



SM Publishing's Portals

Advertising Rates

SM Publishing's Portals

SM Bookshop

Free Who's Online?

Book Shop

- » Cow-Calf Production
- » Records & Recording
- » Mix Composition & Quality
- » Heifer Management
- » Breeding and Genetics
- » Milking & Parlour Mgmt.
- » Bull Management
- » AI / Semen
- » Fertility and Reproduction
- » Waste and Odor
- » Biosecurity and Hygiene
- » Forage and Conservation
- » Health and Welfare
- » Markets and Economics
- » Calving & Calf Management
- » Production and Management
- » Feed, Nutrition & Water
- » Housing & Construction
- » Range, Pasture & Grazing

Discussion Forums

Products & Services

Business Directory

Our Main Sponsors






Supporting Partners

- CID LINES
- Eurotler
- VIV
- SM Bookshop
- Blomin
- Arato Cattle Drinkers
- Dutiron

Our Web Sites

- ThePigSite
- ThePoultrySite
- TheFishSite
- TheCattleSite
- TheBeefSite
- TheDairySite
- TheMeatSite
- TheBioenergySite
- TheCropSite

EXPERIENCE THAT STANDS OUT FROM THE HERD

TESTED BY TIME - TRUSTED BY FARMERS

SEARCH

Section: Articles

Search TheCattleSite:

Use the above box to search this section or the whole site

Print This Page

Heifer Development: Puberty

By Steve Boyles, OSU Extension Beef Team

Puberty is defined in heifers as the time when they first ovulate and show an estrus or heat period. The process involves sensitivity to hormones and receptors in the brain (specifically the hypothalamus) and the ovaries in females.

Heifers born early in the calving seasons are usually heavier at weaning and reach puberty earlier than heifers born late in the calving season. Heifers must reach puberty by 13-14 months of age to calve as two-year-olds. Puberty is influenced by age, weight and breed.

Yearling beef heifers conceiving early in their first breeding season, will have increased lifetime production and efficiency. It is critical that these heifers attain enough weight to initiate their first estrous cycle before the onset of the breeding season. Puberty occurs when heifers reach about 65-67% of their mature weight. Montana research indicates that conception rate is higher on the third estrus compared to the first. Getting heifers to target weights a month prior to the breeding season may increase the percentage conceiving early in the breeding season. The following weights should be attained for puberty about a month prior to breeding.

Relationship of frame score to estimated weight at first estrus.

	FrameScore				
	1	3	5	7	9
Estimated weight at first estrus, lb	580	623	728	803	880

Source: Fox, D. G., C. J. Sniffen, and J. D. O'Connor. 1988. Adjusting nutrient requirements of beef cattle for animal and environmental variations. Journal of Animal Science 66:1475

Source: Fox, D. G., C. J. Sniffen, and J. D. O'Connor. 1988. Adjusting nutrient requirements of beef cattle for animal and environmental variations. Journal of Animal Science 66:1475

Puberty: Individual Weights vs. Group Weights: Individual weights rather than group weights should be considered for replacement heifers. If a group of similar breed-type heifers averages 650 pounds, that may mean some only weigh 500 pounds and are not ready for breeding. Heifers born in a short calving season should be relatively uniform in weight and would not need to be fed in different groups to reach the desired weight. North Dakota data suggests that deworming can improve uniformity of performance.

Scrotal Circumference: Research shows that bulls with a larger scrotal circumference tend to sire heifers that reach puberty at an earlier age than bulls with a smaller scrotal circumference. In those breeds that have a scrotal circumference EPD, breeder should use them to improve age at puberty.

Breed: Numerous studies have reported both between-breed and within-breed differences in age and weight at puberty as well as subsequent reproduction in beef cattle. To achieve optimum production levels, it is important to know the relationships between puberty traits and measures of productivity for effective use of selection, heterosis and complementarity. Breed differences, sire and dam effects within a breed, and heterosis, or hybrid vigor, contribute to genetic control of age at puberty.

Age at puberty can be decreased in three ways:

- By selecting a breed with younger age at puberty.

Tuesday 7th September

Search Site

Search here

Advanced search

FREE NEWSLETTER

COW SIGNALS TRAINING BOOKS

CLICK FOR MORE INFO

Books and Photos

Book Shop

Stock Photography

Health & Disease

Bluetongue News

BSE News

Foot & Mouth News

Cattle Disease Guide

Beef Cattle Breeds

Dairy Cattle Breeds

Ads by Google

Precocious puberty
Information & education on early puberty (CPP)
www.CPPInformation.com

Dairy Cow Comfort Issues
Learn How California Dairy Farmers Keep Dairy Cows Healthy And Happy
www.realcaliforniamilk.com/people

Cactus Feeders
Sell Cattle Direct-Save Frt & Comsn Partnerships and Retained Ownership
www.CactusFeeders.com

Bonsmara Cattle Available
Bulls, Cows, Heifers, Semen-Embryos
Bonsmara Breeding Stock
www.smthbonsmara.com

Puberty For Boys
Search multiple engines for puberty for boys
www.webcrawler.com

中文网站
 SM Enterprises Ltd.
 2009 - 2010
 The Pig Site may be
 reproduced without permission
 The Poultry Site .cn
 The Fish Site .cn
Our Shop Sites
 PigFarmingBooks.com
 PoultryFarmingBooks.com
 FishFarmingBooks.com
 CattleFarmingBooks.com
 SmallholdingBooks.com
 TheChickenSite.co.uk
 TheRabbitSite.co.uk
 WoodenFarmToys.com
 SimplyOmega3.co.uk

- By selecting within a breed for younger age at puberty.
- By crossbreeding with another breed that has a similar or younger age at puberty .

March 2007



Learn how to market your products here



SM Enterprises Ltd., Benchmark House, 3 Smithy Wood Drive, Sheffield, S35 1QN, England.

Contact [TheCattleSite](#) | [Terms and Conditions](#) | [Privacy Policy](#) | [Disclaimer](#)
Telephone: +44 (0) 1234 81 81 80

Co. Registration 3332321 - VAT No. 647 4031 45 - A Benchmark Holdings Ltd. Company