked wild hay.

Burns accomplished what economists today call "vertical integration" by controlling every step of the industrial process (in the beef industry) from raw material to finished product. He also accomplished the herculean task of coordinating his ranch and slaughterhouse operations with his future dairy operations, tanneries, creameries and numerous retail outlets and secondary industries. As big and successful as Pat Burns got, he kept in touch with his humble origins by keeping a dairy cow in the backyard of his opulent Calgary mansion. 🐄

► **Pat Burns' cow camp at Rocky Butte in the Cochrane area. From ranch spreads and feedlots, to packing plants and meat shops, Burns was able to control every step in the cattle industry. (c. 1920s)**

Glenbow Museum / NA-1092-17



►► **The Pat Burns meat market located on the main floor of the Burns building in Calgary on the corner of 8th Avenue and 2nd Street S.E. (c. 1913)**

Glenbow Museum / NA-1469-38







Looking To A Future of More Efficient Feeding

Pat Burns had anticipated the modern custom feedlot with his holding herd system, where large numbers of cattle were fed systematically and intensely for year-round marketing. At the turn of the century the individual cattle farmer and rancher simply did not have the scale of operation and financial means to imitate Burns. Nonetheless there was a gradual shift toward more careful cattle management and “finishing.” Necessity was the mother of this trend, for the days were passing when cattlemen could leisurely hold and feed their cattle for four or five years while maintaining manageable production costs. They could no longer enjoy the luxury of

sending only the best fully-grown and well-finished animals to market while retaining lighter and rougher stock for local consumption. The slow-paced drives to railway cars and other markets that allowed for adequate grazing was also becoming a thing of the past.

Homesteading settlement limited the size of livestock operations, and placed stress on the grazing land needed to feed cattle. It soon became geographically impossible for cattle owners to let their stock roam to graze, and moving cattle from one pasture to another became a more precise and carefully monitored process. The devastation brought about by harsh and

▲
Burns Feedlot in Calgary at the corner of present day Glenbow and Deerfoot Trails.

Glenbow Museum / NA-4538-5

◀
Cattle in a feedlot operation. Note the shelter covering stacked hay in the background.

Photo Courtesy of Ted Pritchett



▲ **Native Indians haying in the Fort Macleod area of Alberta. Putting up hay for winter feed became an integral part of ranching as bitterly cold winters hasten the need for more intense feeding practices.** *Fort Macleod Museum / 80-38-2*

bitterly cold winters only hastened the development of more intense feeding practices. Livestock owners had to store hay in larger quantities but because cowboys notoriously hated haying, operations like the Shaddock Ranch hired native Indians from nearby reserves to do the job.

Another concern brought on by increased population was year-round access to water supplies, especially in semi-arid locations. The development of the various livestock organizations that lobbied for stock watering reserves

helped the large cattle owners for a time, but when the political forces turned against them, cattlemen in the drier areas followed the lead of Mormon settlers in the Cardston area and constructed irrigation systems. This not only supplied cattle with essential water, but allowed the cattle owners to adequately water land that was used to grow hay crops. The irrigated districts in southern Alberta would eventually prove to be the birthplace of the first large-scale custom feedlots.

► **Cattle grazing next to a canal on the ranch at Big Bend on September 21st, 1902.**

City of Lethbridge Archives / P19640356050





One pioneer who showed great foresight in diversifying his feeding technique was Lachlin McKinnon of the LK Ranch. McKinnon learned from his early years working for the Military Colonization Company that rangeland would soon suffer depletion, and while there he got ample experience making hay. When he got his own spread in 1894, McKinnon immediately put up one hundred tons of hay for feed. Even with that, some cold and snowy winters forced him to purchase extra amounts.

McKinnon also fenced off land close to home for holding and feeding his herds, and for a fee would allow Burns' cattle to feed there during their winter drives. The actual method of delivering the hay to hungry cattle was usually done with a team of horses pulling a hay rack on sleigh runners to the specified feed grounds. The dinner would then be unloaded in a circular fashion to allow weaker animals to get at the food as easily as the others. In the spring of 1902 McKinnon went one step further and seeded thirty acres of "Bonanza" oats, threshed it in the fall, and then used some of the grain to finish a few cattle that winter. He did it in part because the usual practise of disposing of beef steers right off the

grass in fall was not entirely satisfactory; market supplies were excessive at that time of year, and that meant lower prices. By feeding grain as well as hay to those first cattle through the winter, McKinnon found they gained significant weight and improved in quality. When spring came around he put them back on grass before selling them for a handsome price, given the market need.

That first year's experience was so profitable that from then on Lachlin McKinnon seeded and fed oats to his cattle every winter, and even found the oat straw to be a useful supplement. When scores of cattlemen were devastated by the winter of 1906-07, McKinnon reported no loss in animal number or weight.

Lachlin McKinnon's feeding strategy was certainly progressive for its time, but cattle owners with smaller operations, and particularly those who practised mixed farming, were really the first to consistently feed hay and even excess grain to their cattle. Central Alberta farmers and ranchers from

◀ **Lachlin and Sarah McKinnon's wedding photo on September 20th, 1893. Lachlin was born in 1865 in Durnham, Ontario. He came west in 1887 and worked at the Military Colonization Co. before buying his own ranch on the Bow River.**

Glenbow Museum / NA-2198-1

Grain wagons at an elevator in Olds, Alberta. Grain became a staple of feedlot diets as the agricultural industry realized that cattle could be raised and finished in Alberta. (c. 1905)

Glenbow Museum / NA-2574-51





▲
Cattle at the Buchanan feedlot in Springbank, just west of Calgary. Steers were being taken off the range and made “market ready” through the winter by being fed hay and grain.

Glenbow Museum / NA-3420-20

High River north to Red Deer led the way in this practise. A carefully prepared estimate of the number of cattle on feed in central Alberta during the winter of 1908-09 showed that cows fed on small-scale operations outnumbered those on large ones by a scale of three to one. Larger cattlemen observed this and sometimes paid farmers to make and supply necessary feed. Ranchers like Ed Maunsell often made such arrangements, and the Pearson farm south of Calgary consistently made their feed grounds available in order to winter feed large numbers of Burns' cattle.

A traveller observing the cattle business in the first decade of the 20th century would notice the majority of range stock across the foothills and southern Alberta area still feeding on the range throughout the year, but increasing amounts of tame hay, fodder and grain was also being grown. Steers were “fitted” for market by being taken off the range and trimmed to prime condition through the feeding of hay and grain. It was observed that an animal not only held its “grass flesh” when hay-fed in winter, but actually gained eighty to one hundred and

twenty-five pounds while on a hay and grain ration.

While men like McKinnon and other small farmers were seeing the value of more intense feeding right on their home spreads, researchers at the experimental government farm in Brandon were coming to the same conclusions after conducting tests of the merits of careful outdoor winter feeding. These findings would find an avid supporter in Dr. J.G. Rutherford, Veterinary Director-General and Livestock Commissioner of the Dominion government. His report of 1909 dealt with the overall health and state of the cattle business in the West. While acknowledging that there was still much territory untouched by the settler, Rutherford emphasized that this virgin area was shrinking rapidly, and that the free, easy and somewhat wasteful methods of the rancher needed to be replaced by those of the farmer-feeder. He urged the appropriate preparation of abundant feeds, proper observation, control and housing of cattle, and an especially careful process of winter feeding. Rutherford went as far as to say that apart from financial limitations, the practice followed by

many owners of not laying in at least enough fodder to sustain life through winter was inexcusable, cruel and reprehensible. He suggested improvements in feeding and care of the livestock during the train trip to market, and made a strong plea for developing necessary technology to establish a chilled meat trade. The latter industry would be important given the fear in the international market concerning reports of disease.

With respect to cattle management, Rutherford made it clear that no wild, grass-finished cattle should be shipped for export, given the resources present for winter feeding and the singular advantage it would mean in stock quality. He observed that when feeding was liberal and judicious and good water available, the grass flesh was not only held, but gains on hay and grain could actually reach as high as 400 pounds. Such cattle were then ready for the spring market when shipping facilities were generally better, and the higher demand could bring in more dollars.

Rutherford argued for the superiority of outdoor as opposed to indoor feeding based on detailed testing



at the government experimental farm in Brandon. His report included detailed suggestions as to the types, amounts and percentages of feed, watering practises, and the construction of buildings, fences and troughs. He proposed methods of land restoration through fertilization and made strong suggestions for carrying of cattle through winter until June.

▲
Cattle being winter fed from a hay rack near Benyon. (c. 1911)

Glenbow Museum / NA-4195-9

▼
Cattle in a feedlot at Swift's packing plant in Edmonton, Alberta. (c. 1913)

Glenbow Museum / NA-1328-2488



By 1912, cattlemen were forced to change their feeding practices in order to remain in an increasingly competitive marketplace.

"The method of feeding which is now being generally followed and which, after an experience of twenty years of cattle feeding, the most of the time in Alberta. I have myself found to give the most satisfactory results, I will describe briefly...First, let me say that I strongly favour feeding in the open, and that I am convinced that many of those who attempt feeding cattle do not feed grain with sufficient liberality to obtain the best results. This, I believe, is one reason why Canadian cattle are generally quoted on the Liverpool market one cent per pound lower than United States cattle. In the United States feeding districts, cattle are put on a full feed of corn almost

from the start, which is kept before them constantly for six or eight months. One hundred bushels of corn is reckoned as the requirement of an ordinary steer during the feeding period. This method gives rapid gains, producing better cattle, which make better prices, than where limited grain rations are fed. The disposition of a thoroughly fattened steer is changed; he becomes docile and contented, ships better, and thus brings a better price at the end of his life's journey. We have just as good of cattle here as in the United States. Chopped barley, wheat and oats are fully equal to corn as a fattening ration, but we must give the cattle all they will eat of it, and when we learn to do this, I contend that our cattle will not sell at a lower price on the British market than United States cattle."

- Leroy Kelly



"Before the turn of the century [the range] was all open and if you went out and mowed around a hunk of grass and put your name on a stake and said it was yours you claimed that grass and you could keep it for hay. Well, around 1902 my dad was running out of hay but he had that little field that he grew oats on. Most people grew wheat for money but this [market] was closer and you could get cash right out of the guy's pocket. So he supplemented the cows that were feeding on this

hay up to two pounds of oats a day and got through the winter just fine on it. Because the cows did so good on it, the next year he moved the steers up closer to home and fed them up to six pounds of grain a piece a day and the grass. Did that for a couple of years, then he fenced them in and turned it into a feedlot."

- Edwin McKinnon

▲
Cutting hay with a horse drawn mower. (n.d.) Glenbow Museum / NA-4170-5



These new methods and techniques would mean hard work as well as careful and precise planning, but it was confidently believed that the best beef could be raised and finished in Alberta. For that to happen, the animals had to be marketed in good condition and at reasonable cost. Though the home market would remain strong, beef production would also exceed local requirements. A revolution in the livestock industry was coming, given

the realities of population growth. There would be a need for better disease control, improved breeds, and more diversified and superior marketing techniques. Central to all this would be a more intense, careful and efficient system of feeding and preparing cattle for market. The most successful cattlemen were already seeing the value of this; many more would have to embrace it in the years to come. 🐄

▲
Longhorns on the feed grounds at a ranch in southern Alberta.
(c. 1900) Glenbow Museum / NA-4035-199



◀
Cattle at Swift's feedlot in Edmonton. (c. 1913)
Glenbow Museum / NA-1328-2487



▲ Unloading hay from a horse drawn wagon into the loft a barn. As harsh winters took their toll on livestock totals, hay became a valuable commodity for winter feed. The most successful cattlemen took this concept a step further by implementing a more intense system of feeding which prepared cattle for market year round. *Glenbow Museum / NC-60-83*



► Winter view of a ranch on Kneehill Creek near Carbon. Note the hay stacked on top of the feed barns and cattle being fed in the foreground. *Glenbow Museum / NA-4657-12*



▲ Jace Mayberry with a hired man driving a wagon load of hay in front of D.M. Lobey dry goods and groceries. The bales are tied with wire. (c. 1930)

Glenbow Museum / NA-4172-1



◀ Stacking hay on William Andrews' farm east of De Winton. (c. 1903)

Glenbow Museum / NA-3849-2

chapter two



THE YEARS OF CHALLENGE AND CHANGE





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The Changing West in the First Half of the Twentieth Century

The trickle of settlement at the turn of the century became a flood by 1907, forever altering Alberta and its agricultural industry. The practise of cattle feeding would grow and intensify, both on individual cattle farms and as a commercial activity. The need for diversification that combined grain and cattle management would be vital to the evolution in feeding technique. Whereas early ranchers fed their animals on grass, cattlemen in the new era supplemented nature's diet with hay and some grain. Within a generation the use of grain as a finishing ration would be the rule.

Statistics clearly reveal the dramatic population growth in Alberta during the

homesteading years. Between 1895 to 1914 it leaped from 30,000 to 474,000, and in the new century's first eleven years the number of people in the province doubled. By World War I more than 400,000 homestead entries were recorded in Saskatchewan and Alberta, and a great deal of the land that had once been occupied by ranchers gave way to settlers' ploughs. The amount of prairie land broken for field crops grew exponentially in the first three decades of the new century as wheat was considered the ticket to prosperity. Many newcomers stocked their operations with pigs, chickens and a few cattle, and this livestock would serve the important purpose of

▲ **Scraping a pig on the Hewson (Darragh) Ranch near Fort Macleod. (c. 1900)** *Glenbow Museum / NA-1128-4*

◀ **Grain elevator in Innisfail, Alberta. As the agricultural sector took root in Alberta's economy, grain elevators became a symbol of the literal and figurative change in the ranching frontier. (c. 1900)** *Glenbow Museum / NA-3596-1*

◀ **Preceding page**
Steam tractor breaking land on the Canadian wheatlands. A 30 h.p. engine was used to pull 10 stubble ploughs and a draw harrow. (c. 1910)

Glenbow Museum / NA-884-8

CHAPTER TWO

► Checking freight at the CPR station in Olds, Alberta.

Glenbow Museum / NA-2105-3



consuming grain when market prices fell. These developments set the stage for more intensive and widespread cattle feeding in the future.

Alberta's growth at the turn of the century was augmented by a growing network of railways that zig-zagged their way across the province. The CPR was especially eager to build lines east of Wetaskiwin and Lacombe in order to tap the agricultural wealth of the parklands between the Calgary-Edmonton line and the Saskatchewan border. In addition to providing an essential and improved means of

transportation that linked cattle feeders to their markets, some railway companies began irrigation projects vital to sustaining and enriching land for agriculture. Within a few years, family farms became dispersed widely between the 49th and 60th parallels with heavy settlement along the Calgary and Edmonton Railway and from Red Deer south to Fort Macleod. Numerous towns sprouted along the rail line, and barbed wire fences sprang up as farmers defined their territory and provided boundaries for their farming operations.

Immigrant train en route to the Canadian prairies. (c. 1883)

Glenbow Museum / NA-669-3



Homesteader infatuation with the possibilities of grain farming made sense because wheat was a crop well-suited to the land. Originally a drought-tolerant grass, wheat could subsist admirably on what moisture the prairies afforded, and soon crops were seen rippling across the provincial landscape. In 1906 the western Canadian wheat harvest exceeded 100 million bushels for the first time; five years later the same area produced double that amount, and in the glorious year of 1915 the West's wheat crop jumped to over 300 million bushels. That year most farmers were easily able to meet their debts, purchase new equipment and machinery, upgrade or replace their original homes and place considerable orders from their Eaton's catalogue. Some were even able to purchase that spectacular new invention called the motorcar.

The romance with wheat continued into the next decade, and by 1923 Canada was number one in the world in grain production and maintained that pace throughout the roaring twenties. At its height in 1928, total production exceeded 566 million bushels. The period between the close of World War I and the Great Depression in the thirties marked the high point of the wheat economy in the



Canadian West. Canada gained an outstanding place in world commerce because of the grain trade.

This development forced cattle ranchers to acknowledge changes in the way agriculture would be carried out in the future. Although they were not so naive to think their hold over the open range would last forever, even the most innovative cattlemen were challenged by the astounding rate of settlement. Ranchers who once based their enterprises on one head of cattle per ten to thirty acres were now confronted

▲ **Stooked wheat in a field near Gem, Alberta. The 1915 crop year stands out as one of the most successful harvests in Alberta's history. This land yielded 70 bushels per acre. (Oct. 15, 1915)**

Glenbow Museum / NA-2179-34



◀ **Threshing on Arrid Carlson's farm north of Bow Island, Alberta on September 26th, 1915.**

Glenbow Museum / NA-4046-1

with homesteaders prepared to base their entire operation on 160 to 320 acres. Some cattlemen sold out completely, reasoning that money gained from selling appreciated land was preferable to risking new and unproven methods of cattle raising. Other ranchers moved to less crowded areas of the province, and some simply scaled down.

American cattlemen and farmers that immigrated preferred to settle in southeastern areas of the province and many became successful and influential, directing much of their product to the Chicago market. The once dominant British and Canadian cattlemen stayed in the western foothills region, generally decreased their operations, and continued to prepare cattle for Britain. The reconfiguration of grazing country also changed the region's social and cultural structure. Not only did the economic pursuits of most newcomers

distinguish them from the original inhabitants, but the new political and social structure contrasted sharply with the early British and Canadian ranching establishment.

The unstoppable march of progress meant that the glorious old days of driving and feeding cattle on the open plains was largely over. Old-timers looked to "the last great roundup of 1907" as a symbolic event that marked the passing of the era where a cowboy could ride miles without any sign of fences or farms. As early as 1901 a Pincher Creek rancher bluntly admitted to the *Macleod Gazette* that the day of the free range was over, and that the only alternative to change was to get out of the cattle business. As abrupt an assessment as that was, the fact is that many ranchers did sell out after 1907, and this only accelerated the influx of grain farmers. Others embraced change and incorporated new techniques, but

Cattle grazing in a southern Alberta coulee valley during the depression years. (c. 1930)

City of Lethbridge Archives / P19754409074





most tried to preserve as much as possible the work styles reminiscent of the glory days of the open range. Throughout all this, the wheat grower happily took centre stage and only later did he realize the need to embrace a more cautious and diversified approach to farming.

Despite a reduction in scope, cattle ranching continued to be a profitable and important business in southern Alberta, and a strong and stable geographical centre of the ranching community was maintained. The core area of “cattle country” reached north from Fort Macleod and the Oldman River and around the flanks of the Porcupine Hills up to Millarville, Priddis, and Cochrane in the Bow Valley. Much of the lifestyle that ranchers enjoyed in the late nineteenth century also continued to be visible in

the first decade of the twentieth. Leisure pursuits such as horse racing and polo continued but other sports like fox hunting were curtailed due to increased fencing. In the social realm, the ranching community remained strong and the Ranchmen's Club flourished. Leading personalities among the cattlemen who took centre stage in the new century included George Lane and A.E. Cross from the foothills region and the seemingly omnipresent Pat Burns. Together with businessman Archie J. McLean, these men spearheaded the first Calgary Stampede in 1912.

Ranchers and farmers eventually overcame their antagonism of earlier days and learned to live together as politicking gave way to mutual respect and the recognition that they had to cooperate to survive new realities in

▲
The F. Collicutt Ranch near Crossfield, Alberta was an example of diversification in the cattle industry. Mixed farming practices and the development of feed crops allowed for greater flexibility to adapt to adverse conditions. (c. 1924) *Glenbow Museum / ND-8-99*

the marketplace. They also influenced each another in ways that would revolutionize the cattle feeding industry. Within a generation Alberta farmers became stock-raisers, and cattle ranchers embraced practices like sowing tame hay and various feed crops, and bought tractors and haying equipment to produce their own feed oats. Many smaller stockmen became mixed farmers. The social distinction between ranchers and farmers blurred, and their work became more interdependent. This new cooperative mindset between farmer and cattleman was inevitable, given the fact that a major one-crop wheat economy and a minor local one-crop beef economy could not coexist for any length of time. The foundation for a more varied and planned economy was being laid down.

By the early 1940s, having together survived difficult times, farmers and ranchers had created a new agricultural reality in Alberta. The effects of this for cattle feeding practice was significant. It was not uncommon to see a well-conducted ranch surrounded by several hundred acres of highly tilled land, seeded to coarse grains which would be chopped to “beef in the making” over the winter. The old idea of only raising “grass beef” and selling once a year was long gone; grain, forage crops and hay became staples in cattle feeding and if cattle owners were not preparing their own feed, they were contracting out to get it done. Often owners would sell their cattle to operators who were capable of finishing or hire farmers to feed their cattle hay and grain in order to prepare them for market. 🐄

Eight binders at work near Rosebud. Many farmers became stockmen and many ranchers took up mixed farming practices. The social distinction between the two groups blurred and a cooperative mindset resulted. (n.d.)

Glenbow Museum / NC-26-270





"The lush, long grass is gone. Cattle now must be fed all through the winter months. Great quantities of hay must be put up. Many herds are driven out of the hills at the approach of winter to feed on the wheat and oat straw stacks of the prairie farmer. Ranching has become stock farming, but as an industry it is by no means dead. We have been forced to change our methods. The first easy, general way of bringing in cattle, turning them out to graze, and rounding them up to sell has had to change to the more arduous system of feeding and caring for them at all times. There is now more expense, more anxiety, more attention to detail, and less profit. Now our weaning calves are put into feed lots with an open shed facing south. Low racks are placed along the sides or down the centre into which the feed is put, easily within the reach of the little fellows. We feed them oat bundles, hay, native or cultivated, and wheat bundles, if they are cut green, and make good feed. My calves get Timothy hay, sweet clover, oat bundles, and good oat straw. There are flat troughs

or tables in my feed lot standing about two feet high, fourteen feet long and two feet wide with sides of four and six inches. On these, whole oats are poured, starting with a light ration and working up until they have all they will eat hungrily. The object is to keep the babies fat, so that they may go out onto the green grass plump and sleek. Now, we plan to sell out beef at two years old, and when they weigh one thousand pounds or eleven hundred pounds....a two year old [used to be] gangling, lank, and unfinished, but with feed and the proper time, he is now baby beef. This is one reason why Herefords have become so popular. They develop early and evenly. A Shorthorn grows first and fattens afterward."

- Frederick William Ings



Cattle grazing in central Alberta. By the 1910s, raising cattle on grass alone had become a thing of the past. Farmers were forced to rethink the entire process of cattle ranching. Only those who were able to adapt survived this transition in the cattle industry. (c. 1900) Glenbow Museum / ND-8-143





Progress On a Number of Fronts

Tremendous progress was made in the agricultural industry during the first half of the twentieth century. With smaller herds, limited pasture, and volatile markets, the cattle feeder embraced innovation and depended on the contributions of scientific agriculture. Cattle feeding became more widespread and intense with the need to more efficiently finish cattle for year-round markets. Feeders recognized and utilized new machinery and methods. Advanced strategies in cattle housing and the layout of fences and troughs reflected a more streamlined approach to fattening and finishing cattle.

All the western provinces established schools of agriculture to encourage research in animal science and husbandry, and range management. In 1906 the Manitoba Agricultural College was built, and the establishment in 1910 of the Saskatchewan Agricultural College introduced to the West a scientific dimension to agriculture that had already existed at Guelph's Ontario Agricultural College. The Alberta

government started agricultural schools in Olds, Vermilion and Claresholm in 1913. Cattle rearing and stock feeding tests began, and professorial staff lectured at agricultural meetings and served as livestock judges at county fairs and shows.

There were advances in the veterinary sciences that resulted in many common livestock ailments being controlled or eliminated. Cattle owners were eventually able to inoculate cattle against various diseases, and cures for cattle abortion and milk fever were discovered. Expensive livestock was less frequently destroyed because diagnosis improved and new cures for diseases were discovered and applied. The establishment of the Health of Animals Branch in the Northwest Territories in 1902 provided a body dedicated to eradicating livestock epidemics, and the Contagious Diseases Act in 1903 assisted the new organization. The federal government also played a leading role in educating cattle owners about disease, and after 1905 both Alberta and Saskatchewan

▲ **Advance Rumely Oil-Pull tractor on a railway flat car in Calgary. It is believed that this new piece of farming technology was brought to Calgary for an Agricultural Exhibition. (c. June 1919)**

Glenbow Museum / NA-5354-7

◀ **'Doc' J.A. Dunnigan administering Blackleg serum to a steer in a chute at the Burns feedlot in Calgary. The remnants of dehorning can be seen on the ground. (c. 1921)**

Glenbow Museum / NA-4974-4



received their own veterinary superintendents under the federal Health of Animals Branch. Tuberculin testing, blackleg inoculation and dipping for mange constituted three of the most important functions of veterinary inspectors.

It took some time before feeding strategy incorporated medicinal purposes, mainly because feeding itself was a relatively uncomplicated and uncontrolled process in the early days. As time went on however, feeders on ranches like the LK saw the wisdom of combining additives such as sulphur with the regular feed in order to treat diseases like coccidiocis. Cattle would not consume the substance directly because of its bitterness, but when combined with some tasty feed it was found that a little bit of hay helped the medicine go down.

Another important sign of progress was a developing press that provided farmers and ranchers with a valuable educational vehicle. Monthly periodicals like the *Nor'-West Farmer* and *Canadian Cattlemen* offered practical advice on a wide range of topics. Large-scale and speedier production and specialization were also key features of the agricultural revolution, just as they were for all

▲ **Veterinary inspector watching cattle swim through a dipping vat of a solution prepared to treat the spread of mange. (c. 1910)**

City of Lethbridge Archives / P19770285050

► **Vaccinating calves with the Blackleg vaccine. "It [the needle] has to be inserted in a fold of the skin on the shoulder and under the skin. When done in the spring and in the fall, it renders the animal immune against Blackleg."**

(c. 1905) *Glenbow Museum / NA-1966-47*





"We continued to join in the regular roundups as our stock would often wander to distant parts of the range country and the dipping was still a necessary operation in which we took part. The roundup became more and more complicated as the farmers increased their small herds and often came to help, mounted bareback on a plow horse wearing a blind bridle and a couple of mongrel dogs running and yelping in every direction. As a rule these fellows were far more of a nuisance than they were of any use and the dogs naturally added to the confusion. Occasionally a farmer would come on foot. His few cattle were raised by hand and were gentle when turned loose in the spring and he would often refuse even to claim the wild

beasts which we would cut out for him in the fall. Their brands were often just blotches and scabs and it generally took a great deal of extra time and patience to sort them all out. The dipping was a source of trouble as many of the farmers would not be convinced that it was necessary to dip their stock and often refused to pay the assessment per head for animals receiving the treatment. It required the combined efforts of the two regular mange inspectors, Campbell Evans along with Gus Holmes, to persuade them to dip their stock and then pay the dipping fees."

- Lachlin McKinnon



Dipping cattle at a federal government constructed vat in southern Alberta.

Fort Macleod Museum / 80-92-1

"I left school the end of June 1929. I arrived at the Old Place at the river and started to work for LK Ranch and Farming Company. The main effort, besides the usual chores and the small amount of farming that was left to do was directed towards readying the corrals and equipment of the feedlot operation for the next winter. The grain grinding facility was improved and a temporary feed storage place was made out of bundle racks. They were used for threshing and were placed on edge to form a rectangle eight feet high. The feed put through the feedcutter was blown into this rectangle. This feed was then measured onto the feed wagon by the fork-full. Then grain measured on the top of it from the chop-bin, by the scoop-full. Then the load

was shovelled into the feed troughs. The drinking water for the beef cattle was pumped by hand from shallow wells into wooden troughs. One forkfull of cut feed, one shovel-full of ground grain and twenty strokes on the pump for each animal was about average. This labour intensive system was gradually changed into the highly mechanized situation that we have today. Feed additives were a new thing and some were good, like making black loam available. The cattle seemed to like it. Although it was not until later, when it was developed that antibiotics were discovered and cultured on black loam. Ground flax was added and was later proven to be detrimental. Salt, bonemeal and powdered limestone are still used."

- Edwin A. McKinnon

► **Breaking land at Standard. A water wagon is behind the Reeves steam engine, replenishing its water supply. (c. 1920)**

Glenbow Museum / NA-3969-68



sectors of business during the industrial revolution. They resulted in the evolution of modern methods of farming and ranching, and the introduction of new and better machinery.

Mechanization in Alberta occurred more quickly on southern farms than in the north but regardless of the pace of change, progress was unstoppable. The number of horses on Alberta farms between 1921 and 1951 dropped significantly as literal horsepower was replaced by steam tractors, gas tractors, and trucks. A variety of ploughs, cultivators and seeders, hay cutters, binders and threshing machines became necessities over the years, and eventually balers and combines

Baling hay from stack. Balers and threshing machines driven by belt power from steam engines replaced hayslides and manual separators. The Letz Mill took advantage of steam power to create feed for animals by chopping and mixing rations. Fort Macleod, Alberta. (c. 1900)

Glenbow Museum / NA-3263-3



replaced the earlier machinery. Those who had the means embraced the new technology. George Lane of the Bar U Ranch bought the biggest steam tractor available in 1912, and Charles Noble of the Cameron Ranch sent ten steamers to break land in 1918, accompanied by one hundred men working around the clock to break 400 acres of ground daily.

