

# How does your herd perform?

*Using performance indicators for increased returns*



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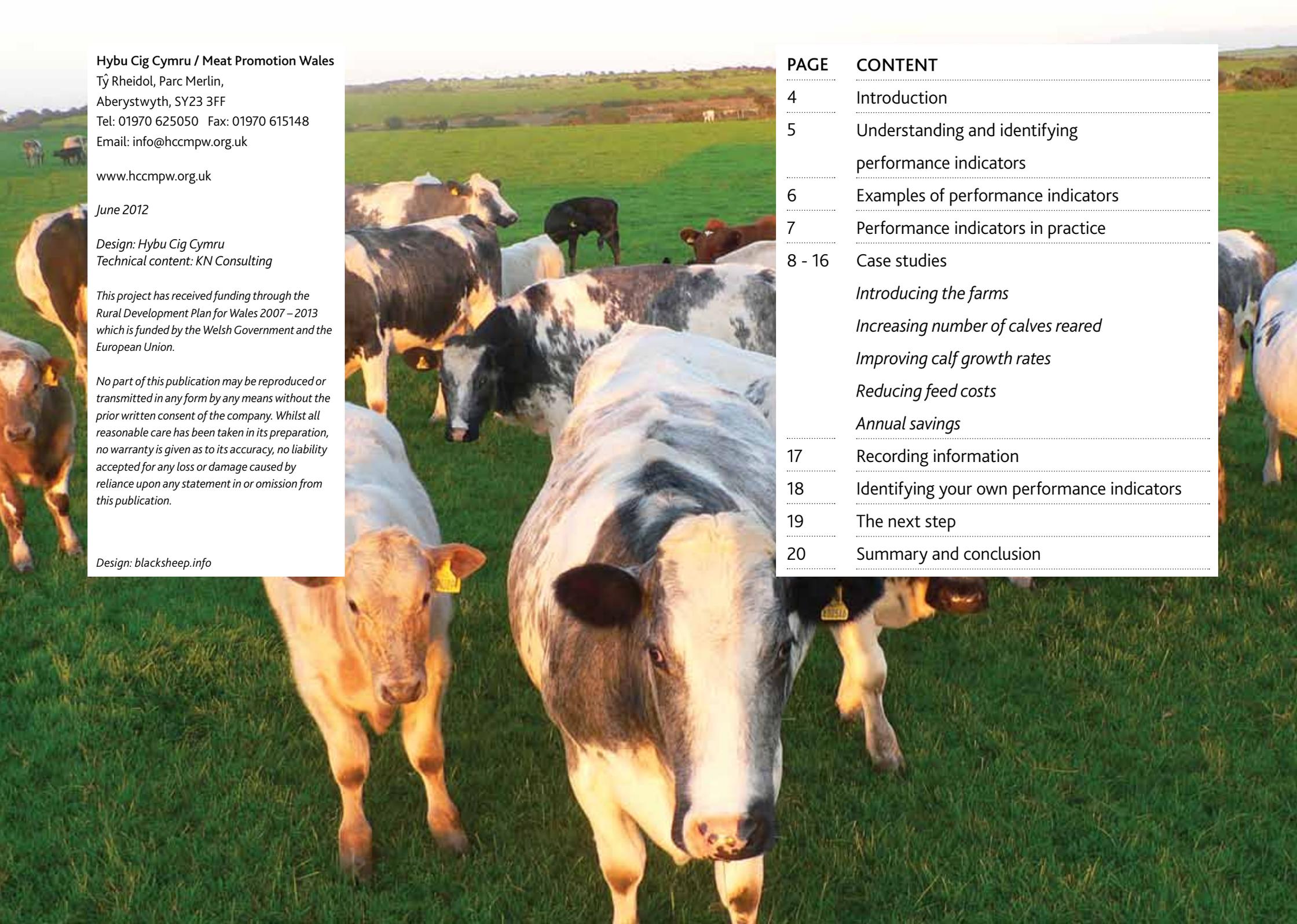
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## INTRODUCTION

Beef producers have had to adapt to a changing business environment over the last 10 years. During this time there have been improvements in meeting market requirements and also business efficiencies. Knowing what factors drive profitable production is the key to continuing this process.

Performance indicators are one of the most useful tools businesses have available for this purpose. Their use helps to identify problem areas and drive improvement. They can be used to set targets and then monitor performance.

