



Integrated parasite plan for First Milk Regenerative Pioneer Farm

As the inaugural Regenerative Pioneer Farm, Barry Connolly is now working with vet specialist and project partner Rob Howe to implement an integrated parasite plan. Rob describes the work he's doing with Barry on Dykesfield Farm:

To implement a new, integrated parasite plan we needed to assess the farm's current biodiversity through a survey of dung beetles and other fauna. Dung beetles are the ideal indicative species of the wider ecosystem, through their positive impact on many fauna and flora.

We surveyed 10 heifer pats on a warm, sunny day in a peaty field. In just 45 minutes, we found 20 dung beetles of six different species.



Around 14 other species of beneficial organisms were also found, and we saw 20 different bird species, all insect predators, with significant bird action seen on the pats.

These are impressive results due to several factors. The cows on Dykesfield Farm graze outdoors for large parts of the year on mixed

species swards in fields with varying soil types. This offers a variety of habitat with good food availability. The farm is also surrounded by other livestock farms and a SSSI, providing multiple dung sources. Parasitic treatments are low, with no parasiticides used in adult cows and garlic licks replacing fly treatments in the youngstock.

The risk factors identified were the blanket use of wormers in youngstock, the lack of fresh dung when cows are housed and the potential impact of neighbour activity.

The plan for Dykesfield Farm is to implement a few interim measures this season before undertaking more widespread changes next year. These include vaccinating against lungworm and monitoring animal health closely with regular worm egg counts post turnout.

Barry aims to increase the condensed tannin-containing plant species (which can provide a natural anthelmintic effect) within the sward and hedgerows, building on existing levels with species such as chicory. In addition to the current rotational grazing systems, Barry is looking at options around silage aftermath

Dykesfield Farm is already a highly productive farm teeming with life and I'm looking forward to seeing how these changes make it even better.

Reducing TB risk

As well as being a farm vet in Derbyshire, Sarah Tomlinson is a veterinary consultant with Kingshay and the technical director for the TB Advisory Service. She also sits on the Defra bTB Partnership.



Bovine TB is the most devastating disease impacting our cattle herds today.

Not because of the direct animal health and welfare impacts - as most reactors are otherwise fit and healthy - but because of the massive impact a breakdown has on a farm business and the knock-on effects on animal and farmer health and welfare.

TB has many risk pathways out of our control, such as what the neighbour buys in or the area of the country in which we farm. But TB is an infectious disease and just like Johne's, BVD, abortion, lameness and calf pneumonia, it also has ways onto the farm we can control.

Through the TB Advisory Service (TBAS) in England (and Cymorth TB in Wales), vets help farmers assess the ways TB could arrive on farm and how it could recycle once it's there. They advise how to reduce, if not eliminate, these risks through simple, cost-effective, evidence-based interventions.

A TB Advisory Service free visit discusses six risk areas:

- 1) Herd's TB history
- 2) Local situation
- 3) Incoming livestock

- 4) Livestock at pasture
 - 5) Livestock in the yard
 - 6) Business impact
- The evidence behind each area is explained, finishing with four agreed recommendations.

Skin test

To appreciate the risk posed by cows, we must understand the characteristics of the skin test. The skin test is very accurate at identifying truly infected animals. It has a **specificity** of 99.98%, meaning you can be 99.98% certain a reactor is infected with TB. At farm level this is important due to the consequent herd movement restrictions when a reactor is identified, and the requirement for the animal to be slaughtered.

In contrast, a test's **sensitivity** is the probability of correctly identifying an infected animal. On a good day, with the test carried out correctly, this is about 80%. This means 1 in 5 infected animals that should test positive actually test negative.

Whether TB lesions are subsequently identified at slaughter or not, we must trust the skin test. It is no different to subclinical mastitis. When milk records show a high cell count, you trust the test and treat the cow accordingly. Untreated, you know the infection would progress to mastitis and she could be infecting others.



What does this mean on farm?

The more recently a herd has had a TB breakdown the greater the chance of having future breakdowns. Even though a farm is officially TB free it might not be infection free. Your vet and/or TBAS adviser can talk to you about how to identify "at risk" animals and manage them differently to limit the spread of TB within a herd, just as you would with Johne's disease.

For incoming stock, the longer a herd has been testing clear, the more you can trust the latest test is genuinely clear. Just as you check the BVD, Johne's, Leptospirosis status and testing history before buying cattle, ask about TB too.

What about badgers?

Most badger and cattle interactions happen indirectly, with nose-to-nose contact very rare. We do know badgers share the same environment as cattle though, ie. water sources and feed. Badgers especially like starchy food such as maize silage and cattle cake. In certain areas of the UK, we have endemically infected badger populations. Dead badger surveys have shown in some areas 1 in 4 badgers can test positive to bTB, shedding the bacteria in their urine, faeces, spit and pus from wounds. In these areas limiting badger and cattle contact will reduce your risk of a TB breakdown caused by badgers. Badgers can squeeze through gaps of just 7.5cm so protect feed stores well. TB can also survive in water for up to 60 days, so raise water troughs to a height of 1m or use badger-proof ones. Thankfully in Scotland, and certain areas of England and Wales, we have no reason to suspect the badger populations are infected. In these areas we need to still engage in reducing cattle/badger interactions to keep the badger population TB free, as TB is much harder to manage when the badgers are infected.

