

WHAT'S NEW @ NOVEL WAYS?

Electronic manufacturing and development news
Fieldays, June 2012

www.novel.co.nz



Batt-Latch update

- Batt-Latch a proven time-saver
- Batt-Latch developments
- Pay-back times for products outlined

Other features

- The GrassMaster Pro, released 2012
- Introducing AgPlanet, the agribusiness website
- Vat Monitors for DTS

Solar-Powered Profit Generator

It's not the best job on the farm - bringing the herd up for milking on a dusty hot day, or in the early hours of the morning. Thanks to the Batt-Latch, a solar powered portable gate release timer, you really don't have to do it anymore.

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 throughout New Zealand, while export sales are increasing.



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 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.

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 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 thought up by farmers, not the product designers.

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.

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.

Call Novel Ways today!

Recommended Retail Price \$395 + GST

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

Farming product news from the design team

Batt-Latch Product Updates

We have made some small changes to the Batt-Latch case tooling. The **solar panel is protected** with a border strip, internal space is provided for a remote control link, and we are using a **new engineering plastic** for the case, which is now a deep blue, is tougher and longer lasting. Inside, the **battery pack** is now a Nickel Metal Hydride type, easier on the environment and more durable - you should get years of use.

We usually supply an extended spring gate (export length, not usually in NZ stores) with adapted hook fittings either end with each sale. We also have available, a custom shock cord gateway. The shock cord gates make less noise, but are easier to carry.

Batt-Latch BOSS Remote

An option for the Batt-Latch that will appeal to some farmers is a long or short-range remote trigger for gate release. We can modify your Batt-Latch so that it can be triggered on demand from a distance of up to **eight kilometres**. This option could be used to let a **second herd** go at an adjustable time for milking, or **stop pugging** in sudden wet weather.



Part of the design includes the idea of having **one of several gateways** triggered from a transmitter switch panel in a control area like the dairy shed. The radio frequency remote requires no licence and each use is free.

Your new version Batt-Latch modified with receiver and aerial plus one four-channel 5km Boss Transmitter system ready for expansion: \$725 + GST (base Batt-Latch is extra).

Visit us at the
National Fieldays
13-16 June 2012
@Site E52
In front of the Pavilion

Working with DTS

DTS, a subsidiary of NDA in Hamilton, have service agents throughout NZ, and supply and service many chiller and vat installations on dairy farms.

We have been designing and manufacturing temperature monitoring products for DTS for three years, and this year a range of them will be on display at our National Fieldays site, E52.

The range starts with the **DisplayPro**, a solar-powered highly visible vat temperature monitor that is easily installed by the farmer. Specifically designed to meet Fonterra's requirement of a readily available indicator for the tanker driver.



The **TempPro 101** is a mains powered multicoloured LED temperature display unit. Primarily intended for milk vat measurement, but includes several pre-programmed temperature ranges for other uses. It uses different colours as a warning of any temperature issues, like someone forgetting to turn on the chiller during milking.

The **TempPro** unit is similar to the TempPro 101, but uses wireless signals between the sensor and display. Extra aerials can be used to monitor the vat from a house up to 2km away. The transmitter is powered from the agitator so that the unit can warn you if the agitator is not running.

These units were all designed and manufactured at our premises, to DTS specifications.

Other collaborative models with more powerful features are the DataPro and ControlPro, and these units can monitor vat levels, control the sequences of normal operations like vat wash cycles, communicate over the web or by satellite, etc.

DTS staff handle all of these enquiries, and will visit the farm to set everything up.
Freephone DTS on **0800-500-387**

Product developments and key projects

Finding More Profit from Forage Production

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 hand-held 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).

