Worksheet 6

Annual semen need calculator

Use this pro forma to calculate your annual replacement breeding numbers and semen needs (Section 5: Example 5.1).

Using a copy of this sheet will allow repeated re-use

	Rate (%)	Number
A Herd size		
B Annual replacements		
C Cows and heifers available for replacement breeding (A + B)		
D Heifer to bull calf births		
E Cows and heifers required for replacement breeding (B x 100 ÷ D)		
F Extra animals for replacement breeding contingencies (20%)*		
G Total animals required for replacement breeding (E + F)		
H Heifers to be used for replacement breeding		
I Cows needed for replacement breeding (G – H)		
J Heifer pregnancy rate		
K Cow pregnancy rate		
L Straws of semen required for heifer breeding (H x 100 ÷ J)		
M Straws of semen required for cow breeding (I x 100 ÷ K)		
N Straws of semen required for replacement breeding (L + M)		

*It is advisable to build a contingency into the semen need calculation to account for the fact:

- Some of the replacement breeders will be involuntarily culled before they calve
- Not all cows earmarked to produce replacements will actually give birth to live calves

- The proportion of heifer to bull calves will vary from year to year
- Some of the heifer calves won't make it into the herd.

D.

Improving through breeding