

Understanding Docility EBVs

Docility in cattle is the way cattle behave when being handled by humans or put in an unusual environment such as being separated from the mob in a small yard. What we define as poor docility is a survival trait in the wild – fear of anything unusual and the desire to escape. In domesticated cattle it is exhibited as flightiness. Importantly, docility is a highly heritable trait and can be improved genetically.

Interpreting Docility EBVs

Docility EBVs are estimates of genetic differences between animals in temperament. Docility EBVs are expressed as differences in the percentage of progeny that will be scored with acceptable temperament (ie. either “docile” or “restless”).

Higher, more positive, Docility EBVs are more favourable. For example, a bull with an EBV of +20 would be expected to on average produce 15% more progeny with acceptable temperament than a bull with an EBV of -10.

Recording Information for Docility

Docility EBVs are calculated from docility scores recorded on animals when the animals are between 60 and 400 days of age.

The recommended time of scoring is at weaning or shortly afterwards. The advantage of scoring at weaning is that all calves should have had similar treatment so variation in handling prior to scoring should be minimised.

Animals can be scored for temperament using either a yard or crush test.

Yard Test

The calves are individually put into a small square yard and the handler should attempt to hold the animal in one corner for about 30 seconds.

Crush Test

The calves are put up a race and individually held in the crush for about 30 seconds.

When using either the crush or yard test, the behaviour of animals should be observed and animals scored using the following criteria.

Score	Code	Description
1	Docile	Mild disposition, gentle and easily handled, stands and moves slowly during handling, undisturbed, settled, somewhat dull, does not pull on headgate when in crush, exits crush calmly.

Score	Code	Description
2	Restless	Quiet but slightly restless, may be stubborn during handling, may try to back out of crush, pulls back on headgate, some flicking of tail, exits crush promptly.
3	Nervous	Manageable but nervous and impatient, a moderate amount of struggling, movement and tail flicking, repeated pushing and pulling on headgate, exits crush briskly.
4	Flighty	Jumpy and out of control, quivers and struggles violently, may bellow and froth at mouth, continuous tail flicking, defecates and urinates during handling, frantically runs fenceline and may jump when penned individually, exhibits long flight distance and exits crush wildly.
5	Aggressive	May be similar to score 4 but with added aggressive behaviour, fearful, extreme agitation, continuous movement which may include jumping and bellowing while in crush, exits crush frantically and may exhibit attack behaviour when handled alone.

When recording docility scores, it is important to note:

- ❑ There needs to be some variation in the scores for them to be used effectively by the BREEDPLAN analysis. That is, scoring all animals in a group with a docility score of [1] will not identify any genetic differences in docility.
- ❑ BREEDPLAN can accept half scores if animals exhibit behaviour which is intermediate to the above scores.
- ❑ Animals should be assigned a different “temperament management group” if they have had a different level of handling prior to scoring.
- ❑ The method of scoring used (ie. crush or yard) should be specified when submitting the docility scores.
- ❑ When recording docility 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.

Docility scores should be submitted directly to the BREEDPLAN office at ABRI

For more information regarding Docility EBVs, please contact staff at BREEDPLAN.