

Heifer Maturation

Let's take a step back and look at how a beef heifer matures. Heifers reach puberty at 8 months and are ready to be bred at 12-14 months. These are critical months where horn flies that spread disease can be a threat. At 2 years, the udders and teats should be fully developed and at 30 months the heifer should be ready to give birth. That's a lot of time to leave your investment unprotected. You may not know about blind quarters until the 29th month. Horn flies should be controlled throughout maturation to lower the risk of blind quarters during udder development.



At 2 years old the udders and teats should be fully developed.



"I never gave much consideration to horn flies causing mastitis in the beef herd until I learned about it leading to blind quarters. Since as much as 50% of all mastitis is caused by horn flies, we began an Altosid® IGR fortified feeding program. We've been on it for three years, and the last two we have seen less and less blind quarters in our herd."

- Alex Johns
Natural Resource Director
Seminole Tribe of Florida, Inc.

To learn more about Altosid® IGR Feed-Thru, ask your feed supplier, call **1-800-347-8272** or visit **www.AltosidIGR.com**.



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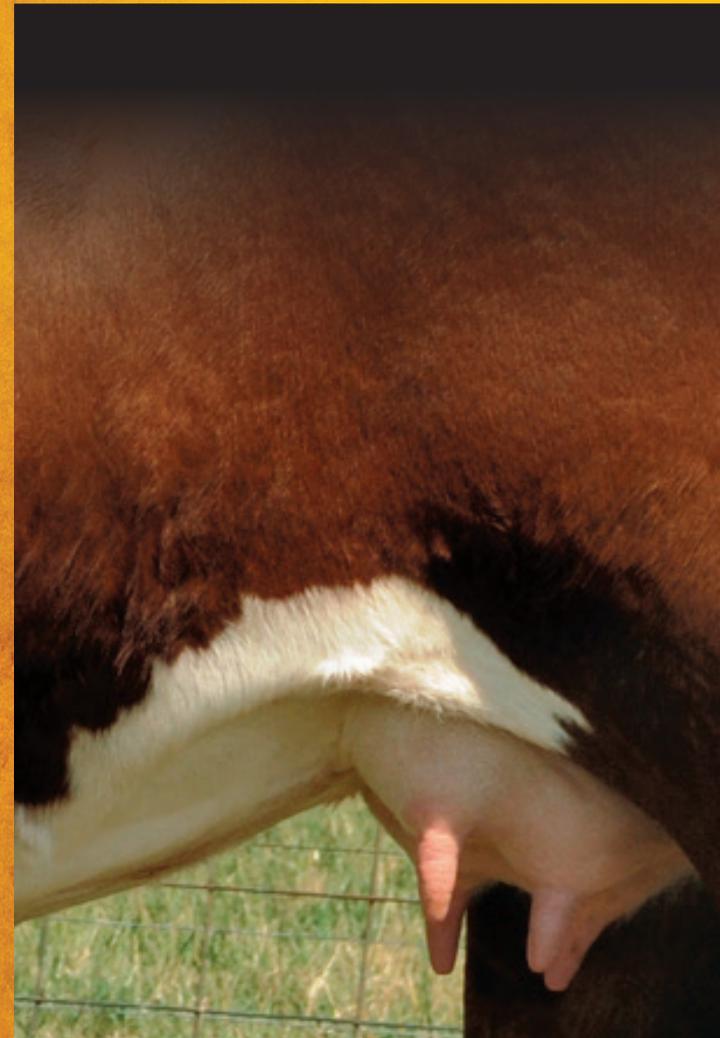
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OPEN YOUR EYES TO BLIND QUARTERS

The Impact Of Horn Flies And Beef Mastitis



The Problem

Heifers are critical to the future profitability and production on a beef operation. The return on the investment made in raising these heifers will not be known until maturity and calf weaning begins. In that gap, heifers are left to fend for themselves which puts them at the mercy of horn fly populations and the risk of diseases they spread.

One of these diseases is beef mastitis, an often-overlooked issue that leads to blind quarters in a mature heifer's udders. Blind quarters seriously hinder milk production, which can seriously affect your operation. The worst part is you won't know it has happened until it's too late.



A healthy calf can reach 400-600 lbs as it develops.

The Horn Fly Issue

While growing, heifers are on pasture, where horn flies can be a constant irritation. Horn flies take 20 to 40 blood meals per day. The horn fly impact on mastitis and blind quarters is twofold. First, horn flies tend to feed on the blood vessels in the skin of the



Horn flies are parasitic blood feeders.

teat causing irritation. Scabs eventually develop where the bacteria that cause mastitis (*staph aureus*) can incubate. Second, as horn flies move around the teat and feed from cow to cow, the bacteria travels with them.

The spread bacteria enter the teat orifice and move upward in the quarter, destroying milk-producing tissues.



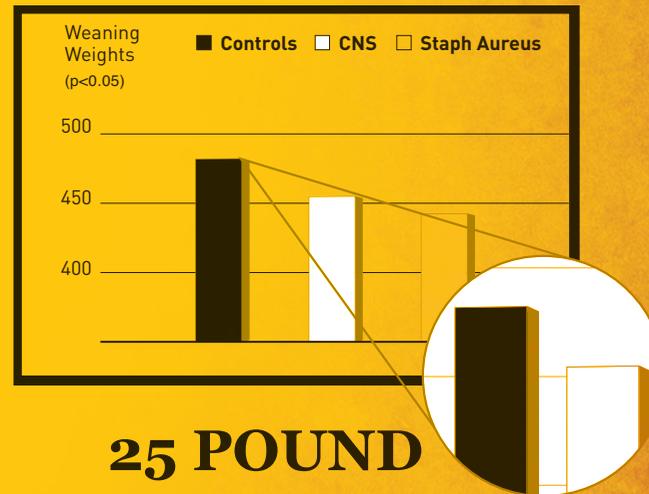
A horn fly proboscis and horn flies feeding on the back of an animal.



Horn Fly Control

Controlling horn fly populations by including Altosid® IGR in the feed mix for heifers when they're young can help prevent blind quarters and the spread of mastitis. Just add Altosid® IGR 30 days before fly emergence and continue throughout the season until 30 days after the first frost. In the long run, fighting horn flies does more to help ensure higher milk yields and improved calf weaning weights than doing nothing.

Weaning weights in calves from herds with fly control versus herds with no control and an influx of mastitis causing bacteria.*



25 POUND DIFFERENCE



Healthy teats compared to damaged teats that lead to blind quarters.

Mastitis Impact

The destruction of milk-producing tissues eventually leads to blind quarters in the udder. As blind quarters develop in the udder, milk production decreases. Studies show that milk production accounts for 60% variation in calf weaning weight.

The diagram below indicates how the onset of blind quarters typically develops.

The front quarters are usually the most affected because flies can feed there for long periods of time creating increased teat irritation. Flies spend less time feeding on rear teats because the tail consistently swats them away.



Incidents of blind quarters by teat location on tested animals.

- 1 - Front Left: 27%
- 2 - Back Left: 8%
- 3 - Front Right: 25%
- 4 - Back Right: 15%

MASTITIS SCORING



SCORE 1

- Clean healthy udder
- Free of scabs, blood and incidence of mastitis



SCORE 2

- Dry, crusty scabs on the teats
- Blood is not evident
- Some swelling is noticeable



SCORE 3

- Blood is present on the teats
- Swelling of the teats
- Presence of both dry scabs and blood