This booklet will demonstrate through practical examples how performance indicators can be used to address three common

issues facing beef producers in Wales;

- \* *increasing the number of calves reared,*
- \* *improving calf growth rates, and*
- \* *reducing feed costs.*

While this booklet uses three examples there are many different indicators that can be used on the farm and these are explored in greater detail towards the end of this booklet.



## UNDERSTANDING AND IDENTIFYING PERFORMANCE INDICATORS

In the last decade there has been increased pressure on herd profitability due to fluctuations in market returns and escalating costs. This means that beef producers need to look at reducing costs while maximising returns.

Improving herd profitability starts with considering current performance. The first step is to consider the most recent performance of the business and answer a few questions;

- \* *Is the herd making money?*
- \* *Are improvements being made each year?*
- \* *Is there a way costs can be reduced to maximise returns?*
- \* *Can the physical performance of the herd be improved to increase returns?*

Introducing performance indicators into a farming business can help provide answers to these questions.

The key to making performance indicators work for a business is to identify factors which have a direct impact on herd profitability.

### Performance indicators should be;

- \* Measureable
- \* Practical
- \* Comparable
- \* Important to the business

## EXAMPLES OF PERFORMANCE INDICATORS

Performance indicators can consist of financial, physical or health measures

### Examples include;

- \* Calf growth rate
- \* Concentrate use per cow
- \* Concentrate intake per calf
- \* Length of herd calving period
- \* Number of barren cows
- \* Herd replacement rates
- \* Herd labour requirements
- \* Length of winter housing period
- \* Machinery costs per cow



Wherever possible the same performance indicators should be monitored each year. This will help keep track of progress over time.

Increasing profitability underpins the identification of performance indicators. However, there are other factors that may be of interest to the business and these could include reducing family labour requirements or reducing risk to market changes.

## PERFORMANCE INDICATORS IN PRACTICE

Performance indicators can be seen as a tool for identifying the strengths and weaknesses of the business. By doing this, efforts can be concentrated on areas of improvement for the herd.

*Putting performance indicators into practice can be seen as a **five step** process.*

### Step 1:

#### Identifying the issue

- \* *Where can improvements be made?*
- \* *Are there areas of specific concern?*

### Step 2:

#### Decide what to measure and how to collect the information

- \* *Where could improvements be made?*
- \* *Can and information be collected, and if so, how?*

### Step 3:

#### Consider the outcome of the measurements

- \* *What does the information collected show?*
- \* *How does this compare with other similar businesses?*

### Step 4:

#### Act on the information collected

- \* *Set achievable targets and then implement changes within the business.*

### Step 5:

#### Monitor the results

- \* *Are the changes working?*
- \* *Can further improvements be made?*

*Using performance indicators should be seen as a continuous process rather than a one-off event.*

*To illustrate performance indicators two example herds have been used which have undergone the process of identifying, monitoring and addressing management changes through examining key elements of herd performance.*

## INTRODUCING THE FINISHING HERD

- \* 410 acre lowland farm
- \* 115 cow suckler herd
- \* Spring calving
- \* Heifer replacements are purchased
- \* All cattle are housed in October
- \* All calves finished on farm
- \* A further 80 calves are purchased each spring for finishing
- \* Four different bulls used
- \* Calving period of 10 weeks
- \* Barren rate of nearly 10%



## INTRODUCING THE SUCKLER HERD

- \* 220 acre upland farm
- \* 60 suckler cows
- \* Spring calving
- \* All replacements are homebred
- \* All cattle are housed in late October/ early November
- \* Calves sold as stores at 7 months of age
- \* Two stock bulls: one maternal breed and one terminal sire breed
- \* Calving period of 15 weeks
- \* Barren rate of 3%



## INCREASING NUMBER OF CALVES REARED

*Tackling the health status of the herd*

### 1. Issue

Over the last couple of years it was felt that there had been an increase in the number of barren cows; with abortions also occurring.

### 2. Measure

During the last calving season 9% of the cows failed to conceive and a further 11 cows (9%) aborted.

### 3. Outcome

The performance of the herd over the last three years showed that both the number of barren cows and abortions had doubled.

### 4. Action

A discussion with the farm's vet led to the testing of the herd to identify its health status. Bovine Viral Diarrhoea (BVD) was diagnosed through testing of the calf crop. Further testing of breeding stock was carried out (including stock bulls).

### 5. Result

Eleven persistently infected animals were immediately isolated and following confirmation through further testing these animals were culled from the herd. A biosecurity plan was put in place with veterinary advice and a programme of vaccination introduced.

