

# WHAT'S NEW AT NOVEL WAYS?

## AGRITECH INNOVATION REPORT

[www.novel.co.nz](http://www.novel.co.nz)

Taupo, New Zealand

2021/2022 Edition



### FEATURES

- Sustainability in the NWL operation
- Not only cows, but horses and sheep too!
- Pasture measurement and management

### BATT-LATCH UPDATE

- Innovative uses for the Batt-Latch
- Batt-Latch product developments
- Does your Batt-Latch need repair?

## Opinion – The Path to Sustainability

If you explore what 'Sustainability' means (by looking it up on the internet) there are a few variations, but also some common themes:

- **Sustainability focuses** on meeting the needs of the present without compromising the ability of future generations to meet their needs.
- **Sustainable practices** support ecological, human, and economic health and vitality – they are all interrelated.
- Six **key factors of sustainability** are suggested as: optimize your current use of fossil fuels, eliminate waste, recycle, recover energy, save time, and reduce, or eliminate, pollution.

Here's how Novel Ways Limited plays its part:

- old Batt-Latch cases and other plastic from manufacturing components is used by **FuturePOST** in Waiuku – they turn domestic and commercial plastic waste into a longer lasting fence post
- when the NiMH batteries reach the end of their useful life they are taken by **Upcycle** Auckland and their chemical components are re-used
- in our workshop we re-purpose clean packaging materials and recycle cardboard if it can't be re-used
- bulk unused gearbox kit components are re-sold or donated, for example we have thousands of unused small electric motors, so put your thinking cap on and give me a call!

Since 1995 we have continued to develop all our products in a bid to make them more efficient and cost-effective.

For example, the Batt-Latch is solar-powered and runs on the sun's energy from the time it leaves our workshop.

In terms of the impact our products have on improving profit and reducing waste for individual users, we maintain that the Batt-latch saves time and labour, cuts fuel and running costs, reduces lameness and herd stress, and lessens pugging damage to pasture.

Visit the products pages of our website to see first-hand reports from users:

- *The Batt-Latch is a magical piece of equipment that can knock hours off your working week...*
- *...we pretty much had no lameness all of last season...*
- *The Batt-Latch saves us 250-300 hours per year by letting the cows walk to the feedpad before milking, so we don't have to chase them. Experts say we also improve production by having the cows digest their food while standing in the yard*

Read on here about how using the Batt-Latch and GrassMaster Pro will improve productivity (and therefore increase sustainability). You can also be confident that we stand behind all our products and do our best to keep Batt-Latch and GrassMaster Pro units operating well, through our prompt repair service. Again, reducing waste.

They say that any journey starts with a single step – we are at least on the path to sustainability!



Graham Lynch,  
Owner  
Novel Ways Limited

Please contact me at  
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### What are your bright ideas?

We are always happy to hear from Batt-Latch users and innovators.

Apart from applications with dairy, dry stock, horses, and (yes!) sheep, we've adapted a unit to release seed for quail. We appreciate your feedback, comments and questions... and your ideas on future applications!

### CONTACT NOVEL WAYS LIMITED TODAY!

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## BATT-LATCH NEWS

### Innovative Uses for the Batt-Latch

From New Zealand and around the world we hear about new and innovative ways of using our solar powered automatic gate timer. Read more about these, and other applications, on our website.

#### Icelandic Horses

Our agent in Denmark, Ole Trier (Smartfold ApS), was excited to tell us about his customers' use of the Batt-Latch with Icelandic horses.



Photo: <https://www.icelandtravel.is/blog/the-incredible-icelandic-horse/>

When teamed up with a Roller Gate (see below) the horses are released to a new feed area.



We're told that horses need regular feeding opportunities not only to maintain energy levels, but the right feeding frequency helps to control physiological, digestive, and behavioural issues.

Utilising the Roller Gate – mounted either permanently or temporarily in a gateway, or on fence standards for break feeding – gives you all of the functionality of the Batt-Latch or Modem Batt-Latch, along with the tidy and safe retraction of a roller gate.

