A is for Angus, Australia and America.

Angus is the largest single breed of cattle in Australia. We have about 30,000 registered Angus cattle; about two thirds are HBR animals. Just under a quarter of the registered beef cattle in Australia are Angus cattle. The original Angus cattle in Australia came from Scotland. In the second half of the last century there was a substantial influx of Angus cattle from New Zealand. The big improvements in the performance of Australian Angus in recent years have undoubtedly been in part due to the import of genetic material from America.

There has been heavy selection for performance within Australian Angus over the last twenty five years. Some animals have had exceptional performance and they have had a large impact on the breed. American animals that were brought into Australia were subjected to the same testing – and we selected genes from those animals that worked in Australia. The intensive use of the resulting high performing animals has meant that their genes are heavily represented in the Angus gene pool. There has been no explicit attempt to control the use of particular high performance animals or to ensure that genetic diversity is being maintained in the gene pool – and some people argue that this is not necessary. Other people (including me) think that it is if we are to avoid excessive inbreeding.

Nearly 300,000 animals were recorded on the American Angus Society data base in 2011. Their system of performance recording is very similar to ours. We can access their EPDs and indices on angus.org. Most of the EPDs they present are similar to ours – Rib Eye Area and Eye Muscle Area, Marbling and Intra Muscular Fat, docility. They also use indices but these are very different from ours. Obviously we cannot compare these sets of data directly.

How can you and I start to assess an American animal with no information in Australia? One piece of information I find useful is where the animal is relative to all other animals in the American data base and assume that it will be in roughly the same percentile in Australia.

It is instructive to look at the percentile distributions of EPDs and EBVs (America and Australia) for a reasonably well known bull such as SS Objective T510 0T26. These are shown on the following pages.

EPD Percentiles for Objective 0T26

Extracted from angus.org on May 23, 2012

(5034 milking daughters, 18716 progeny and 144 carcass progeny)

S S Objective T510 0T26
Reg: AAA #13776378

[AMF-CAF-M1F-NHF]

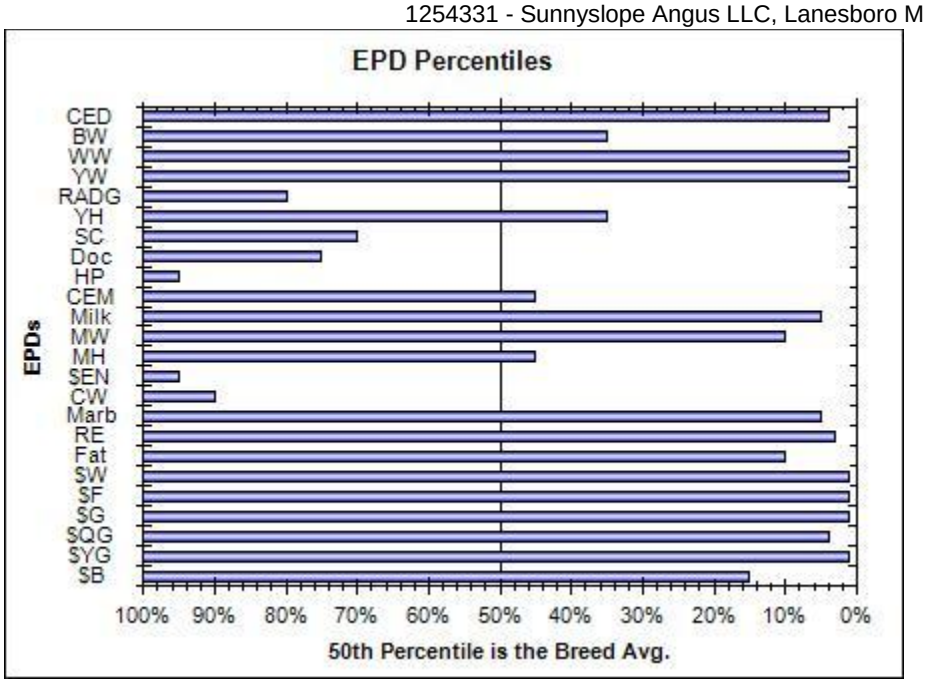
Bull

Birth Date: 04/25/2000 **Tattoo:** 0T26

Parentage: Blood type, Microsatellite, SNP

Genomic: IG1, IG384, PF50

Breeder:	1120 -Julie Ann Abrahamson, Lanesboro MN
Owner(s):	1050496 - Quaker Hill Brownwood Farms, Louisa VA
	1058214 - ABS Global Inc, De Forest WI
	1254331 - Sunnyslope Angus LLC, Lanesboro MN