*Tackling BVD in the herd was expected to lead to an increase of 12 calves reared and an increased income of £7,150.*

## INCREASING NUMBER OF CALVES REARED

*Improving herd health status*

### 1. Issue

Herd health was good. It was felt, however, that there were some issues surrounding the number of stillborn calves.

### 2. Measure

A consistent herd pregnancy rate of 96 to 100% was being achieved; however examination of calving records showed that approximately 5% of calves were stillborn with some calves also suffering from poor vigour at birth.

### 3. Outcome

During the next calving period records were kept on every calf. There was no consistent pattern observed; however, it was noted that certain calves lacked vigour and their growth rates also suffered.

### 4. Action

Vet advice was sought and the herd was blood tested to identify any underlying disease or deficiencies. Results of the blood tests showed no disease issues although some animals were deficient in iodine.

### 5. Result

With further veterinary advice supplementation was carried out leading to a halving of the number of stillborn calves the following season.

*Reducing the number of stillborn calves and improved calf vigour at birth increased income by £2,140.*

## IMPROVING CALF GROWTH RATE

*Using performance recorded bulls*

### 1. Issue

Variable finishing dates and finish weights had been observed making batching of cattle for sale difficult.

### 2. Measure

By analysing BCMS information of birth and selling dates together with data of sale weights it was possible to compare the performance of the bulls used within the herd.

### 3. Outcome

Following analysis of the growth rates it was observed that there was considerable variation between the performance of the progeny from each bull.

### 4. Action

Information was sought on the use of EBV's and when purchasing further bulls those with high breeding values for growth rate and carcase attributes were selected. When sourcing calves for purchase as stores, discussions with the vendors included whether they had been sired by high genetic merit bulls.

### 5. Result

Uniformity within the calves increased and early results suggest a more even finishing of cattle.

*Improved calf growth rate through using performance recorded bulls improved returns by over £2,700.*

## IMPROVING CALF GROWTH RATE

*Reducing the calving period*

### 1. Issue

Upon selection of calves for either sale or retention for breeding a considerable range of liveweights were observed.

### 2. Measure

The average weight of calves at the end of October was 238kg; however, the calves born at the beginning of the calving period weighed almost 60kg more than those born at the end of the period.

### 3. Outcome

A range of factors that could influence the length of calving were identified. With specialist advice, cow condition score at bulling and bull management was seen as key areas for improvement.

### 4. Action

A target cow condition score of 3 was set with over-fat cows identified well in advance of bulling. The management of bulls was also improved with an annual physical examination carried out by a veterinary surgeon and fertility testing undertaken.

### 5. Result

The careful management of the cows pre-bulling led to a reduced calving period. An added benefit of this was that labour and feed costs were reduced.

*Reducing the period of calving from 15 weeks to 11 weeks improved calf sale weight leading to an increased income of £2,380.*

## REDUCING FEED COSTS

*Lowering concentrate usage*

### 1. Issue

Increasing feed costs led to a review of the amount of purchased cereals that were required to finish cattle over the winter period.

### 2. Measure

Records of the amount of feed given to different groups meant that analysis of historic feeding levels could take place.

### 3. Outcome

Feed levels over the winter period were estimated as an average of 3kg of supplementary feed per head per day.

### 4. Action

In order to maintain liveweight gains an emphasis was placed on maximising silage quality. Silage testing was carried out and target values set for protein and ME levels. Advice was also obtained that following testing silage could be better targeted, with the higher quality silages used within the finishing system and lower quality bulky material targeted at in-calf cows.

### 5. Result

Ensuring optimum cutting and appropriate use of additives during silage making reduced the amount of supplementary feed required by 90kg without any reduction in liveweight gain or days to finish.

*Silage analysis and a subsequent reduction in feed use led to savings of £1,190.*

## REDUCING FEED COSTS

*Using a winter forage crop*

### 1. Issue

Higher costs associated with silage production led to a review of the feeding of replacement heifers over the winter period.

### 2. Measure

Replacement heifers were traditionally housed over the winter period on ad-lib silage from November through to mid-April. A record had been kept of the amount of silage consumed and straw used.

### 3. Outcome

Full analysis of the traditional method of wintering replacements showed a cost of over £60 per heifer calf.

### 4. Action

A program of reseeded provided an opportunity to introduce a forage crop to act as a 'break crop' before being re-sown back to a grass ley. A hybrid Rape/Kale crop was selected due to its winter hardiness. The crop was utilised from early November through to early February.

