



Profitability. Sustainability. Competitiveness.

Matching grazing software design with farmer practice

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Introduction

PASTURE FIRST

HOME > FARM > TACTICS > PASTURE FIRST


Increase your profit with home grown pasture - the cheapest and most important feed resource for any farm system.

Pasture, without any input other than basic fertiliser, drives more than 85 percent profit for most farms at a \$7.00 per kg MS milk price, and 98 percent at a \$4.00 milk price.

By putting pasture first farmers can reap the rewards.

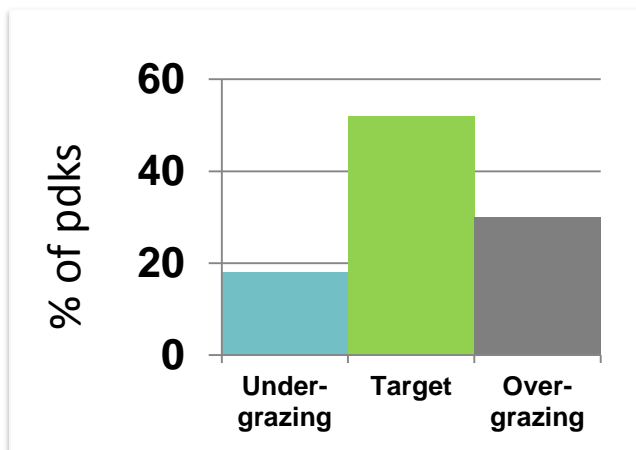
8 habits of a great pasture manager

We've identified the following habits those with great pasture management follow. Can you spot any opportunities in your own business?



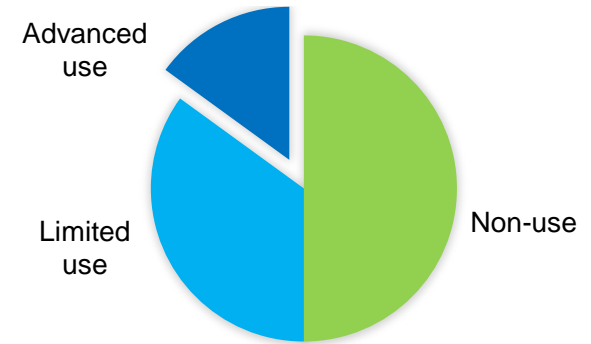
Data is used to drive decisions.

Source: dairynz.co.nz

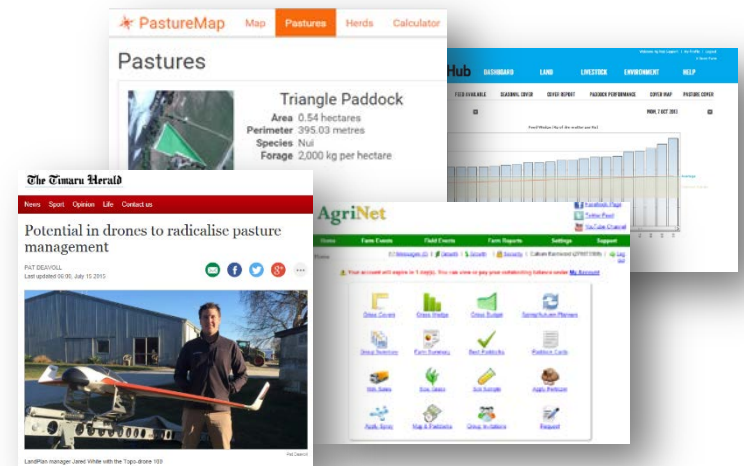


Source: McCarthy et al. 2014

Use of grazing software



Source: Anecdotal!



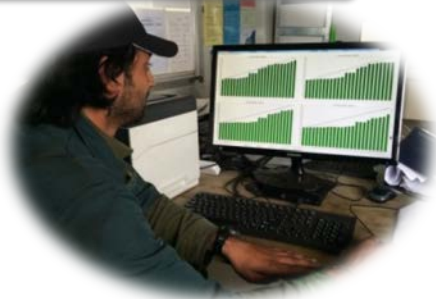
The collage includes:

- PastureMap**: A software interface showing a map of a 'Triangle Paddock' with details: Area 0.54 hectares, Perimeter 395.03 metres, Species Nui, Forage 2,000 kg per hectare.
- AgriNet**: A dashboard with various icons for farm management tasks like 'Grazing', 'Stocking', 'Fertiliser', etc.
- News Article**: 'Potential in drones to radicalise pasture management' from The Otago Daily News, featuring a photo of a man with a drone.
- AgriHub**: A dashboard with a bar chart showing performance metrics over time.

