WHAT'S NEW @ NOVEL WAYS?

Electronic manufacturing and development news
April 2014

www.novel.co.nz

Batt-Latch update

- Batt-Latch a proven time-saver
- Batt-Latch developments
- Text your Batt-Latch from anywhere

Other features

- The GrassMaster Pro, ForageLab developments
- AgPlanet Agribusiness Index
- JustCool and SafeGraze monitor alarm

The Batt-Latch - a Time Saver!

Our Batt-Latch timer is increasingly popular (NZ and overseas), and during the last year we have sourced rugged components to make them even more reliable. Now with the latest optional extra, you can control the timer with your mobile. Great for late milkings!

Over the last few years, the Batt-Latch (designed and manufactured by Novel Ways in Hamilton), has been making life a lot more pleasant for many dairy and drystock farmers all through New Zealand.



The Batt-Latch gate timer is usually used with the supplied portable spring gate kit to hold the herd back in a paddock, raceway or feedpad.

At your preset time the temporary gate's handle is released by the timer's gearbox, and the spring contracts onto the opposite post, alerting the stock that it's time to go.

Making the first timers and showing them at National Fieldays almost 20 years ago was the start of a huge learning curve for the business. Farmers were moderately interested in using the Batt-Latch for break-feeding over winter, which was the main job it was designed for. Soon dairy farmers tried the timers with their milking herd, and in most cases the cows walked happily to the dairy. More recently, all-grass dairy farming is morphing into larger grass-based systems with supplements, usually placed near the dairy on feedpads. Grass is still the main feed.

Payback period for one Batt-Latch timer is estimated to be as quick as just 15-16 days.

The Batt-Latch TXT/Cellular Remote

We are excited to report that a **cellular modem option** will be available for the Batt-Latch by June 2014 (Site M30 Fieldays).

Using an internal aerial and modem module, each unit fitted with the add-on will have a cellphone address on an internal Vodafone SIM card. You'll be able to text it from any cellphone and ask it to release immediately, check its status, delay or cancel the next release time, or set new release times. Great for the second herd, adjustable milking times, extreme weather events.

Any cellphone on the farm can be used as the remote control for one or multiple Batt-Latch timers if needed. Each timer will have a unique phone number. The Batt-Latch will respond to messages by texting back. For farms without good cell coverage, consider the Batt-Latch Boss (Radio Frequency) system - see our website for details of this option.



We'll upgrade your newer version Batt-Latch with a cellular modem, a \$20 SIM card and internal aerial, operation manual, for \$295 + GST, 1 yr warranty (or new Batt-Latch timer kit with modem, \$690 + GST).

Call Novel Ways today!

Freephone 0800 003 003 Website www.novel.co.nz

Save \$20,000 a year

Many pioneering farmers changed their farm practices to use their Batt-Latch timers more effectively.

Cows can be released from the paddock at 2am or earlier, to a feedpad preloaded the night before. They may **pass under a shock cord gate** at the feedpad entrance, which is held up in the middle by another timer. At a time when all of the cows have normally passed through, that gate is released back to the normal horizontal position, holding the cows on the feedpad until milking time if required. The herd can be held up in the race or next paddock gateway after milking by another timer, so they all get to the next paddock or a crop allocation at the same time. All of these clever adaptations, and many more, were fed back to us by farmers and incorporated into the design.

When Novel Ways started asking farmers about the benefits of using the timers, some startling answers were given. Several farmers reported **up to 60% lameness reductions** in their herds, and time-savings of **hundreds of hours** per year. While little documented research has been done on the Batt-Latch, cows being allowed to walk at their own pace down races that may be long (and perhaps in less than perfect condition), saves worker time and wear on hooves. One timer used with a 400 cow herd can save upwards of \$20,000 in costs every year.

Drystock and runoff farms also suit the Batt-Latch timers. The timer can wait for up to two weeks before releasing, so a small set of timers can be used to move drystock every few days, saving big travelling distances to remote runoffs. Remarkably, at least one **drystock farmer** reported to Novel Ways that if bulls and steers are given more frequent unattended pasture breaks by their timers, they put on weight faster and don't damage fences and paddocks as much. Ideal for cell grazing, technograzing.

SafeGraze Energizer Monitor SafeGraze asked us to design a portable cellular monitor for electric fences.

Safegraze Ltd. from Canterbury, has a great idea for а tread-in monitor for electric fences. Waterproof, standalone and robust, the unit designed we monitors the



fence voltage through its clip lead, and texts the people on its list if the voltage drops below a set point. Running entirely from solar energy just like the Batt-Latch does, it carefully looks after its internal battery so the unit will always be ready for use. We'll have a demo unit on our stand at Fieldays (M30).

JustCool Chiller Guard

Another product completed recently for a client, was this warning alarm for dairy platform chillers. If the chiller is left off, or is not running often enough

during a milking, it sounds a buzzer near the staff working area. A polite chirp sounds partway through milking, and а louder one if the chiller is still not going at the end of milking.



