

Interpreting bull's €uro-Star Index

The €uro-star index is one of the first points of reference when deciding on purchasing a stock bull or using a particular AI bull. It allows you to analyse the bull's genetic merit for key profit traits such as carcass weight and milk.

Before looking at any bull's index, you need to ask yourself "What do I want this bull to produce?" Once you know the answer to this question, you can then look for the traits which are of most importance to your farming system.

Replacement and Terminal Indexes

There are two main indexes in beef. The Replacement Index reflects the overall suitability of a bull to breed replacement females and includes traits such as milk, fertility, calving and docility. Farmers looking to breed their own replacement heifers should look at the Replacement Index.

The Terminal Index reflects the overall suitability of a bull to breed cattle for sale as weanlings/stores or for slaughter and includes traits like carcass weight and conformation, feed intake and calving. Farmers should only use the Terminal Index if they are solely concerned with beef traits and do not want to breed replacement heifers from a bull.

The star ratings tell you where a bull ranks within his own breed and when compared to all other breeds. See Table 1.

Within and across breed

The €uro-value's (€151 on replacement index for the above bull) are then expressed on both a within-breed (ie, just compared to all LM animals born in last five years) and across-breed basis (ie, com-

pared to ALL animals born in last five years).

For commercial suckler producers, it is critical that you consider the across-breed stars, as this will give you a better assessment of the genetic merit of an animal relative to all his peers, not just those within the given breed.

Key profit traits

The Replacement and Terminal Indexes give an overview of a bull's breeding potential through the combined effect of a number of traits. However, where a farmer is looking to improve a specific trait, eg fertility, then that trait will have to be looked at in its own right. It is possible for a bull to have, for example, a high overall replacement Index but a poor fertility figure.

Reliabilities

The reliability figure gives an indication as to how much data has been recorded for a particular trait. For example, if a bull has a reliability figure of 99% on calving difficulty, then that bull is fully proven on that trait and the calving difficulty figure is based solely on the data recorded on that bull's progeny.

In contrast, a bull with a reliability figure of only 30% on calving difficulty has few, if any, progeny records and the calving difficulty figure is based almost solely on its ancestry (sire and dam). The higher the reliability figure, the less likely it is that the trait figure will change significantly in the future. Genomics will increase the reliability figures on bulls before they are ever used for breeding and this will lessen the risk of an animal's index changing in the future.



John pictured with his 9 year old stock bull Creggpark Buster. He is sired by Ronick Hawk (RKH) and has a Replacement Index of €138 (5 stars within and across breed). He has been on the farm since Spring 2008 and has sired over 250 calves to date. John has 18 of Buster's daughters calved into his suckler herd and he is very pleased with their performance".

Table 1: Replacement & Terminal Indexes of a bull.

Star rating (with Limousin breed)	Economic Indexes	€uro value	Index reliability	Star rating (across all beef breeds)
★★★★★	Replacement (per daughter lactation)	€151	85% (V High)	★★★★★
	Maternal cow traits	€52	82%	
	Maternal progeny traits	€99	92%	
★★★★★	Terminal (per progeny)	€150	91% (V High)	★★★★★

Q&A

Q. Where can I access the €uro-Star Index of a bull?

Indexes can be accessed in a number of places. The online bull search at www.icbf.com allows you to type in the tag number or name of a bull and bring up his index. If using AI, indexes are available in AI company catalogues. Most pedigree bull sales now have €uro-Star catalogues available to potential buyers. €uro-Star indexes are updated three times per year (Apr, Aug & Dec) so it is important to ensure that you are looking at the most up-to-date indexes. The ICBF bull search will always be fully up-to-date.

Q. How can I tell from a bull's €uro-Star index how well proven he is?

A. You do this by looking at the reliability figures. A bull's reliabilities will not go above 50% until his own progeny start to hit the ground and data is recorded on them. The lower the reliability figures, the less information is known about the ancestry of the bull. Once a bull hits 90% reliability on a trait, it can be considered proven on that trait. Genomics will increase the reliability figures on a bull's index before it is ever used for breeding, hence, giving more certainty as to how he will breed in the future.

FARMER FOCUS: JOHN KELLY

I plan to genotype all of my heifers

Name: John Kelly, Moydow, Co Longford
Farming System: Suckler to weanling.
BDGP Cow Reference No: 72
4 and 5 Star Females: Cows: 47; Heifers: 65.
Stock Bull or AI: Stock Bull
Replacement Strategy: Breed own.

Why did you join the BDGP?

The breeding in my herd is already quite good so meeting the requirements seems to be pretty straightforward for me. I am always looking to improve my breeding as well and I think genomics can add an extra dimension to this. Having more information at hand when selecting future replacements has to be a good thing.

Do you feel it will deliver for the national suckler herd?

It can absolutely. From my experience better breeding can make a big impact on herd performance. You can have the best management practises in the world but if your genetics aren't good enough, you simply won't get the performance.

What is your replacement strategy?

I have always bred my own replacements. The majority of my heifers are coming in with high Replacement Indexes which is great to see. Next year I plan to genotype all of my heifers and sell the surplus heifers as genotyped 4 & 5 star females. I can see a big market opening in the next few years for top quality high Replacement Index heifers.

Do you place much emphasis on the €uro-Star Indexes of bulls prior to purchase?

I use a combination of visual appearance and index. I would get a sale catalogue a few weeks



John Kelly

before the sale and pick out potential bulls based on their indexes. As I am interested in breeding, I would also take the bull's pedigree into account. On the day of the sale I then visually assess each of the bulls and further narrow my selection. This strategy has worked well for me in the past. The only problem that I can run into is that some of the bulls can go out of my price range.

Tell me a bit about your own stock bulls.

I have 2 stock bulls. My main bull is a 9 year old Ronick Hawk (RKH) bull. He has a Replacement Index of €138 (5 stars within and across breed). A lot of my cows are out of this bull and I am very pleased with them. They have milk, are fertile and they are so quiet. They are consistently producing top quality calves. My younger bull is a 2.5 year old Ampertaine Commander (APM) bull. He has a Replacement Index of €109 (5 stars within and across breed). I only have his first crop of calves on the ground this autumn, but so far so good.

DATA RECORDING

- ☛ All calves born from January to May are now old enough (five months) to record calf quality and docility.
- ☛ Cows can be scored for milk and docility as soon as they calve.
- ☛ This information can be recorded online through www.icbf.com, a farm software package or by postal forms.

DATES FOR THE DIARY

- Weds 18th Nov:** Munster AI/Teagasc Suckler Event, Tuam Mart at 7:30pm
- Thurs 19th Nov:** Dingle Mart Suckler/BDGP Information Event, Benner's Hotel, Dingle at 8pm