Recording Flight Time

Flight Time EBVs are estimates of genetic differences between animals in temperament and are calculated from flight time measurements that have been recorded on animals using specialised flight time equipment.

1. Why should Flight Time be recorded?

Flight time is a simple, cost effective and easy to record objective measurement of temperament. Research has shown that in addition to the obvious benefits for ease of handling and management, animals with longer flight time (i.e. superior temperament) also have superior meat tenderness.

Importantly, flight time is a moderately heritable trait and can be improved by selection.

2. How do I record Flight Time?

Flight time measurements are recorded on animals using specialised flight time equipment. Animals are held individually in the crush for a short period and then the head bail opened. Two light beams are then used to objectively measure the time taken for the animal to travel approximately 2.0 metres at the exit of the crush (see picture below).

3. How do I access the Flight Time Equipment?

There are a number of flight time machines located around Australia that producers can access to record flight time measurements for their animals. The easiest way to access a flight time machine is to contact staff at BREEDPLAN. BREEDPLAN will then coordinate the availability of a flight time machine for you. To ensure that a machine is available when required, it is recommended that you contact BREEDPLAN approximately 4-6 weeks prior to when you wish to record the measurements.
4. What considerations should be made when recording Flight Time?

- Flight time measurements should be recorded at a young age prior to the animals receiving significant handling. The recommended time to record flight time is at or around weaning, although measurements taken on yearlings have also been shown to be sufficient for genetic evaluation.

- Flight time measurements must be recorded using specialised flight time equipment. Detailed instructions on setting up and using the flight time machine will be provided with the machine.

- When submitting flight time measurements to BREEDPLAN, animals should be assigned a different “management group” if they have either had a different level of handling prior to recording the flight time measurements and/or experienced different management prior to recording measurements that may affect their flight time.

- When recording flight time, it is important that both a consistent method is used and the same people handle all animals that are being measured in the herd on that particular day. This is particularly important when measuring flight time on large numbers of animals.

- While not compulsory, it is recommended that animals are run through the crush once prior to recording the flight time measurements so that they are familiar with the exit route and consequently do not baulk.

- It is not possible to record useful flight time measurements if animals are required to turn sharply when exiting the crush. In other words, the exit from the crush needs to be either straight ahead or at a slight angle. The crush exit should also be leading into an open yard rather than a confined area.

5. How do I submit Flight Time measurements?

Flight Time measurements should be submitted directly to the BREEDPLAN office at ABRI.

Flight Time measurements are usually submitted electronically via either:

- a BREEDPLAN compatible herd recording computer program such as Herdmaster or Stockbook
- a BREEDPLAN compatible Microsoft Excel template

If you are unable to submit the flight time information using these methods, please contact staff at BREEDPLAN to discuss the alternatives available.

For more information regarding how to record flight time measurements, or Flight Time EBVs in general, please contact staff at BREEDPLAN.