

Will the Real Miniature Cow Please Stand Up?

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June 2005

It always perplexes me when cattle publications ignore the Zebu. I dash through the pages, only to find they stop at Watusi or Wagyu (both pretty uncommon breeds—from Africa and Japan, respectively). Most of these sources name the Irish Dexter as the smallest breed of cattle in the world. Let's explore this.

Originally cattle were quite large. As you know, the common ancestor of all cattle-- the aurochs—was a massive animal. The bulls stood 70"-78" at the withers, with a body length of 117" and a horn spread of 39." Domesticated cattle appeared by 4000 BC in the Fertile Crescent of Mesopotamia. It is believed the first instance of selection for domestication was for size: basically, smaller cows were easier to catch and confine. Disposition probably was a concern also. In addition, social groups—tribes—were determined by the size of a cow carcass. The optimal tribe size was the number that could be fed at one time by one beef. Semi-nomadic people traveled with their cattle and relied on agricultural communities for grain. Thus a farming-ranching relationship was formed.

On the site of modern-day Britain, Neolithic (4000-2000 BCE) tribes pampered their cattle; as a result these cattle were larger than other European Iron Age cattle. The Vikings (1000 AD) preferred smaller cattle; these could fit into longboats for their frequent sea journeys. It is not believed that any of the Viking cattle brought to the New World survived to breed, as the Viking settlements were temporary. The first cattle brought to New England were dairy: Devon, Jersey, and Alderney—Scottish and Danish breeds. In fact, New Amsterdam's Dutch farmers built 6' log walls around their cattle for fencing from thieves—now it's Wall Street in New York.

Back in the British Isles the Neoclassical era of the late 18th century spawned much scientific research and progress. While French farms cherished small-acreage plots that could be worked with hand tools as in Medieval times, Britain eagerly adopted improvements from agricultural research. One controversial improvement was the enclosure movements of the 18th century, when large estates displaced the crofters. Crofters were poor Scottish and Irish farmers who managed small, rugged plots. Their hardy cattle often shared the house with the families. It is believed that the crofters' cattle developed into the smaller European breeds—the Kerry (later called Dexter) and the Scottish Highland.

Shetland cattle were originally from Scandinavia, where cattle tended to be small (48," 1000-1300 lbs.).

The Development of Standardized Breeds

A standardized breed is the result of deliberately modified, defined, and documented human selection. Robert Bakewell (1725-1795) is known as the Father of European Breeds. His experiments in selective breeding and ample feeding created the first breeds. Focusing on quick-maturing, tender, fatty meat, Bakewell utilized linebreeding to develop these qualities quickly. His Lincolnshire Ox became the new ideal: 76" at the withers, 12' from forehead to rump.

Dexter cattle were first noted in 1776. The island of Jersey closed its borders to imported cattle in 1789, developing a smaller cow than modern Jerseys. These cows were 46"/825 lbs; bulls were 49"/1400 lbs.

But What About the Zebu?

Rather than a standardized breed, Zebu cattle are landrace breeds. Their appearance is not consistent as in a "named" breed. More importance is given to environmental adaptation, performance, and fertility than color, weight, or beef quality. In fact, the only common characteristic all Zebus share is the hump.

Historical records report more about the indigenous aspect of the Zebu rather than breed names and characteristics. Simply categorized: large cattle could thrive in lush areas, and were used for draft animals. Superior bulls were castrated, while inferior, smaller bulls ran free to breed. In areas of rough conditions—poor forage, cold weather, extreme heat—cattle became smaller in order to survive. Many different types of *Bos Indicus* cattle evolved in a more natural manner than *Bos Taurus* cattle; some were docile milkers, some were nervous and spirited. Some could trot all day; some could slowly pull large loads. Tiny oxen were sometimes the only animal able to walk in monsoon-soaked fields without overly compacting the soil. All shared a high resistance to parasites and an ability to withstand poor feeding and care. There are at least 40 types of Zebu in the Indian subcontinent. South and East Russia, China, and Southeast Asia contain 15 types. African humped cattle are divided into two groups—those of Zebu descent and those of Sanga descent (dating from 1000 BCE, these Ethiopian cattle are independent of the Asiatic Zebu influence). Combining Zebu and Sanga types, Africa is home to 53 landrace breeds.

So Who Wins the Size Contest?

Hands down—it's the Zebu! Here's a ranking:

Rank	Species	Breed	Native Land	Size	Weight
1	Bos Indicus	Nepalese Hill	Nepal	35"-47"	240-330 lbs.
2	Bos Indicus	Kedah-Kelantan	Indigenous breed of Malaysia	35"-38"	400-480 lbs.
3	Bos Indicus	Sinhala	Sri Lanka	35"—38"	440-550 lbs.
4	Bos Indicus	Tibetan Dwarf	Tibet	39"-47"	550 lbs.
5	Bos Taurus	Dexter	Ireland	39"-48"	660-1100 lbs.
6	Bos Taurus	Shetland	Shetland Islands	39"-43" (cows)	660-800 lbs.
7	Bos Taurus	Scottish Highland	Scotland	41"-51"	1100-1375 lbs.
8	Bos Indicus	Hill Zebu	Russia, Northern India	42"-46"	500-900 lbs.
9	Bos Taurus	Jersey	Isle of Jersey	46"-49"	825-1430 lbs.
10	Bos Taurus	Lowline/Loala	Australia	39"-48"	770-1100 lbs.
(for comparison)	Bos Indicus	Nellore/Ongole	India's most predominant breed	53" -60"	980-1400 lbs.