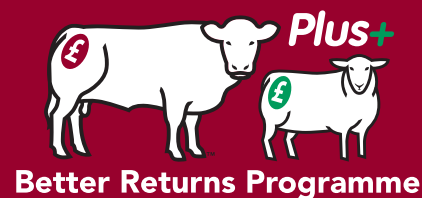


Once-bred heifers from the suckler herd



Information compiled by Basil Lowman, SAC and
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Key messages

- + Once-bred heifers (OBHs) need careful management to ensure they are at the correct weight at bulling and allowed to gain weight during pregnancy without becoming over-fat
- + Heifers must continue to gain liveweight and condition after calving, unlike mature cows that will lose condition after giving birth
- + Creep feeding will maximise early growth and liveweight gain. Select well-grown heifer calves at weaning (six to eight months old). Maintain good growth rates at 0.7-0.8kg/d
- + Manage sire choice carefully, check all the relevant Estimated Breeding Values (EBVs) to minimise calving difficulties
- + Ensure the service period is only six weeks long and covers the main herd's service period, so foster cows are available if needed
- + Scan heifers for pregnancy using ultrasound at five to six weeks after serving. Empty heifers should be finished and sold and not re-bred
- + Finish the OBH quickly within six to eight weeks of giving birth. Handle to assess fat levels at least every two weeks towards the end of the finishing period
- + In most cases the heifers should be fit for slaughter within no more than two months of the calf being weaned

Keywords:

Once-bred heifers, finishing a beef heifer after having one calf, sires for once-bred heifers

A once-bred heifer (OBH) is served and then finished and slaughtered after giving birth for the first time. This system, which makes all heifers produce a calf, whether they are to go on to be herd replacements or not. It can boost the output of a beef herd significantly.

Benefits for a 100-cow suckler herd

100 cows

- 90 live calves weaned (barren cows and calf losses)
- Working on a 50:50 male/female split (45 bull, 45 heifer calves)
- 40 females suitable for breeding



Breeding all maiden heifers will increase herd output

Replacement rate = 20%

- 20 heifers for replacements
- 20 heifers for OBH
- Extra 18 calves produced from the OBHs

Output is increased by 18 calves per year

Following year

- 120 cows and heifers including OBHs
- 108 calves weaned rather than 90
- Working on a 50:50 male/female split (54 bull, 54 heifer calves)
- 20 replacement heifers
- 4 females unsuitable for breeding
- 30 OBHs for the following year producing an extra 28 calves

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Advantages

- + The eating quality of a OBH is the same as for an un-bred heifer of the same age
- + There is an increase in carcass weight without over-fatness
- + Compared to a mature cow, the heifer is doing two jobs – growing her own body size/carcass and a calf, whereas the cow is only growing a calf
- + In a perfect world, if heifer calves from OBHs were kept, within three or four years it would be possible to have a 100-cow herd producing 200 calves and 100 OBHs

Disadvantages

- + Killing-out percentage may fall by 2-3% due to increased udder and uterine weight
- + OBH carcasses tend to have poorer conformation, but the same sellable meat yield as unbred heifers, due to the carcass sagging when hung on a hook. This is because the pelvic ligaments have relaxed to allow the heifer to calve



OBHs must keep growing during and after pregnancy

Heifers must continue to gain liveweight and condition after calving, unlike mature cows that will lose condition after giving birth.



Creep feeding will maximise growth

Creep feeding will maximise early growth and liveweight gain. Select well-grown heifer calves at weaning (six to eight months old). Maintain good growth rates at 0.7-0.8kg/d, without them getting over-fat.

Manage sire choice carefully, check all the relevant Estimated Breeding Values (EBVs) to minimise calving difficulties.

Targets

- + Mate heifers at 15 months for calving at 24 months of age
- + Ensure heifers are 65% of mature bodyweight at service
- + During pregnancy heifers should grow at 0.7kg per day. Care must be taken to ensure they are not too fat at calving

Heifers must continue to gain liveweight and condition during pregnancy and after calving, unlike mature cows that will lose condition after giving birth. To achieve that heifers must be fed better than mature cows after calving.

Table 1: Body Condition Score (BCS) targets for OBHs

Period	Spring Calving	Period	Autumn Calving
Turnout	2.0	Service	2.0-2.5
Service	2.0-2.5	Turnout	2.5
Housing	2.5-3.0	Calving	2.5-3.0
Calving	2.5-3.0		

Table 2: Lifetime targets for OBHs

	Target age	Target weight
Weaning	6-8 months	250-280kg
Service	15 months	380-400kg
Calving	24 months	500-540kg
Finished	26 months	520-560kg
	30 months	560-600kg

Management Guidelines

- + Creep feeding will maximise early growth and liveweight gain. Select well-grown heifer calves at weaning (six to eight months old). Maintain good growth rates at 0.7-0.8kg/d, without them getting over-fat
- + Manage sire choice carefully, check all the relevant Estimated Breeding Values (EBVs) to minimise calving difficulties. Select bulls for breeding OBHs that have:
 - Above average Calving Ease Direct EBV
 - Below average Birth Weight EBV
 - Above average 200, 400 and 600 Day Growth EBV
 - Above average Muscle Depth or Muscle Area EBV

Breed choice should reflect the expected market for the weaned calves or finished cattle. If breeding heifer replacements as well as OBHs, mate all suitable heifers and select those to be retained once they have calved, based on temperament, calving ease, milk supply, udder shape and beef characteristics. The rest then become OBHs.

Ensure the service period is only six weeks long and covers the main herd's service period, so foster cows are available if needed.

- + Ensure the service period is only six weeks long (two oestrous cycles) and covers the main herd's service period, so foster cows are available if needed

Scan heifers for pregnancy using ultrasound at five to six weeks after serving. Empty heifers should be finished and sold and not re-bred.

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Finish the OBH quickly within six to eight weeks of giving birth. Handle to assess fat levels at least every two weeks towards the end of the finishing period.

- + Check BCS every four to six weeks. Note any changes and review grazing or feeding regime if not on track. Once-bred heifers should calve at BCS 2.5; the fatter the heifer the more likely there will be calving difficulties
- + Prepare for calving with well-organised equipment, good colostrum supplies and, if calving indoors, well bedded, dry and disinfected calving boxes
- + Supervise OBHs at calving to ensure any problems are dealt with promptly. Treat the calves' navels as soon as possible with strong iodine solution to prevent infections
- + Finish the OBH quickly within six to eight weeks of giving birth. Handle to assess fat levels at least every two weeks towards the end of the finishing period

Options for the calves of OBHs

- + Wean at birth and use it as a foster calf
- + Remove from OBH at two to ten days of age and use to double suckle a mature cow
- + Wean at six to eight weeks of age at 80-100kgs of weight and rear as a bucket-reared calf. Ensure creep is introduced at a young age
- + Wean conventionally at no later than six months of age. The six months age limit is to ensure the heifer can be slaughtered before she is 30 months old

In most cases the heifers should be fit for slaughter within no more than two months of the calf being weaned.

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For more information:

For more information contact: Better Returns Programme

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