

Calving heifers at two years of age

Fishwick Farms in Cumbria, run by Martin and Arlene Fishwick, has a herd of 110 Simmental cross-bred suckler cows. Three years ago they implemented a two-year calving policy as a way to increase the herd size.

Martin and Arlene had a major overhaul of their herd after tightening their calving period to nine weeks, which resulted in a number of the less-fertile cows being culled. Additionally, they took on more land which meant they were able to achieve a substantial increase in the herd size. To achieve this they decided to calve their heifers at two years of age and they haven't looked back since.



Calving at two years has significantly reduced their replacement heifer costs, it is estimated that for every additional month calving is delayed, it costs the suckler producer over £40/month/heifer. For a herd such as Martin's, where on average 20 heifers are retained each year, moving from a three to two-year calving system equates to a saving of £9,600 per year.

Heifers are weighed at regular intervals between birth and 15 months of age to make sure they hit the target of 65% mature weight at service. At birth, calves are fitted with an electronic identification tag which helps make weighing the cattle easier and less time consuming.

Throughout their lives, the heifers are fed on a purely forage-based diet, receiving no creep feed prior to weaning. This acts as a selection process, with only heifers from dams which manage to produce a calf that grows at least 1.0kg/day to weaning being kept as a replacement. This ensures that only the most productive heifers are retained.

Heifers are weaned at ten months of age and weigh on average 350kg. To reduce the growth check often seen at weaning, heifer calves are vaccinated against pneumonia two weeks prior to housing. During their first winter, heifers are fed good-quality silage and Martin ensures there is sufficient feed space for every heifer to feed at the same time, which is vital for strong growth rates throughout the housing period.

Once the heifers are 15 months of age and weigh 65% of their mature weight they are turned in with the bull. Bulls are selected based on their estimated breeding values (EBVs) for calving ease direct, calving ease daughters, birth weight and gestation length. The bull runs with the heifers for six weeks, ensuring only the most fertile heifers are retained for breeding.

Martin maintains a compact calving period by putting the bull in with the rest of the herd for just nine weeks. Last year, across the whole herd, 86% calved within the first three weeks of the calving period. This makes husbandry practices such as dehorning, vaccination and weaning easier to manage and also results in a more even batch of male calves to sell at the end of the year.

Once pregnancy is positively diagnosed, heifers are managed so that they calve at a body condition score of 3. They remain separate from the rest of the herd until they produce their third calf, which enables Martin to adjust management practices where necessary to ensure the heifers remain between BCS 2.5 to 3.

Heifers require a higher-quality ration compared to mature cows because they are growing as well as producing a calf. The aim should be a steady rate of liveweight gain throughout pregnancy up to the last two months. Maternal weight should be maintained until calving.

Examples of diets which enable these targets to be met are shown in Table 1. They will also maintain gut fill and keep the animals content.

Table 1: Example diets (kg fresh weight per day) for pregnant heifers and cows

	Heifer in mid-pregnancy		Heifer in last two months of pregnancy		Mature cow in last two months of pregnancy	
	Example diet one	Example diet two	Example diet one	Example diet two	Example diet one	Example diet two
Silage*	34	-	32	-	22	-
Straw	1	7.0	2	8	4.5	10
Concentrates**	-	4.5	-	4.2	-	2.4

*Silage composition: 24% DM, 1.6MJ ME/kg DM, 13% CP in DM

**Concentrates should contain 22% CP in DM

For more information, see the BRP manuals [Managing Replacement Heifers for Better Returns](#) and [Feeding Suckler Cows and Calves for Better Returns](#).