DAIRY

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Teagasc Dairy Breeding Advice for 2019

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Teagasc is acutely conscious of the importance of maintaining the high reputation that Irish farmers enjoy in the management of animal welfare. The welfare and value of dairy calves, in particular, are profoundly affected by the breeding strategy of dairy farmers and by the calf management protocols that are operated on dairy farms.

As the 2019 breeding season starts, it is important that dairy farmers have a clear breeding policy as it will have a significant influence on their farm profitability.

All breeding policies should have three main objectives:

1. Continue to use high EBI AI genetics to increase the EBI of your herd;
2. Match the number of dairy breed female calves born to specific farm requirements;
3. Maximise the use of beef crossing in the dairy herd increasing the potential value of the resulting calves by selecting beef AI bulls using the Dairy Beef Index.

Use High EBI AI

The Irish dairy industry has benefited enormously from the increase in the EBI of the national herd since its establishment in 2001. However there are still significant benefits to be obtained by further increasing herd EBI. This is clearly demonstrated in the Teagasc Next Generation herd. Analysis of farm data across a range of different herds has shown that each €1 increase in herd EBI results in a €2 increase in profit/ cow/ lactation.

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Therefore this spring, dairy farmers should select a team of AI bulls with an average EBI of greater than €270 from the ICBF Active Bull List taking cognisance of relatedness, reliability and herd size. Maiden heifers are ideal candidates to select when breeding the next generation of replacement heifer calves. They usually have the highest EBI and can be managed to mostly calve in the first two weeks of the calving season. As a result, the calves born are high EBI, early born and compactly calved. The choice of suitable AI sires for replacement heifers has increased over the last number of years without compromising on EBI. Also select cows that are early calving, high EBI and performing well. In compactly calved herds that are not increasing in size, this means that a proportion of the mature cows can be bred to beef AI from the start of the breeding season.

Reduce the number of dairy breed calves required

Dairy cow numbers have increased significantly over the last 5 to 6 years. This rapid increase in the size of the national dairy herd is currently slowing down. Many dairy farmers can generate sufficient dairy replacements in the first 3 to 5 weeks of the breeding season. The precise number of replacements required however depends on whether the size of individual herds is increasing or stable, how fertile the herd is and how successful the farmer is at calving heifers at two years of age.

This spring farmers experienced at first hand a challenging market for dairy calves which will influence their breeding decisions during the upcoming breeding season. Being able to sell calves quickly and easily is an important consideration particularly in compactly calved and in larger dairy herds. Reducing the number of low value dairy calves born will help. This can be achieved in three ways:

1. Calving over 90% of dairy heifer calves born alive at 2 years of age. Currently more than one third of dairy heifer calves born fail to calve at 2 years of age. Approximately half of these never calve and the remainder calve at around 3 years of age. Increasing the proportion calving at 2 years of age will reduce the number of heifers calves required and increase the number of cows available for breeding to beef AI.

2. Dairy farmers should seriously consider using sexed semen where bulls of very poor beef merit are being used. It's important to note that if you use sexed semen that conception rates could be lower. This can be managed by using sexed semen early on in the breeding season on the more fertile, earlier calved cows and on maiden heifers.

3. Only use beef stock bulls for the last few weeks of the breeding season. Many dairy farmers use AI for 8 to 10 weeks, with the remaining 2 to 4 weeks a stock bull is used. It's important that the stock bull used should be of beef genetics, easy calving and short gestation.

In recent years there has been a trend away from using stock bulls and using more AI; this is preferable due to greater genetic reliability and lower disease and health and safety risks.

Use the Dairy Beef Index (DBI) to select beef AI bulls

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, each €1 increase in DBI can be interpreted as a €1 expected increase in profit for that bull's progeny. When selecting beef AI sires using the DBI, it is important to consider what components are contributing to an individual sire's DBI value when selecting suitable bulls for dairy heifers and dairy cows.

In Teagasc herds, the breeding policy in 2019 is as follows:

- The number of low value dairy calves will be reduced in the 2020 calving season by using a greater proportion of beef semen.
- Beef semen will be selected using the Dairy Beef Index - easy calving bulls, short gestation with good beef merit.
- Only sexed Jersey semen will be used in the upcoming breeding season, as well as conventional HF and beef semen.