Easily installed by an electrician, it can be relocated to another farm by its owner. Pays for itself four times over, the first time it's needed!

See this at Fieldays, Site M30.

Sales enquiries: Ph 0800 JUSTCOOL

Visit us at the National Fieldays 11-14 June 2014

Site M30 Outside Main Pavilion Entrance (Premier Theme Area)

Product developments and key projects

World-leading Pasture Drymatter Instrument

The GrassMaster Pro uses the well-

established capacitance method to estimate drymatter. It is highly portable and easy to use, is not affected by pugged pasture or hills, and can be used in damp conditions.

Grass is the major crop in New Zealand. It underpins our agricultural economy and blankets a large proportion of the landscape. Despite this, there are widely held concerns that the management of pasture, drymatter quality and production could be improved quite easily using new tools.



Since 1996, Novel Ways engineers have been involved in the development of an instrument (the GrassMaster II and Pro) to estimate the drymatter content of pasture.

Using electronic signals, the handheld GrassMaster probe senses the water trapped inside the nearby grass

blades, and uses a software adjustable equation to give a repeatable average of the measurements, quickly taken across the paddock on a walk. The resulting figure is usually given in kilograms of drymatter per hectare (kgDM/Ha).

The rugged and dependable GrassMaster Pro holds the average drymatter figure for up to 200 paddocks, and this very useful information can be read off the screen or downloaded to a computer.

Once the farm walk is completed by any staff member (you can take data from the side of a quad bike too), the GrassMaster information can be used to quickly create a feed wedge graph, total feed available, and a host of other trending data. We now have a new software package that links up with all of the GrassMaster products, called GrassTrack. This software is free for use, and also exports data to Excel spreadsheets.

The drymatter readings are taken by an impartial instrument, so they can be relied on year after year.

Extra profitability on farms can result from:

- using better grass cultivars,
- having less pugging and damage from improved stock and pasture management,
- reducing reliance on supplements,
- using fertilizers carefully,
- improving ME of the grass grown, and
- increasing top-soil depth and quality.

Many of these outcomes rely on initial monitoring of the current situation, and accurately measuring changes and improvements. At RRP \$1,495 + GST, the GrassMaster Pro drymatter instrument should be a highly cost-effective starting point.

The GrassMaster is quite simply the best instrument of its type In the world!

ForageLab Instrument



We have designed this DM% instrument, the ForageLab, to allow farmers to check progress on hay and silage before baling or wrapping, check bought-in feeds, and for agronomists to perform CWD trials quickly. The unit can also be used to check the progress of wood drying, or to dry out soil samples before analysis.

Novel Ways staff will use this instrument to continuously improve the prediction accuracy of the GrassMaster Pro when used on various forages during seasonal changes. The unit can complete a drymatter percentage test on up to 100g of grass within 7 minutes (hay/silage is quicker), and converts quadrat cut data to kgDM/Ha on-screen. Results can be downloaded to a computer.

The prototype will be at National Fieldays in June (Site M30).

Fieldays Special Release (Site M30)

AgPlanet - a website full of valuable content for farmers and all agribusiness professionals



Novel Ways have commissioned a team of web designers to build a website that should profit every farmer in the country by tens of thousands of dollars every year.

Planning has been underway for a website and database holding every single supplier of goods and services to the agribusiness sector in New Zealand. Listed under the categories of Equipment, Supplies, Services, Brands, Companies and Classified ads, no commercial operator will be left out.

The index will hold a lot of new data about the products and services, which will explain how valuable they might be to farmers and users. Farmer feedback will be another important part of the index, this provided in a moderated forum, linked to each product or service being commented on.

At Fieldays in June 2014, the front pages of the website and a limited search will be available to view, and over the next year the site will be built up, after seeking feedback.

There will be android and iPhone access available, so the data can be retrieved from anywhere on the farm.



The Aim of AgPlanet

We intend to develop the AgPlanet website over several years, to be the best source of agribusiness expertise and farming product deals that NZ has ever seen. It will also be very supplier-friendly, to encourage full information content.

When a farmer or user enters the AgPlanet website, they will need to be certain that every product and service available in NZ is available for comparison. Not just *some* brands and services (from those who paid for advertising), but everybody with something to offer the agribusiness sector.

A small annual subscription will allow suppliers to provide extra details and get better responses to their offerings, but we will not stop gathering free content from every supplier we are made aware of. There will be no commission on any sales made through the site either - in fact we will pay for each new contact made with suppliers.



One of the most valuable features of this website will be the ability to search for equipment, say for a dairy farm, with a price restriction, and looking for a fast payback or ROI. Each item might already be vetted by farmers for suitability, with their findings on the site. Once all the data is available, features like this should accelerate the pickup of new technology for farms, and greatly improve productivity.

Anyone will be able to place casual classified adverts on the site as well. We look forward to hearing from you.

www.agplanet.co.nz

The SOURCE

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