



*"Using the Allflex SenseHub system has enabled us to make significant improvements to heifer fertility, ensuring a consistent and reliable supply of replacements for the herd's lower yielders and older animals."*

Philippa MacTaggart, Dairy Manager at WP Callander and Co's Crofthead Farm

# Allflex Heat Detection Technology Improves Heifer Fertility Scores on Crofthead Farm

## BACKGROUND

WP Callander and Co consists of two dairy herds totalling 1500 cows. At the business' main Crofthead Farm near Crocketford, Dairy Manager Philippa MacTaggart is responsible for the day-to-day management of 1100 milking cows plus the herd's followers and youngstock.

## CHALLENGES

Over the past four years, Philippa's primary objective has shifted from producing female calves for herd expansion to ensuring there's a consistent supply of good quality replacement heifers.

As part of that, the farm moved its heifers from offsite to the farm's 'dome shed'. "It made sense to bring the heifers to the main farm so that I could keep a closer eye on their fertility," Philippa continues. "It not only saves me time, but also means I can be more accurate and consistent in terms of when each animal is inseminated."

Additionally, "I was aware that the added burden of having the heifers onsite could divert my attention away from the milking herd, so I wanted to find a heat detection system which would allow me to limit the amount of time I'd need to spend with the heifers without compromising their performance."

## AT A GLANCE

**Company:** WP Callander and Co's Crofthead Farm  
**Location:** Lincolnshire: Crocketford, Scotland  
**Herd size:** 1100 milking cows plus followers and young stock

### Challenges

- Increase insemination rate
- Improve heat detection accuracy
- Reduce costs and labor involved in artificial insemination (AI)
- Decrease the calving age

### System

- Allflex SenseHub™ system with eSense™ Flex ear tags

### Benefits

- Insemination rate jumped from 30%, to an average of 40% and a peak of 60%
- 97.6% heat detection rate achieved, at a savings of £9-£15 per animal
- Average of 1.7 straws vs. 2+ needed per heifer pregnancy
- Semen usage has declined by 15%
- Heifer age at calving down from 28 months to 26

## SOLUTION

In January 2019, Philippa's Semex sales representative recommended the Allflex SenseHub system for detecting heats and providing early warning of behavioral anomalies that could be indicative of underlying health or welfare issues. The farm purchased 90 eSense Flex ear tags, which are now attached to each heifer as soon as she enters the dome shed.

"I opted for the eSense Flex ear tags for their convenience of fitting and because I was concerned the alternative cSense neck collars might get caught on our older style locking yokes," Philippa explains. "At first, I was a little sceptical about the tags' ability to identify heats early enough and was challenging their ability to spot heats in animals I knew were silent bullers. But I was wrong to question the system's accuracy as it has picked up on every single heat event and I'm now completely confident in its ability."

## BENEFITS

Sexed semen is now used for the first two inseminations in heifers, with any subsequent services reverting to beef semen: "My primary focus is to ensure we're getting five or six heifers pregnant with female calves each week. Compared to life without SenseHub, we're moving heifers in and out of the dome shed far more quickly than I imagined," Philippa says.

"Our insemination rate jumped from 30% to 40% within a couple of weeks of the first ear tags going in, and we're turning heifers around in eight to nine weeks compared to three to four months. As a result, the average age of heifers at calving has been reduced by two months, from 28 months to 26 months. And, because I've got total faith in the system's accuracy, I'm spending less time with the heifers which leaves me free to concentrate on maintaining the milking herd's fertility."

Semen usage has also declined by 15%, enabling greater selectiveness when choosing which bulls to use. "Instead of using two or more straws to get a heifer pregnant we're now using an average of 1.7 straws, and we're regularly seeing 100% positive PD results when testing heifers. That gives me the confidence to invest in sexed semen from better bulls as I know we're more likely to make each straw count."

In Philippa's opinion, the secret to improved conception rates isn't just about spotting heats accurately, but also ensuring inseminations are carried out at the optimum time. "In the past, I was only AI-ing at morning and night. Now I can refer to the SenseHub AI timing report on the computer or my phone to see when each heifer's heat started and serve her at the optimum time.

"I AI cows in the milking herd at 14 hours into a heat event to let them settle down a little from their peak activity, but serve heifers slightly earlier at 12 hours to maximise conception rates," Philippa further explains. "My first job each morning is to check the diary and to log into SenseHub to see which heifers need my attention so that I can organise my day accordingly. It's a much simpler, more straightforward way of working and certainly more reliable than using scratch markers to spot heifer heats.

"As well as making my time easier to manage, the Allflex ear tags have also enabled us to stop using ovulation synchronisation treatments on silent or non-oestrus animals. We're saving £9-£15 per animal and still achieving a heat detection rate of 97.6%. As a result, our insemination rate has risen from just over 30% before the ear tags were introduced, to an average of 40% and a peak of 60%.

"It's this ability to make informed management decisions which enables us to ensure each heifer is maximising her contribution to the herd by producing a dairy heifer instead of a beef calf as quickly as possible. It also allows us to be more selective when it comes to culling cows as we've got a readily available supply of heifers to replace any cows which aren't performing, or which are costing too much in veterinary attention."



### About Allflex Livestock Intelligence

[www.allflex.global](http://www.allflex.global) | [info@scrdairy.com](mailto:info@scrdairy.com)

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