

Recording Buffalo Fly Lesion Scores

Buffalo fly is recognised as a serious pest to cattle producers in northern and coastal grazing enterprises, causing serious production losses. Research has shown that variation exists in buffalo fly hyposensitivity between animals, and that a proportion of this variation is due to genetic differences. The submission of buffalo fly lesion scores to BREEDPLAN will be used in the development of a Trial EBV once sufficient data has been collected.

What Causes Buffalo Fly Lesions?

Buffalo fly irritate cattle, interrupt feeding and cause lesions, especially when infestations are high. A small parasitic worm (*Stephanofilaria spp.*) is associated with buffalo fly bites and causes skin lesions. These lesions result in permanent hide damage, decreasing the value of the hide and may restrict access of stock into the live export trade.

Why Should Buffalo Fly Lesions Scores Be Recorded?

Trials in the wet tropics have shown that buffalo fly can reduce beef cattle production by up to 16%. Beef CRC results have also shown a correlation between high fly lesion counts and reduced lifetime fertility in Brahman cows.

Hyposensitivity to buffalo fly is heritable in both Tropical Composite and Brahman cattle as validated by the Beef CRC and previous research by CSIRO at Belmont Research station. The submission of coat scores to BREEDPLAN will be used in the development of a Trial EBV once sufficient data has been collected.

When Can Buffalo Lesion Scores Be Recorded?

Buffalo Fly Lesion Scores should be taken in late summer through to early autumn when the buffalo fly numbers are at their greatest. Scores can be recorded on animals of all ages though fly scars will be more prevalent on older animals. Multiple records at different ages (1 per animal per year) are encouraged.

How Do I Score and Record Buffalo Fly Lesion Scores?

The approved BREEDPLAN scoring method involves scores from 1 to 5:

Score	Description
1	No visible lesions.
2	One to two lesion less than or equal to 7cm diameter.
3	Three to six multiple lesions.

Score	Description
4	Seven to ten multiple lesions or at least three sites such as neck, belly and withers.
5	Multiple lesions more extensive than score 4.

What Considerations Should Be Made When Recording Buffalo Fly Lesion Scores?

- ❑ There needs to be some variation in scores for them to be used effectively by the BREEDPLAN analysis. That is, scoring all animals in a group with the same score will not identify any genetic differences.
- ❑ Animals should be assigned a different “management group” if they have been administered different Buffalo Fly treatments so that differences observed are not down to variation in treatment.
- ❑ When recording Buffalo Fly Lesion Scores, it is important that both a consistent scoring method is used and the same person scores all animals that are being assessed in the herd on that particular day.

How Do I Submit Buffalo Fly Lesion Scores?

Buffalo Fly Lesion Score measurements should be submitted directly to your BREEDPLAN processing centre. The scores should be submitted with a trait code of BL.

Buffalo Lesion Score measurements are usually submitted electronically via either:

- ❑ a BREEDPLAN compatible herd recording computer program.
- ❑ the BREEDPLAN compatible Microsoft Excel template.

If you are unable to submit the Buffalo Fly Lesion Score information using these methods, please contact staff at your BREEDPLAN processing centre to discuss the alternatives available.

For more information regarding how to record buffalo fly lesion information, or EBVs in general, please contact staff at Tropical Beef Technology Services (TBTS).



Figure 1. Examples of cattle with Buffalo Fly Lesion Score 2 – one or two lesions less than or equal to 7cm in diameter.



Figure 2. Examples of cattle with Buffalo Fly Lesion Score 3 – three to six multiple lesions.



Figure 3. Examples of cattle with Buffalo Fly Lesion Score 4 – seven to ten multiple lesions or at least three sites such as neck, belly and withers.



Figure 4. Example of an animal with Buffalo Fly Lesion Score 5 – multiple lesions more extensive than Score 4.