

Teagasc Notes for week ended Friday April 5th 2019

Understanding the New Dairy Beef Index (DBI)

The Spring of 2019 has seen a poor demand for bull calves from the dairy herd. This is due to a number of factors including an oversupply of dairy bull calves, depressed beef prices, restricted calf exports and the uncertainty around Brexit. To ensure the sustainability of the dairy industry as a whole and, in particular, that there is a viable market for the non replacement dairy calves, technologies like sexed semen and the new dairy beef index (DBI) need to be considered by dairy farmers.

The DBI is a breeding goal to promote high quality beef cattle bred from the dairy herd with minimal consequences on the calving difficulty or gestation of the dairy cow. The DBI ranks beef bulls, for use in the dairy herd, according to their genetic merit for calving and carcass performance traits.

Expressed in euros (\in), each \in 1 increase in DBI can be interpreted as a \in 1 expected increase in profit for that bull's progeny. For example, Bull X has a DBI of \in 100 and bull Y has DBI of \in 20. The progeny born to Bull X are expected to generate \in 80 more profit compared to progeny sired by Bull Y.

So what makes up the DBI?

Calving traits account for 64% of the average DBI value. The DBI selects for shorter gestation, easier calving and less calf mortality.

Beef traits account for 36% of the average DBI value. The DBI selects for higher carcass weight and conformation, and more animals that meet minimum factory specifications (280 kg, O=). The DBI also recognises that some breeds are paid a premium slaughter price and the DBI selects for reduced feed intake, as well as quieter and polled cattle.

When selecting beef AI sires using the DBI it is important to consider what components are contributing to an individual sire's DBI value. For example the DBI, calving and beef sub-indexes of two similar DBI beef sires listed on the March 21st 2019 bull list are presented in Table 1. **Table 1.** DBI values, calving and beef values and reliabilities for similar DBI value beef AI sires listed on the current Active DBI bull list.

	Dairy Beef Index (DBI) Summary		
	DBI	Calving Value	Beef Value
Sire A	€84	€69	€15
Sire B	€83	€49	€34

Both sires have similar DBI values (€84 and €83 respectively). However the calving value of Sire A is €69 while that of the Sire B is €49 reflecting his slightly more difficult calving figures. Sire A is more suited for use on dairy heifers while Sire B will be best used on cows with a proven track record of easy calving where he will sire calves of superior beefing merit. Sire B however will produce calves

that themselves have potentially more beef value. He can be safely used on dairy cows without compromising on the risk of increased calving difficulty.

Teagasc is collating a list of suitable well proven high DBI AI beef bulls for use on dairy cows and heifers this year. Contact your local dairy adviser for further information.

Event

Maurice Aherne and his family, farming in Dunmore East, will hold a BETTER Beef farm walk on the 4th April at 2pm. The focus will be on grassland management, health, soil fertility and reseeding. All welcome.

