Pasture
CONDITION TOOL

MAXIMISE YOUR PROFITS

IMPROVE YOUR PASTURE SCORE

INTRODUCTION

HOW TO USE THIS PASTURE CONDITION TOOL

This pasture condition scoring tool aims to provide a simple means of comparing and critically assessing pastures and their capabilities. Our focus here is low rainfall, dryland, permanent, improved pastures. However, the principles of our assessment are adaptable to most pasture types.

USING THE TOOL

We want this tool to encourage a closer examination of pastures and how they can be best used and improved.

Use the tool to compare your pastures and monitor how they are tracking. Our examples are illustrations. They may not be your pasture, but ones with similar strengths or weaknesses. We intend our discussion to stimulate your plans for your pasture.

PASTURE CONDITION

We use a scale of 1 to 5, with score 1 being the lowest and weakest and 5 being the strongest, most productive and reliable pastures.

Assess condition across a paddock to form a paddock view.

Assess a combination of features to describe the strength of the pasture and its potential. Assess: **Species composition** - desirable v undesirable; **Desirable grass density** - are there enough plants and shoots; **% clover** – how close is it to a spring target of 30%; **Ground cover** - is it 70% or more; **Plant vigour** – are the plants leafy, green, not stunted and small.

Score your pasture condition, inform your plan.

PASTURE CONDITION SCORES

CONDITION SCORE 1

The weakest, least productive pastures. Dominated by weeds. Management will offer only limited improvement. Be realistic. Eat the weeds. Plan pasture renewal where appropriate.

CONDITION SCORE 2

Unproductive pastures with some strengths or more useful weeds, but key weaknesses. Management input can increase grazing value a little. Focus on the species strengths. Plan renewal to make more change.

CONDITION SCORE 3

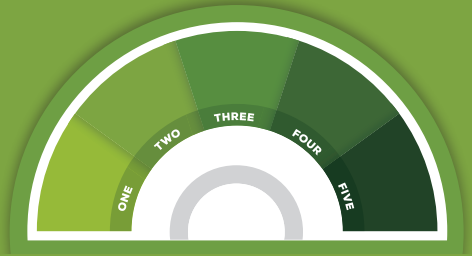
Moderately productive pastures with more potential. Desirable species are present but not in sufficient quantity or vigour. Grazing and nutrient management can increase them. Identify limits, plan a paddock specific strategy for improvement. Nurture the desirable plants and improve condition. Be patient.

CONDITION SCORE 4

Strong, reliable, productive pastures that can still be improved. They have weed ingress, or clover deficiency, but have a backbone of desirable species. Active management can optimise condition and value. Monitor, invest. This asset is worth it.

CONDITION SCORE 5

These pastures are strong, productive and reliable. They balance desirable perennial grasses and clover or legume. They support the most demanding livestock. Monitor condition, enjoy success, but don't let it slip. Keep it up.



CONDITION 1

EXAMPLE 1

100% Annual
OK for a while in winter & spring.

Annual Sub Clover
Good. A lot more would be better.

Barley Grass Leaves
Better than nothing.

Barley Grass
Flowering & ungrazed.

Capeweed
Any is too many.

Ground Cover
OK for now at 70% but all the plants will die.

The future looks bleak for growth and ground cover.

Score	1	2	3	4	5
Species Composition	●				
Desirable Grass Density	●				
% Clover	●				
Ground Cover			●		
Plant Vigour	●				
Overall Condition Score	1				

WHAT'S THERE?

This pasture is 100% annual species, mostly barley grass and capeweed. Both are undesirable. There is a minor presence of desirable sub clover. This pasture condition score can deliver only low and highly variable livestock production and condition. While ground cover is ok, at 70%, the plants are annuals and will die, exposing the pasture to significant summer/autumn ground cover risk without careful management of the dead plant material.

USING IT NOW

Barley grass is the primary feed producing resource. Its strengths are winter and early spring growth. Its weakness is early flowering and rejection by stock as it does so. Grazing to make the most of vegetative growth is essential. This however should not occur at the cost of compromising the management of more valuable pastures.

