

Performance Targets for Small Herds



Small herds often have groups of different ages

Introduction

Benchmarking is as an important tool for small herds as it is for larger herds. However, due to mathematics - many of the standard industry targets don't really make sense for small herds on an annual basis.

This is because no matter how good our stockman-ship is, we cannot lose only $\frac{1}{4}$ or $\frac{1}{2}$ a calf to accident or disease! Also, partly because of chance acting on a small number, we may have many years of achieving 100% of some targets and one year being a very poor percentage.

Table 1: A herd of 6 cows and heifers

Year	Calves Born Alive	KPI – Calves born alive/cows and heifers calved x 100	Target
1	6	100%	95%
2	6	100%	95%
3	5	83.3%	95%
4	6	100%	95%
5	5	83.3%	95%
5 year average	28	93.3%	

As the example above shows in small herds, we cannot get too complacent for years when we are above target and the impact of 2 years of losing 1 calf results in the target not being achieved over a 5 year period.

In this document we discuss Key Performance Indicators (KPIs) outlined in the FAS documents (link to An Introduction to Benchmarking for the Suckler Herd) and suggest some practical ways to apply this to small herds. Please note we have omitted ones which we feel the small herd effect is near neutral to the practical application of the target. This is important as small herds of less than 10 cows make up 23% of the national herd in 2017 (Steven Thompson study).

Table 2: Adjusting Mating/Bulling KPIs for Small Herds

KPI	Calculation	Target	Issue for Small Herds	Practical Resolution
Cow to bull ratio	Cows & heifers put to the bull / bulls used	Mature bull – 30-35 cows Young bull – 10-20 cows max. Rule of thumb 1 cow to each month of young bull's life.	The cost of a bull divided over a small number of cows can be prohibitive.	In the Crofting Counties use the Cattle Improvement Scheme (see FAS link). This also can allow collaboration to have a native bull for some heifers/cows and a continental bull for others if work in collaboration with another township.
Barren cows %	Cows & heifers barren / number bulled x 100	<5%	Unless your herd is more than 20 - less than 5% equates to less than 1 cow	Small herds may often have several years of 0% at this target. To prevent 1 barren cow in a 5 cow herd to indicate a problem it is good to consider this over a 3 – 5 year average.



It's important that you select targets that make sense for your situation

Table 3: Adjusting Calving KPIs for Small Herds

KPI	Calculation	Target	Issue for Small Herds	Practical Resolution
Calves born alive per 100 cows bulled	Calves born alive / cows & heifers bulled x 100	95%	Unless your herd of cows is more than 20 then the 5% is less than 1 calf.	Small herds may often have several years of 100% for this target. To prevent 1 calf death indicating a serious problem in a 5 cow herd better to consider this over 3 – 5 year average.
Cows with calving interval below 370 days	Cows with calving interval below 370 days / cows put to the bull x 100	>90%	This target is not very practical in herds with 10 or less cows	A better application would be to monitor each cows calving interval as an individual. For greater accuracy this should be monitored over several years to ensure individuals intervals are not increasing.
Calves reared	Total calves reared / cows & heifers bulled x 100	>94%	This target not very practical in herds with 17 or less cows.	A better application would be to monitor each cows calving success as an individual. Any averages would need to be taken over 3 to 5 years.
Calf mortality (birth – weaning)	(Calves born alive – calves weaned) / cows & heifers put to the bull x 100	>3%	Not a very practical target in a herd of 34 cows or less	A better application would be to monitor each cow's calf mortality figures as an individual. Consider the reasons for the calf loss and target any factors or cull out cows with poor milk etc. Any averages would need to be taken over 3 to 5 years.

Table 4: Adjusting Weaning and Growing KPIs for Small Herds

KPI	Calculation	Target	Issue for Small Herds	Practical Resolution
Calves weaned per 100 cows and heifers put to bull.	Calves weaned / cows & heifers put to the bull x 100	>94%	Not a very practical target in a herd of 17 cows or less.	<p>A better application would be to monitor each cow's weaning performance as an individual.</p> <p>Any averages would need to be taken over 3 to 5 years.</p> <p>A further interesting step would be to compare calf weaning weight against mothers weight.</p>

Set your own targets

The beauty of small herds is that we can treat every heifer and cow as an individual when it comes to looking at KPIs to ensure we are getting the performance we require from them. Small herds often have target beating KPIs, this is due to many factors but must be partly driven by the fact that it is harder for a poor performing cow to get missed in the crowd.

In small herds it is equally instructive to look at the life-time performance individual animals as it is to look at herd averages on a purely annual basis.

Due to the nature of small herds - I would suggest that other KPIs should be considered

- Cow temperament – Small herds are often managed along with other jobs the cows need to be docile and easy to handle.
- Cows ability to hold condition well – in small herds you are restricted in how many management groups you can have cows need to be suited to the condition and hold condition well.
- Cows ability to rear a calf each year – the cost of a barren cow is disproportionate in a small herd.
- Easy calving – bull and cow selection should reduce calving problems and increase likelihood of having a cow rear a calf each year.
- Low maintenance – cow selection can reduce the amount of problems that require routine work or vet input i.e. feet problems, udder problems.