

## 52. CATTLE AND CORN

Corn and cattle go way back. When the Corn Belt was still a frontier and the few roads in existence became impassably muddy for months at a time, getting farm raised grain to market was a critical problem. A popular end run around the problem for many farmers was to feed the grain to hogs or cattle, then drive the animals to a market.

There were *drovers* who made a business of buying cattle and hogs from farms along their way as they moved these mixed herds toward markets. I have come across accounts of such livestock drives in the early 1800s that started in Georgia or the Carolinas, eventually delivering their collected animals to Philadelphia or New York.

Many of the cattle moved out of Texas in the great trail drives before, during and after the Civil War were bought first by farmers in the Mid-west to fatten on corn before proceeding on to slaughter market. As the frontier moved west, followed by the railroad, movement of cattle became more efficient, fueling these markets.

On the farm, cattle ate more than just the grain. *Aftermath* (corn stalks, grain stubble, bean vines, sugar beet tops<sup>1</sup>) is what is left over after a crop is harvested. Cattle, mature cows in particular, can utilize very rough forage<sup>2</sup>, especially when they are between calves. When I was a little boy, some farmers (and all their kids) still picked ears of mature corn by hand, tossing the ears into a wagon drawn by a team. After that, the corn stalks were cut by hand with a heavy knife, bundled and stacked in *shocks* or *stooks* (Chapter 31) like grain, to be fed whole to cattle in pens.

Traditionally, corn was harvested in whole ears that were stored in *corncribs*. This allowed the corn to be harvested earlier at a higher moisture content and continue drying in well-ventilated storage with air circulating around the ears. The ear corn was often fed whole or ground. Ear corn could also be shelled

(removing the corn kernels from the cob) and sold as grain. In the early days, corn was shelled by hand using a husker's glove.<sup>3</sup>

**Corn Stalks** – After World War II, winter pasturing of corn stalks with mature dry cows had become time-honored practice throughout the Great Plains and the Corn Belt. But times were changing, and by the early 1980s it had become less popular both among stock growers and corn farmers. It took money and time to move and manage the cattle. Most farmers had removed fencing from field edges in the interest of weed control and using larger equipment, so installing temporary electric fences and jury-rigging stock water was required (no small job). In the new farming regimes, cattle pastured on stalks were more of a nuisance than a value to farmers.

**Silage** – Also, harvesting and feeding of the whole corn plant as ensilage or *silage* grew in popularity from the early 20th Century. Corn silage is a cousin to sauerkraut. The plant is harvested near maturity but still green and chopped finely to be packed into silos to remove all of the air. In the old-fashioned vertical silo, gravity does the packing. In trench or bunk silos, the silage is packed by driving tractors over it.

The anaerobic fermentation that follows produces a mild lactic acid vinegar that pickles the silage, allowing it to keep for a year or more. Cattle find well-made silage very palatable and it makes up the bulk of most feed rations for dairy and feedlot cattle in the US.

**Ear Corn** – In the late 70s when we first started running cows in Livermore, we fed ear corn as a low cost supplement for our cows around calving time. Corn is high in energy and helps the cows maintain their condition under the stress of winter calving and lactation.

If you dump ear corn on the ground, a cow will pick up a whole ear of mature, dry corn, rolling it round one side of her mouth like a big wad of 'chew' while stretching her neck out and assuming an expres-

sion of pure bliss. She grinds up the whole thing – cob and all – with almost no waste, swallows, licks her lips and runs her tongue up each nostril a couple times before reaching for another ear.

Around this time, changing agricultural practices and technology<sup>4</sup> were rapidly making ear corn obsolete. While we still operated the Wellington Farm, we grew and harvested our own and hauled it to Livermore as we used it. For weaned calves on feed, we ground the ear corn into *corn chop* (corn and cob meal – a particularly fine feed for calves). Later on, we bought ear corn from a farmer near Fort Morgan – one of the last growers in the region.

**Ethanol** – The digested stuff that's left over after making corn into ethanol is called *distillers grains*. It is a high protein, high energy substance that is becoming an important feed for cattle. If you're near an ethanol plant you can get it cheap and wet by the semi load straight from the still – it looks sort of like pumpkin pie filling, but smells dicier. Also available as a dried powder that is less offensive.

<sup>1</sup> In earlier days along the Front Range, sugar beet tops were pastured by cattle and sheep in the winter. Lamb feeding was a major industry around here – thus the CSU *Rams* and the Fort Collins High School *Lambkins*.

<sup>2</sup> The most extreme example I'm familiar with is gin trash, the stems and brambles left over after cotton has been run through a modern version of Eli Whitney's device. Gin trash is widely fed as roughage to feedlot cattle in cotton country, like the Texas Panhandle.

<sup>3</sup> The redoubtable Nebraska Cornhuskers spring naturally to mind.

<sup>4</sup> Earlier corn hybrids that are drier at harvest time, grain dryers that blow hot air into grain dryers and combines that pick and shell the corn in one operation.



Jeanne loading ear corn for morning feeding at Rabbit Creek – 1980