Cattlemen also employed better methods, materials and strategies in building barns, corrals and fences, and over time various feed crushers and mixers made life easier for those who fed cattle. Alex Gillespie was one cattle owner who used a "Letz mill" to prepare feed. Gillespie fed cattle on a small spread near Calgary and around 1930 purchased the mill to cut oat straw into silage. Straw was forked in from one end and combined with surplus grain. The feed mixture was chopped by grinding plates in the mill and the finished product fell into a receptacle at the bottom of the machine. From there a blower would propel it into a wagon, which was used to transport the feed to troughs where the hungry animals eagerly waited. Sometimes the standard feed of hay, straw and oat grain was supplemented by a surface sprinkling of linseed or soybean meal, and salt and monocalcium mix was occasionally added as well.



Gillespie's Letz mill was powered by a 15-30 McCormick Deering tractor equipped with a threshing machine belt. Within a couple of years the mill was augmented by an overhead bin with sloping floor that fed grain into the machine. The grain for the bin was stored in movable granaries. This "state-of-the-art" equipment certainly did not eliminate the need for hard work. Straw and hay was forked in manually and finished feed had to be shovelled into the blower for transfer to the wagon. Once there, the feed ration was delivered to the troughs via a shovel or special fork. Early feeders like Gillespie moved the food to his animals in a wagon or box set on sleighs and pulled by horse teams. The process was slow, but this was before the time when gasoline powered trucks, automobiles and tractors revolutionized and quickened work on farms and ranches. When modern and speedier machinery did become available, Eastern-based farm implement firms set up an extensive network of distributorships throughout western Canada and made enticing credit term offers to farmers.

Progressive stockmen in Alberta always saw the need for irrigation because of unpredictable weather and especially in dry land areas that extended eastward from the foothills. As early as 1878 John Glenn, a farmer south of Calgary, took water from Fish Creek to irrigate twenty acres. The farmers from Springbank, west of Calgary, organized a district irrigation project in 1896, taking water from Elbow River to irrigate up to 20,000 acres.

The more widespread development of irrigation was a gradual but continuous process that began in the 1890s and unfolded in three phases. Soon after the North West Irrigation Act, became law in 1894, large irrigation companies like the Galt Railway Company began to operate. The Canadian Pacific Railway, with a soft spot in its heart for developing southern Alberta's agricultural economy, also set out to make dry lands blossom with alfalfa, vegetables, sugar beets and cattle.

The first phase of irrigation was the company-built or commercial phase, and lasted until the 1920s. This gave

▲
Chopping feed in a hammer mill at the E.P. Ranch on the Pekisko Creek. This hammer mill is belt propelled by a production model Fordson tractor (c. 1923)

Glenbow Museum / NA-4613-9



▲ **Cattle grazing next to an irrigation canal in southern Alberta. After the North West Irrigation Act went into effect in 1894, irrigation canals became a common site in the drier regions of southern Alberta. (c. 1901)**

City of Lethbridge Archives / P19640356004

way to the districts phase after the Irrigation Districts Act was passed in 1915. During this time the provincial government supervised a number of individually owned and operated projects. A more strictly government-developed phase began after the second World War.

Towns such as Bassano and Brooks sprung up and grew because of the development of irrigation, but Lethbridge soon became the centre associated with the new and growing practise. While still a fledgling city of

only 8400 people Lethbridge hosted the Seventh International Dry Farming Congress in October of 1912, and researchers and leaders of the new science gathered to discuss new methods and approaches. More than 40,000 people passed through the city's gates during the six-day event, and the congress attracted delegates from Russia, Germany, Austria, Holland, Persia and China. Authorities informed the public about new machinery, cultivation and summer fallowing practice as well as range management and the growing of grasses and legumes. They exchanged information on the use of farm power and windbreaks, and the behaviour of markets. Lethbridge thus became the leading Canadian city in the new science of irrigation. This was a time when land-hungry immigrants were rushing in; in 1910 alone the Lethbridge Lands Office reported almost five thousand homestead applications.

Stockmen had always led the way in embracing irrigation techniques with a view to improving methods of feeding their stock and replacing more wasteful open range methods with intensive ranch farming. These new ranch farmers participated in the first



► **A horse powered pile driver on the main irrigation canal in the Monarch area of the Eastern Irrigation District. (c. 1922)**

Glenbow Museum / NA-5200-108

tentative experiments in irrigation which involved diverting creeks to increase hay cropping. They also controlled calf crops by herding bulls separately from cows and began fencing more extensively to protect herds from scrub bulls. Once the calving season was regulated, calves were weaned in the fall so mothers had a chance to recover before facing the difficulties of winter.

Charles Noble was a good example of a farmer and cattleman who carefully and thoughtfully embraced innovation and progress in the years of challenge and change. One of the many Americans who came north to Canada at the turn of the century in response to the promise of fertile fields and the good life, Noble homesteaded near Claresholm in 1902. He later bought five thousand acres of land near Lethbridge where he commenced a large-scale farming operation. He would eventually place over 30,000 acres under cultivation, harvest excellent crops, irrigate and fertilize his land, and feed livestock. Over the years Noble kept in step with the latest developments in mechanization and incorporated equipment deemed necessary for his operation. He



developed the innovative “Noble blade” which was used to effectively cultivate and plough land so easily ravaged by human overuse and nature’s unpredictabilities.

By operating as he did, Noble illustrated what would be necessary for cattlemen, farmers and feeders to be successful in the first half of the twentieth century. He was an astute businessman, he never stopped educating himself about the agricultural business, and he exemplified the wisdom of diversification. Certainly other cattlemen and farmers who were more specialized were also successful, but Noble’s example reflects how the cattle business from 1907 to World War II underwent certain fundamental changes; grain farming became a fixture in Alberta, agricultural science advanced, and the market economy became more complex and unpredictable. Some became victims of change; others, like Noble, met the challenge by integrating grain and cattle management to maximize land fertility and feed his cattle. 🌾

▲ **The original Noble blade invented by Charles Noble in 1936, patented in 1942 and restored for the town of Nobleford’s 60th anniversary in 1969 (shown here).**

Glenbow Museum / NA-4884-29

◀ **Charles S. Noble; innovative farmer and stockgrower. The town of Nobleford was named after him. (c. 1920s)**

Glenbow Museum / NA-4884-2





Depression and Diversification

The first half of the twentieth century was not a problem-free time of progress; it was marked by some bitter realities that broke the heart and willpower of numerous once-optimistic homesteaders. The century began with government propaganda promising fortune, and lured many to stake their fortunes in grain farming. Soon cattle could only stare forlornly through barbed wire fences at thousands of acres of wheat covering land once used for grazing.

Excitement sometimes results in caution being thrown to the wind. Wheat ascended the throne as king, but it would prove to be an unpredictable and even fickle monarch. Settlers who entered the West in the early twentieth century were not able to discriminate, especially on the basis of the government's propaganda, between

good and marginal agricultural lands. Scientific studies conducted over the years would confirm that the plains region south of Red Deer River and east of the foothills was a water-deficient area, and that these and many parts of Palliser's triangle should never have been broken for grain growing purposes. During the good years extravagant use of machinery on marginal lands exacted an insidious and heavy toll as farmers mined the land instead of conserving it. The early prosperity of the twentieth century had a quality of artificiality about it, and the confidence that abounded among farmers in the first decade of the twentieth century gradually evaporated.

Fields that once produced wonderful harvests became damaged and impoverished. The newcomers operated on an extensive rather than

▲ **Threshing machine and Minneapolis tractor partially buried by wind blown soil. The drive wheels of this tractor are spec'd at 84" giving a good indication of the amount of drifting. Ironically, the threshing machine is covered to protect it from moisture and rain. (c. 1933)**

Glenbow Museum / NA-2291-2

◀ **Soil piling up against a fence at the Agricultural Experimental Farm station near Lethbridge. (c. 1920s)**

Glenbow Museum / NA-4357-2

intensive basis, hoping that large area farming would make up for small profit per acre. Few were thinking about potential damage to the land, especially in the heady years of growth and healthy income. Hindsight would reveal that these practices gave rise to waste and thus in the very heyday of their triumph, many farmers were sowing the seeds of future problems. Soil inevitably lost its fibre under a one-crop economy; erosion became more acute; weeds increased; losses from insects and plant disease grew as a problem and soil fertility diminished. Farmers inexperienced in the new land ended

Brush fence made of poplar branches laid out to stop soil drifting in the Namaka Lake region. (April 29, 1931)

Glenbow Museum / NA-2179-53



up over-relying on grain crops in the arid regions, and when drought came in the late teens, disaster followed.

As early as 1912 some farmers who were buoyant about the prospects of winter wheat were dismayed by poor yields. A series of dry years that began in 1917 combined with grasshopper infestation and a drop in world grain prices to deliver a triple blow to the once-optimistic farmer. Things got so bad that southern ranchers imported hay from as far away as Edmonton. The government stepped in to help in 1920, buying and shipping feed from northern farmers to those in need elsewhere in the province. There was full-time work for many men willing to haul sheaves from fields to box cars, and then load them for transport to areas where hungry cattle waited. The feed weighed at elevators sold for as high as forty dollars a ton. In 1921 there was widespread drought in Palliser's triangle, and within five years more than 10,000 Alberta farms had been abandoned. Where once a small flow of immigrants became a flood within a few years, now the same momentum could be seen operating in reverse; from 1905 to 1930 nearly 46% of all homesteaders failed and a whopping seven of ten eventually abandoned their land. The dirty thirties continued the downward slide of the wheat economy. In 1930 grain receipts fell to \$73 million from the 1929 total of \$135 million, and in the disastrous year of 1937, the total would plunge to \$16 million.

Throughout this time the federal government stepped in to help, beginning dry land reclamation projects in the 1920s that involved a system of cultivation and tilling to prevent moisture loss. But the cultivation literally pulverized the soil in a manner that would cause it to be easily blown about. This in turn led to the dust storms of the "dirty thirties", when further drought and wind made a mockery of the so-called "modern" farming techniques of the previous decade. By the time the federal government established the Prairie

"The [Southern Alberta Survey] board says you must keep some stock and milk cows and have pigs and chickens. Quite so. No farm is a farm without them. Now comes the rub to a nice little farm like that in the dry belt. I has been conceded and proven by the best authorities and those that have tried it, that 25 acres perhaps is only sufficient for pasturage. Now a man must have six horses to plow with, to make a living off the land. He must have fifteen cows. There will be calves and so forth till some will be ready for market, thirty or forty head.

When there is some ready to sell he would then have 40 to 45 head of stock around him. It would take at least 800 acres to pasture this much stock, and I refer to our late member, Archie McLean, to verify this statement. Mr. McLean had the good sense to sell and get out when once the free range was coming to an end. So much for our nice little dry farm."

- Wm G. Wenbourne
Letter to the editor,
Lethbridge Herald, 1922

"The relentless winter of 1919-20 settled down to take its tremendous toll of cattle. Feed was scarce after a summer of drought. Crops were poor, the straw of what wheat grew was short and dry; oats, which need more moisture, were not in existence; hay was thin and scarce. The country was practically without feed.

The winter started the last week of September and was with us, hard and steady, till the last of May. Prices of all fodder soared to unheard of heights. I bought hay shipped in bales from the North, at \$65.00 a ton. A ton of hay goes like summer snow before a bunch of hungry cattle. Tons innumerable were needed to carry even small herds through. A bunch like Mr. Wallace had, cost many tens of thousands of dollars to feed. That was not the end. In the spring, if we could be said to have had spring that year, the cattle lay down and died - hundreds of cattle that had been kept alive to this point with feed worth almost its weight in gold. Mr. Wallace had no beef to ship in the spring. What was left was gaunt and thin. It took all summer to bring them back to the condition they had been in when that blizzard broke, and then the Fordney Tariff Bill went through in the U.S.A. and our market was

gone. Prices fell lower and lower. It would have paid us to have gone out and shot what cattle we had that fall. Jim Wallace was broke and so was many another cattle man. No one in the business has ever quite recovered from that year."

- Frederick William Ings

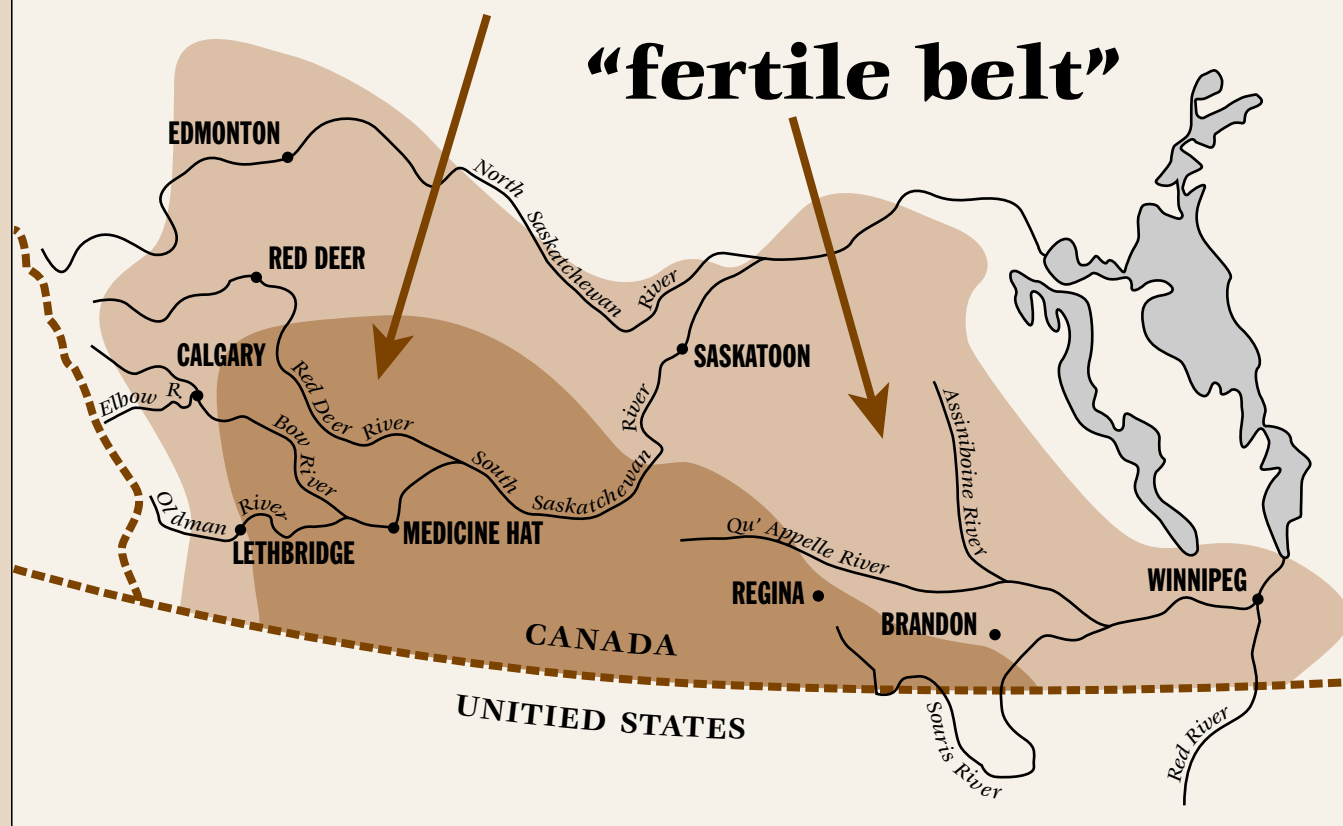


Born and raised in Charlottetown, P.E.I., Fred Ings spent his youth in England, Spain and on the sea. In 1882 he moved to the west where he worked moving cattle into the mountains to supply camps of the C.P.R. surveyors and engineers. In 1883 he purchased land on the north fork of the Highwood River calling it the Rio Alto Ranch. He bought his first cattle from Oliver Henry Smith and took ownership of the familiar OH brand. He continued to operate the Rio Alto Ranch in partnership with his brother Walter until 1902. At that time, he purchased Joe Trollinger's stopping

place on Mosquito Creek between Fort Macleod and Fort Calgary and established the Midway Ranch which he ran until his death in 1936.

▲
Frederick William Ings. (c. 1920) Glenbow Museum / NA-3627-27

“Palliser’s triangle”



Palliser's Triangle

From 1857 to 1859, the Royal Geographic Society of Britain sponsored a careful scientific expedition of western Canada under the leadership of John Palliser. Palliser's three-year study of virtually the entire region from the Red River to the Rocky Mountains resulted in a comprehensive report, and division of the region into zones of varying agricultural potential. Palliser judged millions of acres across the northern regions to be a "fertile belt", but he also concluded that much of the southern country was too dry for farming. The latter region stretched eastward from southern Alberta into southern Saskatchewan, and northward to form what became known as "Palliser's triangle". These conclusions provided a strong rationale for cattle ranching as opposed to farming.

There was a period between Palliser's report and the beginning of the first large ranch in southern Alberta of about twenty years. This

time span between 1870 and 1882 has been termed the "free grass" years as the newly formed Canadian government was yet to impose strict legislation regarding settlement.

Palliser's report was not the only influential one; twenty years after his conclusions, another expedition was carried out by University of Toronto biologist James Macoun. In an official 1882 report entitled "Manitoba and The Great North West", Macoun vigorously argued that western Canada contained immense tracts of land that represented a veritable agricultural Eden. In fact, he claimed that Palliser's "triangle" was virtually nonexistent, and that there was an abundance of fertile soil and grass for grazing. The federal government of Wilfred Laurier, anxious to settle the West with homesteaders, leaned heavily on accounts such as Macoun's and highlighted them when advertising the region to potential homesteaders.



Farm Rehabilitation Act of 1935, there was common admission that a great deal of southern Alberta had been unfit for the type of farming done, and that insufficient agricultural research had led to devastating consequences.

While wheat farming was in its heyday in the second decade of the century, a number of voices began calling for diversification, but as soon as farmers were convinced of the merits of mixed operation, a good crop would come along and diversification would be forgotten. In time, however, the wisdom of harmonizing soils, grain crops and livestock was generally recognized. Diversification would allow cattle to contribute manure to fertilize fields and improve soil, and crops could be sold for cash or (in the case of glutted markets) used to feed and finish livestock. Combining cattle feeding with grain farming would also balance natural resources that would in turn result in good nutrition, good soil, and good farming.

A cyclical market economy, combined with harsh weather and the fragility of natural resources eventually convinced cattlemen of the need for diversification. Soon milk cows and even pigs were part of many farms, allowing for cash flow from cream and pork. The cattle herd could consume excess grain. Farmers who diversified

▲ Dairy cattle and hogs at George Lane's mixed farming operation at Namaka. Diversification to include such practises allowed ranchers to be less dependant on any one source of income. (c. 1922)

Glenbow Museum / ND-8-121

"I have dried out five years in succession. I have had a leg broke twice and fractured once; a little over two years ago I could have drawed all the money I wanted to off the bank to buy feed during the coming winter, but I would not have it. I said I had bought feed for cattle for two years and I would not do it a third. I went and sold them. I went to the bank and paid every cent that I owed them."

-Charles Harod, 1922



▲ Charles Noble standing waist high in a wheat crop on Noble Farms. Noble wisely used a variety of homegrown feeds including surplus and low grade wheats to feed and market cattle. (c. 1911)

Glenbow Museum / NA-4884-16

this way became among the most self-sufficient in the West. In addition to selling wheat they could butcher livestock when they needed meat, drink milk from their cows, eat eggs and pork, make their own butter, and cook with cream. Though wheat remained the primary cash crop, considerable land was reclaimed for its natural use. By the thirties livestock numbers rose and so did land dedicated to pasture, fodder and feed grains. Mixed farming was firmly in place after World War II.

Cattle feeders in the years of challenge and change had access to valuable scientific findings from research centres which also encouraged mixed farming as a means of balancing income. Available information educated the cattle owner on the nutritional value of feeds and strategies for feeding. In 1926 the University of Alberta's College of Agriculture produced research showing that the feeding of alfalfa followed by oat hay had excellent nutritional value, especially when protein supplements were lacking. In order to combine sufficient roughage with green grass that was high in protein and water content, scientists also suggested that

spring pastures should not be over-grazed in the previous fall or winter. Weight gain decreases in cattle were found to coincide with a decrease in adequate protein content, but an increase of carbohydrates in forage fed during autumn allowed cattle to withstand low winter temperatures. Agricultural researchers urged cattlemen to consider deferred and rotational grazing practices to allow maximum feeding value per unit area of pasture.

The practical application of these findings became critical during the 1920s when old markets disappeared and new ones demanded a higher quality of meat, due in part to the introduction of a beef grading system in 1928. With operations more limited in size, ranchers had to intensify their operations to improve herd quality. The dirty thirties only accentuated this need for resourcefulness. Thoughtful feeders increasingly used grain for feed and some smaller farmers used "screenings", the weed seeds and broken kernels of oats, wheat and barley, as a food supplement. Screenings could be acquired from government elevators or flour mills, and were delivered in box cars.

Often as fine as dust, this supplement provided decent nutrition and saved already busy farmers from more work grinding grain and straw.

Even though thousands of drought-driven refugees began leaving Alberta in the twenties and thirties, it was clear that progressive cattle owners and feeders who diversified could survive the worst of times. Charles Noble was an excellent example. His respect for the land and skill in blending the various components of the farming business helped him succeed despite suffering some huge financial losses during the difficult years.

Armed with knowledge and experience in both the cattle and grain business, Noble operated a fine feeding operation. His farm was located near the town of Nobleford (named after him), and though it was neither the smallest nor largest feedlot in Alberta, it was successful in both the lean and

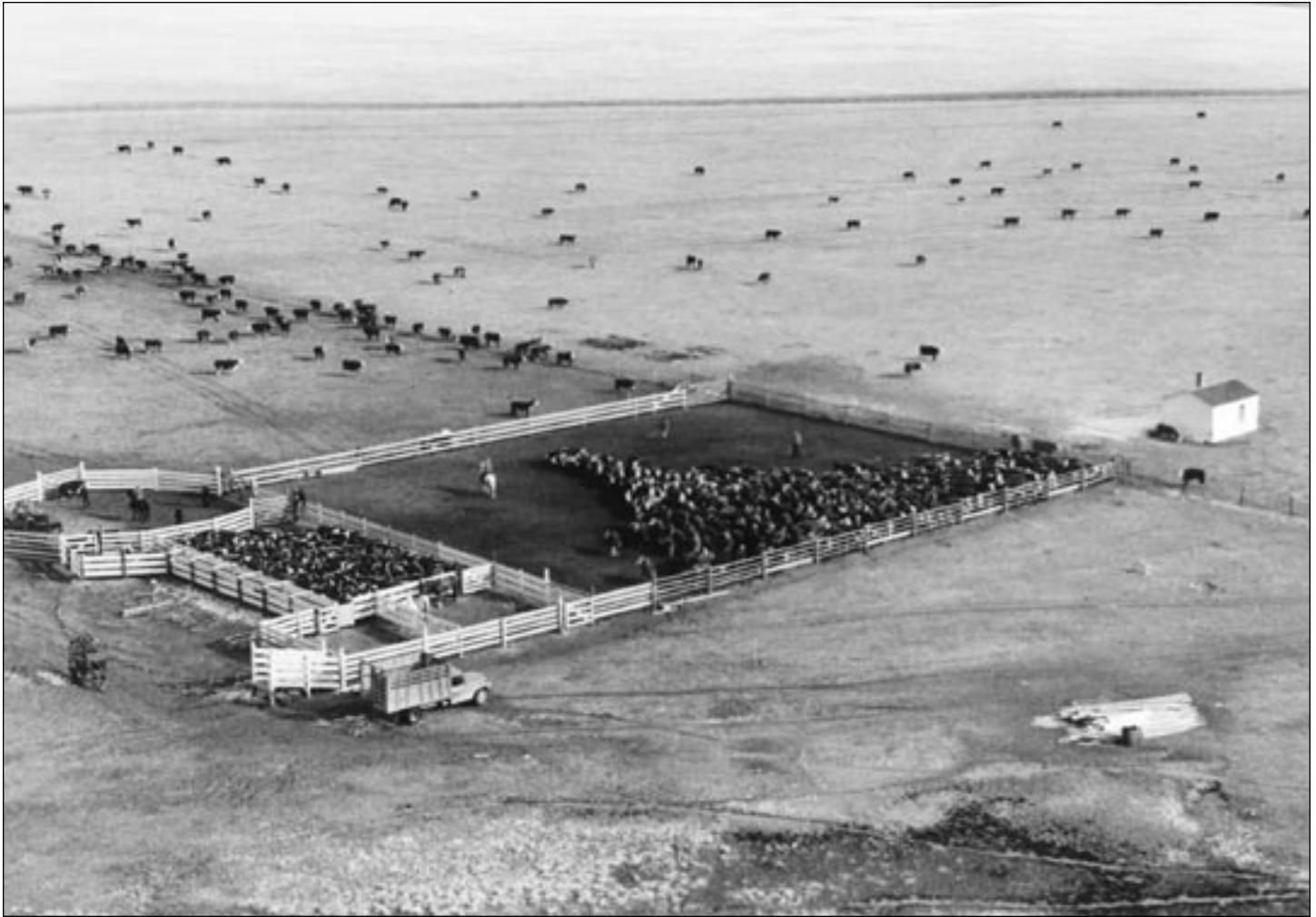
good years. Noble wisely used a variety of homegrown feeds including surplus and low grade wheats, and excess oats and barley to feed and market cattle. Roughage was used in cereal silage form, cut before it reached maturity so it could offer high food value. Even the weeds growing in the crops were arrested and translated to useful and edible feed. In 1934, during a time when cattle feeding and the livestock industry was in the throes of drought and depression, Noble shipped a good quantity of Red Leaf beef cattle to Britain through the Southern Alberta Co-operative Association. The cattle sent had been purchased the autumn before and brought to a profitable finish through the winter by following a careful feeding plan. Charles Noble illustrated how cattle feeding was becoming a more strategic and even scientific enterprise within a more diversified agricultural approach. 🐄

Railway cattle cars were used to transport cattle to the larger eastern markets. Many of these animals were exported to Britain and other foreign countries.

Photo Courtesy of Ted Pritchett







Life and Times in the Cattle Business

By 1920 a traveller across southern Alberta would have passed a variety of agricultural enterprises differing in scale, objectives and methods. Many grain farms would have been seen in the eastern part of the province, with some cattle grazing in bottom lands. Toward the foothills a number of modestly sized ranches, numbering their herds in the hundreds rather than thousands, would be observed. The more accessible fields were fenced and land was broken to grow fodder crops. On the impressive grazing areas in higher foothills and forest reserves, some purebred herds of cattle and young steers would be seen feeding to their heart's delight. The EP Ranch centered near Pekisko Creek was

a “typical” large operation in the teens and twenties, consisting of nearly 1,500 acres of deeded land and some 20,000 acres of leased territory. Most of the deeded property was eventually fenced, some crop land broken, and the ranch operation featured about 600 cattle. The EP represented a trend in which cattle owners, regardless of size, had to improve their herds and intensify their operations.

This situation was exactly what the federal and provincial governments wanted. They believed more cattle could be produced for market with thousands of farmers providing high quality stock, as opposed to a smaller number of huge operations. While some larger herds still remained,

▲ **Aerial view showing cattle being cut out in corrals for branding and shipment. The grazing cattle in the background are separated by a barbed wire fence.**

City of Lethbridge Archives / P19760205010

◀ **The EP Ranch in the Rocky Mountain Foothills was a typical large ranch in the 1920s.**

Photo Courtesy of Grant MacEwan

middle-sized ranchmen became the norm, but the largest ranching operations still fared better than the smaller ones when faced with difficulties. The bigger cattle companies could absorb losses during poor years, and so tended to be more economically secure. Once they adjusted their grazing methods to fit the region's climatic realities, particularly through proper feed supplies and shelter for cold winters, they had even healthier yearly returns.

Some of these adjustments were slow in coming. While there was obviously economic advantage to be gained by new procedures such as putting up hay for winter, many ranch hands simply did not like such work because it meant replacing the well-known "cowboy" tasks with work deemed less dignified. Fear of unemployment changed many minds, however; in 1921, an experienced cowboy seeking employment on the Cross ranch stated in his letter of

application that he had changed with the times and was willing to do all kinds of ranch work.

Ranchers in the foothills region got into the regular habit of preparing more feed for their cattle. This meant getting hay ready for the winter, and because most cattlemen finished their own animals for market, they did so on grass in summer and hay in winter. Toward this end, cattle ranchers were especially receptive to new haying equipment which could speed up the laborious task. George Lane of the Bar U Ranch used a powerful steam tractor fitted to drive two big threshing separators at the same time. When the threshing crew was in place, as many as ten teams hauled sheaves to the equipment. The use of feed grains would become even more popular in the middle of the 1930s, but in the early years it was simply too expensive and inconvenient for ranches in the eastern and southern regions of the province to plant crops or haul in grain from distant fields.

Wintering cattle on hay near Cypress Hills. Once ranchers adjusted their grazing methods to fit the region's climatic realities, particularly through proper feed supplies and shelter for cold winters, they had even healthier yearly returns.

