APPLICATIONS OF BREEDPLAN – fine tuning cattle to the environment.

Following is an unedited letter received from Jack Kennedy (Bumper Droughtmaster Stud Mitchell, QLD), describing the practical and successful application of BREEDPLAN in Northern Australia.

“BREEDPLAN figures on breeders have divulged a few secrets enabling the Bumper Droughtmaster herd at “Rockybank”, Mitchell to be fine tuned to the environment. The environment at Rockybank is considered to be suitable only for breeding, with a stocking rate of 1 cow to 45 acres in phosphorous deficient country. In this environment it is a challenge to get females to calve at 2 years of age and every subsequent year thereafter. These hardships have led to some interesting discoveries by analysing the BREEDPLAN figures of the successful cattle.

In such an environment females with high EBVs for 400 day growth (the period of joining) have trouble conceiving because they have not satisfied their requirement for growth from the nutrition available. These animals will use all their energy to grow and not have the energy to conceive. This problem is compounded if these heifers also have low fat cover EBV’s.

The growth and fat factors of these heifers will override any effect of high EBVs for Scrotal Size their sire may have. That is to say that it does not matter how strong and well developed the reproductive tract of the heifers is, if the growth rate and fat are not matched to the environment then fertility problems will surface. The good news is that due to the high heritability of these traits (400 day growth and fat EBVs) the problem can be rectified quickly once the problem is recognised.

Having moderate 400 day growth and higher fat EBVs also gives your herd a window to finish for the local trade.

The volume of fat is also important in the Bumper breeding herd. Late in the dry season, cows (and 1st calf heifers) must live on their fat reserves and often calve at this time. Cows that do not have adequate fat reserves will not go in calf the next year. The use of Rump, Rib, and IMF fat EBVs can maximise the volume of fat a female can carry without compromising (in some cases enhancing) market specifications. Evenness of fat cover is also very important to maximise the volume of fat a female can carry.

Breed plan EBVs can be a very useful tool to streamline your genetics to your environment. A combination of EBV’s can be a better guide to fertility and hence profitability. It is hoped this article may save some cattle breeders from going up a dry gully, and demonstrate the practical use of Breedplan figures.”

The major point raised by Jack is that successful producers select breeding cattle that are suited to their environment and able to produce progeny that meet the specifications of the selected target market.

Other Northern cattle producers have mentioned the importance of milk production and mature cow weight in the environmental adaptation of their breeders. Producers
running breeders in less favourable environments generally find their more successful breeders are those with moderate milk production and moderate mature cow weight.

From the above points it should be noted that BREEDPLAN is not just a tool used to increase the 600 day weight of progeny. It is also a tool that lets cattle breeders fine tune genetics for economically important traits in their breeding cattle (fat, milk, mature cow weight etc) so they are able to meet their breeding objectives.

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