Number of AI straws needed to deliver one replacement heifer?

Advisory Programme

The Teagasc dairy newsletter for April has generated some discussion. (See http://www.teagasc.ie/publications/2013/1902/Dairy_Newsletter_April13. pdf)

In particular the paragraph (see below) on the number of AI straws needed when you want to produce one new dairy heifer replacement to enter your herd.

Sufficient heifers – Extra heifers are required where you want to increase the six-week calving rate. Use 5.5 straws per heifer required this spring.

Teagasc dairy specialist George Ramsbottom outlines how the 5.5 straws per heifer required, is calculated.

This is based on having done this sum with many groups of farmers.

- I want 20 heifers milking in the parlour in 'perfect mechanical order' in the spring of 2016.
- I will need 23 15 month old heifers at least to get this the rest will drop out because of infertility, mastitis issues, mortality or the hazards of calving.
- I will need 25 new born heifer calves to get these the rest will drop out because of mortality mostly (8% is the national figure from birth to calving)
- For the 25 heifer calves we will have 2 deaths around calving that's a total of 27 heifers and assuming one bull calf per heifer calf that's 27 bull calves as well.
- That's 54 calves assuming a 50% pregnancy rate (nationally 48%) that means 108 straws or approx 5.5 straws per heifer required
- Sounds a lot? Nationally only 77 dairy heifers calved for every 100 born alive in 2007