Saskatchewan Archives / R.B10527





With soil damaged by overseeding, range management became increasingly important over time. The dissemination of information through agricultural societies, colleges and research centres helped farmers and ranchers understand adequate range management, seeding techniques, and the behaviour of native grasses. Summer fallowing and crop rotation were the most common strategies employed to increase production. The Prairie Farm Rehabilitation Act, passed by the federal government in 1935, provided for the establishment of

community pastures and resettlement of farms on better soils where crop production improved. Grass was allowed to recover naturally and other areas were reseeded on these community pastures.

No region of western Canada escaped the pervasive impact of the depression, but foothills ranchers were spared the stereotypic image of rolling dust clouds that led many to abandon farms. That is not to suggest that ranchers escaped the dirty thirties unscathed. A spring snowstorm and heavy spring rains in 1933 delayed spring work in much of the foothills region, and by mid-July drought conditions had settled in. That year the EP Ranch crops yielded less than a third of their normal amounts of fodder. The winter of 1935 was bitterly cold, and dust storms followed in May. Feed supplies dried up and cattle shrunk. During the drought period it was not unusual to see sand drifted to the top of fence posts, and only the top of

▲ **Threshing in the Highwood River area.** As ranchers began to decrease their herd size and intensify their feeding practices, they also began the process of finishing their own cattle for market. Threshing machines made the task of separating grain easier and the number of grain crops soon increased. Grain from these crops was not only used to feed cattle during the winter months, but also as a finishing ration during the rest of the year. (c. 1907) *Glenbow Museum / NA-2800-6*



◀ **Grass recovery programs on 'heavily grazed' pastures** gave nature time to rejuvenate itself and sustain land for future use. *Photo Courtesy of Alberta Agriculture*



▲
A dust storm at Cereal, Alberta. Soil drifts reached the tops of fence posts and rendered the land barren and stripped of nutrients and moisture. (c. 1930s)

Glenbow Museum / NA-2543-45

machinery levers poking out of the drifts. On one farm, a sand drift reached half way up the roof of a horse stable and extended out to a point one hundred yards away.

The LK Ranch also faced the standard difficulties of the thirties, but managed by exporting to a more steady foreign market, tightening the belt on spending, and simplifying feeding procedures. The LK men served their cattle available oats and wheat, and the livestock itself would seek out necessary supplements, even if it meant licking sand. Foothills cattle owners and feeders who exhibited resourcefulness (and were perhaps a little lucky) made it through the depression, and the forties brought better days. In general, cattle production decreased only slightly from the days of the homesteaders. In fact, a 1941 survey of 218 ranches in southern Alberta showed that the average ranch size was just over 10,000 acres, indicating the extensive scale on which operations carried on after the grim thirties.

Another important development during the years of challenge and

change was the gradual introduction of new breeds of cattle. In the early years of cattle raising in the West, the need for quantity was far more important than animal quality. Improvement in cattle had to wait until sufficient numbers resulted in inferior stock and the need to reject animals of ill shape and questionable quality. As a result, research conducted at government experimental stations before 1925 gave little attention to animal husbandry and problems associated with livestock breeding and housing.

From the first day that cattle set their hooves on the Alberta rangelands, three breeds were dominant. The first purebred Shorthorns were brought into Alberta by Kenneth MacKenzie and Walter Lynch even before the era of large ranches, and Aberdeen Angus were first bred and introduced to the West by Walter Gordon-Cumming at the Quorn Ranch in 1889. But it was the red and white faced Herefords that ultimately became the leader in breed popularity. They were present on Matthew Cochrane's first ranch west of Calgary in the early 1880s, spread

quickly, and experienced a boom period during World War I. Herefords established their dominance throughout the province because of their adaptability to the rigorous and unpredictable conditions. As World War II began, 80 percent of the cattle in Alberta had Hereford breeding, and that included 17 percent of Hereford-Shorthorn crosses. The remainder were herds where no particular breed predominated. Smaller ranches (less than 100 cattle) allowed more indiscriminate mixed breeding, while those running up to 800 head favoured the Hereford. On the large ranches featuring over 800 head, Herefords were the norm but other breeds were also gradually introduced.

In the years leading up to World War II, cattle owners became increasingly aware of the value of good sires. Growing interest in a higher class of Herefords reached a climax after World War I, and this corresponded to a growing demand for superior bulls. Between 1918 and 1930 new European breeds were introduced so that by the end of this period western Canadians could count at least fifteen types of cattle, even though not all were necessary. Individual voices were also occasionally heard encouraging



▲ **Herd of polled Aberdeen Angus cattle at the Cathro place. (n.d.)**
Glenbow Museum / NC-26-276

◀ **Shorthorn bull. Shorthorns were one of the three dominant beef cattle in Alberta. This animal belonged to George Allenby of Crossfield. (c. 1930s)**
Glenbow Museum / NC-26-276



◀ **“Domino 49th” from Frank Collicutt’s spring herd. This was the Grand Champion bull at the Royal Winter Fair. (c. 1931)**
Glenbow Museum / NA-2040-1

cattlemen to breed better. A.E. Cross's cattle returned great prices in 1916, and he urged fellow ranchers to follow his practice of better breeding as a means of higher profits. Between 1910 and 1930 many stockmen across the prairies stabilized the industry by organizing bodies such as the Saskatchewan Livestock Cooperative Marketing Association. These co-ops were formed to improve and maintain better return on investment. The logic was simple: by pooling livestock for sale through a central agency, each contributing member enjoyed returns directly related to livestock quality. This same type of organizing trend took place among stock breeders themselves, especially after the provinces of Alberta and Saskatchewan were formed in 1905.

Of all the ways western stockman acquired knowledge of improved breeding methods, perhaps none was more important than local agricultural fairs and exhibitions held in numerous communities throughout the West. These events featured livestock

exhibitions and judging, and were enormously popular among stockmen. One of the most exciting competitions took place at the Calgary Summer Fair in 1917 when numerous cattlemen from across the country entered their finest stock. Recognizing their importance, provincial governments began to annually fund exhibitions, appointed Superintendents of Fairs, and even supplied judges capable of evaluating the stock. The fairs also helped establish breeding standards. Eventually spring and winter fairs became as popular as autumn ones, and the sale of pedigree bulls became an important component of the events. It was at these fairs that Junior Beef Clubs and later 4-H clubs were formed.

The effect of improved breeding on cattle feeding was direct. New breeds represented variations in animal constitution and meat type, and each breed required unique feeding strategies to optimally finish animals for market. In later years market analysis would become an important

Sundre 4H beef club showing calves at a fair in Olds. (c. 1942)

Glenbow Museum / NA-2986-10





◀ **Beefalo or Cattalo were a cross between domestic cattle and bison. This unusual breed stemmed from an attempt to develop the perfect large, heavily muscled beef animal. The breed developed a small cult following during its tenure, however the larger shoulders inherited from its bison ancestry made calving difficult and interest in the breed was short-lived. (c. 1940)**

City of Lethbridge Archives / P19760200047

component in determining which meat type and quality (and representative breed) was preferred by different markets. Gradually the cattle feeding business was becoming specialized as the market diversified.

The market for Alberta beef producers exhibited a cyclical pattern in the first half of the century. When prices rose, as they did between 1910 to 1914, producers were attracted and herds expanded. It would then take

about five years for increased numbers to glut the markets and drive prices down, resulting in some smaller cattle owners being driven out of business. The cycle then reversed as cattle numbers went down and prices rose again. High points in the cycle of beef production in the West occurred in 1882, 1902, 1915 and 1928. Other variables such as the onset of war, increasing settlement, and lease changes also affected markets, but

"The CPR outdid itself in getting cattle through, sometimes even stopped a "crack" silk train to hook us on. Those transcontinental freights, rushing Oriental silk from Pacific ports to New England textile mills, had priority over everything on the line, and they could get our cattle through with just one stop en route, which saved two feeds along the way. It was quite a thrill to get word of a silk train coming....One who did go on a trip was an adventurous young Albertan named Harry Hays, who returned to make a fortune exporting cattle, and went on to become Canadian minister of agriculture; it was he, of course, who opened up the North American continent to European cattle. But that's another story. It was quite a joke on Harry that a silk train came through on his wedding day. The knot was hurriedly tied, and Harry kissed the bride, and departed, all alone, in the caboose."

- Edwin McKinnon



▲ **Harry Hays: cattleman; Canadian minister of agriculture; and developer of the Hays Converter cattle breed.** Photo Courtesy of Ted Pritchett

whenever hard times hit, the small producer usually paid the biggest price.

Major oil discoveries in the Turner Valley in 1924 introduced a new player in the economic development of Alberta, and some ranchers (especially those who held mineral rights on their deeded land) became involved in the exploration activity. But in its day-to-day operation, western stock-raising changed little. Cattle branding, rustling, wolf bounties, range fires, cattle disease control and concern for favourable laws continued to be the traditional issues engaged by the cattlemen's organizations. The key organizations were also changing, as regionalization required new political strategies. When the Western Stockgrowers' Association experienced funding problems and was unable to adequately galvanize the cattle community, George Lane spearheaded the establishment of the Cattlemen's Protective Association of Western Canada in 1919. A year later the organization was renamed the Stock Growers' Protective Association to appear more inclusive. The association busied itself with issues such as the treatment and control of mange, and the prevention of market deterioration. Its efforts led to improved access to

British markets and the protection of the big ranchers' lease arrangements with government. The organized and effective activity of this group revealed that ranchers still held significant power in Alberta's agricultural community.

Political strategy and solidarity was especially important when farmers and ranchers faced the devastating blows delivered by nature's unpredictabilities and depressed market conditions. The "dirty thirties" were perhaps the most significant ten years in western Canada's history, a watershed era which scarred and transformed the region. The stock market crash of 1929 provided the initial shock, and the effects were immediate. Between 1929 to 1930 the number of cattle shipped to the United States fell from 160,000 to 9,000. While some foothills ranchers escaped the worst ravages of drought conditions, they bore the full brunt of world trade disruptions. After the phenomenal demand and exceptional prices of the late 1920s, the bottom fell out on livestock prices in 1931, reaching their lowest price in thirty years. They continued dropping in the thirties. Nothing in the decade was more depressing than the dust storms, and 1937 was the most ominous in that

"The export beef off the ranges had another hard condition to contend with when ready for market. The fat animals of the Alberta prairies are wonderfully fit when the grass of the fall has matured and the animals have "trimmed to solid meat and marbled flesh", but the long haul, the handling, transferring, crowding in cars and jamming up chutes and into the strange interiors of vessels, the pitching, tossing voyage, all count to worry the wild, nervous range stock. Bruised, battered, worried out of hundreds of pounds of the fat they carried when crowded up the first loading chute, they landed in England, where almost immediately butchery awaited them, and the bruises, cuts and jams showed all over the butchered meats. This hurt their sale, and the reduction in weight during shipment subtracted considerably from the pockets of the owners. An



average shrinkage of nine to ten per cent, was the usual result of the long journey."

- Leroy Kelly



Loading cattle onto box cars. (c. 1900) Glenbow Museum / NA-1368-13



regard. Before the summer of that year ended, Palliser's triangle was reduced to desert-like conditions, and it was clear the fodder growth would not meet livestock needs. The government stepped in to help ship cattle to areas of better feeding, and bought up to 90,000 head to be shipped to stockyards or feedlots in eastern Canada.

In the second half of the decade, facing feed shortages, producers often had no choice but to market their cattle to the point where packing plants were reporting losses. The federal government helped by paying both the producer and packer a cent per pound for cattle. The cattle industry hit its low point in 1937, due to severe drought and a spring storm. Conditions then improved so that by 1940 all classes of stock were selling for about \$2 per hundredweight, an increase over the previous 19-year average. Increased precipitation during the last three years of the decade coincided with a growth

in farm and ranch receipts. The rebound of cattle operations in the 1940s is exemplified in the accounts of the EP Ranch, when stock sales grew from \$1,500 in 1940 to \$7,500 in 1947. Though management had been pessimistic about the economic outlook in the late 1930s, the new decade brought positive developments.

Cattle that had been fed and finished on ranches such as the EP usually found their way to the Calgary Stockyards in those days. These stockyards, which was Alberta's major terminal marketing facility, was built in 1903 by Pat Burns and a number of other shareholders, and followed the business pattern of similar stockyards in major U.S. cities. At the time it was built the auction market system had yet to be established. At first the Calgary Stockyards conducted its own business, but by 1910 various commission firms had set up and battled over the cattle brought in by ranchers and feeders.

▲ The desert-like conditions in the area know as Palliser's Triangle, left the land scarred and transformed as soil drift inhibited any substantial fodder growth. Hanna, Alberta (c. 1930s)

Glenbow Museum / NA-4179-15



"Some cattle were headed for Cayley from the OH ranch, there was the buyer or drover who had these cattle that got into the alkaline water and damn near died, at least they tried to die. They got nitrate poisoning. They just lose the use of their legs and drop and they slaughtered them as fast as they could. They tried to anyway, they got Dick, the butcher at Nanton to come out and he butchered a bunch of them but they were going down so fast that they couldn't keep up. So they

got a hold of Pat Burns and he brought down a crew from the packing house. He had connections everywhere. He got the railroad to ship down a few refrigeration cars. They were able to salvage a few. [The buyer] worked for Pat Burns who was probably the biggest drover of the bunch."

- Elden Seney



Skinning beef on the Alberta prairie. (c. 1912) Glenbow Museum / NA-777-28

"When I was a kid, we roughed calves through the winter, and I mean rough. If they weighed 380 pounds at weaning, they went out next spring at 400 and disappeared in the bush till November, when they'd weigh 450. A year later they might go 800; eventually, as grass fat three and four-year-olds, they'd go to market at 1,100 or 1,200 pounds. Dad was of the old school, where the main criteria for a cow was easy wintering and dropping a calf each spring. It didn't matter what some judge might pick; Dad wasn't the least bit interested in showing. I was never in 4-H. Dad saw no sense in leading cattle; he was more for chasin' 'em – within reason – consistent with the business of selling pounds. A high point of the CL year was shipping

the steers. Dad and his brothers liked to trail to Calgary, where, as their string of big old three-year-olds headed through a residential area, the "drag" would see the leaders up in front and take a shortcut through the roses and petunias. This went on through the thirties until one day when they had their steers lined out along a thoroughfare, a lady stepped out on her porch and shook a tablecloth or bedspread. Pop! Snap! Crash! Those steers went in all directions, taking clotheslines and fences with 'em. A cop was there with a warrant when we finally reached the stockyards, and we never trailed through Calgary again."

- Marshall Copithorne



The cattle feeder typically delivered his cattle to the Stockyards, which would then distribute locally. If the provincial market was full, the animals would be fed and prepared for eastern Canadian or foreign destinations. For many years the Stockyards used loose hay as the principal diet for held cattle. This feed would be purchased from farmers around Calgary who would haul it in by horse and wagon. Hay trails creased the landscape, winding their way along paths of least resistance into this haymarket hub. More than one farmer would weigh, sell and unload his feed, treat himself to dinner at a Calgary restaurant, and then head back home before dark.

From the Stockyard's opening until World War II, most cattle brought in came from a relatively narrow perimeter around Calgary. Even by the late thirties and early forties most cattle owners and feeders were too remote from the city to truck cattle all the way in, so they drove them to local railway shipping points where rail cars took them the rest of the way.

The growth of the Calgary Stockyards coincided with the development of the meat packing industry that was also spearheaded by Pat Burns. Meat packing was in high gear during the roaring twenties when everyone involved seemed to make money. Burns expanded his operation

▲ **After the stockyards in Calgary became instrumental in the marketing of cattle, wagon loads of hay could be seen headed for the larger hay market hubs. (n.d.)**

Fort Macleod Museum / 80-38-1



◀ **Beef cattle headed for the Strathmore stockyards. Cattle were often shipped by rail from outlying areas to the Calgary market instead of transporting them by truck or trailing them all the way into the city limits. (n.d.)**

Glenbow Museum / NB-39-26



▲
The Pat Burns & Company packing plant near the Burns feedlot and the Calgary stockyards. (c. 1910s)

Glenbow Museum / NB-16-371

across Canada, and several other plants and abattoirs joined to form Canada Packers. Swift Canadian and Union Packers were also successful organizations. When Burns and Company was sold to the Dominion Securities Corporation Limited of Toronto in 1928, the era of branch-plant packing began in Alberta.

By the time World War II began, the butcher and feeder markets were the two principal destinations for cattle. A great many animals were termed “two-way”, being suitable for either purpose. Centres for butcher cattle were located in Vancouver, Winnipeg and Toronto, feeder cattle had several outlets, and the number of feedlots were growing. The larger packing houses also sent buyers to purchase stock at ranches or shipping points. It was not uncommon to see buyers from more than one

packing company visiting a cattle feeder to view sorted cattle and make bids on behalf of their employers. Drovers and independent buyers also travelled to range areas, but they tended to have a poor reputation because they often presented the producer with a “take it or leave it” offer. When market information became more readily available to cattlemen, drovers became unnecessary. A few ranchers also held private auctions that they developed and ran themselves, and these became popular because of convenience and lower costs.

The important development of community auction sales were initiated by Don E. Ball of Edmonton in the fall of 1938. Though stockmen were initially apprehensive because the system was new and allowed strangers to name the

price and take livestock, they were eventually won over by Ball's careful public relations work and a system of guarantees. Ball and his associate, Charles Franklin, gradually managed to get interested stockmen to support their business, and its success resulted in the Community Auction Sales in Alberta. Soon these sales were taking place in a number of towns throughout southern Alberta. The auction market system made millions of dollars for stock growers, helped stabilize the industry, and encouraged both old and new cattlemen in the business. There are dozens of auctions markets across Alberta today, and they serve as a important link between the cattle producer and the feedlot operator. 🤠



◀
The auction ring at a community cattle sale in Pincher Creek, Alberta. (c. Sept. 1953)

Glenbow Museum / NA-4510-120
 Glenbow Museum / NA-4510-119
 ▼







Cattle Feeding in the Years of Challenge and Change

The period from the end of the open range to World War II saw a slow but steady increase in more planned and precise cattle feeding. Cattle owners who did some grain farming (or had access to grain) were able to feed and even finish cattle throughout the winter. Long before feeding became a large-scale business enterprise, however, research in how to better fatten and finish livestock for greater profit was humming along at places like the Brandon and Indian Head (Saskatchewan) Dominion Experimental Stations. Various rations were tested after 1880 as researchers sought to determine each fodder crop's value in the stages of a steer's life. As

early as 1888 the *Nor'-West Farmer* advised that providing a supply of more palatable or concentrated food to make up the shortage caused by the drying out of natural grasses would allow cattle to maintain their plumpness. The publication also recommended a daily addition of turnips for supplement. In addition to testing feeds, nineteenth-century scientists addressed issues of general diet, and made suggestions for mixing hays and crops. For example, Brandon scientists contrasted the weight of cattle fattened on corn with those on brome hay, and with both diets supplemented by turnips, chop and bran. This meant that by the 1890s cattle owners could access information

▲ Hereford steers penned in a feedlot. These animals, owned by Leslie Towers of Jumping Pound, eventually topped the Chicago market at \$8.75/lb. (c. 1938)

Glenbow Museum / NA-691-2

◀ Margie Buckley feeding cattle at a Jumping Pound feedlot west of Calgary. (c. 1918)

Glenbow Museum / NA-3017-4

to identify qualities they wanted in steers, and how to more adequately feed in order to achieve those characteristics. The Brandon researchers eventually recommended corn silage as a supplement to more traditional feed crops, and suggested that carefully planned feeding programmes for prescribed periods could mean more dollars. This early work revealed that improved feeding would greatly assist cattle owners, and many carefully noted the conclusions and recommendations, especially for fall and winter rationing.

Whether or not they had access to these feed options, most small cattle owners at the turn of the century had built small corrals in order to feed units of twenty-five cattle. Homesteaders and early mixed farmers in the more northern regions of the province found it easy to feed a bit of grain to their few cattle. Foothills ranchers were slower to seed crops, choosing instead to continue the time-honoured practise of raising

their cattle on grass in summer and some hay in winter. Further south, ranchers in irrigated areas began to add oat straw and even newer supplements such as turnips and oil cake to the traditional feeds.

One major drawback to the seeding of forage crops in these early years was cost. Succulent feeds such as alfalfa and brome grass were priced beyond the reach of most small or mixed farmers, while others did not possess the skills needed for successful maturation of such crops. Furthermore, forage crops diverted valuable wheat fields to a non-marketable commodity for up to five years, and so for many the investment did not make sense, given the cost and effort. Yet another drawback was the need for adequate water supply in order to seed land in drier regions. Irrigation systems that developed in the south and southeastern parts of Alberta allowed cattlemen in those areas to experiment with alternative feeds more readily than their fellow cattlemen in other areas.

Cattle in a corral used for feeding. After the turn of the century, cattle owners began to build feed pens to hold about 20 - 25 head. These cattle were primarily fed on hay. The man in the background is riding a horse drawn swather used for such haying purposes.

Glenbow Museum / NB-39-570





◀ Aerial view of 2000 head of Pat Burns' cattle being trailed from the Bar U Ranch to Burns' Calgary feedlot. This was the last drive of the Burns empire cattle. New and improved methods of transporting cattle soon took over. (c. 1949)

Glenbow Museum / NA-2575-6

Native grasslands in the parklands area of Olds and Didsbury soon gained an excellent reputation among cattlemen in Alberta, and so it is not surprising that Pat Burns' entrepreneurial spirit resulted in his "holding herds" being established there before the turn of the century. Earlier, Burns' beef camps had been set up to feed railway crews. Partnering with Cornelius Duggan and assisted by capable men like Walter Wake, Burns' feeding programme allowed him to finish cattle for the markets on a gradual basis and throughout the year. Before this time the general practise was to slaughter four year-old cattle when they came off the range. Unlike most ranchers, Burns cut and stacked immense amounts of hay for winter feeding and did not maintain a breeding herd. The holding herd system also provided a guaranteed income for small cattlemen who did not have the resources to finish their livestock. Burns would buy both young and thin stock as well as older cattle and finish them for his slaughter house and packing plants, or send them to other markets. His holding herd centre in Olds also became the most important shipping point for cattle on the line

between Calgary and Edmonton. It was two-way traffic, with young cattle being shipped in and fat four year-olds going out to market. Burns and Duggan were pioneers in carrying out a new plan of winter feeding and fattening of mature steers with hay. By 1902 Burns' was finishing up to 30,000 head every year and depending on the severity of winter, the amount of hay required ranged from one to three tons per animal.

The beef camps and holding herds were precursors of the modern feedlot, but they were obviously not as refined as today's modern methods. Neither were the feeding practices of early ranches. They would simply set aside some land and build necessary fences and troughs to hold and feed stock. If they did not have enough members in the family who could do the work, they would hire ranch hands, homesteaders or native Indians to help put up hay. Some cattle finishers purchased haying equipment and rented it out to farmers to get the job done in return for a portion of the hay. Other enterprising farmers bought their own machinery and spent all summer putting up hay for early feeders or for Burns' herds.

Some of the early independent feeders were Einar Stephenson of

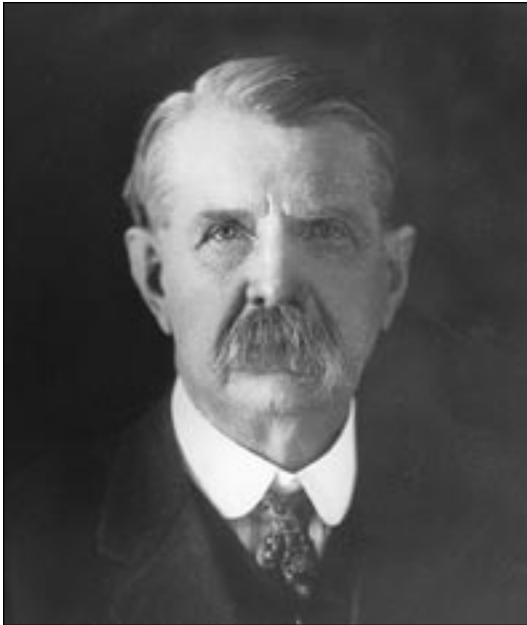


▲
The LK Ranch, established by Lachlin McKinnon in 1895, on the Bow River southeast of Calgary. The board in the foreground was used to carry the weather report. (c. 1914) Glenbow Museum / NA-2511-7

Lacombe and the McKinnons of the LK Ranch. The LK was started by Lachlin McKinnon in 1895 and located close to the Bow River near Langdon. In 1897 McKinnon broke land for feed crop and, when his hay ran out in the winter of 1902, used oats as a supplement to grass, feeding his cattle up to two pounds a day. The cows did well on this feed, so the following year McKinnon fenced an area with an adequate water supply and fed grain to steers. He not only considered feeding grain a valuable option when crops were abundant, but also when they were so sparse that threshing did not seem profitable. In 1918, when McKinnon's oats crop was light, he decided to pitch the sheaves right into a machine feeder. He also took advantage of a wonderful brome grass crop two years later by cutting it for seed rather than hay, and used the straw for feeding. Many cattle owners in the future would follow McKinnon's strategy, and even if the initial goal was to feed in a limited manner, many of those who did it successfully would inevitably expand their feeding practises.

The terrible winter of 1907-08, combined with diminishing land and increased cropping, forced cattlemen to limit their sizes of herds and to feed them more adequately and intensely. When government experimental farms continued to demonstrate that feeding grain to livestock over winter could result in handsome profits, wild hay was gradually replaced by cultivated hay and fodder crops on many cattle operations. Over time oats and barley meal were introduced and fed in increasing quantities.

George Lane of the Bar U was one rancher who began to feed his cattle every winter starting in 1912. Feed was cheap, and Lane reasoned that it was much more economical and businesslike than the old system of wintering cattle on the range when cattle were cheap and feed was scarce. In those days it was still profitable to leave cattle on the range and absorb inevitable losses of at least five per cent of the herd. With cattle worth \$50 a head, Lane concluded that it was worth feeding the herd to eliminate loss and have animals in shape for market at



any time, ready to sell when they commanded the highest price. So in 1912 Lane fed 3,500 beef cattle on frosted wheat, and he made his way to the United States to consult with authorities regarding the growth of alfalfa. Later that year, three hundred of his beef steers received the highest prices ever paid for cattle in Chicago.

The first cattle feeding enterprises faced common challenges, regardless of their size, and many small time feeders

and cattle owners in the early years found the process precarious. Several times throughout the first half of the twentieth century severe droughts caused an almost total failure of feed supplies and water facilities. These included local droughts, such as the 1917-18 dry period near Pincher Creek. Rancher F.M. Baker sent his own haying crews to Peace River to cut and bale hay to be transported down to his ranch. Unfortunately, delivery problems resulted in the hay arriving long after the need was greatest.

Another challenge facing feeders was the propensity of cattle to gorge on either hay or grain when presented with a free choice. The problem was alleviated in part with the introduction of machines such as the Letz mill which cut and mixed the two items. Of equal importance was feeding strategy and adhering to a carefully thought out plan. In the 1920s, the LK Ranch's feeders would meticulously measure the hay and grain thrown into the cutter. Once the combined feed was delivered by wagon to the troughs, the worker would thoroughly mix the ration and scoop adequate portions to the hungry animals.

◀ **George Lane, an astute cattle and businessman, was a vocal proponent of mixed farming operations in Alberta. He felt that in order to be proficient at raising cattle, grain and hay must be grown for feed. This is the same fundamental philosophy used by the feeding industry today.**

Glenbow Museum / NB-9-57

Making sunflower silage on the Kerfoot Ranch in Grand Valley near Cochrane. A horse and rake are being used to pack the feed in the bunker. (c. 1924)

Glenbow Museum / NA-4286-3





▲
The feedlot and stockyards of the Pat Burns cattle empire. A precursor to the modern feedlot, Burns finished 6000 head of cattle per year. His stockyards were said to have been larger than the CPRs. (c. 1910s) Glenbow Museum / NB-16-373

Cattle feeders would soon become increasingly dependent on favourable markets, where the smallest drop in prices could wipe out profit margins. Yet it was not uncommon to see more and more large ranchers finishing their own cattle. Often their choice of feeds was not wide-ranging, but most saw value in breaking some land to seed a feed crop, and did their haying in the fall with a view to bring their stock to market size. Other successful feeding operations saw fit to expand. The LK purchased the XL Ranch in 1921, used the new land for summer grazing and trailed the cattle to the home area for wintering and grain finishing. By the end of the decade the LK broke 1500 more acres of sod for seeding wheat, barley and oats. These coarse grains were used for finishing and Lachlin McKinnon was soon able to ship his beef to markets across Canada as well as to Great Britain.

The first outstanding (and certainly the largest) cattle feeding operation that could at all be compared to a modern feedlot was the Burns Ranches' feedlot located in what is Calgary today. It started in 1922, and was gradually expanded over the following decades. In the early years two hundred steers were fed on sunflowers, and within six years the yards had the capacity to hold and feed two thousand head every year. By 1950 the Burns feedlot was turning out almost six thousand cattle a year. The cattle feeding enterprise throughout Alberta benefited immensely from the work done and lessons learned on the Burns feedlot over the years, as almost every type and mixture of feed was used and tested there.

Further south, the cattle feeding industry began to take off in the late 1920s, and was boosted by the revival of the Raymond sugar factory in 1930.

