Ian and Di McCauley, principals of Valinor Grazing Co, have been breeding tropically adapted Bos Taurus for over 25 years. Their CattleCare accredited property is in the Callide Valley to the north of Biloela in Central Queensland.

The 1000ha of grazing country is predominantly cleared softwood scrub, improved with buffel, green panic and butterfly pea. More recently, the McCauley’s have introduced stands of Leucaena, which is a native of South America, into their grazing system. This has a high nutritive value for a tropical or sub-tropical forage plant with leaf protein levels approaching that of lucerne and clover. Ian comments that leucaena, once established and if managed correctly, is very tough and productive. They most commonly use it to finish steers or to supplement sale bulls.

Their 200 stud breeders are primarily Belmont Reds but with the current introduction of Bonsmara and Senepol genetics, this is set to change. (Bonsmara and Senepol are tropically adapted Bos Taurus breeds developed in South Africa and the Virgin Islands (Caribbean) respectively). Ian adds “their introduction into our Belmont Red herd will achieve a controlled extension of tropically adapted Bos Taurus genetics.”

“We are not into breeds as such, but more interested in producing tropical animals that cover all commercially important traits. Our aim is to end up with purebred lines of Bonsmara and Senepol along with a line of Belmont Red / Bonsmara / Senepol composites.” The progressive attitude of the Belmont Red Association (BRAA) has allowed composites to be recorded and included in the BREEDPLAN analysis. Valinor, along with several other composite breeders, already receive EBVs for their composites against the Belmont Red base.

All joinings in the Valinor herd are by single sire mating AI and ET are also used for the introduction of Bonsmara and Senepol genetics. Heifers are joined at 13 to 16 months. If they preg test empty after their first joining, they are culled (along with empty cows). Over the last four years all heifers entering the breeding herd have tested in calf.

To date the majority of Valinor sale bulls (20-24 months) are sold through the BRAA Rockhampton sale held annually in September. In the 2002 sale, Valinor achieved 100% clearance - in light of the season, not a common occurrence! In 2003 Valinor will also be selling pure Senepol bulls at a Senepol vendors sale prior to the BRAA sale. Pure Bonsmara bulls will also be offered as an extension of the BRAA sale.

Records are currently kept on the herd recording program HerdMASTER (See page 14) for transmission to breed associations and BREEDPLAN. Along with pedigree details, the McCauley’s record most economically-important traits such as four weights (inc. birth), scanning (with IMF%), and scrotal size.

The McCauley’s have been active members of BREEDPLAN since 1985. Ian states that “BREEDPLAN is currently the only selection tool that I am aware of that provides genetic information on the majority of economically important traits. It is also valuable because it allows genetic comparisons across herds for those animals recorded with the BRAA. I would eventually hope that the BREEDPLAN analysis will allow me to compare genetics of all the breeds included in our program including those from overseas breed societies.”

The McCauley’s are also using gene markers to help with selection and marketing. Sale bulls and replacement females are now being tested for both the GeneSTAR Marbling and Tenderness genes. Ian comments that “initial GeneSTAR results are promising”.

Continued over page
The flight time test was developed by the CRC for Cattle and Beef Quality. It is a measurement of the time it takes an animal to pass through two light beams (1.7m to 2m apart) when leaving the crush through the head bale (see picture below). An animal that has a shorter flight time is considered to have poorer temperament to an animal with a longer flight time.

The CRC has also found that steers with a longer flight time (more docile whether from genetics or handling) will generally grow faster in feedlots to achieve higher final and carcase weight. Bulls genetically superior for flight time, will sire progeny with more tender meat (measured by sheer force and MSA consumer taste panel testing).

BREEDPLAN members are encouraged to record the flight time of their weaners in preparation for the generation of an EBV which uses this information. Flight time recording units can be purchased from Ruddweigh Australia or, for our northern members, possibly borrowed from the CRC depending on their work load. Those wishing to borrow a CRC unit should contact me - Tropical Cattle Technology Services (07 4927 6066).

Ensuring desirable EBVs can be passed on

DNA fingerprinting is enabling some herds using multiple sire mating and tissue sampling of sires and progeny, to use the full BREEDPLAN potential of single sire identification. Most studs in Australia, particularly in the north, still rely heavily on single sire mating. The cost of sire breakdown is very significant in such situations. Therefore, it is important to do as much as possible to ensure herd sires are highly fertile and have the necessary reproductive capacity to pass on their genes.

Over recent years I have been involved in a large fertility study in northern Australia. This involved over 1,000 bulls, mainly Santa Gertrudis, Belmont Red and Brahman. Unfortunately no single trait was able to consistently predict a bull's fertility in multiple or single sire mated groups. A number of traits were demonstrated to collectively influence the calf-getting ability of a bull. These include scrotal circumference, semen quality (particularly percentage of normal spermatozoa), sheath depth, thickness of the umbilicus, mating behaviour (mounts and mounts plus serves). Many of these traits are part of a Bull Breeding Soundness Examination (BBSE) provided by the Australian Association of Cattle Veterinarians.

Please contact me if you wish to discuss the use of such a test in stud and commercial herds.

John Bertram
QDPI Goondiwindi
Ph: 07 4671 1388

“Valinor” - tropically adapted breeding.... continued

All yearlings in the Valinor breeding herd are assessed by visual inspection which includes structural soundness and type. This together with BREEDPLAN figures are then used to select breeding and sale bulls along with the replacement heifers. All cull calves that don’t meet the selection criteria are sold at 15 to 18 months of age. Ian comments that “selling the culls at an earlier age reduces the grazing pressure and allows more breeders to be run. The major objective for our breeder herd is to produce superior genetics for beef production not to produce actual beef.”

The McCauley’s not only provide their sale animals with a range of performance information but they also only buy in animals from other herds that are performance recording. Ian concluded by stating that he believes that “accurate fertility, growth and carcase performance records provide an invaluable guide to selection of seedstock genetics”

Further information on Valinor Grazing Company can be obtained from their website: www.valinor.com.au

Christian Duff