Source: PastureMap; Ballance AgHub; Agrinet; stuff.co.nz

Research approach

Farmer interviews



Expert panel



Understand how grazing software design can align with farmer practice

Technology developer workshop



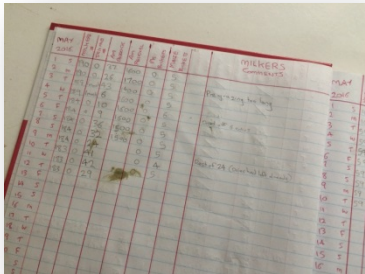
Rural Professional interviews



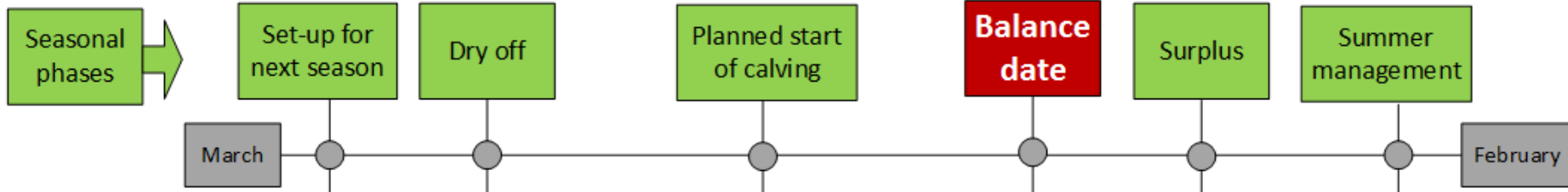
Findings

Multiple approaches, farm structure influence

- Farmers not seeing value to regularly measure and use software
- RPs and multi-farm owners use software for benchmarking and delegation of grazing management
- Individuals/companies trying to integrate variety of grazing management tools
- Need incentives to ensure data quality 'up the chain'

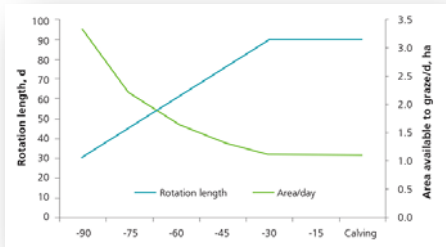


Seasonal decision making

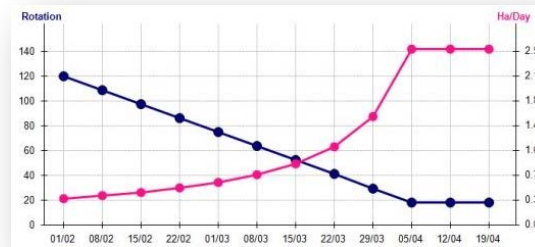


Critical success factors

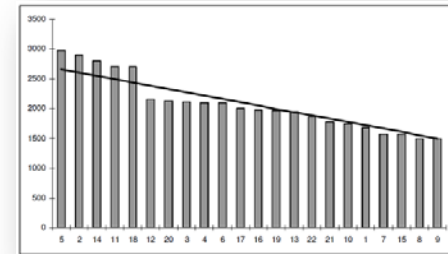
Tools and information used



Autumn planner



Spring rotation planner



Dynamic feed wedge

What would motivate non-users?

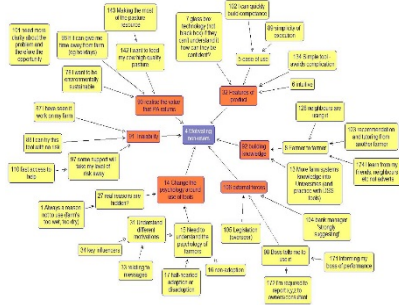
- More clarity about the problem that tools would address (opportunity)

- Simple tool, avoid complication

- Trialling software with no/low risk

- Incorporate 'different motivations'

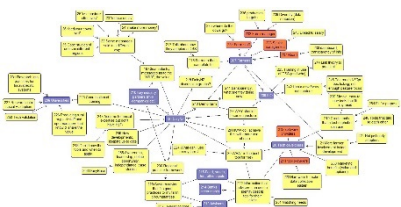
- Legislation drivers, farm owner or bank manager 'strongly suggesting use'



Motivating non-users



Demotivating users



Roles in grazing network

Attributes of grazing DSS

| Attributes of grazing decision support systems | | | | | |
|---|---|--|--|---|--|
| Seasonal System reflects the seasonal nature of pasture growth and decision making. | Simple System is intuitive and easy to use. | Triable Farmers can test and assess value before a large investment of time & money. | Flexible Enables differences in farm systems and region to be accounted for. | Scalable Can be used across multiple farms and linked to farm advisor practice. | Integrated Data can be exchanged with other DSS products, e.g. animal databases. |

Take home messages

- Six key **attributes** need to be considered by grazing software developers
- Barriers to software use aren't just time and cost
 - Value perceptions, design, awareness, desire to change
- Seasonal grazing management not reflected in most software
- Future – software review, measurement guidelines, linking with developers