Before the arrival of the sugar industry, most cattle was sent directly to slaughter off the grass or were shipped to eastern Canada for finishing, but the sugar beets and by-products allowed feedlot operators and irrigation farmers to join forces in order to finish cattle. The Southern Alberta Cooperative Association started contract feeding of beef cattle in 1928, as 3000 head of cattle were placed in feedlots for winter fattening. Ranchers supplied the range cattle and split the profits of winter gain with the feedlot operators and irrigation farmers. Eventually the process was simplified and feedlot management purchased cattle outright. A second sugar beet factory was built at Picture Butte in 1936 and another was built near Taber, meaning more available beef pulp for feedlots. As a result, many more farmers and ranchers contributed their cattle to the growing feed enterprise.

The feedlot near the Picture Butte factory illustrated some distinctive feeding techniques. Workers would load and transport ground barley using shovels, old large wagons and a team of horses, and then spread the ration evenly on a floor. A load of beet pulp



and molasses from the factory would then be brought and mixed with the barley, and the meal would be shovelled into bunkline feeders. Numerous beet farmers in the southern areas also constructed feedlot facilities on their farms, because the abundant supplies made it relatively easy to feed out a carload or two of cattle for the winter. The Riverside Ranch near Lethbridge was one such operation which could

▲ **Cattle in pens at a Lethbridge area feedlot. These cattle are being fed a mixed ration of sugar beets and hay. (c. 1953)**

Glenbow Museum / NA-4510-88a



◀ **Front end loader filling a dump truck full of sugar beets for delivery to a local feedlot. Sugar beets and their by-products became a staple in feedlot diets with the arrival of sugar beet factories in southern Alberta. (c. 1953)**

Glenbow Museum / NA-4510-92

feed their Angus cattle a choice of abundant hay, brome and blue grass, crested wheat and sweet clover.

Early experimentations in feeding would lay the foundation for the breeder-feeder contract systems of the future. The process was well adapted to Alberta, where the southern portions provided purer grazing areas and irrigated crop land, and the central and northern portions had abundant feed for supplemental winter feeding and finishing. The feeders would benefit ranchers who found it unfeasible to finish on their own. The process involved ranchers placing cattle on shares with the feeder-finisher in the established feeding area. The latter would use his feed to finish the cattle to desired requirements. Mutual agreement required discussion on factors such as age, rate of gain on feed in an area, cost of feed, water supply and general care of the animal. It was sometimes difficult for producers and feeders to reconcile their differences regarding contractual agreements, but a popular contract in the early thirties was the "Inventoried Investment Plan"

where the ultimate profit was divided on the basis of each party's investment. J.F. Murray was one early feedlot operator who fed for himself and others. He arrived in the Picture Butte district in 1927 with two cows, but within a couple of decades was handling and feeding hundreds of cattle for himself and others.

Market realities continually influenced progressive cattlemen to prepare cattle for market all year round, and to finish cattle to more precise specifications. What George Lane realized in 1912 became common knowledge after a beef grading system of "blue" and "red" grades was put in place in 1928 under federal government supervision. Canadian packing plants grew in numbers and located closer to regional sources of supply, and the introduction of self-service retail outlets in 1935 increased the power of the consumer in demanding products. Cattlemen from the thirties onward needed to become more cognizant of costs and strategies involved in finishing and marketing their product to a higher quality. A popular practise

► Custom feedlots came into being as ranchers and farmers began to work cooperatively to feed cattle. For a per pound fee, farmers with an overabundance of grain could finish ranchers cattle to their desired requirements. In return, ranchers would have a finished animal that would go for considerably more in the marketplace. (c. 1953)

Glenbow Museum / NA-4510-87



that emerged at the time was lightly seeding oats in late summer in order to produce a “cover crop” used for fattening cattle. Two year-old steers were then let loose on the green growth, fed there for a couple of months, and finished on grain.

By the early thirties the two standard methods of fitting cattle for market, outside of selling them as feeders, were to supplement feeding by grain on grass, and complete contract feeding off the range. Many cattlemen were winter feeding on the range across Alberta and, depending on their location, relied heavily on oats, rye, wheat, “prairie wool” or slough hay, clover, alfalfa and corn. The general practise was to capitalize on complementary feeding areas. Stocker and feeder cattle were produced on the more central plains area and, if sold as finished stock, were finished on grass. About 10% of range stock at this time was finished in range feedlots on supplementary grain, hay, and concentrates. This was done in central and northern areas where farming was the dominant activity and winter feeds were more readily available.

One of the early feeders who used his operation to manage his own cattle as well as feed for others was Edwin McKinnon, son of Lachlin McKinnon of the LK Ranch. In 1936 the younger McKinnon began his “Running M” ranch near Airdrie, and worked eight sections. He eventually fed as many as 3500 cattle, which included six hundred of his own. Ed McKinnon creatively designed a silage pit to store cut feed and roughage mixed with oats, and his finished cattle found a willing customer in the Union Packing plant fourteen miles away. The Running M grew to the point where an office was set up in Calgary, from which an auditor kept track of the financial picture. By being one of the largest and earliest “local” ranchers who began to finish cattle for others as well as himself, McKinnon proved to be a transitional figure between the early years of feeding (when cattle owners fed their own



cattle for market) and the commercial feedlots that took flight in the fifties.

Throughout these years, agriculturalists at the Lethbridge Experimental Farm continued their research in beef feeding and the finishing of beef calves, and determined costs and returns on calves finished under contract feeding trials. Ranchers like the Gilchrist brothers raised stock and sold them to the Dominion Range Experiment Station for this research. It was generally found that cattle were better finished in feedlots and commanded higher prices on the market, and this only provided more impetus for the cattle owner to engage in feeding.

The smaller feedlots in the south got a boost from the Alberta government in the mid-thirties through an organized “feeder association” program. Upon recommendation of the Minister of Agriculture, the Legislature passed the Feeder Association Guarantee Act in 1937. This provided a means by which prospective feeders could secure credit necessary to purchase feeder livestock. Individual cattlemen were encouraged to register their own brand, and the banks lent them money to encourage cattle acquisition, while the owner was expected to provide the feed. The Provincial Treasurer provided a maximum 25% guarantee on the

▲
Lachlin McKinnon and family on their homestead south of Foremost, Alberta. The McKinnon's were one of Alberta's pioneers in the feeding industry. (c. 1910s)
Glenbow Museum / NA-2604-32

borrowed money. Government appointed supervisors were put in place to oversee the acquisition process and monitor the enterprise. This initiative lured many people who had sufficient money and interest (even some who had never raised cattle) to get into the feeding business. Some of these new feeders were able to build a legitimate business, and the initiative paved the way for Alberta's eventual large feeder associations. It also provided an important new destination for cattle from local stockmen. During the 1938-39 feeding season six associations were operating successfully and the number almost tripled in four years.

The severe drought years of the thirties, combined with problems with gophers, grasshoppers, army worms and other natural plagues hit the cattle feeding industry hard. The most obvious and pressing problem was finding adequate feed. Haying yielded little, feed grain was scarce and matters got so bad in some areas that livestock was fed Russian thistle! When governments realized the natural

calamity would not be short-term, they developed relief plans. The cattlemen also devised methods to counter the depression difficulties through the activities of the Western Stock Growers' Association under the leadership of Kenneth Coppock. Approximately two and a half million government dollars were spent to replenish local stocks of grains and hay. The buyer was paid for freight charges and expenses. A processing policy was designed to move poorer quality stock from farms and producers to the abattoirs, and a freight feeder policy allowed for the transport of foundation herds from hard-pressed ranches and farms to winter feeding areas. Feed was also moved to cattle by means of a policy where free freight was given when forage and grain was shipped to foundation herds in their home location. Eventually an optional marketing policy allowed cattlemen with surplus stock to ship them to holding pastures before sending them to markets in Winnipeg.

Even successful ranchers like the Hargraves needed to move their cattle

Cattle being loaded into box cars for shipment during the drought years. By taking advantage of the freight feeder policy, hard pressed ranchers could transport their cattle to feeding areas where there was feed available to winter and finish their cattle. The buyer was paid for the freight charges and expenses. (c. 1930s)

Saskatchewan Archives / R.A5103





Fields that were ravaged by the drought were obtained by the government under the Prairie Farm Rehabilitation Act of 1935 and turned into community pasture. (c. 1937)

Glenbow Museum / NA-2223-4

to irrigated land during the difficult times. From 1931 to 1935, cattle numbers in the drought areas of the province grew from 490,000 to 630,000, due in part to the strategy whereby feed from other areas of the province was transported to places of need. While these measures helped livestock owners in some ways, they also saved cattle that could not be sold profitably on the market. By the late 1930s surplus numbers of cattle needed to be bought outright by the government.

The government's Prairie Farm Rehabilitation Act of 1935 also urged water conservation and improved land use. Money was given to create dams and dugouts that retained water for many farms. In addition to providing water for cattle, these moves helped to water fields for hay crops and coarse grains used for feeding. The government also attempted to reclaim and restore damaged land through reseeding of perennial wheatgrass. Better lands were targeted for new and improved cultivation methods and management. Fields too badly ravaged by the drought were obtained by surrender, exchange or lease and turned into community pastures. Local stockmen organized to arrange and

regulate the grazing process. By regrassing where needed, the carrying capacity of the range was increased. Whereas at the outset of the programme it was estimated that fifty-eight acres were needed to feed one cow for a season, within two decades the carrying capacity was tripled. Crested wheatgrass was found to be an outstanding drought-resistant grass.

The formation of the Red Label Feeder Association in the early thirties also helped many feedlot owners join forces and tackle financial difficulties.

Charles Noble diversified his feeding activities to include animals other than beef. This "pig village" was part of a joint effort with other feeders to supply bacon for Britain during the war years. (c. 1942-43)

Glenbow Museum / NA-4884-27





▲ **Threshing near Olds. Successful grain farming operations often allocated a large portion of their produce to go toward feed for cattle. Cattle owners and their partners took advantage of an over abundance of grain by converting it into beef and increased their revenue per bushel ratio by fattening cattle. (c. 1912)**

Glenbow Museum / NA-2105-6

Seventeen members joined in 1936, and together represented businesses that finished hundreds of cattle. This Association developed a feeding plan for baby beef that involved following specified conditions supplied by the grower, but dependent upon the market price. So the feeding business progressed slowly through the depression, and by surviving the difficult years it entrenched itself in Alberta's agricultural business. The rationale was obvious; grain that brought very low prices on the market could be used when converted to beef. By 1940 cattle feeding was no longer a small enterprise; it was a growing business that would soon become a multi-million dollar one.

The decade of the forties saw the cattle industry rebound, and many ranches that enjoyed renewed success did so in part because of better range management and improved feeding techniques. Cattlemen who fed their cattle supplements to grass became the

rule rather than the exception, and ranches such as the EP reflected the standard practise of growing feed crops such as oats and barley. Feeding expenses at the EP, as throughout all of Alberta, increased from the late thirties onward. These expenditures included purchase of cover crops, stubble grazing, hay and grain, miscellaneous concentrates and mineral feeds, as well as arrangements made for contract feeding. In fact, feeders who contracted to finish other people's cattle would increase significantly after the War, and eventually result in the establishment of commercial operations such as Western Feedlots.

Harold Riley of the *Canadian Cattlemen* wrote in 1941 that there was no longer the same dependence placed on the native hay crop as in former years, and that it was a common sight to see well-run ranches surrounded by several hundred acres of highly tilled land, seeded to coarse grains which are put through the chopper and fed on the

ranch to “beef in the making” during the winter season. The old idea of raising “grass beef” only, and disposing of it once a year had been largely discarded, and the production of beef the year round was in vogue. The development had been accelerated by the establishment of co-operative and privately maintained feedlots in many centres. This intensification of feeding procedures was also illustrated by Riley’s anecdotal observation of a rancher who ordered a carload of stock salt with one half iodized and the other half plain. Riley mused that in the early days of the industry, an enterprising rancher might have purchased just a few sacks of raw coarse salt or some chunks of quarried rock salt, but that in 1941 things were much different.

Cattle ranchers also gradually developed their own systems of range management, but they were not complex. Suitability and convenience were key factors in grazing strategies,

and costs for fencing and water provision entered the equation as well. In the foothills, northern slopes were used in summer because the brushes provides shelter from flies and sun, and the southern slopes were grazed in winter because, being free of brushes, they tended to be swept dry when chinook winds delivered their tempering effect. On the prairies, certain fields were sometimes reserved for spring or fall primarily to utilize stock-water resources. Many ranchers also segregated various classes of cattle in different fields, but this reflected livestock management as much as it did range management.

As the Second World War approached the individual cattle owner was becoming a more careful and devoted feeder, and the emerging feedlot enterprise was starting to take shape. Eyes were turning to southern Alberta where irrigated crop land and the development of the sugar beet

Rounding up cattle in southern Alberta. As range management evolved, it maintained the basic fundamental grazing strategies – the availability of a good water source and the abundance of thick, natural foragable grasses for grazing. (c. 1930)

City of Lethbridge Archives / P19760205040





▲
A crane loading sugar beets into the bed of a pick-up enroute to a feedlot in the Lethbridge area. Beet pulp, when used to make a silage mixture, was considered a very effective, readily available feed for finishing. (c. 1953)

Glenbow Museum / NA-4510-93

industry offered potential for more intensive feeding enterprises. The establishment of sugar refineries made available a beet pulp which, when properly rationed with a mixture of crushed grains, provided a very effective fattening and finishing feed. The extensive irrigation systems between Lethbridge and Medicine Hat also produced wonderful corn and alfalfa crops, as well as the more standard grains such as wheat and oats. It was clear that the fine crops would be as useful for cattle feeding as they were for the volatile grain markets. Though farmers soon began selling alfalfa to cattlemen, it made more sense to bring cattle to areas where grain was grown. The ranching and grain industry were becoming more complementary and mutually dependent. Entrepreneurial stockmen were seeing the potential value of working cooperatively to establish feedlots close to refineries.

A government report on Alberta's cattle industry in the early forties concluded that the expansion of the feedlot business in Alberta appeared

logical and inevitable. The future would reveal that statement to also be an accurate prediction. The entire cattle feeding industry – from the individual feeder to the large-scale enterprises and associations – was poised to grow after the War, and grow it would.

When the twentieth century began, the cattle feeding industry was largely an informal and individual process in which individual cattlemen arranged for winter feeding by hiring help for haying, and used available feed to supplement what nature provided on grazing pastures. There were some localized beef camps, such as those run by Pat Burns, where finishing took place on a larger scale. Over time many ranchers began finishing their own cattle using hay and other available feed to supplement grazing. A number of other farmer/entrepreneurs also structured their operations to feed cattle through contractual agreements with neighbouring cattlemen. Most of these never rose to fame, but they laid the foundation for today's highly specialized procedure. They



◀ The owners and operators of a small feedlot in the Lethbridge area. Note the haystack, threshing machine and feed pens in the background. (c. 1953)

Glenbow Museum / NA-4510-91

"When they started the sugar beets around Taber, they would import a lot of sugar beet helpers to harvest their crop. In those days, the late '40s, they went in with a big cleaver and cut the tops off the beets. Most times they would cut off part of the beet as well as the top. They would pile the beet tops in small piles and, whether it snowed or not, you could always see the piles....I shipped cows to these beet fields. I could fatten the cattle on the beet tops - the sugar in the beet. At one time I fed more cows than anyone in Alberta when I was able to feed them on beet tops and grain. I'd fed a lot of cows on these beet tops until they got new methods of harvesting beets. When they could clip the tops off with machines there were no more left-over beet portions for feed."

- Luther Evenson

experimented with different feeds and silages, used manure to fertilize their fields, and housed the cattle in various types and combinations of corrals, feed pens and barns.

The evolution of cattle feeding into a more specialized activity was a function of the grain and cattle industries realizing the benefits of mutuality and cooperation, especially in light of the growing population and changing market realities.

Cattle feeding and finishing became more important as the market demanded cattle of better quality on a year-round basis, and cattlemen chose to focus on the cow-calf end of the business. Scientific advances and the sheer complexity of the agricultural industry created a niche for specialists who could custom finish cattle under optimum conditions on both small and large scales. The progressive feedlots of men like Pat Burns, Lachlin McKinnon and Charles Noble would give way to more advanced feedlot operations that reflected the latest in procedures, techniques and equipment. 🐄

chapter three



THE YEARS OF PROGRESS AND SPECIALIZATION







The Growth of the Feeding Industry in the Modern Era

By the end of World War II, Alberta's cattle and grain industries had survived difficult years, learned to coexist, and were poised for further development and growth. With the population set to explode after the war, the virtues and possibilities of cattle feeding were limitless. Nevertheless, even the most optimistic cattle owners would have had difficulty predicting or imagining what actually happened during the following generation. The feedlot industry enlarged and evolved to become a commercial enterprise offering highly specialized custom feeding. This development was accompanied by a growing dependence on scientific agriculture, with the result that the last half of the twentieth century saw cattle production and the feeding industry embrace state-of-the-art technology.

Cattlemen were certainly feeding and finishing their stock in a focused and strategic manner prior to World War II. By the late thirties and early forties people like Ed McKinnon had expanded their feeding enterprises to finish stock for other ranchers who wanted to specialize in the cow-calf end of the business. Slowly the stage was being set for larger scale "commercial" feeding, and this trend would grow as many individuals saw the opportunity of success in finishing for others.

These developments in feeding went hand in hand with diversification and changes in the international marketplace. A grain glut in Canada was created by the recovery of the European farming enterprise after the war, and converting grain to beef was a logical and even necessary strategy for western Canadian farmers. Increased

▲ Although feed grains became the basis for effective gains in feeder cattle, hay and other naturally foragable grasses remained a ration for feedlot diets.

Photo Courtesy of Alberta Agriculture

◀ After World War II, specialization in the beef industry set the stage for large scale commercial feedlots to operate. Many took advantage the "grain glut" and a positive marketplace to finish cattle for hungry consumers.

Photo Courtesy of Alberta Cattle Commission (ACC)

◀ Preceding page
Looking west over the feed pens at Western Feedlots toward the Rocky Mountains. Photo Courtesy of ACC

cattle production had been encouraged as part of the war effort, and beef markets were satisfactory at the time. When restrictions against the export of cattle to the United States were lifted in 1948, significantly more markets were reopened to Canadian cattlemen. A new peak in livestock production was reached from the late war years until the end of the forties, due to this combination of an increased demand for good quality beef and the need to convert excess grain.

While wheat remained the principal cash crop and had historically been the feed grain of choice, it was barley (in its various strains) that eventually became the most popular feed grain. The amount of land sown to pasture, fodder and feed grains also grew. This combination of good crops, rising grain prices and steadily reduced costs translated into handsome revenues from livestock sales. Beef prices reached new heights in 1951, with

even heavy old bulls selling as high as \$500 each, compared to \$10 a head only eighteen years earlier. Many farmers who reaped this type of income celebrated their good fortune, and were able to finally repay the obligations incurred during the great depression.

Feeding practises on many farms during the forties were still not very sophisticated. Small farmers fed simply, sometimes carrying feed in five-gallon pails and finishing their yearlings and early calves over a prolonged period. The quantity of grain fed was gradually increased until the animal's stomach could accommodate the free choice of a grain ration. The use of self feeders later helped to maintained the animal's hunger by offering an almost constant but limited supply of food.

Practices changed, and even revolutionized, as mechanization and hay-making methods improved and cattle owners and feeders availed themselves of the latest equipment.

Stacking hay using a tractor and a bale rack. Mechanization began to replace horse power which allowed ranchers and stock farmers a more efficient means to feed livestock. (c. 1960)

City of Lethbridge Archives / P19760204052





Rancher Tom Hargrave was one cattle owner who took advantage of these developments by buying a tractor and front end loose hay loader in 1944. The tractor pulled the hay mower and then could load the bunched hay onto a rack. Hargrave eventually purchased one of the first round hay balers, an Allys-

Chalmers, and the old-style racks needed to be redesigned with open sides. These new additions meant that heavy horses were no longer needed, and surplus draft horses were sold off many farms and ranches in the forties. The era of the work horse ended when trucks became popular, but many ranchers still kept horses to maintain the tradition of riding the range.

The postwar cattle business in western Canada boomed until the onslaught of the foot-and-mouth epidemic in 1952. Fearing the effects of the disease, the United States placed an embargo on Canadian cattle, which left Alberta producers with only a home market. A banner year in grain production also produced a huge grain surplus. Once the disease scare subsided, southern Alberta cattlemen lost no time in seeing the possibility of

▲
Filling a grainor corn bin at Handley-Jensen Livestock Co. Plant located at Picture Butte.
(c. 1965) City of Lethbridge Archives / P19754409160

◀
A 1200 pound round hay bale. The availability of new equipment offered incentives of decreased labour and increased efficiency.
 Corel Professional Photos



1952 Foot and Mouth Epidemic

In February, 1952, infection from an unestablished source sparked a foot-and-mouth outbreak near Regina, Saskatchewan. The Canadian government moved swiftly to contain the disease, the United States and several Provinces, including Alberta, closed their borders to livestock imports from Saskatchewan, and the Regina Livestock Show and the Calgary Bull Sale were cancelled. A forty mile area around Regina was quarantined and over 1,500 infected or exposed cattle were rounded up and destroyed. Despite these efforts, renewed outbreaks of the disease occurred in the buffer zones around the quarantined area.

Following containment of the disease and subsequent testing, the Canadian government officially declared the epidemic over on August 19, 1952. The U.S. government lifted the ban on livestock imports later that year, and programs and policies, including floor pricing, were put in place to compensate livestock owners for losses which had exceeded \$14 million.

-Based on an unpublished work by Max Foran.

◀ **Hereford steer showing typical signs of Foot and Mouth disease. (c. 1952)**

Saskatchewan Archives



▲ **238 cattle being herded into a burial pit for the first mass destruction in Canada of bovine infected with Foot and Mouth disease. (c. 1952)**

Saskatchewan Archives

"There was a fellow in Medicine Hat by the name of Dirk Shoulton. He was a big Dutchman and when he came back from the war he was really a wheeler dealer and he got in the Ford Agency and he sold Ford cars and trucks like you wouldn't believe but nobody had any money, so they'd pay him in grain and he had piles, no mountains of grain and so Dirk got into the Feeding business, got a feedlot, bought some cattle and fed them the grain he'd been paid for by selling the cars. He had a young fella by the name of Dick Gray working for him. Eventually Dick Gray split away from Shoulton and started Valley Feeders by Lethbridge."

- Eion Chisholm

marketing the grain "on the hoof", resulting in higher prices for both grain and cattle. Some entrepreneurial merchants accepted grain in exchange for consumer products such as cars, snowmobiles and television sets. They then sold the grain to existing feeders or began their own commercial feedlots. Finishing cattle in summer grew in popularity, and some farmers left their soil operations entirely in favour of finishing livestock.

South of the border, commercial and custom feeding was also a growing business. Large-scale feeding operations were in full swing by the late thirties and expanded after World War II. A combination of increased incomes, declining prices for feed, a stronger consumer demand for better quality beef and the development of improved technological methods of raising and feeding cattle produced this growth after the war. By the late fifties the state of California had seven times as many cattle on feed as it had twenty years earlier, and Washington and Arizona's feed cattle increased by sixfold in the same time period. Prospective Alberta

feeders could study some excellent examples of success in the northwestern United States.

Despite this growth in commercial feeding in the United States, the coastal states of Washington, Oregon and California were experiencing rapid population growth, and American cattle numbers were not keeping pace. Prices for Alberta cattle were high, and exports moved south of the border as well as to eastern and western Canada. The Alberta cattleman was in much better shape financially than just a few years earlier, and the crystal ball continued to present an optimistic picture. Cattlemen needed to be informed better than ever, and especially familiar with the latest in livestock marketing.

Alberta shared in the growing trend, observable across North America throughout the fifties, of utilizing grain to finish beef cattle. The use of corn silage in the early part of the decade enabled central and eastern Canadian producers to finish cattle more economically than their western counterparts and so the large feedlot industry had its genesis in eastern Canada; however, the advantageous climate and geography of Alberta would soon make it the leader in customized cattle feeding. Moderate temperatures allowed for production of high-energy crops and maintenance of cattle in

Alberta's moderate temperatures allow owners to feed their cattle in outdoor pens all year round.

Photo Courtesy of Alberta Agriculture



outdoor pens all year, and the ideal location placed feedlots in proximity to feeder cattle and Canadian and American packing plants.

Throughout the fifties, new machinery such as power hayers and fully automated balers became commonplace. Hydraulic forks, shovels and other attachments for tractors eliminated some of the drudgery of cleaning stables and pens. Electric water heaters kept stock tanks from freezing and semi-automatic grinding, mixing and pumping units helped the cattle feeder provide food and water for the animals. Grass and forage crops were cut and shredded by automatic field harvesters that could also directly load wagons which were then mechanically unloaded into trench, pit or upright silos. Grass silage and forage crops grew in popularity, and plant breeders were providing new varieties of crops to circumvent some of the perennial problems such as rust, root rot and early frosts. At the same time,

agricultural scientists and engineers worked hard to control the effects of natural hazards and provide mechanical assistance in reducing costs.

Einar Stephenson of Lacombe was an example of a local farmer-feeder who was on the cutting edge of the feeding industry at this time. In 1954, when many farmers had trouble putting up hay because of wet weather, Stephenson ensiled 3000 tons of feed. These were pit silos scooped out of the side of a hill, measuring about 24 feet by 200 feet. He covered the silage with a thin layer of earth, which admirably preserved the feed.

Stephenson also used fancy new power equipment to load and distribute his silage, cut straw and forage, and grind grain. He saved time using tractor power take-off, and a combination power mixer and unloader in spreading feed to his steers. During the summer the animals drank water made available by a twenty-foot dam, and at freeze-up time water was pumped into troughs by

The fifties saw the introduction of a variety of methods for storing silage. The silage pit had its beginnings a few decades earlier. With the development of different covering techniques, pits have remained one of the most cost effective and practical means of feed storage. Upright silos have also increased in popularity, especially in feedlots where space is limited.

Photo Courtesy of Alberta Agriculture





a well equipped pressure system, with oil heaters preventing ice from forming on the tanks. Stephenson fed older cattle a mixture of ground wheat and barley plus cut straw and silage, and calves received some ground oats in addition to wheat and barley.

The number of cattle fed each year in farm and commercial feedlots in Alberta in the late fifties was not accurately recorded, but clearly more cattle were being finished in the province than ever before. The difficulty of cash marketing of grain accentuated the importance of livestock marketings as the main source of income, and record numbers of cattle were fed in feedlots during the winter and summer of 1957. Exports of beef cattle and calves to the United States increased from just over 6000 in 1956 to over 100,000 in 1957. In 1958 that figure would double to over 200,000 head! Of equal importance was the fact that significantly more steers and heifers were graded at higher levels in 1957 compared to twenty years earlier.

The end of the decade saw Alberta's feeding industry poised for further growth, and the birth of the commercial feedlot north of the border was

imminent, and indeed sprung to life with the founding of Western Feedlots near Strathmore. An increasing population provided limitless possibilities for beef cattle production in North America, and offered the promise of stable and profitable markets for cattle from Alberta feedlots. In addition to cash returns, specialization in the feedlot industry would promote soil conservation and adequate waste disposal, provide a wise use of forage and other crops, and serve as a profitable way to manage labour and capital.

As the sixties began, cattle feeding was in full swing and periodicals such as the *Canadian Cattlemen* were devoting significant articles discussing the new developments. In October of 1961 no less than 116 Alberta feeders, farmers and other members of the agricultural community toured Idaho, carefully questioned two dozen feedlot operators and top men in allied industries, and observed their operations in detail. The inquisitiveness of the Albertans was admired by host Frank Shields of Boise, secretary of the Idaho Cattle Feeders Association. The event actually turned out to be an

▲
Spreading hay from a round bale using a manure spreader. As stock farmers looked toward mechanization and technology, innovative ideas resulted in the development of new techniques.

Photo Courtesy of Ted Pritchett

► **A feed pen in southern Alberta. Feedlot layouts and facilities vary according to individual need. Board fences can be used to protect livestock from prevailing winds, and straw bedding can be used to limit soil acidity. One constant is that it is profitable to build feeding operations near packing plants.**

Photo Courtesy of ACC



intensive forum on rations, feeding, and management strategy. The Albertans learned that feedlot layouts can (and should) vary according to individual need, and that it was profitable to build feeding operations in proximity to packing plants. Consistency in feeding was seen as the key to success, and a number of alternative feeds such as pelleted beet pulp, corn silage, steam-rolled barley and potatoes were carefully studied.

By 1963 livestock production in Alberta represented well over half of the total cash income for farming. *Photo Courtesy of Alberta Agriculture*



The development of profitable feedlot businesses within Alberta soon meant that prospective feeders no longer needed to leave the province to learn from “experts.” In November of 1961 the first annual Feed Industry Conference in Alberta was held in Edmonton, and two years later some 250 cattle breeders from a wide area of central Alberta hit the road to visit a number of farmer-feeders in the Red Deer area. They concluded their stay by participating and attending the fall “Feeders Day” program put on by the Department of Animal Science from the University of Alberta.