Following simple evidence-based measures on farm can reduce your risk and length of a TB breakdown. Feedback from vets and farmers is telling us being part of the TB Advisory Service is rewarding and instead of waiting for the Government to do something, they feel they had taken back some control of their own TB risk.



FREE TB Advice

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Grazing workshops kick off with a great member turnout

In early June, Pasturetec was involved in the first grazing workshops we're running for members. Managing Director Rob Massey reports.

The first two farms hosting workshops were Stafflar Farm near Kilmarnock and Cotehill Farm in Cumbria. On Stafflar farm, Tom Steel milks 250 cows, with all-year-round calving and grazing on a paddock system, using existing field boundaries to allocate grass. At Cotehill, Andrew and Margaret Smith milk 550 cows, with spring block calving and a paddock grazing system in place. This gave us a range of farming systems, soil types and grazing experience.

Over the two days, one clear message came through. By managing grazing and increasing the percentage of forage in diets, as well as reducing tillage, the environmental and soil health benefits were clear. These farms are also growing more grass, with lower fertiliser use and a reduction in carbon output.

The top workshop take-home tips:

- Remember to graze and rest, following the 'rule of three' for ryegrass. Graze at 2.5 to 3 leaf stage, for no more than three days, then rest for three weeks. This helps ensure cows eat grass at its optimum nutritional stage, and then rests the ground allowing grass to regrow, the root structure to rebuild nutrients and gives the soil time to recover. Grass grows grass!
- Investing in sufficient electric fencing to split fields to strip graze, or better still into paddocks, delivers clear benefits by using grass better, lowering feed costs and improving



First Milk members at Stafflar Farm



Justin Rees talking about solar energisers

nutritional intakes to drive yield from forage. It also saves time not having to move every reel and post each time cows are moved, creating a system that's easier to manage.

- Build your paddocks/strip grazing around water access as this is often the limiting factor to implementing a grazing plan. Consider adding more water troughs and fast flow water valves, such as the Apex Xraflow valves. Increasing water availability helps increase forage intakes.
- Solar energisers can be a time saver where mains power is not an option and prevents reliance on heavy batteries. Like a car alternator, the solar panel keeps the battery topped up. They can provide power for up to three weeks with no daylight at all and batteries can last for up to three years.
- If you strip graze, use a back fence to prevent cows eating the regrowth to allow the ground time to recover.
- When moving from set stocking, start by keeping it simple. Split your first field, allocate grass and then build from that. Semi-permanent paddock systems are quicker and easier for moving cows around, but strip grazing is a good start to improve allocation, rest the soil post grazing and drive production from forage.

For a free farm visit, or call to talk through your grazing system, contact the Pasturetec team office on 01283 387290 or visit www.pasturetec.co.uk

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First Milk member putting theory into practice

Alistair Cumming at Cowend, Stranraer, has always rotationally grazed, but is now taking his grassland management to a new level. After attending a grazing workshop and completing his 2022 Regenerative Farming Plan, Alistair is now strip grazing in tighter groups which is closer to what some call mob grazing. He shares the details:

We have around 12 strips on an 11 acre field. Cows have two milkings per strip but if the weather is particularly wet, they have the previous strip too. As we are on a **long rotation of around 28 days** a strip, we use slurry when needed after grazing. The grazing fields are growing faster than those for silage, which have been fertilised, and I've only topped one field because of weeds.

We have already seen some clear benefits. Grazing fields would usually have 2 cwt (0.1 tonne) of nitrogen fertiliser.

Since strip grazing, they haven't received any yet grown more grass. We usually graze 70 cows through the summer but this has increased to 80 and I think we could potentially graze 90. Our milk protein is sitting at 3.5%, which is high for us at this time of year. After measuring the protein in our grass, we've reduced our dairy cake content to 16%.

We've already invested in additional electric fence posts but looking ahead we need more tracks as it can be messy when it rains. After a horribly wet night we woke to a dirty bog of a strip. The cows had trampled the grass and it resembled a slurry lagoon! After worrying how it would ever recover, it now has more grass than any other strip.

To sum up higher density grazing overall, I'd say it's fantastic – it just works!

Grazing workshop in action

- Rotational grazing based on 1 day grazed and 28 days rest
- Less than 1 acre per day allocated to 80 cows – higher animal impact but longer rest
- Growth rates faster than fertilised silage fields
- Grass and milk protein up, allowing for a drop in dairy cake protein
- Electric fencing key, more tracks required
- Poached land recovered really well as cows only there for 1 day

Non-Executive director role

Shelagh Hancock has been appointed as an independent non-executive director for Carr's, the agricultural and engineering group, and will take up the position in September this year.

Carr's is an international leader in manufacturing value-added products. It has market-leading brands and robust market positions in agriculture and engineering, including its agricultural supplies division, Carr's Billington.

Shelagh will undertake this role alongside her position as Chief Executive of First Milk as is common practice with serving executives. She remains fully committed to First Milk and any salary associated with this new role will be donated to First Milk's current charity, Macmillan Cancer Support.



Annual Member survey

Each year we conduct a member survey to gain greater understanding of your thoughts and opinions on First Milk. The 2022 survey will be carried out during July.

As previously, we are using a telephone survey, the easiest and most convenient way to access members across the broad geographical spread of our milk field.

If you receive a call from research company Marketing Means, please be assured it is genuine. The survey takes between 5-10 minutes and your responses are anonymous.

We thank you in advance for taking part.



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