Artificial insemination: proven, practical and profitable

Three-quarters of all calves born in suckler herds are from stock bulls (ICBF). By not using AI, a lot of farmers are missing out on access to the best genetics at a lower cost than maintaining a stock bull

Gabriel Travers Teagasc Future Beef Programme

I offers you access to a vast range of bulls. You can choose animals that will pass on good maternal qualities to daughters for top quality replacements. Others have easy-calving traits. Many will pass on good terminal traits to increase the performance and value of calves intended to be sold for beef.

AI unarguably gives you more flexibility with your breeding policy. So why do more farmers not use AI? One of the main reasons farmers give is the time needed to observe cows and drafting those in heat. But there are technical solutions which can help with that.

Aonghusa Fahv lives with his wife. Olivia, and two children in Tullira, just outside Ardrahan, Co Galway. He is part-time farming and working fulltime in a secondary school teaching construction, DGC and agricultural science. The farm is divided between Ardrahan, Co Galway, and Tulla, Co Clare, 36km away.

"We run 30 spring-calving suckler cows," says Aonghusa. "Calving starts in the first week of February.

"Exceptional calves may be sold as weanlings but all other progeny are brought through to slaughter. Heifers finish off grass at 20 to 22 months at ~300kg carcass weight. Steers finish off grass at 28 to 30 months at ~420kg carcass weight.'





beef



Breeding plan

Aonghusa is using both AI and a stock bull, and is aiming to increase the overall AI use in the herd.

"Last year, 26 cows out of 30 proved in calf to AI and I am delighted with that," says Aonghusa who has used MooCall HEAT for the last three seasons to aid heat detection.

A vasectomised bull is fitted with a Moocall HEAT collar and the cows and heifers are fitted with a special tag. Moocall HEAT sends a message to Aonghusa's phone once the vasectomised bull detects a cow in standing heat giving an optimum time to serve the cow.

"I wouldn't be able to use AI without it as I am away from the farm for large periods of the day. I will get a text on my phone that tells me what cow is in standing heat and I can then call the AI man for the morning or evening," he explains. As a backup, Aonghusa tail paints the cows.

Overall management

"I bought in two Friesian weanlings in 2022, reared them on farm and got them vasectomised in early February, well in advance of the breeding season," says Aonghusa.

"They were on top-quality silage plus 2kg of meal over the winter to ensure that they were fit for this year's breeding season.

"I will run one of the bulls with the cows and the other with the heifers. I like to let the vasectomised bulls out with the cows at least three weeks before breeding actually starts. This allows the bull to settle with his collar and I can record heats before the season starts."

The farm is dry and cows and calves were let out to grass in February and despite having to be rehoused for a week, they are in a body condition score of 2.5 to 3.

The paddocks around the yard are closed for March and most of April to build grass covers. The breeding season started on 24 April and the cows are moved to these paddocks for easier drafting into the shed.

"This year, I have selected bulls such as CWI (Castleview Casino), S14147 (Curaheen Gunshot) and LM2014 (Ewdendale Ivor) for replacements. On the terminal side charolais bulls CH4159 (Knockmoyle 10 LOKI) and CH4160 (Pottereagh Mark) will be used on specific cows.

"We'll use AI for six weeks this year



and the bull will be introduced and left with the cows to mop up.

"When I am working, six weeks using AI is very manageable," Aonghusa adds. "I am at the stage now where I could nearly manage without the bull - maybe next year."

Sexed semen

For a herd size of 30, only six to seven replacements are needed each year. Sourcing four- or five-star replacements that will calve at 22 to 26 months of age is very difficult. "I would like to breed my own and I think sexed semen is a game-changer is this regard," says Aonghusa.

"Last year, sexed semen was used on six replacement heifers. A synchronisation programme prescribed by the vet was followed and using fixed-time AI, all six heifers went in calf to the LM bull, LM2014 (Ewdenvale Ivor)."

With the positive results and confidence gained for last year, Aonghusa is planning to use sexed semen on the best five or six cows that also have the highest value on the replacement index.

"Getting heifers off these cows and putting them in calf to LM2014 and Gunshot will ensure that my replace-



ments will be top-quality."
Aonghusa adds: "With good heat detection and having an experienced AI man, sexed semen can simplify a replacement strategy for a lot of suckler farmers."

For suckler farmers, the key goal remains that every cow or heifer must produce a live calf every 365 days. If using a stock bull is the only way to achieve this; then continue with that. If you want to steadily improve your cows and their offspring and make more money... AI is a proven route.

Surprisingly high cost of a stock bull

The average cost of purchasing a stock bull is €2,000 to €4,500. ICBF figures have shown that the average stock bull sires 80 calves over its four-year working life, so approximately 20 calves/year.

If you buy a bull at €2,000, and subtract the price it will sell for you can calculate the cost per calf. The average cost per calf produced from this bull is €32.50. At a purchase price of €3,000, this rises to over €45 per calf.

Sourcing a four- or five-star bull with figures that have high reliability is a challenge for a suckler farmer. Too often a bull is purchased primarily on its physical appearance and price with the hope that calving will be easy the following year. These risks are greatly reduced when sourcing proven bulls from an AI catalogue. In the Teagasc Future Beef Programme almost 80% of the participants are using Al at different levels, ie from 100% Al to using Al on maiden heifers only.



Trevor Boland moves the herd to fields adjacent to the yard near calving time.

Farmer focus: Trevor Boland

Trevor Boland farms part-time in the picturesque setting of Bunnafedia, Dromard, Co Sligo. He is married to Tara and is farming in partnership with his father Joseph. He works full-time off-farm as an accountant with ifac.

The farm size is 48 hectares, fragmented into three main blocks. The suckler herd consists of 50 cows calving in the months of August, September and October. "Calving at this time of year suits me and the farm," says Trevor. He moves the herd to fields adjacent to the yard near calving time. He adds: "As I am working, there is a lot less risk in calving outdoors and in most cases very little intervention is required."

There is another big advantage for Trevor with an autumn-calving system. "With cows calving at this time of year, I can use AI at breeding when the cows are indoors."

Calving at two years of age with high-value four- and five-star heifers is one of the main targets for the farm. Trevor adds: "Using AI gives me a choice of bulls, both for the terminal market but also for producing replacements."

To help with heat detection I use Sensehub which monitors the cows' overall activity. It gives me precise information on what is the best time to inseminate.

"I can understand why a lot of suckler farmers don't use AI but my advice would be to take advantage of the technologies that there now to help with good heat detection. Under TAMS some of this technology is now grant-aided which is an extra incentive to make the move now.'