By 1963 livestock production in Alberta represented well over half of the total cash income for farming. Ranching and feeding was becoming more specialized as the functions of ownership and management became more complex. Farm units became larger and risk of loss grew significantly, resulting in an increase of livestock sharing, feeding and leasing arrangements. Cattlemen needed more feed, facilities and labour than they could easily afford or risk, while farmers and landowners who had extra pasture, grain, facilities and labour needed to use these resources to

greater advantage. Logic dictated that the pooling and sharing of resources through feeding arrangements would minimize risk. As a result, the evolution of cattle feeding in the sixties was due to this emergence of more specialized and integrated sectors.

It seems entirely fitting that, in a decade known for cultural upheaval and other radical changes, the first computers (called “electronic data processing” in those days) also made their appearance in some of the larger American feedlots. The Noble Cattle Company of Kernan, California developed its own data processing centre and used programs specially designed to benefit the feedlot operator. The computer could be fed information about purchased animals (such as weight, origin, days needed for fattening), and would return information about potential profit, feed analysis, feeding programs and data accounting. Computers eventually made their way onto Alberta’s feedlots and have become invaluable tools.

Though customized, commercial feeding in the sixties was already represented by Western Feedlots, Valley Feeders and the Lakeside operation, countless other Alberta cattle owners were also feeding their own stock using the latest methods and machines. An example of a successful, moderately



sized feeding operation that began in this time period was King and Son Ranches near High River. Their outside feedlot had a 4000 head capacity, with pens built to hold 100 to 350 head. King’s feedlot exhibited admirable ingenuity; gravelled feed alleys, provided easy passage for vehicles, eight foot board fences on the north and west gave livestock protection from prevailing winds, and straw bedding was chosen over wood chips to limit soil acidity. King would later build a 1000 head slatted floor barn, with a scraper under the floor that separated manure into liquids and solids. Twenty thousand gallons of this liquid manure

▲ **Computers aid in the cattle feeding process by performing such tasks as calculating potential profit, analyzing feed, developing feeding programs and general data accounting.**

Photo Courtesy of ACC



◀ **Gravelled feed alleys provide easy passage for vehicles delivering feed for the cattle.**

Photo Courtesy of Ted Pritchett



▲ **Spreading manure on feed crops at Western Feedlots. Many of the feedlot operations are cyclical in nature. Manure is generally used as a fertilizer to grow corn, barley and oats which are then fed back into the cattle.** Photo Courtesy of ACC

(or “slurry”) was pumped daily into a holding pond and later used for fertilizer to grow corn, barley and oats. The special sprayer for the task was bought in the United States, and the process was so successful that the corn crop needed no other commercial fertilizer. King also used the solid component of the manure to concoct a backgrounding or finishing ration which was mixed with cut straw or hay, blown in a Harvestore, and fed back to the cattle.

Although modern and larger-scale feeding such as that carried out by the King family was becoming more common, it must not be forgotten that

farmers with just a handful of cattle also continued to feed and finish their animals with effective simplicity. Eldon Seney of Blackie, who years earlier had built a few simple bunk feeders to begin feeding grain to his cattle, designed a bucket device that, when attached to his tractor, could carry and spread manure on his fields for fertilization. Farmers and ranchers with larger numbers also built pens with a driveway between them, so that a tractor and stoneboat could be driven through and feed shovelled into troughs on either side.

By 1967 it was clear that no phase of beef cattle raising had advanced as rapidly as cattle finishing, due to consumer demand for higher grade beef and the grain glut. In fact, the cattle feeder had become a “specialist”, a combination stockgrower and businessman who incorporated the latest technological changes to operate more efficiently. By this time, the modern feedlot represented a complete break with the early range traditions. Allowing cattle to graze at will on the open plains had been replaced by controlled feeding, and grass diet and simple treatments were supplanted by special starter and finishing rations, growth hormones, systemic insecticides and animal tranquilizers. The cattle feeder on the cutting edge used push-button controlled feed mixers, had

“With James L. and his wife Vivian now in charge, the feed lot had expanded to a year-round operation. Most of the lot itself was switched to an alley and fence line feeding method. The water pumps and trough heaters were now electrified, but the feeding was still carried on with the same system of team and wagon. The measurement of the feed ratio was still done by counting roughage by the forkful and grain supplement by the scoop shovelful. Although the same old heave it on heave it off method seemed rather outdated, it did provide the feeder with what could be called the ‘personal touch’.”

- Charles H. McKinnon

“We farmed out at Blackie for 57 years until 1979. We didn’t have too much in the way of cattle because there wasn’t any grass out there and there still isn’t but we fed a little, we had a few cows around all the time, then we started feeding a little for. There were times when there was only three bushel grain quota’s to the acre and you couldn’t farm on that so we went to growing flax, cannola when it came along as a cash crop then we’d feed a little to try to get some dollars out of our grain and trying to cover up any money for income tax so in case one year we got hailed out we’d have something to live on.”

- Elden Seney



grinder plants set up right on the feedlot, and utilized automatic feeding devices.

In the late sixties much of the world experienced a dramatic increase in grain yields. This was a result of generally favourable weather conditions,

improvements in technology, and the development of higher yielding and more disease-resistant varieties of grain. An increased use of chemicals and fertilizers improved weed control and enhanced soil fertility. Surplus grain was initially exported to the Soviet Union, but soon farmers were faced with a grain glut and low prices. Feeding livestock continued to be a common-sense and convenient way to convert the grain to dollars and so grain consumption per head in Alberta increased fifty-five percent between 1960 and 1972.

In the postwar years the largest and most familiar sales outlets for cattle feeders were the public stockyards, located in bigger centres on main railroad lines. Stockyards handling a large volume of trade set prices for the entire industry, as commission agents, brokers and packer-buyers bought and sold at the auction ring. From 1903 to 1950 all livestock bought and sold at the Calgary Stockyards were handled by private treaty, where the buyer contacted an agent privately and made a deal. In July of 1950 the Calgary

◀ **An insecticide oiler strategically placed in a opening where cattle have to pass in order to get water.**

Photo Courtesy of Ted Pritchett

Hungry cattle waiting for their feed. Between 1960 and 1972, feeding livestock was a common-sense and convenient way to convert the grain into dollars.

Photo Courtesy of Ted Pritchett





▲ **Cattle going down the alley at the stockyards in Lethbridge. (March 9, 1954)**

Glenbow Museum / NA-4510-421

yards converted to competitive auction selling, becoming the first major terminal livestock market on the North American continent to do so. In addition to the auction ring at the public stockyards, other popular sales outlets in the sixties were the country auctions and cooperative “community” auction companies. The Alberta Auction Markets Association was incorporated in 1955, becoming a focal point in many communities and creating a marketplace for the cattle owner to buy, sell and trade with the highest bidder. Some cattlemen sold directly to packers (which slaughtered, processed and cured meat) and the beef packing industry included larger firms such as Canada Packers and Burns, medium-sized packers operating across provincial borders, and local and small town-and-country operators.

By the 1960s, cattle were transported to market more quickly and efficiently. Trucks, in use since the twenties, were boasting air conditioned semi-trailers and a load capacity equal to a standard 36-foot rail car. The railways also made a comeback,

► **Tom S. Lanier inspecting a fat beef herd on a ranch in the Wilson Siding area near Lethbridge. (c. 1963)** *Glenbow Museum / NA-4213-2*





◀ By the 1960s, cattle were transported to market more quickly and efficiently. Trucks, in use since the twenties, were boasting a load capacity equal to a standard 36-foot rail car.

Photo Courtesy of Alberta Agriculture

improving their cars with adjustable shutters, sun-reflecting aluminium-painted roofs and 50-foot units for increased capacity. Cars also featured better brakes and suspension systems and non-skid floors that decreased vibration and bounce, which cut down on injury and animal loss.

As the seventies dawned, Alberta boasted approximately three million cattle, about half of Western Canada's total. Of those, almost half came from small farms less than a section in size,

and only around 15 percent came from operations over 1600 acres in size. So despite the growth of large feedlots and the continuing presence of large ranching operations, the small farmer who owned and feed only a few cattle continued to be a vital part of Alberta's agricultural community.

The feeding businesses that popped up all over the southern half of the province in the seventies were a product of many entrepreneurs investing capital and borrowed money

"We started feeding cattle....just after the war. We moved from Black Diamond and we got our own place....just north of Cochrane. We struggled but we got by. I spent those years pitching bundles for four different farmers, feeding cattle and handling feed. We had 35 or 40 head and a couple of big old Angus bulls. We also fed a couple dozen of our neighbours cattle which we would haul water and feed for. He had too many for his own place. Over the years some would die, some we would sell some but we managed. We also had some crop land. Hay mostly. We sold some of it and kept some. We'd stack the hay in big piles, two stories high. In the winter the snow got so deep we had to spend hours shovelling our way just to get to it. Often deer would climb on top and eat our winter feed. We'd chase them off okay usually."

- Archie Hehn



▲ Angus cattle grazing in summer pasture. Photo Courtesy of Ted Pritchett



▲ **Cattle lined up at the feeding troughs at Western Feedlots. In the seventies, many entrepreneurs invested capital and borrowed money to “get in the business,” hoping for a quick dollar and a way of reducing tax exposure.**

Photo Courtesy of ACC

to “get in the business,” hoping for a quick dollar and a way of reducing tax exposure. The success of some was enhanced by federal Agricultural Research stations that provided important information on technology and procedures. When times became more difficult and the outlook for feeders was no longer as rosy, the number of “city” investors such as doctors and lawyers declined as the initial rush flattened and the market evened itself out.

Some of these entrepreneurs became very successful. Ben Thorlakson, owner of Thorlakson Feedyards and Cattleland Feedyards, exemplified a “modern” feedlot operator who turned a few dollars and a lot of tenacity into a profitable operation. Beginning with shoestring budget and depending on a line of credit from the bank, he purchased a quarter section of land in 1970 and built six pens to feed 1200 head. In his wildest dreams, he saw the feedlot one day having a capacity for 3000 cattle. In November

of 1970 Thorlakson started by feeding 111 animals, and had to manage with buildings that lacked insulation, and some unreliable machinery. Though he had to learn the accounting and business end of the operation from scratch, Thorlakson’s feedlot grew remarkably. What made it work was buying abundant barley on credit and offering his clients 100% custom feeding. Thorlakson added one or two pens a year, and in 1975 he and a partner were able to purchase a Strathmore area feedlot, naming it Cattleland Feedyards. Today Cattleland has a capacity of 25,000 head and Thorlakson Feedyards has an 18,000 head capacity.

From the 1970s to the 1990s the cattle feeding industry in Alberta experienced steady growth. Though beef cow numbers on Alberta farms and ranches increased more in north-central and northern Alberta than in any other parts of the province, the heart of the feedlot industry shifted to southern Alberta. Eventually the

"If someone were to ask me what I thought had the biggest impact on the industry over the last 30 years ['66-'96], I would have to say - The Federal Government allowing the importation of the European breeds. This, plus the technology of Artificial Insemination and Embryo Transplant, which has allowed the proliferation of superior genetics that have filtered down to the commercial industry. This is best illustrated when you compare the weights of the first fed calves going out of the feedlots in March or early April, 15 to 20 years ago - 1025 - 1050 lbs. was good. Now weights at the same time of year are closer to 1150 - 1250. No doubt improved nutrition and implants also contributed to this improved performance. ...Feedlots are now reaching the size in Canada that were common only in the United States a few years back...Selection pressure on superior genetics at the seed stock level will continue."

- Bill Hartall

highest concentration of feedlots in all of western Canada was to be found south of the Trans-Canada highway which runs through Calgary. Not surprisingly, the majority of large packing plants were established in the same area, as their proximity to cattle sources improved efficiency. There was also a recognizable trend toward large custom lots feeding the majority of the province's cattle. By the mid-eighties, only about one in ten feedlots had a capacity for more than 10,000 cattle, yet that group fed almost forty percent of the cattle in the province. In other words, most cattle owners owned only a few feeders, and a relatively small number of cattle feeders had a large number of animals. Feedlot expansion and efficiency of this kind corresponded with the evolution of the packing plant business, feedgrain production, improved transportation and improvements in technology such as the introduction of more efficient feed converters.

At the end of the eighties Alberta retained its longstanding position as the largest beef cattle producing province, holding over forty percent of the Canadian beef cow herd, about the

Western Feedlots in High River is an example of a large feeding operation in southern Alberta. By the mid-eighties, ten percent of the feedlots fed almost forty percent of the cattle.

Photo Courtesy of ACC



same as its share in 1956. Although feedlot numbers declined in the country between 1986 and 1991, this decline was mostly in Ontario. The average Alberta feedlot was four times the size of Ontario's. Alberta had also grown in its share of the national slaughter numbers between 1980 and 1992 to where it represented almost half of the country's total. Feedlots across the province marketed to the United States because of price and flexibility, and also sent cattle to Ontario, Saskatchewan, and packing plants in Edmonton, High River, Brooks and Calgary.

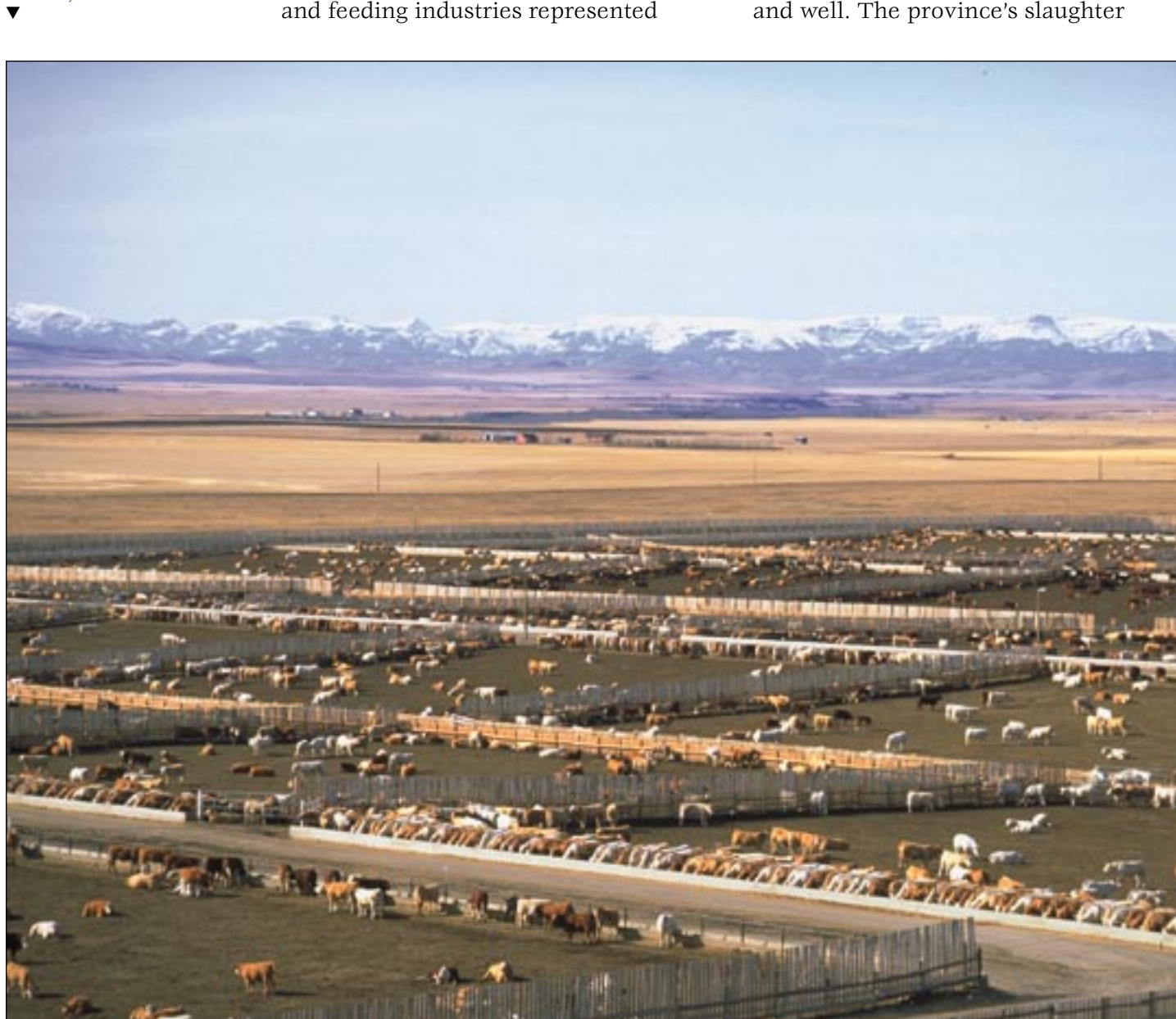
The importance of Alberta's feedlot industry is illustrated by the fact that between 1980 and 1995 the livestock and feeding industries represented

more than sixty percent of the total provincial farm gate receipt. Alberta farms in the mid-nineties averaged fifty six cattle, and though most did not keep cattle as their primary product they were primarily used to convert feed. On operations dedicated to cow-calf production, cattle owners weaned and sold their cattle to the feedlot. As a result there were over four thousand feedlots in the province ranging in size from 100 to over 30,000 head of cattle in 1993. Some of the larger operations finished over 100,000 head yearly and one hundred largest feedlots finished over half of Alberta's beef cattle!

As the century comes to a close, it is not an exaggeration to say that Alberta's cattle feeding industry is alive and well. The province's slaughter

In 1993 there were over four thousand feedlots in the province ranging in size from 100 to over 30,000 head of cattle.

Photo Courtesy of ACC



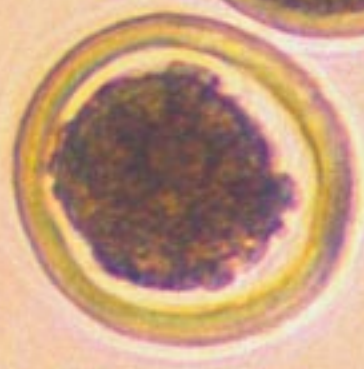
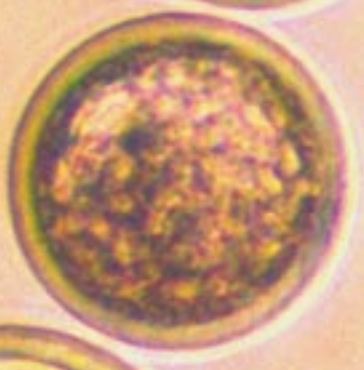
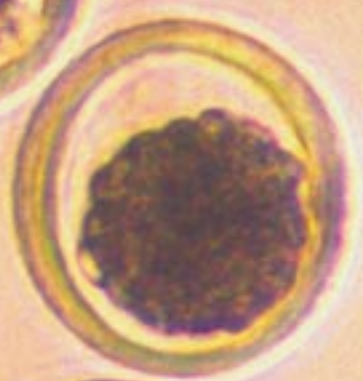
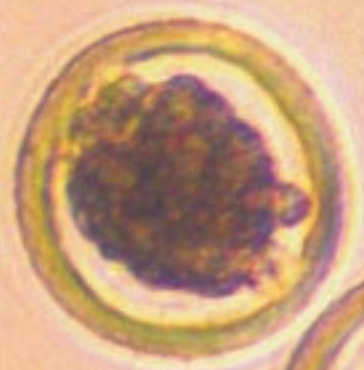
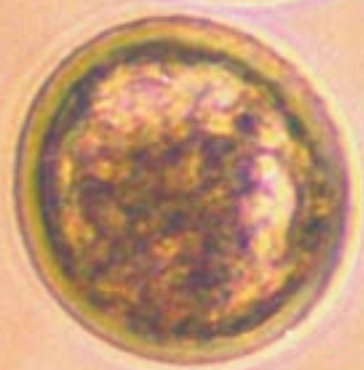
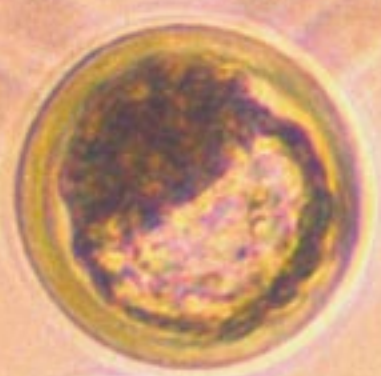


"Some 10 or 11 years ago [1985], our leaner exotic cross Canadian cattle seemed to gain considerable acceptability with the American packers, resulting in the U.S. market becoming "part of our market." Considerable numbers of Alberta cattle would move south. This certainly gave the Alberta feedlot operator another option on the bid system. Over the years we've sent cattle to I.B.P. in Washington; Washington Beef; Montfort in Colorado and Millers in Utah. Cattle that went [there] was done through order buyers."

- Bill Hartall

cattle exports to the United States jumped from 205,000 in 1991 to 350,000 in 1992, and in 1994 Alberta produced almost two million head of slaughter cattle, representing two billion dollars in cash sales. Cattle exports also secure some 400 million dollars in foreign exchange. The growth of the cattle feeding industry in the last half century has been spectacular, and individual feeders deserve full credit. Through their hard work, knowledge of cattle, and business acumen they have created an industry that serves the consumer, increases our wealth, and gives all Albertans a reason to be proud. 🍴

▲ **By the mid-nineties, Alberta farms averaged 56 cattle. Most owners did not keep cattle as their primary product. Feed conversion was the main directive. Eventually, most cattle ended up being finished in a commercial feedlot operation.** Photo Courtesy of ACC





The Maturation of the Industry: The Contribution of Science

The period following World War II could well be described as the age of scientific agriculture, and no history of agriculture in Alberta is complete without a tribute to scientists. Their work resulted in new methods and improvements in cattle raising and feeding. Cattle owners certainly relied on their own knowledge throughout the years, and were always able to “troubleshoot” when problems such as bloat struck an animal. Yet from the beginning they acknowledged the need for trained animal doctors and relied on the expertise of these professionals.

Veterinary medicine grew into maturity in the modern era, based on intense scientific investigation and applied research. Animal scientists at universities and government research centres and the federal government’s

Health of Animals Branch led the way. Brucellosis (Bang’s disease) and bovine tuberculosis were two devastating diseases eventually controlled through careful inspection and vaccination, saving cattlemen millions of dollars.

Since early in the century, vaccinees could be purchased and applied during branding. As cattle feeding grew into a separate and specialized industry, veterinarians became even more important. The financial margin of risk in the cattle business shrunk given new market realities, and it paid to have veterinarians on call to ensure the health of animals and prompt treatment of problems. The sheer number of animals that came to the same feedlot from different sources, and then spent time together in closed

▲
Immunizing cattle against disease. Veterinary medicine grew into maturity in the modern era, based on intense scientific investigation and applied research.

Photo Courtesy of ACC

◀
Bovine embryos as seen under the lens of a microscope.

Photo Courtesy of Alta Genetics Inc.

"The worst disaster I ever had at Western was an outbreak of red nose. We'd never had red nose in this country and this was way back in the 60s. The Provincial Veterinary director [Ed Valentine] and I went fishing one time and I said to him, the one thing that scares me half to death is if we ever got red nose in here. And he says, oh, you won't get it, I said that they got it in Montana, what's to stop it from getting in here. He says we've never had it and we never will. And by golly within a year the head cowboy come in one day and he says Eion come have a look at this pen of steer, I can't figure them out. He says they're sicker than hell. So I went out and I looked at them and by this time we had a vet in Strathmore so I phoned John Bradley and the three of us went through those cattle and they were just drooling clear fluid standing with their head down between their legs and John says I suspect this is red nose [IBR]. Inter-nasal ... doesn't matter. Anyhow, we didn't have any vaccine in Alberta because the Vet branch wouldn't allow it. They said if we ever started to vaccinate with a live vaccine you'd just spread it. So we got a hold of Ed Valentine and he agreed to let us bring in some vaccine. By golly a day or a day and a half is gone by and the next pen has got it now, from drinking out of the same water trough."



We had 1400 or 1500 head of cattle on feed when it happened. As soon as we got vaccine from Chicago it shut off. In the meantime I think we lost in the neighbourhood of 100 head of cattle. I had to get on the phone and tell all the owners what had happened, some lost 6, some lost 8 and this one fella, he was a good customer of ours for years, he lived out at Big Stone. I phoned him and said we got some bad news for ya. We had some tough luck at the feedlot and I lost 24 of your steers, out of about 100. Well he says, oh hell, I lose that many in one storm."



Cattle with IBR. Photo Courtesy of Alberta Agriculture

- Eion Chisholm



Spraying for mange.

Photo Courtesy of Alberta Agriculture

pens, raised the possibility of contagious diseases wreaking havoc.

In addition to relying on the expertise of veterinarians, cattle feeders today profit from biotechnological companies offering health and growth

products derived from the latest in DNA technology. Genetic improvements allow for progress in herd development where superior characteristics such as higher reproductive rates, leanness of meat, and disease resistance are enhanced. These directions were kick started in the war years with the establishment of an artificial breeding centre at the Olds Agricultural School, which also provided the basis for general public acceptance of artificial insemination. With the advent of frozen semen and importation of both frozen and chilled semen from British Columbia and Ontario, artificial insemination soon became a widespread practice.

As a result, product improvement through reproductive technology has become an integral part of the livestock business. Modern artificial insemination (AI) and embryo transfer (ET) centres in the province have



◀ **Embryo transfer allows cattle to be engineered with optimum genetic material improving the quality of the calf. Genetic improvements allow for progress in herd development through the enhancement of superior traits and characteristics.**

Photo Courtesy of Alta Genetics Inc.

developed to serve the industry with innovative research and genetic technology. AI involves the fertilization of cows by mechanical means, and is helpful in improving herd performance. Frozen semen can be obtained and effectively used from the world's leading sires without the trouble of transporting bulls and waiting for nature to take its course. Embryo transfers are a natural extension of the AI industry, and involve the fertilization of more than one ovum from selected bulls. The ova are then transferred into surrogate mothers for gestation. The practise of embryo transplants lengthens the span of a cow's calving capacity, offers access to a wide pool of genetic material, and generally improves the quality of the calf.

Advances in reproductive technology have been valuable when combined with the developing method of performance testing, which helps determine herd quality. Producers can judge their cattle through a home test and then improve production efficiency by selective breeding, where bulls with superior genetic qualities are mated with selected cows to create a better offspring. The Hays Converter is an example of a beef breed that appeared through effective cross-breeding.

The introduction of "exotic" breeds began in the sixties and also enhanced breed quality. The French Charolais cattle boasted exceptional growth rate and muscling, and they were followed by Limousins, Maine-Anjou, Bond-d'Aquitaine and Salers. Other exotics include the giant Chianina, Swiss Simmentals and German Gelbvieh cattle. These were introduced to produce

Charolais cattle in a southern Alberta cow-calf operation. The introduction of "exotic" breeds and subsequent cross breeding programs have opened up new opportunities in the quest for the perfect beef animal.

Photo Courtesy of Deryk Bodington



more muscled, hardy and faster growing animals, as the trend toward generating leaner cattle became increasingly important given the demands of a more calorie-conscious market. Despite these additions, the historically dominant “English” breeds of Hereford, Aberdeen Angus and Shorthorn remain popular across the province.

Yet another realistic effort to produce better and more efficient beef took place in 1970 when a number of Alberta cattle producers began Beefboosters, a crossbreeding program whose goal was to create consistent synthetic strains of commercial cattle by tapping the hybrid vigour of various breeds. By 1990 the organization had grown from the three original active breeding units to twenty-eight breeding herds, which supplied bulls to over one hundred customers.

The entire feed industry also developed significantly since World War

II and was well established in the West by 1960. Firms such as Shur-Gain, United Feed, Triple West and Lakeside Industries became large and well-known in the mixing and manufacturing of high energy livestock feed that significantly improved the conversion rate of cattle. This feeding industry grew hand in hand with the establishment of commercial feedlots, but those who fed their own cattle also remained primary customers of the feed grain manufacturers and suppliers. The cost of the preparation of feed, when combined with the other feed-related aspects of the business, can comprise up to 80% of livestock production expenses. New feed production requires careful attention to adequate nutrition, which is achieved by recognizing the latest research on nutrients. Auxiliary feeding practices that consider supplements, concentrates and replacements

Barley in a silage pit. The use of high energy livestock feed significantly improved the conversion rate of cattle.

Photo Courtesy of Alberta Agriculture





for traditional feed is a growing area of study, and cattle owners have access to findings through agricultural journals and government publications. Nutrition research has resulted in the development of rumensin, an additive which can improve feed efficiency in cattle. By augmenting the animal's natural process of chewing and digesting food, rumensin allows for the production of more beef on less feed. It also aids in the protection of diseases and generally allows for a more profitable feeding program.

Both cow-calf operators and backgrounders use forages such as alfalfa, timothy, clover, wheatgrasses and rye grasses. Forage can be obtained from cereal, legume/grass and corn silage. This in turn requires good pasture and range management which has also been an important area of discussion and research in recent years. Alberta's wide open spaces allows for ample growth of barley, which is the prime feedlot feed source. Barley is a high protein, high energy feed source that has been found to contain more

protein units and fibre than corn. Barley-fed cattle are the foundation of Alberta beef's claim of tenderness and flavour in meat. Other feedgrains that have been time-tested are wheat, oats and mixed grain.

