

Heritability* Estimates for Important Beef Cattle Traits

from: *Beef Production & Management Decisions.*

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Trait(s)	Heritability *(%)
REPRODUCTIVE	
Age at puberty	40%
Weight at puberty	50
Scrotal circumference	50
Breeding soundness examination (BSE)	10
Primary sperm abnormalities	30
Secondary sperm abnormalities	2
Reproductive tract score	30
First service conception rate	25
Calving date	20
Calving ease (direct and maternal)	15
Gestation length	40
Birth weight	40
Pelvic area	50
Body condition score	40
Calving interval	10
Percent calf crop	10
GROWTH	
Weaning weight	30%
Milk production	20
Post-weaning ADG (feedlot)	45
Post-weaning ADG (pasture)	30
Efficiency of feedlot gain	45
Maintenance (ME _m)	50
Yearling weight	40
Mature weight	50
CARCASS	
Carcass weight (at similar age)	50%
Carcass quality grade	40
Fat thickness	45
Yearling hip height	40
Yield grade	30
Tenderness	50
OTHER TRAITS (FUNCTIONAL, CONVENIENCE, LONGEVITY)	
Cancer eye susceptibility	30%
Horn fly resistance	60
Pink eye susceptibility	25
Pulmonary arterial pressure	40
Disposition	40
Longevity	20
Udder attachment	20
Teat size	50

* Heritabilities below 20% are considered low; those 20% - 39% are considered medium; and those over 40% reflect highly heritable traits.