Resellers in the UK and Europe also report that the Batt-Latch has been successfully used with horses for releasing or allowing them access to new pasture or hard feed, meaning the owner can control the weight gain and condition of the animal. Horse owners find the Batt-Latch useful, as often they are 'absentee owners' for much of the time each day.

Roller Gates are available from Smartfold ApS:

<http://www.smartfold.dk/>

or we have a limited number of these specialised gates for potential NZ customers.

See our website products page at:

<https://www.novel.co.nz/>

### Cell Grazing

Cell or mob-grazing, also trademarked as TechnoGrazing and Technosystem in NZ, is a technique of using semi-permanent electric fences to hold a mob of animals in a confined space for a short time, before moving them to the next break.

A set of Batt-Latch timers can be set up to open sequentially, over a period of several days, to move the stock for the farmer. Water must always be available, and baleage can be pre-fed into each cell, but otherwise the farmer need not be present – perfect for a remotely-run operation. You can get an idea of how it works, from the diagram below:



The Usmar family run a drystock unit in Feilding, using this technique, and kindly shared their example with us.

Drystock handled this way tend to be more settled and gain weight faster, while improving poorer quality pasture. Read more about a NZ example here: <https://agrihq.co.nz/section/beef/view/grazing-system-cleans-up>

We are currently working with sheep farmers in the South Island of NZ who are wanting to break feed large mobs of sheep, using the Batt-Latch – we'll keep you posted on how this develops!

### Uses for spare timers.... A Bird Feeder!



Alongside our interests in preserving local forest habitats, we've been experimenting with using a 3D-printed enlarged cam on the Batt-Latch to release bird feed at pre-set times.

Small seeds attract quail in the area. If you used corn, it may bring in game birds (ducks and pheasants).

**Contact us if you would like one of these free cams and instructions to build your own bird feeder!**

## BATT-LATCH PRODUCT DEVELOPMENT



### The Batt-Latch Modem Unit

Text/Cellular Remote



The modem version of the Batt-Latch timer can be controlled with text commands.

Communicating by mobile phone makes the Batt-Latch unit very flexible for changing situations. To start you off, they are supplied in NZ with a pre-paid SIM card (specify Spark or Vodafone) but you must remember to top up online at least once every 12 months, or, for greater convenience, add it to your current service provider's plan.

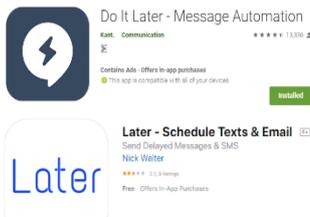
For overseas purchasers, a local SIM card will need to be installed – choose a reputable local provider to ensure the best possible service/reception. Instructions are on our website.

See our website products page at:

<https://www.novel.co.nz/>

### Do It Later!

We all put off things we are supposed to do now... but here is an App which encourages you to do just that!



Do It Later (Android) or Later (iOS) Apps allow you to pre-program and schedule a text message to be sent out at a specified time. You can also set up recurring messages.

This can extend the functionality of the Batt-Latch Modem Unit. For example, you can schedule a job for more than seven days in the future, edit or change a message before it goes out, or ask for a periodic status update.

Search in the Play Store or App store for details.

### Batt-Latch Servicing and Repairs

We've published a handy guide for when your Batt-Latch timer needs service or a repair.

<https://www.novel.co.nz/>

Please ensure that any timer returned to our Taupo workshop for repair:

- is clean, so we don't spread anything around
- includes contact details and a description of the issue(s)
- identifies any new or additional spare parts required, for example, a strap, full spring gate kit

#### Warranty

While each new Batt-Latch has a two-year warranty, we will charge for damage caused by extreme external forces, even if the unit is otherwise within a warranty period. See our guide for details.

### The Batt-Latch – A Time Saver!

Our Batt-Latch timer is increasingly popular (in NZ and overseas), and we are continuing the process of sourcing rugged components to make them even more reliable.

Over nearly 27 years, the Batt-Latch (designed and manufactured by Novel Ways Limited) has been making life a lot more pleasant for many dairy and drystock farmers all through NZ and, increasingly, overseas.