The breed, sex, age, weight and grades of feeders are all factors to be considered as the feedlot manager decides on a feeding programme. Different groups of livestock have different energy level requirements and so feeding is a dynamic process, where the first month is usually the most critical period. Rations need to be palatable so that animals begin eating immediately upon arrival to the feedlot, in order to reduce stress and threat of illness that develops in transport. Rations are also varied in the early, middle and late feeding periods. Feeds used in the feedlot include grain, minerals, fat, hay and various additives. Nutrients within each feed or additive are carefully considered so as to "customize" the process for maximum effect, and produce the best grade and marbling of meat. Since the late fifties

▲
Alberta's wide open spaces allow for ample growth of a variety of grains which have become a staple in feedlot diets.

Photo Courtesy of ACC

► **Advances in feed processing has seen grain moisturized, rolled, flaked, roasted, micronized, popped and gelatinized, all in order to improve digestibility.**

Photo Courtesy of Deidre Williams



advances in processing has seen grain moisturized, rolled, flaked, roasted, micronized, popped and gelatinized, all in order to improve digestibility.

The development of the feedlot industry has also meant advances and considerable research in cattle housing and feedlot facilities. Construction of housing and arrangement of other

necessary equipment requires the careful integration of space, shelter, feed, water, waste management and handling facilities, while at the same time keeping in mind the type of beef being produced. These requirements also need to be adapted to natural site features on which the feedlot rests.

Feeding systems and equipment have evolved to the point where agricultural engineers now prepare detailed guide books for the feeder. Over the years, grain processing and feed mixing has been done by hammer mills, burr mills, roller mills, electric blender-grinders, portable grinder-mixers or horizontal mobile mixer-feeders. Feeding methods include self-feeding or creep feeding, and can involve chain and slat feeders, auger-type bunk feeders or the feed bunk and cart. Feeding has also become a computerized process. Ed Miller, who runs a 11,000 head feedlot east of Acme, Alberta, is a strong supporter of strict feedlot management that is monitored by computer. According to Miller, giving up his computerized bunk management

Construction of proper housing facilities to provide adequate shelter for extreme weather conditions can help to avoid unnecessary set backs in gains.

Photo Courtesy of ACC





◀ **New forms of animal identification and monitoring are being developed at a rapid rate. The use of ear tags, electronic implants and computerized readers will become commonplace in the modern era of cattle feeding.**

Photo Courtesy of Alberta Agriculture



◀ **A computerized feed management system is considered a necessity for efficient modern feedlot operations.** *Photo Courtesy of ACC*

system would be comparable to selling his truck and going back to a horse-drawn carriage!

The study of feedlot structures and feeding systems and equipment are only two aspects of what has become a full-fledged discipline. Animal researchers have produced full-length textbooks on the feedlot and feedlot

industry that deal with everything from the role of feedlot consultants and the economics of feedlot management to manure management and feedlot diseases and parasites. As the twentieth century comes to a close, industry representatives are analyzing new forms of animal identification and monitoring the use of ear tags, electronic implants and computer relays. Ultrasound and electronic grading methods allow for backfat measurement of live cattle and estimates of lean meat yield while the animal is still alive. Video imaging is a current strategy employed to estimate carcass lean meat percentages. Cameras are used to send digitized representations that a computer program then translates into estimates.

Science and technology has revolutionized and transformed the cattle and feeding industry, and will continue to do so. Only the imagination can limit what kind of progress is possible for the future in feeding technology and cattle management. The availability of funding for research and the affordability of new techniques and resources for operators remain standard limitations, but what has been accomplished is impressive and the future remains exciting. 🐮





The Evolution of the Industry: Business and Commercial Aspects

Cattle feeding since the war years has become big business, and as a business requires the feeder to have a keen understanding of the marketplace. Consumer demand has also changed over the years, and the emergence of a global economy means cattle feeders must avail themselves of the latest resources to remain competitive.

Quality of product is vital for any business to thrive, and for over four decades the “red” and “blue” grades initially established by the federal government remained the standard measures of meat. Eventually the grades of “choice”, “good” and “standard” were added and in 1972 the system was overhauled. The new

grading terminology became “A”, “B” and “C”, and was based on a combination of quality and quantity. Additional grades conveyed fat content and general meat quality, and these were important, given the growing consumer preference for leaner meat. Over the years, Alberta’s feeders have done a superb job producing high quality beef, while at the same time meeting specific market demands. Almost 97 percent of Alberta’s feedlot animals grade out to Canada A, AA or AAA.

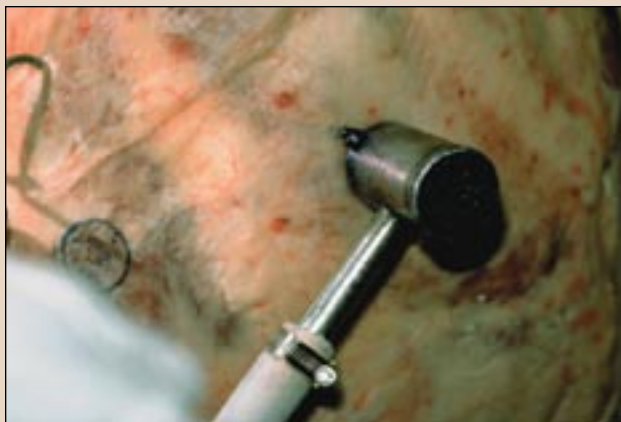
Agriculture Canada implemented the new Beef Carcass Grading Regulations in 1992, providing a improved means of measuring prices and communicating quality. A major

▲ **As a consumer driven industry, providing beef information and receiving feedback is necessary in order to keep in touch with consumer demands.**

Photo Courtesy of ACC

◀ **Quality of product is vital for any business to thrive, including the beef industry.** *Photo Courtesy of ACC*

"In the early fifties, the University of Alberta took a championship at Toronto with a Shorthorn steer of the standard type that put on fat in patches. The judge called that steer "...the best fleshed animal I ever put my hands on in my life", his actual statement. And somebody took a picture of the rib eye of that steer (an unusual thing to do in the 1950s), which has allowed us to see that it had six square inches of lean and was covered by a three-inch rind of fat. The point is that the experts in those days never saw a carcass; yet they talked a lot about 'fleshing', meaning what they thought



they felt through the hide – actually, gobs of fat. We at U of A were as quick as anybody to be suspicious. Certainly I was when I came home from Minnesota in 1955 thinking, "Let's find out what's really under the hide. That should be simple." Of course, it wasn't simple. You can't really tell what's hidden under the rind of fat without cutting through to the rib eye, as in quartering. And in those days sides weren't quartered before grading. That would require a major change in the system."

- Roy Berg

Photo Courtesy of Alberta Agriculture

The beef processing industry is closely connected with the feeding sector, and so the packing business expanded as the entire cattle industry grew.

Photo Courtesy of Alberta Agriculture

change in the system was the introduction of a marbling grade, which measures the dispersion of fat deposits within the muscle tissue. Not only does marbling now effect the grade assignment, but it communicates the flavour and juiciness of the meat. These developments have affected feeding technique, which always needs to adapt to new market demands. For example, the Japanese and Americans prefer a more marbled product which necessitates longer feeding periods.



The beef slaughtering and processing industry is closely connected with the feeding sector, and so the packing business expanded as the entire cattle industry grew. Alberta's slaughter steer marketings more than doubled between 1958 and 1988, and cattle passing through federally inspected plants in the province rose 42 percent between 1969 and 1988. The number of packing plants grew from fifteen to twenty-nine in that time period so Canada's packing industry became firmly concentrated in Alberta, reaching the point where 1.35 million cattle were processed in 1992. In 1993 there were nine beef processing plants in Alberta, with seven located in and south of Calgary, and the average number of animals processed per plant in Alberta was the highest in Canada.

Historically most of the cattle finished for slaughter in western Canada went to eastern Canada where the population was highest, but with growing markets and proximity to the northwestern United States, Canadian cattle heading to the American west coast has increased. From 1987 to 1992 exports of slaughter steers and heifers from Canada to the U.S. more than

quadrupled. Packers have constantly developed new export markets and products, including consumers in the Pacific Rim countries and Mexico as well as the traditional American market. Changing market trends require companies such as Lakeside Packers to carefully service regional markets that express different demands. For example, Quebeckers like very lean beef, with tenderness not as important a factor, and the growing Asian market demands large carcasses and a dark red colour of meat. Regardless of meat type, all markets are sensitive to any cattle with a history of health problems and body or brand damage.

Since the War, most cattle were sold through the public stockyards by livestock commission agents, and auction markets were an important player, serving as a mid-point between the cattle raiser and the feeder. Over the last four decades, however, there has been a strong trend to marketing directly from feedlots to packing plants. Between 1966 and 1978 the percentage of cattle slaughtered in Alberta that went directly from the feeder to the packer jumped twenty-five percent. A familiar practise has seen larger feedlots offering their cattle for sale on a specific day each week, with packers sending their buyers to examine the livestock and submit a sealed bid. The feedlot representative then examines all



the bids at a set time and either choose the successful buyer or puts the cattle up for another bid.

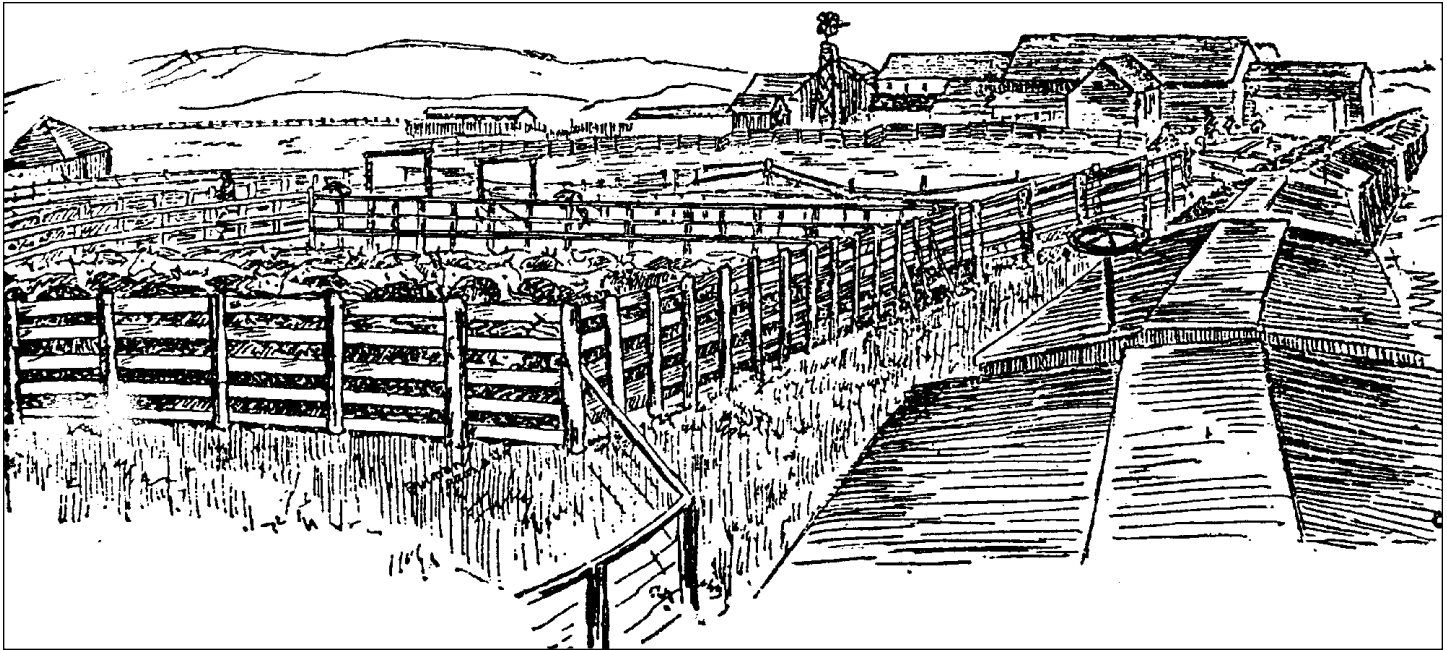
Cattle marketing has now entered the electronic age. Marketing systems that involve computers, tele-auctions, and video auctions offer a progressive and convenient means of buying and selling cattle without compromising efficiency. The first Canadian satellite livestock auction sale was held in Morningside, Alberta in October of 1993, made possible by three Alberta member markets working together. The auction featured a live auctioneer with current bid prices electronically flashed on a TV screen as bids

▲ **The final product is the result of carefully directed feedback from the most important variable in the feeding process. Consumer demands always prompt changes in the industry's feeding practises.**

Photo Courtesy of ACC



◀ **Cattle owner going over a pen of steers with a buyer. Sealed bid selling has proven successful for the vast majority feedlot operators.** *Photo Courtesy of Ted Pritchett*



▲ **The Calgary Stockyards shut down in 1989 after over 100 years of operation. This drawing was found in the Calgary Herald on September 30th, 1893.**

progressed. Herds on screen had been previously videoed grazing in pastures or pens. The sale was viewable across North America, and those not owning satellite dishes could participate via phone-in centres. The satellite system provided a major step forward in modern marketing.

Computer and satellite communication technology has allowed for more informed decision making in the management of livestock in the feeding and cow-calf sectors. Computers provide rapid and accurate access to an animal's history and performance records, and satellite and remote sensing equipment allow for more accurate crop forecasts.

Trading in live cattle futures opened on the Chicago Mercantile Exchange in 1964. The Exchange functions as a centralized market place where buyers and sellers come together to trade commodities.

Photo Courtesy of Alberta Agriculture



The introduction of these and other modern forms of marketing cattle contributed to the death of the eighty-six year-old Calgary Stockyards in December of 1989. One hundred thousand cattle were still sold through the historic yards in 1988, but that was a far cry from the glory years when as many as 375,000 head passed through the yards annually.

Futures trading was developed in the last century in the United States and has evolved to stabilize prices and facilitate trading. Trading in live cattle futures opened on the Chicago Mercantile Exchange in 1964, functioning as a centralized market place where buyers and sellers come together to trade commodities at a mutually agreeable price in the form of futures contracts. Canada does not have similar centralization due to small cattle markets, so the Chicago market is accessed by Canadians. The futures contract is an agreement that publicly sets a price and date of delivery of a designated product within a geographic area.

The business of cattle raising and feeding has also profited from progress in other areas historically associated with the industry. Irrigation continued to expand after World War II, so that by 1960 Alberta boasted about 600,000 acres of irrigated land. Significant expansion after 1973 resulting in over



◀ An irrigation canal in southern Alberta. Irrigation plays a vital role in cattle feeding by providing high quality drinking water for livestock in dry areas. Manure disposal is easier and less expensive on irrigated land as increased moisture facilitates decomposition.

Photo Courtesy of Alberta Agriculture

one million irrigated acres by 1988. The growth of irrigated land corresponded with the rapid expansion of feeding activity in southern Alberta in the sixties and seventies, and huge increases in provincial slaughter marketings. Most of the expansion of irrigated lands occurred in the southern area of the province and has been managed by various Irrigation Districts. As a result, semi-arid areas have been transformed into productive regions, and reduced the risk associated with crop production. Corn and cereal silage have emerged as valuable cash crops and large feedlots are utilizing irrigated barley silage for roughage and grain

barley for energy. Irrigation also plays a vital role in cattle feeding by providing high quality drinking water for livestock in dry areas; a 20,000 head feedlot can use over one quarter of a million gallons of water per day. Furthermore, manure disposal is easier and less expensive on irrigated land as increased moisture facilitates decomposition.

Transportation has also affected the development and location of cattle feeding in Alberta. Expanded highways, the creation of safer road networks in rural Alberta, and the arrival of semi-trailers has allowed cattle producers, feeders and packers to overcome the earlier constraints of location. Major



▲
The arrival of semi-trailers has allowed cattle producers, feeders and packers to overcome the earlier constraints of location.

Photos Courtesy of ACC

transportation routes have especially helped southern Alberta cattle feeders who had the advantage of proximity to the growing American markets.

Cattle feeders have become students of business and economics, and the important economic principle of “economies of size” is applicable and valuable for the feeding industry. The concept suggests that optimum economies of size in any business derive from the ability to spread the large initial capital costs and costs of specialization – for example, skilled labour and management, specialized machinery, research and development – over a greater volume of output. It is very important for feedlot owners and managers to study what the optimum size of a commercial finishing operation is in Alberta and what the important elements are that create the best and most profitable economy of size. Substantial economies of scale

exist for larger feedlot operations of 10,000 to 30,000 head, as the larger operations have lower unit costs for feed and other inputs, and appear to be more effective buyers and sellers of cattle. Trends show feedlot numbers decreasing in North America, with a smaller number of operations accounting for a larger share of fed cattle marketings.

To reduce costs and improved profitability, various risk management strategies are also vital for forward contracting and strategic industry alliances. Cattle feeders need to stay abreast of new technology and work closely with the grocery trade to develop marketing and promotional strategies that are designed to better serve consumer needs. All this needs to take place without losing competitive advantage in animal health, genetics and feeding, which ensures the highest possible product. 🤠







Specialization in the Industry: Ranchers and Feeders Working Together

Specialization has been the characteristic trend within the Canadian cattle industry in the modern era, and feedlots have become one of the major players. Virtually all slaughter steers and heifers in Canada are now finished in feedlots, which means that feedlot operators work hand in hand with the cow-calf operators in producing cattle for market.

The growth of the feeding industry has not meant the complete disappearance of some longstanding traditions such as ranchers riding the Alberta range; in fact, the province still boasts the greatest number of cow-calf operators in the country, and many

ride their horses regularly to monitor the herds. Many smaller farmers also maintain cows and so every year thousands of calves, commonly called feeder cattle or stockers, are sold to feedlot operations either directly or through other stocker operators who raise the cattle on winter forage and summer pasture. Some producers also raise beef cattle from birth until they are ready for the trip to the packer.

The traditional and time-honoured spring calving and fall round-up activities remain busy times for the rancher or cow-calf operator, as herds are watched closely for health problems and given adequate feed. Six month old

▲ **The traditional cowboy activities of branding, calving and fall round-up remain an integral part of the cow-calf operator's yearly routine.**

John McQuarrie, Corel Professional Photos

◀ **Many ranchers specifically operate cow-calf herds where every year thousands of older calves are sold to feedlot operations.** *Corel Professional Photos*

calves are weaned from their mothers in fall at a weight of up to five hundred pounds, and are also vaccinated, branded, dehorned and castrated. The cattle owner may then “background” the animal, which means feeding it over the winter. To do this, forage crops may be grown and harvested, but beef cows are fed little or no grain throughout their lives. A huge proportion of cattle owners that regularly background own small numbers of cattle.

Progressive cattle owners whose focus is the cow-calf business and who may do some backgrounding recognize the importance of keeping inventory of their use of rangeland. Finding adequate range for cattle has become an increasing challenge for stockmen and the availability of grazing reserves, so vital in the terrible 1930s, has continued to be an important resource. Stockmen wanting to place cattle on a reserve gain permission from local advisory boards and are levied a charge on the basis of head per month and the

quality of pasture desired. Grazing associations are another resource for stockmen needing range. These associations operate as a syndicate on deeded land. A range’s “carrying capacity” has been measured as the number of animal units (one 990 pound cow is equivalent to an animal unit) a particular field can carry. To maximize carrying capacity of rangeland and insure adequate recovery of grasses, cattle owners exercise rotation, deferred grazing and complementary grazing strategies. An intensive and planned grazing program, given its relatively low overhead, allows backgrounders to market forage through cattle and prepare weaned calves for the feedlot.

While some of the calves may be retained and fed by the producer and others kept for breeding purposes, most are raised for the feedlot. The financing necessary to establish and maintain a large-scale finishing operation is beyond most cattle producers. The feedlot is also important for the cow-

Cattle grazing in a cow-calf operation. To maximize carrying capacity of rangeland and insure adequate recovery of grasses, cattle owners exercise rotation, deferred grazing, and complementary grazing strategies.

John McQuarrie, Corel Professional Photos



calf producer because of increased costs and risks associated with his own operation. Research has shown that total cost of grain in custom feedlots is lower than required for cattle fed in farm feedlots (in every area of Alberta). The cost of wintering calves is also higher than feedlot costs for finishing feeder cattle. Land investment for feed involves significant money, labour, machinery, fencing and health costs, and these have all risen dramatically in the last quarter century. Feedlot operators are also in an excellent position to know the market value of cattle at any one time because of their constant buying and selling. Furthermore, the finishing of cattle demands large amounts of risk capital in today's competitive market, so it has been a natural and necessary progression for the feeding and cow-calf industries to specialize and yet work closely together.

When thinking of moving cattle off the ranch or farm, "preconditioning" is an important strategy. It is a program to minimize economic losses caused by stress and disease when calves are moved from cow herd to feedlot. Preconditioning methods include dehorning, castration, parasite control, vaccination and weaning. In 1981 the Minister of Agriculture established an Advisory Committee to guide the new Alberta Certified Preconditioned Feeder Program (ACPF). This committee includes members from representative of the cow-calf industry, as well as Alberta Agriculture, Alberta Veterinary Medical Association and the Alberta Cattle Feeders Association.

Most feedlots conveniently purchase feeder calves through local auction markets. Cattle are categorized into uniform groups, based on animal type and weight. Feedlot operators often look for specific types of calves depending on how the market is interpreted. Today that process has been enhanced by video and computer auctions. The process often involves a number of independent commission agents or salaried buyers, and more

buyers may produce a higher price. The September to November period, called the "fall run," is when most calves make the transition from the cow-calf operator to the feedlot.

When the feedlot purchases a young unfinished calf from the rancher or farmer, the animal is usually a recently weaned six month old calf, or a stocker that has spent a second summer on grass. Purchased cattle are classified as feedlot calves, wintered calves, yearling cattle or two year old cattle. Weighing anywhere between 500 and 800 pounds, these animals are gradually introduced to a high energy diet that allows them to gain up to three pounds a day. They are also gradually moved from hay feed to a diet of grain and silage. One key component is the feed's "DE" (or digestible energy) which varies from grain to grain. The DE value is only one variable in establishing a feeding program; cost of grains and protein, and vitamin and mineral content are also important. Additives may also be used to increase the rate of gain or feed efficiency. During the last few months of its feeding, the beef animal is brought to a proper finish, as four pounds of grain produces a pound of carcass beef.

Animals ready for market are about two years old and usually weigh between 1000 to 1100 pounds. They are sometimes shipped by truck or rail to the public stockyards or local auction and sold to the highest bidder, but the most popular method of selling slaughter cattle is directly to the packer. Whatever the route or method, the final destination is the packing plant where the beef is processed and distributed to the hungry consumer.

This integrated system of beef management requires feedlot and cow-calf operators to each fulfil an important role. Their cooperation in carrying out specialized activities has resulted in a well coordinated system which spreads out the business risks and ensures a steady flow of cattle from producer to customer. 🍖





The Birth of the Custom Feedlot

Interest in specialized feeding and finishing grew as the 1950s progressed. The cattle industry was diversifying, and cow-calf operators had their hands full producing feeder cattle on land that had been grazed for almost two generations. Many of them did not live in areas of the province where grain and roughages were abundant. Converting feeder cattle into finished beef by a more specialized method was logical given the market demands and a need to keep pace with progress. The practise of customized commercial feeding, whereby cattle were placed in a feedlot for backgrounding and/or finishing, was a natural step.

Prior to the late fifties, none of Alberta's feeders were completely or even predominantly commercial in their approach. The Burns company had fed significant numbers of cattle for

their Calgary packing plant (and occasionally fed a few cattle for others), and though it was the most advanced and largest operation of the day, it did not custom feed for others. Feeding operations took the form of individual farmer-feeders of varying sizes, including some larger ones like Edwin McKinnon's Running M Ranch.

Those who foresaw that specialized custom feedlots could offer improved and precise care, feeding and marketing of their cattle were motivated by the booming commercial feedlot industry in the United States. The experience south of the border offered an important model of success to be studied and adapted for the local context. The first large feedlots emerged in California where there was an abundance of forages and other feeds. Similar intensive operations

▲ **The feed pens at Western Feedlots.** Photo Courtesy of ACC

◀ **Packing and levelling out silage at Western Feedlots.** Photo Courtesy of ACC



▲
The entrance to Western's Custom
Round T Feedlot.

Photo Courtesy of Western Feedlots

eventually formed and thrived in Colorado, Oklahoma and Texas. It was observed that feedlot managers there could lobby more effectively than cow-calf producers with packing houses to get maximum prices for finished cattle. These operators had access to improved communications systems that allowed for better access to market prices and projections. As feed grain technology also became more advanced, it made sense for ranchers and cattle farmers to focus on the cow-calf business and allow the new specialists to finish and sell their cattle.

Back in Canada, government publications in the late fifties offered strategies to promote the establishment of feedlots, and entrepreneurs were ready to invest money in the new enterprise. Also needed were experienced people of vision and courage who would take the risk of beginning the first commercial feedlots. Thankfully, Alberta has never been short of those individuals.

Western Feedlots

In the 1950s Eion Chisholm served as secretary-manager of the Western Stockgrowers' Association (WSGA) and worked on the small Pyramid Ranch just west of Calgary. The "Pyramid", owned by a group of Shriners primarily to keep horses, also allowed Chisholm the opportunity to feed three hundred cattle, but he was interested in feeding more. It would not be long before he did.

In 1958 the WSGA sent Chisholm to a cattlemen's convention in the United States and while there he visited Montfort Feedlots in Greeley, Colorado. It was a typical American feedlot that Chisholm determined to be ten to fifteen years ahead of what was happening in Alberta. What Chisholm saw impressed him in a big way. Montfort was feeding 19,000 head of cattle, which he described as "pretty terrific for that time." This was Chisholm's first glimpse of feeding on a large scale. He could not wait to get back to Canada to tell his friends what



◀ **Cattle at Western Feedlots' Strathmore facility.**

Photo Courtesy of Western Feedlots

he had seen, because he could not imagine why the same setup would not work in Alberta.

When he returned, Chisholm approached Charlie McKinnon, who had coached him during his early feeding days at the Pyramid Ranch, and they discussed the possibility of starting a commercial operation in Alberta. Concluding that there was sufficient cattle, feed and markets, the logic seemed straightforward to them. But they needed some capital and cattle owners willing to place their livestock on a feedlot, so that meant selling the idea to their friends in the industry.

They did not have to do much convincing. A group of cattlemen got together in Calgary, formed a

shareholder base, and inside a couple of hours raised enough capital to start a company called Western Feedlots. Charlie McKinnon served as the first president and early supporters included Bert Hargrave, Cec Barber, Eugene Burton and Neil Harvie. These men spread the word to their neighbours, explaining that a large-scale operation would provide the advantages of economy that come with size and volume. Many ranchers who sold most of their stock off grass in the fall were anxious to spread their marketing while still maintaining title to their cattle from one year to the next. By availing themselves of a commercial feedlot operation, they could capitalize on better price situations and adjust

"I rented a place on top of the hill and decided to feed my own cattle, that was the start of my troubles. Twenty acres. The owner was planning to build a house. It had a little old tar paper shack barn and two corrals. There was water and this old boy had apparently milked Jersey cows there until he sold it. So I rented it got two loads of cattle in there, one from Bert Hargrave and the other was from being able to borrow \$2500 from the bank. That bought a herd of cattle. I just got setup there

when I had a visit from the city's founding fathers. [They] said I was inside the restriction zone and they wanted me out of there. I said well look I just moved the cattle in, got the feed for the winter. Give me until the first of April and I'll be gone. So finally after a lot of negotiation they agreed. That was my first shot at feeding cattle."

- Eion Chisholm

"It was the fall of '58 and I happened to be sitting at the Calgary market sitting beside Percy Copithorne, one of the bigger ranchers in the Cochrane area. He had his cattle there, a couple of hundred of big 2 and 3 year old steers. They were selling for 12 - 14 cents a pound, and he turns to me and says, You know Eion, I just can't make it at that and I says well you damned old fool it serves you right. You should be feeding them. Oh no, he says, that's a different business than ranching. Those feedlots he says, I won't have any part of that. About 2 or 3 nights later the phone rang and it was Percy. He said you know I've been thinking,

maybe you got something there. He says, I'd like to try it. Suppose you could handle 300 steers for me. I says you bet, how do you want to feed 'em Percy, cause at that time there wasn't any set programs. Well, he says what will it cost me by the day? I says give me a couple of minutes to figure it out and I'll call you back. I think I quoted him 45 cents a day if you can picture that. Anyhow, we feed the cattle out. They did well and in February we sold them for 22 cents/pound. After that I had a customer for life."

- Eion Chisholm

marketings to income tax requirements. The newly formed company pulled together \$40,000 by subscription, and bought 528 acres of what was originally a grain and livestock farm near Strathmore for \$32 per acre. In addition to being a tremendous boon for Strathmore, the location had many benefits from a feeder's point of view: it was within an hour of huge packing plants in Calgary such as Burns, Swift's, Union, and Canada Packers, close to the Western Irrigation District where feed was abundant, and near the CPR line that could conveniently transport their product. The owners decided that it would be sound business to handle customer cattle as well as their own, while charging the same rate for both.

And so the first commercial feedlot in Alberta was born, ushering in the first large-scale custom feeding operation in the province.