Taking the March 2019 ICBF beef evaluations, Teagasc has prepared a recommended list of Active beef AI bulls that have more than 100 dairy cow calving records, have a reliable DBI proof and relatively easy calving. Those proven in dairy heifers will also have more than 100 dairy heifer calving records in their proof. The full list of Active Beef AI bulls is available on the ICBF website.

Teagasc Recommended List of Active beef AI bulls that are proven for calving difficulty on dairy cows (≥90% Reliability), ranked by Dairy Beef Index (Mar '19)

Rank	Code	Name	Breed	Dairy Beef Index		Key Calving Value Traits			Key Beef Value Traits		Supplier
				Index	Rel. %	Gestation	Calving Diff %	Proven in Dairy Heifers	Carc. Wt.	Carc. Conf	
1	SFL	Du Stordeur Flaneur	BB	€120	94%	-1.4	5.1%	-	19	2.5	Bova
2	DJH	Drimeen Joseph	BB	€107	90%	-0.2	3.9%	-	16	1.9	MU/PG
3	EBY	Elderberry Galahad	LM	€104	95%	2.4	3.8%	-	20	2.2	Dovea
4	WZG	Westellen Diego	AA	€91	90%	-1.8	2.8%	-	8	1.3	Bova
5	PZB	Bonaparte	SA	€87	91%	0.6	3.0%	-	15	1.3	MU/PG
6	KYA	Cornamuckla Lord Hardy	AA	€84	97%	-4.8	0.8%	Yes	-2	0.5	MU/PG
7	AA4088	Intelagri Maverick	AA	€83	72%	-3.1	1.7%	-	9	0.5	MU/PG
8	DFD	Celestin Du Fond De Bois	BB	€80	92%	-0.5	6.1%	-	20	2.8	Dovea
9	AA4089	Intelagri Matteo	AA	€77	71%	-3.4	1.3%	-	5	0.6	MU/PG
10	AA2163	Liss Brendan	AA	€77	90%	0.2	1.9%	Yes	10	0.7	Dovea
11	AA4195	Thrunton Picador	AA	€76	71%	-2.9	1.8%	-	10	0.5	Eurogene
12	JZJ	Cairnmor Jameson	AA	€75	93%	-3.2	0.8%	Yes	-1	0.7	Dovea
13	BZB	Bolide	PT	€74	91%	3.9	6.6%	-	18	1.5	Dovea
14	ZAG	Castleview Gazelle	LM	€72	97%	3.8	4.3%	-	20	2.2	MU/PG
15	ZLT	Birches Littleman	AA	€71	96%	-2.3	2.0%	Yes	-3	1.3	Dovea
16	ZFL	Lisduff Dandy	AA	€59	95%	-1.2	4.3%	-	16	1.2	Dovea
17	AA2123	Christon Elton	AA	€56	94%	-3.9	2.4%	-	6	0.3	MU/PG
18	AA2259	Portauns Volcano	AA	€50	90%	0.0	1.7%	Yes	-2	0.8	Dovea
19	SPL	Solpoll 1 Handsome	HE	€45	95%	0.6	3.2%	-	4	0.6	MU/PG
20	KZP	Cill Cormaic Kasper	HE	€43	95%	-1.0	2.2%	-	-3	0.6	Dovea
21	TKR	Thrunton Rocket	AA	€42	95%	-1.6	2.9%	-	8	0.6	Eurogene
22	MLJ	Mogeely Joe	AA	€42	97%	-0.1	2.5%	Yes	6	0.6	Dovea
23	AA2309	St Aodain L Master	AA	€39	90%	-0.5	3.1%	-	12	0.8	MU/PG
24	GZA	Cahirmee Gino	AA	€38	95%	-0.8	2.2%	Yes	-2	0.6	Dovea
25	SYT	Sandylane Tadgh	AA	€37	94%	-1.5	1.8%	Yes	-4	0.6	Bova
26	BZC	Boherard Cian	BB	€35	91%	-0.8	6.9%	-	25	2.3	Bova
27	HE4045	Moorside 1 Joseph	HE	€34	90%	-1.5	3.2%	-	2	0.5	Eurogene
28	ESH	Early Sunset High Time	AA	€31	92%	1.4	1.4%	Yes	-2	0.5	MU/PG

Active bulls with a Dairy Beef Index of ≥€30 and Dairy Beef Index reliability of ≥35% with at least 100 dairy calvings and a calving difficulty reliability of ≥90% in dairy cows are included - For more information on the Dairy Beef Index, please call 0238820452 or log onto www.icbf.com Copyright© ICBF2019