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

At your pre-set 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. All timers come with a two-year warranty. The manual (if you lose yours) is available to download from our website: <https://www.novel.co.nz/downloads.html>

**The payback period for one Batt-Latch timer is estimated to be as quick as just 15-16 days!**

### Your Feedback

Here are some comments from one of our early adaptors:

...of the 10 Batt-Latches [we use]:

- 2 have completed 11 and 7 years without problem
  - another 3 have completed 5 years without problem...
- ... the reliability has improved tremendously...

And from award-winning 50/50 sharemilkers of 630 cows: ... it took a week or so to train the cows but once they got used to [the timers], they worked well, and we have a lot less lameness.





## PASTURE MEASUREMENT and MANAGEMENT

### GrassMaster Pro

Manufactured exclusively by Novel Ways, 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.



Using electronic signals, the hand-held GrassMaster probe senses the water trapped inside the nearby grass blades, and uses a recent calibration to give a repeatable average of the drymatter in the paddock. 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 all paddocks on the farm, and this very useful information can be read off the screen or downloaded to a computer.

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 Metabolisable Energy of the grass grown,
- increasing top-soil depth and quality.

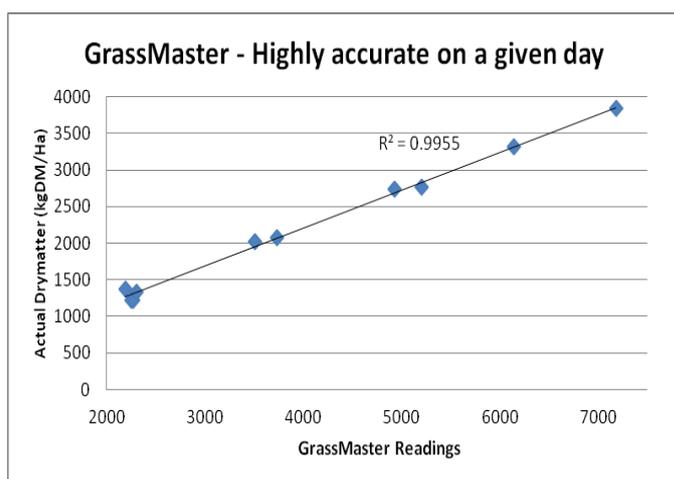
Many of these outcomes rely on initial monitoring of the current situation, and accurately measuring changes and improvements. At RRP NZ\$1,995 + GST, the GrassMaster Pro drymatter instrument should be a highly cost-effective starting point.

The GrassMaster Pro is usually calibrated within minutes at the start of the walk by both probe measuring and carefully estimating kgDM/ha in one low cover area and one area with high forage cover. Once the brisk 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.



Free for use with all GrassMaster products, Grasstrack supports the storage of 800 paddocks, suitable for larger farms and forage cultivar trials. It imports and exports data to EXCEL.

Recent trials also indicate that, once calibrated, the GrassMaster Pro will closely match even highly experienced whole paddock visual assessments of similar forage mixes. Put simply, it's great at grading cultivar plots or paddocks!



These quadrat readings were taken on a chicory/ryegrass/clover mix paddock and then compared to actual weighed drymatter.

### Improving Profitability

Research shows that regular estimates of herbage mass can improve profitability of pasture-based dairy systems. By measuring pasture cover, feed supply and demand can be better matched, reducing wastage and saving some imported feed costs. Using a payout of \$8/kg milksolids, the gross profit difference between 'low' and 'perfect' knowledge of herbage mass on an average NZ dairy farm would be approximately \$100,000 pa (\$682/ha). Read more here:

[https://www.researchgate.net/publication/322268668\\_Regular\\_estimates\\_of\\_herbage\\_mass\\_can\\_improve\\_profitability\\_of\\_pasture-based\\_dairy\\_systems](https://www.researchgate.net/publication/322268668_Regular_estimates_of_herbage_mass_can_improve_profitability_of_pasture-based_dairy_systems)

And visit Grazetech - our business associate's website:

<https://www.grazetech.com.au/page/articles-and-information/>

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