Western Feedlot's layout and capacity introduced a new reality in Alberta, where the average farmer or rancher might have attached two or three feeding pens to a barn for winter feeding in order to convert cheap grain and keep hired men employed in winter. These cattle feeding strategies were effective but simple. Early self feeders featured storage bins with troughs on each side that refilled as the cattle ate. Some feeders still used scoop shovels and a wagon pulled by a team of horses to get the feed into troughs. Most of the grain processed was put through a grinder similar in working principle to the old hammer mill, where two corrugated plates ran against one another and cracked the grain to make "mill". Americans at the time were far ahead in feed preparation, already having experimented with popped grain and steam rolling. The farmer-feeders in Alberta simply could not afford the equipment necessary for this type of feed preparation, so the formation of Western Feedlots represented a significant step forward in incorporating modern techniques and machinery.

Western Feedlots began operations in October of 1958, with ten acres of corrals and facilities equipped to handle

Cattle, pen riders, and the feed truck at Western Feedlots. Western's layout and capacity introduced a new reality for custom feeding in Alberta.

Photo Courtesy of Western Feedlots



two thousand cattle. Pens were laid out with central alleys so that grain and supplements could be augured directly into troughs from power feed mixers. The days when Chisholm caught pneumonia using a scoop shovel were over! In order to provide water for a couple of thousand head, Chisholm hired an expert to install a water system complete from well to heaters, able to pump 36,000 gallons per day. They fed seven hundred cattle that first year, and because no one can run such an operation alone, Chisholm hired Ontario cattleman Ross Weaver to be the first foreman. According to Chisholm, feeding in 1958 was an art, and that “the man on the lot has to do the feeding and be with the cattle every day to know when to add and when to cut back.” Chisholm did not have a uniform feeding plan for the first while, feeding either for the day, the month, or the gain.

The feedlot attracted more than a few visitors in the early days, with

many figuring the scheme to be a little crazy, but in time many more probably wished they would have thought of the idea first. More than a few cattle owners were hesitant to give Western Feedlots their cattle because the new and unproven method was deemed too risky. Despite difficulty in attracting clientele the first couple of years, the original group of ranchers who formed Western Feedlots faithfully provided feeder cattle to stabilize the business until others began to see the value of the new approach.

The original land base of 520 acres may have seemed extravagant at first, but the decision proved brilliant given the need for a place to transport huge amounts of manure that quickly piled up in the pens. With sufficient land to meet that need, fertilizing techniques evolved over the years. Horse-drawn manure spreaders were first used and later Chisholm contracted with a cat owner to clean the pens, with trucks distributing the fertilizer on the field.

Loading the feed truck at Western.

Photo Courtesy of Western Feedlots



Still later, dump trucks would deposit the manure in rows and a grader would do the spreading. The benefit to the soil was dramatic; land that had been very sandy produced a healthy crop of oats the first year of seeding, and two years later Chisholm harvested sixty bushels an acre off one of the fields. It was all due to the abundance of fertilizer and sufficient moisture.

Despite the great potential for crops, not many were harvested over the years; instead, Chisholm bought hay and grain and relied heavily on silage which was harvested early and stored in bunker pits. These pits were simple holes in the ground (usually into the side of a hill) that were dug out by a front end. A tractor with a front end loader was also used to pour in and push down the silage. A number of different covers were used. One of the earliest was a plastic cover held down by old car tires, but bits of plastic inevitably found their way into the silage and ultimately into the cattle.

Another method was to spread barley on top of the silage, and then top the mixture with molasses, producing a concoction that Chisholm said was “like shredded wheat.” When that got too expensive to maintain, barley alone was used as a spread and, despite the fact that it germinated and grew, the covering provided an edible seal. These methods all remained more economical than constructing vertical silos.

Chisholm soon acquired new grain processing and feeding equipment. A state-of-the-art stainless steel steam roller was imported from Kansas to process grain, as moisturizing was seen to be the best way to convert grain to pounds. By 1968 a modern mill was built, complete with two steam rollers and a cooler, with the capacity to mix molasses and tallow. Western's feed mill at the Strathmore site burned down in 1989, but the company decided the equipment was too expensive to replace and today they use a tempering method where grain is soaked before rolling.

Cattle in the feed pens at Western Feedlots. Photo Courtesy of Western Feedlots



At first Chisholm's three employees could and had to do every job. The day began at 7 a.m. with the mixing of feed that included hay, barley, and sometimes wheat and supplements. Soon after, the "feed wagon" – a box mounted on a truck – was on the go. After feeding ended, sick cattle were tended and fed in an area aptly named the "hospital." This was before a veterinarian was available in Strathmore. The workers were experienced with cattle and could recognize and treat common problems such as pinkeye, shipping fever, bloat and foot rot. In later years available veterinarians were hired to be on call, and paid for each animal tended. Veterinarians have become a vital resource over the years, offering their expertise in overseeing procedures and administering treatments.

Most cattle were sent to the stockyards in the early years, where they were consigned to a commission merchant and sold one group at a time through the auction ring. This system, strongly supported by the huge Burns operation, was the method that Western initially followed. It soon became apparent that the process had its difficulties. Commission merchants had marketing networks across the country that cattle owners and feeders were not privy to, and so Chisholm and some of his colleagues saw the benefits of taking marketing into their own hands. They began a new system where feedlot operators weighed their own cattle and then let packers bid while the animals were still inside the feedlot. Packers were not thrilled with this process, but the system worked and other commercial feedlots followed suit in the 1960s. Over the years, the local market got roughly three out of every four cattle finished at Western Feedlots. There was never a year when cattle failed to be exported, and that exercise was greatly enhanced by improvements in trucking and other means of transporting livestock.

The only government regulated activity at Western (and other commercial feedlots) involved animal health. Drug administration and vaccination required certain public standards, and use of qualified veterinarians offered the necessary expertise and needed assurance. Cattle going for immediate and local slaughter did not require government approval but foreign imports (for example, feeder cattle from the United States) were subject to checks for diseases such as tuberculosis. This was especially important in the early days when even one diseased animal might infect an entire herd. Finished cattle for export and slaughter also required a visual veterinary inspection for warts, ringworm or external deformity.

The product quality at Western Feedlots developed through market pressures, and both producers and packers found the standards to be more than adequate and uniform. Satisfied consumers who shopped for meat at Safeway stores in southern Alberta over the years could be confident that much of their beef came from animals fed and grown at Western Feedlots.

Alberta's first commercial feedlot grew steadily and maintained its status as one of the leading commercial feedlots in Alberta. In 1959 Chisholm was feeding over one thousand head, and numbers steadily increased over the years. Profits were always reinvested in order to build more pens, improve equipment, and hire more help. Western thrived in the sixties and seventies when dozens of feedlot operations popped up all over the landscape. An extension was built near High River despite many delays caused by detailed environmental studies.

Western Feedlots continues to finish thousands of cattle every year, and maintains its high standards. As the first large commercial and custom feedlot in Alberta, it holds a unique and honoured place in the history of cattle feeding in the province.



▲ **Valley Feeders operation located in the Oldman River bottom near Lethbridge. In the very first year of their operation, Annett and Gray developed some of the 140 acres of river bottom land. (c. 1960)**

City of Lethbridge Archives / P19760205036

Valley Feeders

After Eion Chisholm and his friends blazed the commercial feedlot trail, it was only a matter of time before other informed cattlemen and entrepreneurs would begin their own operations. Early in the 1960s, two friends living in Medicine Hat saw the potential for a commercial, custom feedlot near Lethbridge. The men were Harold Annett and Dick Gray. Annett had already established Alberta Western Beef, his own packing plant, in Medicine Hat in 1961. Soon they purchased 255 acres just outside the Lethbridge city limits, and Valley Feeders was officially incorporated on September 5, 1963. Located on what was originally a mine which had subsequently filled with water, the land provided an unlimited water supply for the irrigation of 140 acres of river bottom land right next to the feedlot. There was ample hay, grain and cattle, and with packing plants nearby the operation had an accessible market.

Annett and Gray would operate Valley Feeders as co-owners until Annett's death in 1982, after which the business was dismantled. In their working arrangement Annett provided the major financial commitment and Gray was the hands-on manager. They focused strictly on contract agreements, running their operation on yardage

plus cost of feed. In 1984, two years after Harold Annett's death, the expanding City of Lethbridge purchased the feedlot land from Annett's widow and the second-oldest large commercial feedlot in Alberta passed into history. During its lifetime, however, it was a shining story of success.

Surrounded by an abundance of cattle owners willing to have their cattle finished commercially, Valley Feeders actually began feeding its first cattle long before all the corrals were finished, and by the time it was incorporated, the fledgling operation had finished over eight hundred head. In fact, Dick Gray stated that he would have been happier if business would have started a little slower! The original sixteen pens were designed to hold 75 cattle each. The animals were fed twice a day from a fence-line unloader, as a dial on the mill automatically weighed the grain in each load. The feed was bought largely through the Canada Packers Feed Mill in Lethbridge.

Most of the early patrons were commission men and livestock buyers, but along with colleague Eion Chisholm of Western Feedlots, Dick Gray took marketing into his own hands and treated cattle with Swift's and Canada Packers. Gray would go to both packers and simply ask for bids on the cattle before moving them off the feedlot.

This process was not without difficulties, as packers tended to be suspicious of feeder scales, and were unhappy to lose control of the marketing and pricing process. But Gray was tenacious and his perseverance paid off, allowing feeders to exercise more power on behalf of themselves and the cattle owners.

As the second of the first three large custom feedlots in Alberta, Valley Feeders was progressive and expanded. In the very first year of their operation, Annett and Gray developed some of the 140 acres of river bottom land, resulting in a magnificent yield of irrigated alfalfa and fodder corn. Gray set up a working arrangement with a local veterinarian to maximize animal health and investigate all deaths with a view to

prevent repeated problems. Valley Feeders featured the latest advances in modern equipment, and in the late sixties Annett and Gray added forty more acres to the originally purchased land. The operation grew consistently over the years reaching a capacity of nearly 30,000 cattle.

Harold Annett's love of the feedlot and cattle business extended beyond his joint enterprise with Gray. Back in Medicine Hat, where he co-managed Valley Feeders from a distance, Annett began another custom feedlot in 1968 called Fed Rite Beef, where he finished cattle for his packing plant. This feedlot was 650 acres in size and provided ample land for growing corn and the breeding of his beloved Herefords.

Filling the feed troughs at Valley Feeders. The operation grew consistently over the years reaching a capacity of nearly 30,000 cattle. (c. 1965)

City of Lethbridge Archives / P19754409097





▲
Lakeside Farm Industries Ltd.
 Lakeside's feed mill has the
 capability of producing 600
 tonnes of rolling each day.

Photo Courtesy of Lakeside Farms Ltd.

Lakeside Feeders

Harold Annett of Valley Feeders was one of the early entrepreneurs to own both a packing plant and feedlot, reflecting the interdependence of various sectors connected to the business of cattle feeding. As impressive as Annett's expansion was, his business would pale in comparison to that of Lakeside Feeders, the last of the three early large commercial operations to begin in Alberta. Beginning as a strict feeding operation, Lakeside would diversify and evolve to become a prototype of a modern feedlot featuring a packing plant, feed mill and research centre.

Jim Wilfley was one of the key men involved in the birth of Lakeside Feeders. A senior partner in the new venture, Wilfley had run an adjacent small cow-calf operation. In order to plan and build the feedlot wisely, he spent two months visiting feedlots in the United States and took on Garry Evans as his partner. Lakeside's other original shareholders were Tor Wigemyr and Garnet Altwasser, and together with Wilfley they continue as the senior management team.

The first feedlot pens at Lakeside Feeders were constructed in 1966, located near the Trans-Canada Highway two miles west of Brooks. The location offered sandy soil which aided drainage, and access to almost unlimited hay, grain supplies and feeder cattle. Lakeside originally consisted of fourteen pens capable of holding two thousand cattle. The feed bunks were all fence-line, and were filled with a combined mixture of chopped hay and grain prepared in a Grain-o-vator. The first cattle in Lakeside's pens began feeding on October 2, 1966. The operation quickly doubled in size and then just kept on growing.

Before the Lakeside feeding enterprise was a year old, management began a milling operation and in 1969 they merged the two interests to create Lakeside Farm Industries. The operation grew so rapidly that by 1974 Lakeside had constructed a packing plant and welcomed a Japanese trading company to become a partner, creating a unique opportunity to serve the growing Asian market. During the economic slowdown in the late seventies Lakeside consolidated holding

companies and sold assets in order to reconfigure the business and ensure long term success. Over the years it developed its milling, packing, fertilizer and research facilities to become a more multifaceted cattle operation.

Today the feedlot operation has reached a 30,000 head capacity, due in part to its location in the heart of the Eastern Irrigation District which supplies ample moisture and a dependable supply of forage. A wide variety of foodstuffs are carefully analyzed for optimum nutrients and computer evaluated to result in rations that achieve the lowest cost per pound of grain. About half of the cattle at Lakeside are owned by the company. It was one of the early feedlot companies to use computers to keep inventories and measure cattle performance. Clientele can get break-even prices calculated at any time during the feeding process to allow sale at the desired time. When selling time does arrive, finished cattle are sorted and offered to packer buyers in a closed bid sale.

From the beginning, Lakeside's milling operation stood alongside the feedlot to provide feed for producers in central and southern Alberta, as well as south of the border. It includes a steam flaking system and pelleting facilities, uses computer technology to insure sound nutritional levels, and works closely with the research and laboratory department.

Lakeside Packers is a major beef slaughtering plant and in addition to processing meat has developed new markets for offal. In 1984 a cattle hide curing plant was built to process green hides and maximize carcass by-products. The rural location of the packing plant provided space for a waste water treatment facility that provides nutrients for growing silage. The fertilizer plant was upgraded in 1981 and has used the traditional dry granular as well as liquid fertilizer, anhydrous ammonia and "fertigation", the application of fertilizer using irrigation systems.

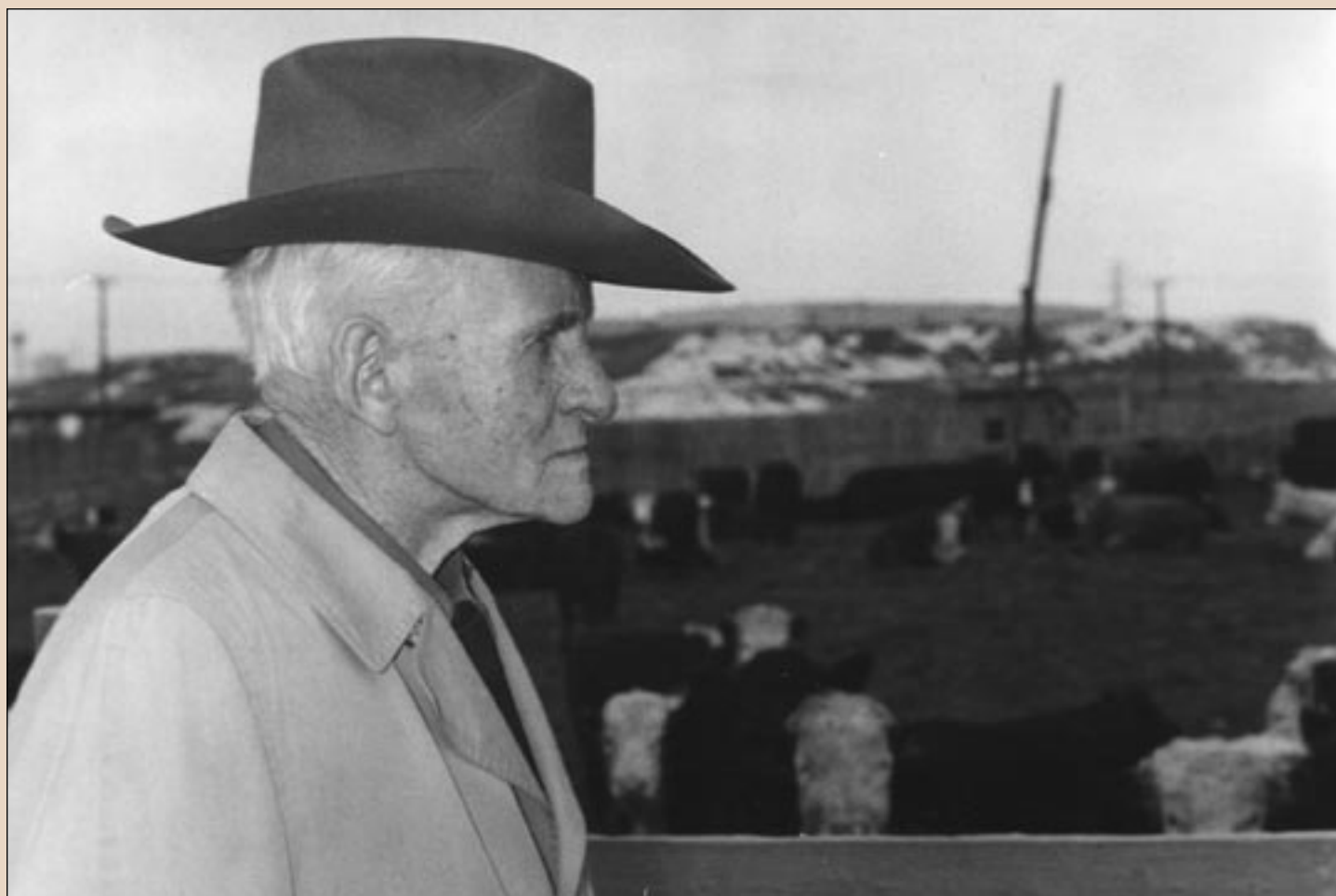
The research division of Lakeside's fertilizer plant studies soil samples, analyzes plant tissues and offers advisory and consulting services on fertilization. Applied research toward the actual feeding process began in 1972 and pens began being built in 1978 for the purpose of studying cattle. Researchers also do soil, feed and water testing, and crop research. The research centre provides contract research on behalf of major firms in Canada and the United States.

With the business of feeding serving as its cornerstone, Lakeside Farm Industries Ltd. was the third of the three original large feedlots in Alberta. Its continued development over the last three decades provides Albertans with a microcosm of how the beef industry has become more diversified and specialized. 🐮



◀ **Aerial view of Lakeside in 1969. With a capacity of 8000 head when this photo was taken, Lakeside was one of the first large custom feedlots in Alberta.**

Photo Courtesy of Lakeside Farms Ltd.



The Gillespie Feedlot

"My father Alex Gillespie came back to Calgary after a few years of farming at Strathmore, east of Hanna. He didn't go homesteading but wanted to farm. Most of his time was spent working with a man with a steam outfit, breaking land. The steam tractor pulled 10 breaking plows. The plows had a platform on them that Dad stood on. At the end of the field each plow had a lever that lifted each plow up. When it turned around they all had to be lowered again.

When returning to Calgary he got a job working for Pat Burns delivering meat to the butcher shops around Calgary. He did this with a well manicured and spotless team and wagon. This was his pride and joy.

Around 1923 he acquired about 12 acres where the Deerfoot Trail goes under the CN Railway in east Calgary. This was outside the city limits until about 1950. He started feeding hogs and eventually a few cattle. He was one of the first to feed screenings. At that time they were being put in the dump.

▲
Alex Gillespie at the Bonny Brook Feedlot in 1976. Photo Courtesy of Ted Pritchett

My earliest memory of the feedlot was in the very early 1930's when straw and grain were the feedlot ration. A Letz mill was purchased to cut the straw to a length of silage. It had grinding plates on the same shaft to grind grain and it would mix in the bottom and went into a blower that blew it up into a wagon. In the beginning the Letz had a feeder to fork the straw onto. This mill was run with a 15-30 McCormick Deering tractor and a 120 foot threshing machine belt.

In about 1933 an overhead bin with a sloping floor was put up with an overhead bin for grain. The Letz mill was underneath at ground level with an open side for forking in straw to the feed mill. Grain would come down from above and the ground ration would be blown upstairs to the sloped floor bin. The team and wagon would pull along the side and be easily filled. There were 2 graineries pulled alongside to hold grain for storage. The grain from these bins was fed out to the corner of these bins into a pit with a blower that blew it up overhead of the Letz. All of the grain was handled with a shovel (#10 scoop) into

the bin and across the bin to the blower. All of the feed ration was handled with a shovel or a wide close tined fork. All of the straw that went into the mill was with a fork. We never knew what bales were until in the 1940's. In the 1930's everything imaginable was used to work. All kinds of teams, wagons, trucks and sleighs. I'm afraid the only names that I can remember that hauled is Homer Carr - Innisfail, Extrand Bros. - Carstairs, Vern & Gordon Aikens - Ogden, Charles Tucker - Okotoks, Howden's - Sheppard, Eddie One-Spot - Sarcee, Hugh Bennett - Reddington, and many others.

We never had any hay at the feedlot in the 30's, but there was always some oat bundles to feed the team. It seemed once in a while we would have some linseed meal or soybean meal to sprinkle on top of a load of feed for supplement. For the most part it was salt and monocalcium mixed that was used.

In about 1922 Dad put in a 10 ton platform beam scale to weigh feed and cattle. Ollie built a stock rack on skids that could be pulled onto the scale to weigh the cattle. Most of the cattle that ever left the lot were weighed on that scale. Every year it had a government approved sticker put on it.

I always remembers helping Mickey Dirrane or Bud Sewall sort cattle in the alley. Mickey was Burn's cattle buyer and Bud was Union Packing or Mayland's buyer. In about 1938 I was 10 or 12 years old on a spring day Pat Burns was down at the lot. He had some one driving him as he was almost blind then.

Most of the winters were cold with deep snow. The feeding was done in fall, winter and spring Norman Frayn did most of the grinding. In the evening after grinding all day he would look after the Letz and tractor. The cutter head knives would need sharpening and the grinding plates would need adjusted or changed. Every morning before 7 a.m. he would be out there building a fire under the 15-30 to warm it up. They used No. 40 oil in the tractor so it had to be warm to turn over. Often I saw flames up past the frame of the tractor. I don't know why it never caught fire.

All tractors in those days were steel wheeled and you had to start them with a crank. The mid 30's were the first rubber tires on tractors and it took some time for them to catch on. He had to heat the water for the tractor as well. You had better not forget to drain the engine when it was last used. The tractor was never froze up to break anything that I remember. It was the days before antifreeze or it was just becoming available in the mid 30's. Also the 30's was before plywood, plaster board, insulation, electric power, running water,

livestock waterers, plastic sheeting, plastic pipe, augers, feed wagons, automatic scale mounted, heated cabs with radio and computer phone, oil or natural gas heating, propane, front end loaders, legs for farm use, post hole augers, treated posts, heated shops, t.v.'s, truck mounted manure spreaders and on and on. Everything listed above is so necessary today in a feedlot.

The Frayn's and Cox's were half brothers, 8 of them from Springbank. All of them worked at the feedlot at one time or another. Alf for 8 years, Norman for 12 years, also Alex, Bill and Wilf Martin from Chestermere Lake district. We always milked a cow, sometimes two.

Mother had the hardest job of all raising 4 of us kids (I was the oldest) and cooking for 4 or 5 guys. Until around 1939 there was no power, it was coal and wood heat. We had to carry water in and carry it out and chop fire wood. It was before fridges and deep freezes. Some winters Hazel Bray from Red Deer Lake would help and sometimes Edna Burwash from Balzac would help. They washed some clothes for the men as well. There were no coin operated washers in those days. The only other was the Chinese Laundry and they would get their dress shirts and some red and blue label underwear done there. In the early 30's Dad brought Mom a new washing machine. It had a two cycle gas engine in it. It ran pretty good for a year or two and then it started balking, it was hard to stop. Mom would heat water in boilers, on the kitchen stove and put in the washer. Then when we couldn't get the engine to go the water would go cold. I wanted so bad to know about gas engines and sometimes I couldn't make it start. I'm sure that must have been where I learned to swear. I would finally have to get Alf to come and help. Regardless of what you see on TV Maytag will be in my mind forever. We had that machine until after we got the power around 1939.

Watering the cattle could sometimes take up a lot of time. We had two wells. There was an International 1 cylinder engine on one well and a McLeods pump engine on the other. The cribbing on the well had to be extended up about 8 feet to where the pump and engine was to get enough height for a gravity steel pipe to reach to the far corral. On the days when the engine ran it was great but some days, usually when it was 10 below F or colder it could be a 2 or 3 hour job. You had to have a pail of warm water with you too as those engines had to be drained. I always have to stop and watch how rice a flat bed trailer full of these engines run when at pioneer day shows. Don't

forget - watch that the water trough doesn't run over, then when it is full go back and shut it off and drain it.

About 1940 was when 3 ton trucks started to haul cattle. There were no trailers then. Before that all cattle were trailed to and from the feedlot, mostly from the Stockyards or from railroad loading chutes, or in from the country. About 1946 Dad purchased a grain auger which was a big help. Before that all grain was handled with a shovel and all straw handled with a fork. Farm trucks didn't have hoists on them either, so there were some shortline companies making truck loaders that ran off the PTO. You could use them to load from the ground or out of a bin and also to unload out of the box. They were awfully heavy and awkward to handle, but better than what we were used to. Some models were an auger and some were a box type with paddles.

There was an open shed in most corrals to keep the snow off their backs and for shade. Bedding was put in these sheds at times. In the summer time we could spend time cleaning these sheds with a team and dump wagon and fork.

Our feedlot would handle 900 head. There was the Bill Mackie feedlot close to us and Tom Farrell had a feedlot next to us. On the otherside of us right where Deerfoot Trail and Glenmore Trail meet today, Burn's Ranches had an up to date style feedlot. They had an elevator with a leg in it and three phase power to run a hammer mill, a cook house for the men, a large garage below the cook house for two nice three ton trucks. They had a lot of farming as well, so there was machine storage and a machinery repair part to their shop. It had heat in it as well as an office. All of their roughage was hauled in bales (mostly hay). The railroad spur hauled their grain. They had a nice big barn for the teams too. That barn is in Heritage Park now. I believe they could handle 4500 head.

When the Second World War was on, help was nearly impossible to find. Grinding straw and grain required a lot of labour. So Dad got into feeding wheat and barley screenings. It was shipped in box cars to a siding a half mile from the lot. The Canada Malting Co. screenings was mostly small barley, wild oats and weed seeds. Wheat screenings came from the Renown Flour Mill, it all made really good feed. Once in a while we would get a carload from Buckerfields at the west coast (Prince Rupert). You could be sure before you started to unload that it would be nearly straight dust. To unload the box cars we

had a large scoop with two handles on it and two small wheels that we could wheel back and forth with feed from the back of the car and dump into the wagon. By the end of the 1940's we were feeding about 1200 head.

Somewhere around 1949 Burns packing plant workers went on strike on short notice. They had something like 500 head of cattle in their yard to slaughter. Mickey Dirrane, Burn's buyer asked Dad if we could handle them for a short time. When those cattle came down we had cattle everywhere but in the house yard. Shorty Ross and Harold Bissell came with those cattle to help us look after them.

Dad was a wheeler dealer in the cattle business. Often he would go out to someone's place to buy their cattle and they would come to the feedlot. By 1940 he was better established. He bought Crosses ranch steers, two or three different years. 300 head of Q Ranch steers of Wildhorse two or three times. Gilchrist Bros. Rube, Joe, Chay and Bill, 300 head, Indian steers from Gleichen, Ross Ranch steer from Lost River. They were all British breeds in those days. Dad's own O7 Ranch steers from the ranch at Dorothy, 300 head. In those days everything was pretty well two year old and often three year old steers that was fed. I always thought that Dad owned everything that was fed there. I only remember two instances that we weighed everything, that went to a pen. One of those deals was for C.C. Matthews Angus cattle. We never fed calves and I don't remember feeding yearlings.

We didn't have feed alleys like feedlots have today. We had troughs made out of 2 x 8 x 16' planks 4' wide on skids that we moved from time to time in the corral. We had to drive into each pen to feed.

We had very few plank fences. Most of the pens had 8' high slab fences all around for shelter, especially the outside fences. We used bigger posts than today so they wouldn't rot off so fast. There were no treated posts in those days either so when the corrals got a little age on them we were fairly safe like in the winter time, but when the ground was thawed in the summer and a high strong wind came up, you could be sure there would be some posts broken off. To repair a broken post you had to dig out the old stump. The top plank was always tied with No. 9 wire to the post. The spikes were smooth and wouldn't hold like today. There were no spiral spikes or coated nails then. The first posts that were treated was sometime after the Second World War, and as I remember it was

called osmose. It was a tar liquid that you painted on a ground level about 15" where the post would rot off and over the paint you would wrap with tar paper. Even today around our own place after a strong wind I hope and look to see if the wind breaks are all up.

I was there for 26 years until Eleanor and I got married in 1952. Then we only went back to visit. From 1951 Slim Sonnie (my Father-in-law) led screenings to the cattle all the while until 1958. Dr. Larry Sparrow teamed up and fed cattle until it all came to an end. After Bill and Larry took over Jimmie Paul of Saul & McDonald built some troughs and they fed the Alberta Distillery Soup for a few years.

By the middle 60's the city was crowding all around the feedlot. Feedlots are undesirable to city living. The city finally expropriated the land.

