



technical brief

“Docility Scoring and EBVs for Shorthorns”

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Docility in cattle is the way they 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 really a survival trait in the wild – fear of anything unusual and the desire to escape. In domesticated cattle such flightiness is undesirable and can adversely affect productivity, net feed intake, and meat quality - docile animals are less likely to stress during handling and transportation than less docile animals.

Docility is a heritable trait and should be part of a breeder’s selection strategy, particularly as docility can now be measured objectively and the docility score used to calculate Breedplan EBVs for the trait.

Because Docility is such an important trait, valued equally by commercial breeders, lotfeeders, stock agents, carriers, and processors, Shorthorn breeders are encouraged to score docility of their calves and submit the scores for calculation of Docility EBVs.

Measuring and Recording Docility.

Docility scores should be recorded on animals between 60 and 400 days of age. The recommended time of scoring is at or soon after weaning – at this time all calves should have had similar treatment so variation in handling prior to scoring is minimized.

Animals can be scored for docility using either a **yard** or **crush** test – both are equally effective, however if the animal’s have had a reasonable amount of handling prior to testing, then the yard test is preferred.

Crush test – calves are put up a race and individually held in the crush for about 30 seconds. Their behavior in the crush and on exit from the crush can be scored 1 – 5.

The animals do not need to be put in the head-bail, however it is important that all animals be exposed to the same amount of scoring pressure, e.g.; closeness of handler/s, presence of dogs etc.

Score	Code	Description
1	Docile	Mild disposition, settled, exits crush calmly.
2	Restless	Quieter than average but slightly restless, may be stubborn during handling, may try to back out of crush, some flicking of tail, exits crush promptly
3	Nervous	Manageable but nervous and impatient, a moderate amount of struggling, movement and tail flicking, exits crush briskly
4	Flighty	Jumpy and out of control, quivers and struggles, may bellow and froth at mouth, continuous tail flicking, defecates and urinates during handling, exits crush wildly.
5	Aggressive	Similar to score 4 but with added aggressive behavior, fear-full, extreme agitation, continuous movement which may include jumping and bellowing while in crush, exits crush frantically and may try to attack through the crush.

Yard test – this test is an alternative to the crush test and is preferred if animals have had considerable handling or do not exhibit variations in behavior in the crush test.

Calves are individually put in a small square yard and the handler attempts to hold the animal in one corner for about 30 seconds. The animals are scored from 1-5.

Score	Code	Description
1	Docile	the animal is easily held in the corner and the handler can get close enough to put a stick on the animal
2	Restless	the animal can be held in the corner but exhibits some restlessness and tail flicking. The handler cannot get close enough to put a stick on the animal before it moves away
3	Nervous	the animal is not easily held in the corner even when the handler is some distance back from the animal. Continual movement and tail flicking
4	Flighty	the animal cannot be held in the corner, frantically runs the fence-line and may jump when penned , exhibits long flight distance.
5	Aggressive	similar behavior to Score 4 but is also aggressive towards the handler, stares at the handler and threatens to charge or charges – handler should exit yard before the animal actually charges.

Note: The scorer should be aware of and avoid the chance of contact injury when handling animals in close confine. Do not use this test if you are unskilled in handling animals.

Consideration when Docility Scoring.

- * Breedplan can accept half scores if animals exhibit behavior which is between 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 (yard or crush) should be specified when submitting docility scores.
- * it is important that a consistent scoring method is used, and the same person scores all animals being assessed in the herd on that particular day.
- * docility scores should be submitted directly to the Breedplan office at ABRI.

Interpreting Docility EBVs.

Docility EBVs are estimates of genetic differences between animals in temperament. and are expressed as differences in the percentage of progeny that will be scored with acceptable temperament – either “docile” or “restless” (score 1 or 2)

Higher, more positive Docility EBVs are more favorable. 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 (half the difference of the EBVs being compared)