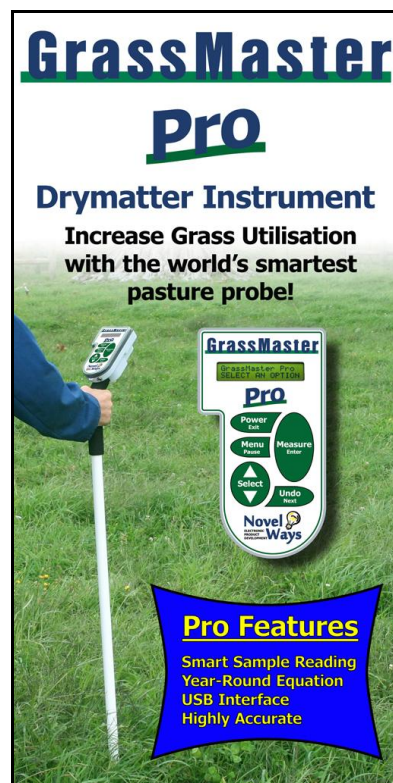
The rugged and dependable GrassMaster Pro holds the average drymatter figure for up to 200 paddocks, and this very useful information can be read off the screen or downloaded to a computer. Novel Ways have linked up with ASL to utilise their FeedFlo software, which is a flexible and powerful feedbudget package.

Once the farm walk is completed by any staff member, the GrassMaster information can be used to quickly create a feed wedge graph, total feed available, and a host of other trending data. The drymatter information is quantified by the instrument, so it can be relied on year after year. Over a period of time, the impact of fertiliser regimes, new grass types, seasonal changes, stocking rates and so on can be seen in the figures, and related directly to farm outputs like meat and milk production.

The earlier model (GMII) was very accurate in grading paddocks on the day, and in the last two years we have been completing an important research project - finding an annual universal equation for our instrument, and ensuring the new data can be gathered quickly on-farm.

The GrassMaster Pro is quite simply the best instrument of its type in the world.

In 2011 and 2012, our design team has been helped by two graduates from The University of Waikato (Steven McCabe and Mark Benseman) in developing what is likely to be the world's most accurate standing forage drymatter (DM) instrument. Using one multivariate equation for the whole year, each paddock's average DM should have an error of less than 200kg, meaning farmers and agronomists can really start to fine-tune production.



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 of \$1,495 + GST (2012), the GrassMaster Pro drymatter instrument should be a highly cost-effective starting point.**

Feedbudget Software

Novel Ways is pleased to be associated with Agricultural Software's FeedFlo - it's a natural partner for our GrassMaster Pro if you are serious about getting the best out of your dairy farm!

visit www.feedflo.co.nz



Fieldays Special Unveiling

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

www.agplanet.co.nz

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 customer uses 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.

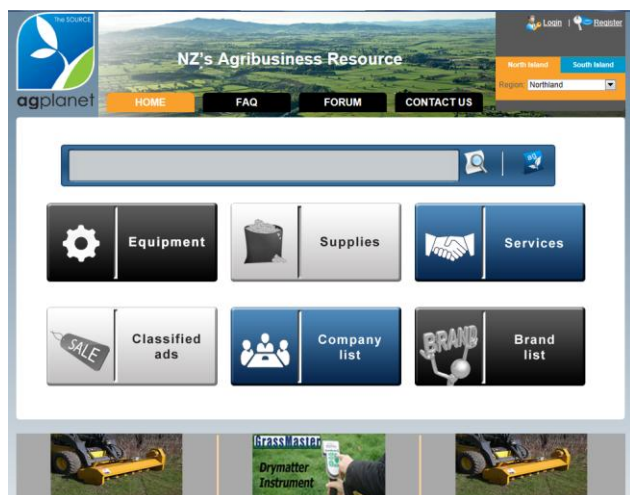
A small annual subscription will allow suppliers to provide extra details and get better responses to their offerings, but we will not stop gathering free content from every supplier we are made aware of. There will be no commission on any sales made through the site either - in fact we will pay for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

We are well aware that farmers do not have easy access to this information at the moment, because we have observed the slower than necessary word-of-mouth adoption of our own ag-tech products by the rural sector.

Anyone will be able to place casual classified adverts on the site as well, again with no commission. We look forward to hearing from you.

www.agplanet.co.nz



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.

Since 2004, 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 2012, 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 i-phone access available, so the data can be retrieved from anywhere on the farm.



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