About 1941 Covercropping Cattle in the Cayley, Nanton, Claresholm and Stavely area was getting started and Dad got into that in a big way. Others that I know were in it as well like Augie Sauer, George Denoon of Parslow & Denoon. A cover crop was seeding oats in the middle of July and pasturing it until late in the fall. Each fall he may have over 1000 head on cover crop all over that area. After the cover crop season when it was either eaten off or the snow got too deep. The cattle that were finished went to the packing plant. Claude Shackle was a Canada Packers buyer that was in that area a lot. The rest of the cattle would go to the feedlot. For cattle that weren't being shipped to the commission firms at the Calgary stockyards the CPR had a much higher freight charge. The next closest unloading chute on the railroad was Turner Siding which was south of MacLeod Trail and Heritage Drive now. We had to trail the cattle from there.

Dad then decided to build a feedlot at Picture Butte. It was a closer and a cheaper haul from cover crop. The sugar beet pulp, molasses and grain made good feed and a cheap gain. I spent a couple of winters there. Loyd Tytlandsvik was running the lot there at the time. His brother Bert Landis was hauling beet pulp and helping me when he could hauling straw. Again hauling pulp was done with a team and wagon. A sharp shawed team to be able to get out of the sugar beet pit. We had to grind the grain with a hammer mill but the beet pulp was loaded up at the sugar factory with a drag line and weighed. Then molasses was added on top when we got back to the feedlot grain was added. You had to have a contract to get pulp and molasses for feeding cattle. The feedlot was

located a half mile east and a half mile south of the sugar factory. Eleanor and I have been past there at different times. I see it is still there. My job was to haul straw for roughage and bedding. We had a 2 ton truck with a 30' trailer for hauling straw from all around Picture Butte, Iron Springs and Shaunessy. All straw in those days was in straw piles as it was all stook threshed. Most of those piles you could haul out of for days before cleaning them up. That was a nice job for Bert and I. Forking loose straw in that windy country and trying to get it to stay in the rack and make a decent load. Harold Bishop of Picture Butte built that lot in 1941 and ran it for 3 years. Lloyd Tytlandsvik ran it for 4 years, Slim Sonnie and family for 3 years until about 1951. Then shortly after that Dad sold the feedlot to Harry Watson for \$1.00. Harry was a business partner and friend.

Some of the feedlots close to Picture Butte were R.L. McMillan lot, Hymie Cohen, Green, Bob Mitchell, and Harry Kane feedlots.

Maybe we don't realize how much bigger framed cows have become. Around 1954 there were a few purebred Hereford cows at the feedlot. They had been there for quite a while. Slim Sonnie my lather-in-law was at the feedlot when those cows were shipped to the yards. Three of those cows weighed 1630 lbs. There was a lot of talk about how much they weighed. They were some of the biggest cows to ever come to the yards. Those cows were way over fat. Of course there area a lot of cows bigger than that today.

I never seem to get over the cattelinerers of today, especially the 3 axle liners. The size and amount of cattle they hold and the rigs that pull them compared to the way things were done 60 years ago. They seem to me to be a palace on wheels for the cattle and the driver. The way the feedlots and feed mills are put together, I never tire of seeing and looking at them.

What changes will there be in the next 30 years in the cattle and feedlot industry? I hope I have really good health and watch what happens, by that time I will be 100 years. I really can't hope for more than that."

- Delbert Gillespie





Today's Cattle Feeder and the Modern Feedlot

Ask any feeder for the key to success, and he will probably say that keeping pace with change is a fundamental requirement. From the days when cattle owners scoop shovelled grain, to today's use of trailer-mounted mechanical feeders, there have been constant changes throughout the feeding industry. Those keeping pace have maintained viable operations.

A relatively small number of huge feeding operations cumulatively feed a large majority of the cattle in Alberta. That means the large feedlot operations have had to grow and constantly refine their methods and equipment. With cattle management and feeding increasingly becoming a matter of scientific study, feeders and cattlemen on the cutting edge of industry must

respect the value of this research, and incorporate the growing literature offering advice on everything from feed guidelines to construction of facilities.

The modern feeder needs to balance and plan land distribution, study the latest technological changes and carefully weigh consumer demands. Feeding itself is a highly programmed process, taking into account the proper mixture of grains and supplements, types of cattle being fed, and market demand. Feedlot financial management has become a complex business that requires highly trained personnel with appropriate expertise. Administration of large feedlots often takes place in an office with trained accountants and managers using the latest in computer

▲ **Monitoring feed. Feeding is a highly programmed process, taking into account the proper mixture of grains and supplements, types of cattle being fed, and market demand.**

Photo Courtesy of Alberta Agriculture

◀ **Aerial view of Lloyd Sproule's feedlot near Pincher Creek in 1992. Alberta fed cattle production now approaches 1.4 billion head which represents well over half of the total Canadian fed slaughter and export cattle.**

Photo Courtesy of Lloyd Sproule

programming to produce least-cost ration formulations and programs for growing, finishing and selling cattle.

In the area of feed processing, the roller has long since replaced the hammer mill. Over the years the feedlot owner has seen extruding, tempering, pelleting, micro popping and steam flaking all represent the latest trends. Supplements have improved, as have the manner in which they are blended into feed. Advances in animal health has meant increased numbers and varieties of vaccines and more effective products for parasite control, and better breeding has produced more “efficient” cattle. In the early years of feeding many cattle went to market at two years of age, weighing 1100 pounds. With the advent of crossbreeding and the importation of European breeds, they are now coming to market at fifteen months of age or less and averaging 1200 pounds.

Marketing changes have resulted in the bidding system replacing the public market and auction method of selling.

The older method often resulted in severe shrinkage, no assurance of sale, and the cattle owner and feedlot operator being at the whim of buyers. Bidding gives more power to the cattle owner. When Western Feedlots and Valley Feeders began the process they were boycotted by some packers, but in time the system took hold and the cattle and feedlot owners were the winners. The beef grading system has also changed, allowing for feeders to custom feed their cattle to meet market demands in a more precise manner.

Feedlot finishing of cattle demands considerable risk capital, and even a relatively small operation requires huge investments in land, buildings and equipment. It has been estimated that a feedlot with a 400 head capacity involves half a million dollars of investment. Profits depend on how the selling price compares to feeding expenses, as well as housing, veterinary, and transportation costs. History has revealed a cyclical nature to beef and cattle market prices that

The silage pit at a feedlot operation. The sheer size of the modern feedlot demands considerable risk capital. Even a relatively small operation requires huge investments in land, buildings, and equipment.

Photo Courtesy of Alberta Agriculture



results in three to four years of higher prices followed by three to four years of lower ones. Successful feedlot operators require an entrepreneurial spirit, and a high plane of knowledge regarding production practices, pricing feeder cattle and alternative marketing options.

The construction of adequate feedlot facilities requires significant investment and planning. Lots consist of receiving and shipping facilities, a scale, a series of sorting alleys and holding pens, feed pens, concrete feed bunks and feed alleys, cattle processing facilities (for vaccinating and branding) and a hospital with isolation pens. Pens also need to be designed to permit adequate drainage for waste. Feed mills that process grain require galvanized storage bins, silage pits and various other storage systems.

Modern feedlot operations also need to listen to environmentally-conscious researchers and consultants. This means consideration of sites, taking into account slope for drainage and thoroughly studying distance separation, watercourses and strata. The use of settling or evaporation ponds is an important strategy in manure discharge and monitoring.

Ben Thorlakson is one feeder who has stayed on the cutting edge of change while maintaining success. He has operations managers overseeing the day-to-day work in his feedlots near Airdrie and Strathmore. Over the years Thorlakson has established an impressive bull test station, and continues to farm land for feed. Workers at his research facility (Animal Research International) conduct tests in communication with the Bureau of Veterinary Drugs and the Food and Drug Administration in the United States. He has also developed a garden supply division where compost steer manure is used to prepare topsoil mixes and fertilizer blends for the home gardener. Thorlakson still oversees the buying of cattle at Thorlakson Feedyards, but has no time for any day-to-day responsibilities at Cattleland.

Ben Thorlakson believes that the

biggest challenge facing any modern feedlot operator today is the volatility of markets. As a result, the ability to identify and manage finances requires familiarity with risk management tools. On the sales side, an important and popular risk management method is to maintain self-owned cattle to spread out costs. Most of the cattle at Thorlakson Feedyards are owned by Thorlakson himself. Knowing the markets and being open to increased sales to the Pacific Rim countries represents an important wave of the future, so networking with important organizations such as Canadian Beef Export Federation is vital.

Of all the skills that can benefit the feeder today, management prowess and business astuteness rank near the top, because the feedlot business is capital intensive. Building a 25,000 head feedlot would require anywhere from five to eight million dollars and stocking it could up the total to well over ten million. The feedlot manager must definitely be a shrewd businessman. Thorlakson's gross sales exceed forty million dollars, which means that he and his managers work with databases and spreadsheets on a daily basis. Most large feedlots hire controllers who have accounting designations and significant work experience.

The biggest need in starting a feedlot today would be capital. Beyond that, the operator would benefit from experience and knowledge in agriculture, business and mechanics. Entrepreneurial skill is essential, as all feedlot owners need to maximize profits while minimizing risk exposure, which requires striking a balance between aggressiveness and calm objectivity. People who make economic mistakes do not last long in the business. Despite all the need for business prowess and the value of formal education, pioneering feedlot operator Eion Chisholm maintains that "knowing all about cattle" is still a valuable skill. 🐮



1997 Environmental Stewardship Award

When Highland View Farms Limited was founded in 1976 by Jack Kotelko and his son Bernard, it comprised 400 acres of mixed crops and a small number of purebred cattle. In the period from 1976 to 1982, lucrative grain prices enticed the company to concentrate its energy on increasing its land base. When Michael Kotelko joined the company as vice-president in 1981, the changing world economy was encouraging farmers to diversify. Bernard and Michael quickly recognized the vulnerability of being involved solely in primary grain production. Two years later, as a value-added alternative to the straight selling of grain, they purchased 50 feeder cattle to finish for slaughter. Feeding cattle impressed upon the family the potential for enhancing sustainability and profitability.

In 1993, Highland View Farms became Highland Feeders Limited. Still owned and operated by brothers Bernard and Michael, the company currently has a feeding (standing) capacity of 25,000 head. One of the ten largest feedlot operations in Canada, Highland Feeders is a significant competitor in producing beef for the North American market.

The company's commitment to the consumer is to produce an end product that is safe and of consistently high quality. A research and development program, currently located on site, focuses on beef production, animal health and environmental issues. The operation functions under the philosophy of dedication to quality assurance and environmental sustainability.

For environmental considerations to be effective, they must be taken into account from the first point of construction. The Highland Feeders' feedlot took advantage of the natural sloping conditions of the land in construction of the facilities. The site is landscaped on a clay base with a slight slope to optimize drainage, and the runoff is contained. Water wells are located to minimize the chance of percolation, and subsurface clay soils provide an excellent barrier to migration. Waste material is recycled as fertilizer onto the surrounding 3,800 acres, and the resulting silage crop is fed back to the cattle.

Daily maintenance of the operation is designed to maintain control of the feedlot's environment. As an example, manure is piled within the pens to limit the surface area exposed to the air and reduce evolved odours. The piles' dried surface provides a barrier to both odour and insects escaping, and



sets of pen were built at different times thereby creating an ideal situation to measure changes in flow rates and volumes for pens already in use as well as for the introduction of new pens.

This research allows for the measurement of soil infiltration levels, runoff volumes and water movement. Chemical and microbiological information about the nature of runoff can also be obtained. This data can be used to characterize an optimal drainage lagoon. Eventually this information will help define a runoff model that will provide an engineering tool for facility design or even for the reclamation of old sites. This

also controls the adverse effect that continuously moist conditions can have on cattle hooves.

Environmentally sound siting and planning of feedlots requires that runoff does not have a negative impact on surrounding watersheds. There is increasing societal pressure on the livestock feeding industry to contain and treat runoff. To do the necessary designs and advise on treatment, there has to be an accumulation of base data on quantity and quality of runoff from an active feedlot.

The company's pro-active approach to research includes a feedlot pen runoff study in cooperation with Alberta Agriculture, Northeastern Conservation Connection, Alberta Environmental Protection and the Alberta Cattle Commission. The goal of the study is to provide hydrological data or information about the properties, distribution and movement of water in western Canadian feedlots. The majority of information collected has been from three sites. Each site comprises 14 to 20 pens that are engineered to optimize runoff collection. Each set of pens has its own culvert that feeds into a drainage lagoon. Flow measurements for each set of pens can be taken independently. Feedlot designers believe that as cattle are introduced to new pens, the mixture of the soil and manure that builds up in the pens changes the runoff rate and volumes draining from the pens. The four

should refine or provide alternatives to current methods of handling, collecting and utilizing manure as a valuable resource. By quantifying some of the costs involved and describing the benefits, this exercise provides the industry with research on practices that are sustainable and improve the environment.

Cattle feeding is an industry with high public visibility and participation in environmental initiatives is the natural progression of concern for environmental accountability. By optimizing management practices, cattle feeders ensure that they are protecting the environment. 🌱

• All photographs

Water quality and waste management monitoring facilities at Highland Feeders.

Photos Courtesy of ACC



ALBERTA CATTLE FEEDERS' ASSOCIATION





The Role of Organizations

Throughout history, Canadian stockmen have formed organizations to protect and sustain their interests, and provide an educational role. Recent years have seen the birth of an increasing number of bodies that perform these functions, and cattle feeders have recognized the value of formal and informal networks that allow for strength in numbers.

The Canadian Cattlemen's Association (CCA) was formed in 1932 and has served as a national voice for stockmen, which includes feeders. It is structured to represent every phase of the beef industry and provide leadership for all sectors. Some of the issues the CCA engages are trade, animal health, environment and animal care, fiscal and monetary policy and grading and inspection issues.

The CCA has given birth to other

important organizations. Canfax was established by a group of progressive cattlemen in 1971 under the umbrella of the CCA. It is a non-profit market information service that attempts to collect, analyze and communicate information in a unbiased manner. Canfax has been embraced by cattle raisers and feeders who want to strengthen their bargaining power.

They benefit from weekly summaries and the *Trends* publication that provides break-even analysis, slaughter statistics, carcass weights, trade information and feed grain prices. In short, Canfax puts feeders into a position to get top dollar for their product. Two other important bodies are the Beef Information Centre, formed in 1973 to provide a nationwide public relations function, and the Canada Beef Export Federation, established under the umbrella of the

▲ **Cartoon illustrating the ACC and the CCA working together to strengthen Alberta's cattle industry.** Photo Courtesy of ACC

◀ **Cover photo of the Alberta Cattle Feeders' Association brochure.** Photo Courtesy of ACC

CCA in 1989 to improve export results for the Canadian cattle industry.

The Alberta Cattle Commission (ACC) was formed in 1969 to provide a securely funded and effective voice for cattle producers. Over the years it has represented the province's beef industry on critical issues such as economics, animal welfare and environment. It also develops and supports programs and services enabling the cattle producers to keep in touch with consumer needs and apply technical information into their practical operations. The ACC also approaches the government with cattlemen's concerns.

The Feeder Associations program that began as a result of the government's 1937 Feeder Association Guarantee Act has been especially helpful to smaller farmers who background and "grass" cattle in order to sell them to custom feedlots in southern Alberta. The program has provided these farmer-feeders with financial help to use surplus feedstuffs for feeding purposes, or to market feed "on the hoof." More specifically, it allows cash-strapped farmers to secure loans through a government-monitored but cooperatively run organization. Although the livestock that are purchased are technically owned by the local feeder association, the care, feeding and marketing are the responsibility of the individual member. Each association is a cooperative with a Board of Directors that approve and monitor the loan money. Today there are sixty-two feeder associations spread throughout many communities in Alberta. Together they represent just under 11,000 individual members, 600,000 feeder cattle and take in almost 400 million dollars of loan money.

The province's Agriculture Department has provided a valuable research function for feeders over the years. In addition to pouring out information on cattle feeding, the government communicates with feeders through research trials, workshops and demonstrations in a

number of provincial locations including various educational institutions and agricultural schools. Specialists address feedlot operators on matters such as starting calves, feedlot diseases and nutrition. The government also offers environmental studies on key issues impacting feeders. Codes of practice for areas like humane animal management and transportation are a function of the cattle industry's own concerns operating in conjunction with government awareness and initiative. In 1995 a code of practice for the safe and economic handling of animal manures was prepared by the Intensive Livestock Operations Committee and printed by Alberta Agriculture's Food and Rural Development Branch. The committee is represented by over a dozen organizations, including the Alberta Cattle Feeders' Association.

Alberta Cattle Feeders' Association

As early as 1961, a number of Alberta's feedlot operators began to discuss the possibility of forming a organization within the Western Stock Growers' Association to specifically address their needs. The organization was not able to get off the ground at that time, but the idea did not die. What was needed was a specific cause to galvanize support, and that came in the early seventies when the grading system underwent change. The system's alteration resulted in an oversupply of cattle whose quality had been discounted, and Valley Feeder's Dick Gray did not hesitate to speak out. He was also concerned about the banning in Canada (but not in the United States) of DES, a steroid used to stimulate growth. Cattlemen believed that fears concerning the potentially harmful effects of the drug were inaccurate and overblown, and the banning served as a rallying cry for feeders. In 1972 approximately one hundred feeders and packers met in Lethbridge to tackle the issue. It was from this meeting that the Alberta Cattle Feeders' Association (ACFA) would form to provide a new voice for the industry.

Gray's concerns may have provided the spark needed to begin a lobby group, but other ranchers like Lakeside's Jim Wilfley also felt the time was right for an organization that would responsibly and consistently educate the cattle feeder and capture the attention of government. Wilfley was a quiet and effective driving force who networked with other cattle feeders. Organizational meetings led to the association being informally pulled together in 1972, and then incorporated in January of 1973. What had begun as a single issue movement grew to embrace wider concerns distinct from those addressed by the Western Stock Growers' Association.

The ACFA did not experience a meteoric rise to power; in fact, for the first few years it experienced financial difficulties and struggled to establish an identity separate from the powerful Western Stock Growers' Association. The organization nevertheless helped individual feeders by supporting the sealed bids system in the late seventies as well as the development of the Canfax marketing system.

In 1978 the ACFA turned its focus to fund raising because of significant debt and decided to organize its own convention to move out from under the shadow of the Western Stock Growers' Association. The first separate ACFA convention in Red Deer took place early in 1980. It included a suppliers' area and "trade show" that offered feed and veterinary supplies, livestock, forage and feed handling equipment, and information from banks, insurance companies and commodity brokers. The purpose was to educate as well as raise money. The Association recruited good speakers and that first successful convention began a tradition of popular and profitable annual meetings. Under the presidency of Ben Thorlakson in 1980 and 1981, the ACFA formally broke away from the Western Stock Growers' Association and also created the Alberta Feed Grain Users' Association.

The ACFA hired Don Saynor as their first full-time General Manager in 1979 and it was Saynor's idea in June of

that year to refurbish a monthly newsletter entitled "Round Up" by providing regular columns and informative articles written by association leaders and feedlot operators. The publication has grown substantially and continues to be printed today under the name "News Round-Up". The organization also published its first annual yearbook in conjunction with their 1982 annual convention, which commemorated the ACFA's tenth anniversary. Through these various publications, conventions and public relations moves the ACFA gained financial and organizational strength.

The annual yearbook, aptly titled the "Round-Up Annual", brought in significant revenue the first year, and has continued to provide a valuable summary of the key issues facing Alberta cattle feeders. The first edition's articles discussed the new trends in electronic marketing, the value of feedlot stock horses, and provided a comparison of Canadian and American agri-credit sources. In subsequent years, the annual has continued to summarize the state of the feeding industry and provide valuable information for feeders. The 1984 annual featured marketing as its theme, and the following year the articles focused on "realities of beef cycles, economics and politics." Though the 1986 edition centred attention on the prospects for the year ahead, the publication stopped articulating a theme and instead based articles solely on newsworthiness and timeliness.

Over the years the ACFA has provided a strong voice for feeders in discussions with government, has churned out important educational resources, and kept feeders abreast of the latest developments in the feeding industry. A practical example of this is the inclusion of the first annual Cattle Feeders' Directory as part of the Round-Up Annual in 1992. The directory features information on over forty various producers and service professionals that aid the cattle feeder. They range from silage truckers and

nutritional experts to bull testing stations and accountants.

General manager Saynor resigned in the fall of 1991 and was replaced by Ron Axelson. With the introduction of the Alberta Environment Protection and Enhancement Act, the ACFA's environment committee became an important body as the new decade promised more vigilance on the part of environmentalists. In 1992 the ACFA worked with various government departments to draft an intensive "livestock operations waste management code of practice."

Under the leadership of president Lance Carnine and general manager Axelson, the ACFA engaged a renewed strategy for changing times in 1993, reshaping and sharpening its vision to even better serve the cattle feeder in the years ahead. More specifically, the ACFA developed a strategy statement which committed itself to be a membership-needs driven organization. That means providing a forum for the analysis of trends, issues, opportunities and accomplishments that impact the cattle feeding industry. They committed themselves to interpret and report on issues of government, trade and economic and consumer trends that affect the feeder, and develop and deliver services to assist members. The ACFA pledged to represent the interests of cattle feeders before all levels of government and legislation, and to enhance the profile and image of its

members and industry. The motto of the ACFA focused on "serving the needs of our membership."

The decade of the 90s brought about dramatic changes in the cattle feeding industry and created new expectations of the ACFA. A demand for higher standards in both food safety and product quality came from an increasingly informed consumer, and the expansion of Alberta's livestock industry put cattle feeding under intense environmental scrutiny.

In 1997 the ACFA Board re-designed the association's strategic plan in order to establish a clear direction for the future, and to make use of recently developed technology. The new mission was to provide a forum for the exchange of ideas and to represent the cattle feeding industry on important issues. It has become the association's priority to provide members with a constant stream of high quality information aimed at transforming cattle feeding into a knowledge based industry with a global perspective. Electronic information services, research and technology transfer, training workshops, and procedure and best practise manuals have been added to a menu of services that ACFA offers to its membership.

Since its inception, the ACFA has been led by a series of presidents elected for two-year terms. All of the presidents have, without exception, been cattle feeders themselves. 🐄

"I purchased a quarter section of land in September 1970 and built six pens that would have a capacity of 1200 head. I thought at that time that if all went well, someday I might expand to as high as 3000 head. It was 100% custom. I didn't have any money and I built the feedlot on a real shoe string. Materials were cheap. Concrete was \$17 /cubic yard, lumber was \$70 / thousand and labour was \$2.25 / hour. I put my first cattle, 111 head, on November 11, 1970. It was a tough winter, we didn't have an insulated shop and we were working with terribly old equipment; tractors that

hardly would start. But we got through the winter. What made it work was that farmers couldn't sell their barley and it was trading at 50 cents a bushel. So we would arrange to buy barley on credit and we custom fed through contacts I had as a feed salesman where I had garnered some customers for custom feeding. We had no idea about accounting but survived the first year and went on from there."

- Ben Thorlakson, ACFA President '80-'81

The Challenge of Ranching

*You wake up and the sun is shining bright.
 Your feeling really good and your ready to fight.
 Your ready to meet the challenge of what lays ahead.
 You stretch and yawn and get out of bed.
 You go on a tour to check for grasshoppers and grass.
 You have a flat tire and run out of gas.
 As you walk along you've got time for thought.
 Maybe you should have sold when really you bought.
 That pen of steers you bought at 84-85.
 You sold for a dollar twenty two thats dressed not alive.
 That works out to sixty nine cents on the hoof.
 Feeding cattle is a gamble this poem is the proof.
 You notice the grasshoppers are taking there share.
 The cards seem to be stacked and it just isn't fair.
 You've got a pup when really you need a dog,
 and you've got an auger that just won't aug.
 The feedlot is filling up pen by pen.
 They're going to get sick it's just a matter of when?
 You pick rock and cultivate to grow your own grain.
 But it's windy and dusty and simply won't rain.
 You get all primed up to go travelling some where.
 A tractor breaks down and you loose some more hair.
 You get subsidies, loans, grants and such
 but compared to the expenses it still isn't much.
 You scratch and figure then you let out a curse.
 The markets gone from bad to considerably worse.
 You phone up Can-Fax to get the market that day.
 You just learn them cattle simply won't pay.
 You find you can lock in a loss of a hundred dollar bill.
 But you really don't want to swallow that big a pill.
 So you keep'em on feed until their well over fat.
 Now there above the weight breaks and they don't like'em like that.
 You won't have to worry about tax cause profit there's none.
 You hope you still own the place when the banker gets done.
 You tell your wife no when she wants to buy a new horse.
 She wants to take him racing on that three barrel course.
 Please don't get mad, try and understand honey.
 We need to buy cattle, they'll make us more money.*

-John Gattey (started in '84 finished in May '95)





What the Future Holds

Cattle feeding in Alberta has had a long and successful history. It has grown and modernized to where it now contributes billions of dollars and thousands of jobs to the province. A healthy feeding industry has in turn benefited the cow-calf rancher and farmer, and contributed to the development of a thoroughly progressive packing industry, which creates more jobs and profits for Albertans. The cattle feeder is also an important player in a diversified agricultural industry, as he uses feed resources and grain and roughage by-products otherwise unsuitable for human food production.

Alberta's beef industry and feeding sector is on solid footing in the twentieth century's final decade. Provincial cattle numbers account for one-third of the Canadian total, and there are over 4500 feedlots in Alberta,

ranging from 100 to 50,000 head in size. A whopping seventy-five percent of Alberta's finished cattle come from 500 of these operations, many of them high-capacity, modern feedlots that use the latest feeding techniques. Alberta's fed cattle production now approaches 1.4 billion head, which represents well over half of the total Canadian fed slaughter and export market. This industry helps the economy to the tune of over ten billion dollars!

The cattle industry in Alberta also has a bright future and is well-prepared for international competition. Agriculture Canada's research in the early nineties projected a continued expansion of Canada's cattle and beef sector with farm output increasing as much as three percent every year. Feedlots in the province are among the most competitive and successful in North America, situated close to both

▲ **State of the art facilities at Western Feedlots near High River. Agriculture Canada's research in the early nineties projected a continued expansion of Canada's cattle and beef sector with farm output increasing as much as three percent every year.**

Photo Courtesy of ACC

◀ **Feed pens and the Rocky Mountains at W.C. Ranch near Pincher Creek.**

Photo Courtesy of Laura Leyshon-Thuresson

feeder cattle and Canadian and American beef-packing plants.

Future challenges for the beef industry include gaining unimpeded access to American markets, holding market share while improving quality and consistency, and maintaining cost control. It is also important to capitalize on new markets in Mexico and the Pacific rim countries. The industry will need to continue finding more efficient ways of feeding cattle, and stay informed of new research and techniques through organizations like the Alberta Cattle Feeders' Association. Consumer trends and the public's nutritional concerns must be heard and met. Critical challenges in the nineties also include educating consumers about fat, calories, cholesterol, new products, and cooking information. This will require organizations such as the Alberta Cattle Commission to fund research and be a strong voice on behalf of the feeder.

Educating consumers will be an important issue facing cattle feeders in the future.

Photo Courtesy of ACC



Cattle feeders will also need to interface with non-agricultural components of society. Environmental concerns related to water, odour and noise pollution have to be translated into workable guidelines. Public health aspects of primary food production and animal welfare issues are an ongoing concern to the consuming public, and so the feeding industry must address those issues in order to maintain a positive and responsible public image. Animal rights activists and the general public also have to be educated about the progressive and responsible manner in which cattle are handled and managed by feeders.

Looking into the crystal ball is not a precise science, but common sense may be dictating some new directions in the cattle industry. One secret to success in the future will be continually improving communication among the consumer, packer, feedlot owner and cow-calf operator to effect a smoother





and more profitable transition of cattle through the system. An area where changes could be seen is branding practise. More money can be made from hides unmarked by the traditional burnt brand, but this is a message that will need to move from the consumer and through every sector to the cow-calf producer. Any changes would involve new strategies for the feedlot operator. For example, new types of ear tags for identification and information could be monitored by computer, and would allow for a clean hide and ultimately provide a better price for the animal.

Cattle feeding in Alberta is experiencing certain trends in the final decade of the twentieth century. Most custom, commercial feedlot owners are stocking their pens with their own cattle as a strategy to control financial risk. Not only does it spread out the costs, but it also requires less maintenance, tracking and billing. There are some examples of successful large feedlot operators, like southern Alberta's Cor Van Raay, who own all the

cattle. A custom feedlot of that type can operate with about half of the workers that a commercial operation requires.

New feedlots continue to open but there are not many that can start from scratch and be economically viable. Nevertheless, there is every reason to expect that both commercial and private feeding will continue into the next century as the second generation of commercial feeding in the province begins. The Alberta landscape will continue to feature the large feedlot and the small farmer-feeder. Cow-calf operators who background will also remain important contributors to the feeding industry.

For all its advances, cattle feeding in Alberta is still a matter of combining cattle and feed to meet the demands of the consumer. As long as Albertans enjoy beef and use the numerous by-products from cattle, there will be a place for the feeder in the agricultural industry. As we have seen, that place is a proud one, as the cattle feeder has been an integral part of Alberta's history, economy and culture. 🐮

▲
The homelot of Cor Van Raay Farms Ltd in Iron Springs, Alberta. Cor Van Raay owns all of the cattle in each of his four feedlots. He has a total capacity of over 90,000 head which turns over approximately twice a year.

Photo Courtesy of Cor Van Raay Farms Ltd.

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