### 5. Result

Using an area of deferred grazing and only 40 bales of silage meant that winter costs were reduced to only £25 per heifer.

*The introduction of a forage crop led to savings of £1,080.*

## ANNUAL SAVINGS FROM USING PERFORMANCE INDICATORS

From the examples used in the previous pages it can be seen that the following savings were made through the use of performance indicators.

### Finishing herd

\* Reducing calf losses  
= £62/cow/year

\* Increasing calf growth rate  
= £23/cow/year

\* Reducing finishing costs  
= £10/cow/year

**TOTAL SAVINGS**  
= £95/cow/year



### Suckler herd

\* Improving calf survival  
= £35/cow/year

\* Increasing calf growth rate  
pre-weaning = £40/cow/year

\* Reducing heifer wintering costs  
= £10/cow/year

**TOTAL SAVINGS**  
= £85/cow/year



## RECORDING INFORMATION

Making correct decisions relies on having the most up-to-date and relevant information. It is also important to set time aside for planning ahead. However, recording the information needn't be tedious or time consuming.

\* Save time by ensuring that all relevant invoices and output records that will be used are kept together.  
\* Make notes while interpreting the results so that in 6 months time you understand what was originally calculated and meant.

### Quick tips

\* Only record / keep records that will be important to the business.

There are many different ways of recording herd performance, all of which have their own advantages and disadvantages.

	ADVANTAGES	DISADVANTAGES
Pen & paper	<ul style="list-style-type: none"> <li>* Cheap</li> <li>* Flexible</li> <li>* Simple</li> </ul>	<ul style="list-style-type: none"> <li>* Can be time consuming</li> <li>* Need specific areas for record storage</li> <li>* Analysis needs to be carried out manually</li> </ul>
Computer programs	<ul style="list-style-type: none"> <li>* Easily legible</li> <li>* Flexible</li> <li>* Easy to set up simple analysis options</li> </ul>	<ul style="list-style-type: none"> <li>* Requires some level of computer skills</li> <li>* Calculations need to be set up manually</li> </ul>
Farm management software	<ul style="list-style-type: none"> <li>* Can be integrated with Electronic identification / legislative requirements</li> <li>* Can perform difficult calculations quickly</li> </ul>	<ul style="list-style-type: none"> <li>* Requires some technical knowledge of computers</li> <li>* Higher cost</li> </ul>

Collecting the information needn't be difficult. Many use a notebook for recording information 'in the field' whilst others are using technology such as hand-held readers or smartphones.

## IDENTIFYING YOUR OWN PERFORMANCE INDICATORS

Use this page to identify areas that could be measured within your own beef enterprise.

What area of the farm business could be improved?

1

2

3

What measurements are needed to monitor physical or financial performance?

1

2

3

What are the targets for improvement?

1

2

3

What changes could be made to meet the targets. Where could the best advice be sought?

1

2

3

## THE NEXT STEP

Performance indicators can provide useful information about an individual farming business. Once the data has been collected over a period of two or three years it is easier to see if the beef enterprise is moving in the right directions.

It is important to set achievable targets and once these are in place, monitor the results to see if the targets have been achieved. Further improvements can be made through comparisons with other similar systems.

In practice, it is easy to informally compare the performance of the herd through discussions with other producers. However, it is well worth engaging in more formal groups where there is time to address specific issues and discuss problems.

The process of benchmarking will help compare the performance of the business with other similar enterprises and identify areas for improvement.



## SUMMARY

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\* To be successful and profitable most enterprises need to have the following:

- *High physical and technical performance*
- *Control over costs*
- *Maximum returns from the market place*

\* Only by considering the individual enterprise costs and then looking at its strengths and weaknesses can improvements in herd profitability be made.

\* This booklet has shown that performance indicators can be used within beef enterprises to make improvements and monitor progress in specific areas.

## CONCLUSION

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Performance indicators provide the opportunity to consider an enterprise's performance. They demonstrate where improvements can be made and how an individual business compares with others.

Whilst analysing the performance of the beef herd can seem a difficult and time-consuming task, performance indicators are in fact a simple way of identifying opportunities to improve the enterprise.

*For day-to-day management, performance indicators can;*

- \* *Increase profitability*
- \* *Identify key business drivers*
- \* *Set targets*
- \* *Improve working practices*

*Further information on HCC's activities and other relevant publications can be found at [www.hccmpw.org.uk](http://www.hccmpw.org.uk)*