

Strategic Pasture Renovation™

Increasing farm profitability through increased home-grown forage production

The profitability of New Zealand animal grazing systems, be it dairy, sheep, beef or deer is closely related to the production and consumption of **home-grown** forage.

Because all productive pastures deteriorate over time, there is a need to renew pasture on a regular basis to enable stock to produce to their maximum capacity. The benefits of re-grassing include the opportunity to produce significantly more feed, control seasonal production, and increase the quality of the feed, which leads to greater animal production.



The base forage for most animal production systems is perennial ryegrass due to its ability to provide a seasonal spread in production for most New Zealand grazing systems.

However perennial ryegrass still has its limitations, including its in-ability to provide adequate feed all year round – particularly reduced winter and summer production, and reduced late spring, summer and autumn quality.

These limitations reduce the ability of New Zealand farming systems to fulfill their production potential.

A proven approach to improve forage production and therefore to increase farm profitability is to adopt a 'Strategic Pasture Renovation™' system which integrates other forage species into a farm's system. The Strategic Pasture Renovation™ system has the ability to increase total annual dry matter production, by strategically incorporating other forage options that produce large quantities of quality feed when perennial ryegrass can not.



Talk to your local Cropmark
agronomist about how to incorporate an
SPR system on your farm.

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How much more feed can I grow through a Strategic Pasture Renovation™ system?

The more feed that is grown and consumed on your home farm, the more profitable the farm will be.

The Strategic Pasture Renovation process increases the total amount of feed grown on your farm through establishing high yielding and high quality crops that compliment the perennial pastures on your farm.

SPR SYSTEM EXAMPLE:

Zoom annual ryegrass → Marco turnip → Revolution AR1 ryegrass

EXISTING/OLD PASTURE		STRATEGIC PASTURE RENOVATION SYSTEM	
Year 1			
Forage production from existing ryegrass/clover pasture per year	13,000 kgDM/ha	Forage production from Zoom™ annual ryegrass crop – March-Oct	8,000 kgDM/ha
Average Metabolisable Energy (ME) content / kgDM	11.0 MJ	Average Metabolisable Energy (ME) content / kgDM	12.0 MJ
		Forage production from Marco turnip crop – November-February	12,000 kg DM/ha
		Average Metabolisable Energy (ME) content / kgDM	12.5 MJ
Total forage grown per year	13,000 kgDM/ha	Total forage grown in first year of SPR process	20,000 kgDM/ha
Total MJ ME produced per ha	143,000 MJME/ha	Total MJ ME produced per ha in first year of SPR process	246,000 MJME/ha
Year 2			
Total forage grown per year	13,000 kgDM/ha	Forage production from new Revolution Enhanced® ryegrass pasture per year	18,000 kgDM/ha
Average Metabolisable Energy (ME) content / kgDM	11.0 MJ	Average Metabolisable Energy (ME) content / kgDM	11.5 MJ
Total MJ ME produced per ha	143,000 MJME/ha	Total MJ ME produced per ha in second year of SPR process	207,000 MJME/ha

STRATEGIC PASTURE RENOVATION - EXAMPLE 1

Zoom annual ryegrass → Marco turnip → Revolution AR1 ryegrass

STAGE	PRODUCT	PRODUCTION PERIOD	PRODUCTION ESTIMATE	BENEFITS
1		March – October	8,000 – 10,000 kgDM/ha	<ul style="list-style-type: none"> High DM production through autumn and winter High quality feed Ideal as a break crop to eliminate weeds and wild endophyte containing pastures
2		November – March	10,000 – 14,000 kgDM/ha	<ul style="list-style-type: none"> High Dry Matter production through summer and autumn High quality forage with increased levels of metabolisable energy, digestibility and protein Ideal as a break crop to eliminate weeds and wild endophyte containing pastures
3		March onwards (5+ years)	15,000 – 20,000 kgDM/ha/year	<ul style="list-style-type: none"> Increased annual Dry Matter production High quality forage though autumn and spring Better seasonal supply of forage

STRATEGIC PASTURE RENOVATION GROWTH CURVE
- ZOOM ANNUAL RYEGRASS AND MARCO TURNIP



STRATEGIC PASTURE RENOVATION - EXAMPLE 2

Sonik Italian ryegrass → Chico chicory → Revolution AR1 ryegrass

STAGE	PRODUCT	PRODUCTION PERIOD	PRODUCTION ESTIMATE	BENEFITS
1	 <p>Sonik ITALIAN RYEGRASS More feed per bite</p>	March – November	8,000 – 10,000 kgDM/ha	<ul style="list-style-type: none"> High DM production through autumn and winter High quality feed Ideal as a break crop to eliminate weeds and wild endophyte containing pastures
2	 <p>CHICO Dependable chicory</p>	November – March (18 months)	15,000 – 20,000 kgDM/ha	<ul style="list-style-type: none"> High Dry Matter production through summer and autumn Deep root system, ideal for summer-dry areas High quality forage with increased levels of metabolisable energy, digestibility and protein Semi-perennial plant giving grazing option of 6-18 months Provides ready-made summer crop in second spring/summer
3	 <p>Revolution AR1 – Enhanced[®] Ryegrass High Energy Grass[™]</p>  <p>GRASSLANDS DEMAND NEW ZEALAND WHITE CLOVER</p>	March onwards (5+ years)	15,000 – 20,000 kgDM/ha/year	<ul style="list-style-type: none"> Increased annual Dry Matter production High quality forage though winter and spring Better seasonal supply of forage

18 MONTH STRATEGIC PASTURE RENOVATION GROWTH CURVE - STAGE 1 AND 2

