

UNIT : THE BEEF COW – HERD REPLACEMENTS

INTRODUCTION

The success of the beef herd depends on regular replacement of breeding cows as unproductive animals are culled due to infertility, lameness, mastitis, low milk yield or poor quality offspring. Although culled cows can provide a valuable income, an effective culling and herd replacement policy is essential to minimise the cost to herd profitability and herd replacement rate should be maintained at 17% or less annually on average.

CULLING

There are many reasons for culling from the herd :

- Cows that slip out of the herd's calving pattern – these might be moved (at a cost) from the spring calving portion of the herd into the autumn calvers in some cases or sold as breeding cows into other herds
- Infertile / Barren cows – cows that fail to get back in calf
- Cows with udder problems – these normally include cows that have suffered severe mastitis and lost one or more quarters or cows whose pendulous udders make suckling difficult
- Cows which are under-performing – it is difficult to measure milk output in a beef cow but the weaning weight of calves can be an indicator that the calf has not received enough milk or has not grown because of poorer genetics – in either case good record keeping will identify the likely culprits and the cows concerned have to be culled
- Old cows – although longevity is a valuable characteristic of some breeds or individual cows, reproductive performance, milking ability and susceptibility to a range of problems e.g. milk fever, calving difficulties often increases and cows are rarely kept beyond 10 years of age (8 calvings)

REPLACEMENTS

Choice of breed has been covered elsewhere but replacement cows might be obtained from one or more of several sources :

- Home-bred – heifers bred in the herd can be kept as replacements ensuring high herd biosecurity and heifers of known origin but there are potential drawbacks
 - If cows of a particular breed are kept, at least a proportion will have to be bred pure meaning reliance on more than one bull or AI

- If cross-bred cows are kept, selection of a suitable sire from which to keep heifer calves might be difficult if the characteristics of these cows are to be retained
- Purchased – buying in stock might compromise herd health status to some degree but a number of options are available :
 - Rearing bought heifer calves – the heifers will come out of the dairy herd and are likely to be dairy / beef cross-breds – although their cost might be lowest of all the bought in options and they have the longest time to acquire immunity to disease, calf rearing is time consuming with the risk of losses and, even if they calve at 24 months, it will be 36 months or more before they produce a saleable calf
 - Buying in weanling or bulling heifers – a wider range of breed options are available as the heifers may be dairy / beef cross-breds or could be pure or cross-bred beef animals – calf rearing will not be involved and the animals will be old enough to be fed more cheaply on grass or conserved fodder and the bull used can be selected with ease of calving in mind but it will be 18-24 months before their offspring are sold
 - Buying in in-calf heifers or cows – there will be an earlier return (9-12 months) but choice of sire and service date will be outside the buyer's control
 - Buying in heifers or cows with calves – the most expensive option but the cows or heifers will have calved and calves may be sold in as little as 6 months

SELECTION

Replacements need to be selected on the basis of :

- Soundness of feet, legs, udder and conformation
- Temperament
- Breed
- Size
- Genetic merit – performance data / EBVs

INFORMATION SOURCES

HCC (2007) Making the Most of your Suckler Cows

HCC (2008) Profitable Beef Breeding