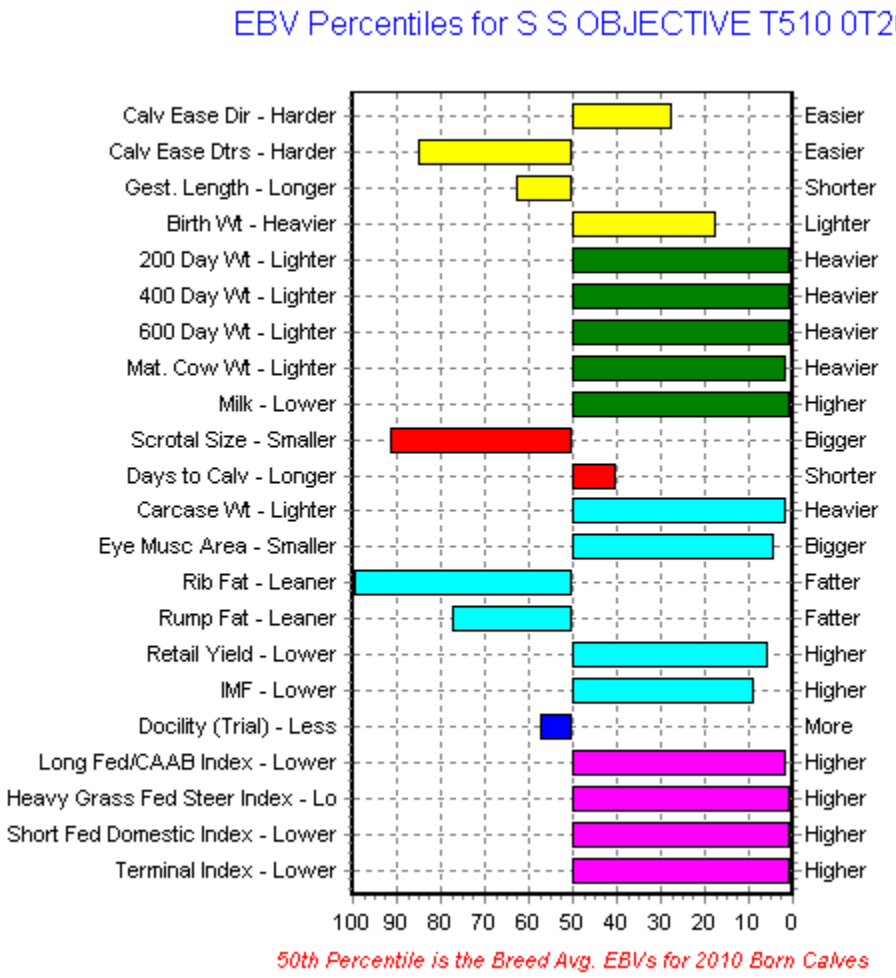
Some of the important (for us) EPDs are Calving Ease (CE), WW and YW (Weaning and Yearling Weight), MW (Mature Weight), SC (Scrotal Size), Doc (Docility), Marb (Marbling) and RE (Rib Eye area).

0T26 has direct calving ease (top 5%) but not daughter calving ease. He has extreme growth and slightly less marked mature weight. His scrotal and docility leave something to be desired. His marbling and rib eye area are amongst the best in the breed in America. We know his pedigree – it is reasonably outcrossed to the most important blood lines in use. We might expect him to be a similar sort of bull in Australia. In fact we have his Australian EBVs and so can compare him.

EBV Percentiles for SS Objective 0T26

Extracted from angusaustralia.com.au on May 23, 2012

(Herds 25, Progeny 651, Scan Progeny 407, Carcase Progeny 1, Daughters 98)



0T26 has direct calving ease (top 20%) but not daughter calving ease. He has extreme growth and slightly less marked mature weight. His scrotal and docility leave something to be desired. His marbling and rib eye area are also in the top 10% of the breed. His long fed and short fed indices are both very high.

His EPDs would have been a very good guide to his EBVs.

What about all the other factors such as appearance, feet, legs, white hairs, jaw, pin bones and neck extension? There are people out there who are evaluating these things and you have to access their information. By asking and looking we know that he is one of the most successful and highly used outcross bulls in America and this leads us to think that he might be a useful bull

in Australia. We can breed the ill temper out and we can breed testicles in – and reduce inbreeding without doing much damage to calving ease, growth and carcass.

There are about ten times as many recorded Angus cattle in America as there are in Australia. Some of them are not very closely related to our high performance Angus cattle. In my opinion we can minimise the risks associated with inbreeding by bringing in unrelated high performance animals from another highly recorded gene pool such as that which exists in America.

VPI Lord Patriot, Scotchcap, New Design 036 and Future Direction were all recognisably high performance bulls when their genes were imported into Australia. They lifted our cattle to a new level and were outcrosses to the New Zealand and Scottish bloodlines that we were using then. There were some other American imports that did not perform here and they were reasonably rapidly exposed and rejected. I think we have to find the next outcrosses like these bulls to blend into our own very high performing and well adapted cattle.

And A is Also for Amen