HOW TO MOVE UP

There are no desirable grasses to build on. Well planned total renewal is required for significant change. Before this reduce the barley grass seed bank and encourage sub clover. Address nutrient limits after soil testing to improve clover and future pasture establishment.

CONDITION 1

EXAMPLE 2

- **Annual Weedy Spear Grass** — Sheep won't like this.
- **Annual Silver Grass** — Too much. All stem and few leaves.
- **Annual Sub Clover** — One small redeeming feature.
- **Annual Soft Brome** — Only a bit better than silver grass.
- **Sorrel** — Just one more weed.
- **Ground Cover** — Not much bare ground. Good for now.

All the annuals make this an unreliable pasture with few strengths.

Score	1	2	3	4	5
Species Composition	●				
Desirable Grass Density	●				
% Clover		●			
Ground Cover				●	
Plant Vigour	●				
Overall Condition Score	1				

WHAT'S THERE?

This pasture is dominated by undesirable annual species. Weedy annuals, silver grass (vulpia) soft brome and spear grass (great brome), make up 85- 90% of the biomass. The broadleaf weed, sorrel, is the only perennial present. Desirable sub clover is a showy but minor component. Ground cover is effectively 100% here, but at risk in dry times due to the dominance of annuals.

USING IT NOW

The dominance of annual grasses restricts value in this pasture to winter-spring grazing. Growth and feed quality will be limited. Silver grass in particular flowers early and produces little leaf compared to less palatable and lower quality stem. This pasture will support only low and variable animal production. It could be a spring sacrifice paddock.

HOW TO MOVE UP

Limited improvement may be achieved with fertiliser and grazing. A focus could be on increasing the clover content. However, the absence of desirable grasses severely restricts the improvement that can be achieved without well planned pasture renewal. This is the most likely path to improvement where this is appropriate, including prior effort to reduce annual grass seed banks.

CONDITION 2

EXAMPLE 1

Silver Grass
Annual grass. But not much of one.

Annual Soft Brome
Only OK, and only compared to Silver Grass.

Leafy Cocksfoot
Useful, too few plants & little prospect of more.

Sub Clover
Not enough. Making too little difference.

Annual Spear Grass
Weedy & unpalatable.

Ground Cover
<70%, more bare to come.

Desirable in parts, but so much more required and too little to work with.

Score	1	2	3	4	5
Species Composition		●			
Desirable Grass Density	●				
% Clover	●				
Ground Cover		●			
Plant Vigour		●			
Overall Condition Score		2			

WHAT'S THERE?

This pasture is mostly annual grass weeds, silver grass, soft brome and spear grass. Perennial cocksfoot is present in leafy patches. There is very little sub clover. Ground cover is below a 70% minimum target. Whilst cocksfoot is a significant proportion of the biomass, the density of this desirable perennial species is too sparse, exposing the pasture to low ground cover risks. This pasture would only support low and variable livestock production and condition.

USING IT NOW

Cocksfoot represents the main feed producing component of the pasture. The significant brome grass and silver grass presence means it will not be reliably productive. Optimise value by managing for the cocksfoot in spring and summer. This may not be worthwhile if the management of higher condition pastures is compromised to achieve this.

HOW TO MOVE UP

Well planned total renewal will most effectively and rapidly improve pasture condition. Limited improvement may be achieved by maintaining vegetative growth in spring and resting in summer. This will benefit the cocksfoot density. Pale leaf colour, low shoot density and low clover presence suggest nutrient limits may need to be addressed after soil testing.

CONDITION 2

EXAMPLE 2

Annual Sub Clover
Dominates providing great feed quality. But only for a while.

Annual, weedy, Spear Grass, Barley Grass and Silver Grass
Some grass is good but perennials are better.

Ground Cover
Great ground cover now but 100% annuals will make summer very different.

This pasture is unbalanced. It can deliver a burst of high quality feed but without desirable grasses the burst will be short lived.

Score	1	2	3	4	5
Species Composition		●			
Desirable Grass Density	●				
% Clover		●			
Ground Cover					●
Plant Vigour		●			
Overall Condition Score		2			

WHAT'S THERE?

Here the dominance of sub clover is deceptive. Whilst clover is terrific, a balance with perennial grass grows more feed across more months in low rainfall, dryland pastures. There is only a minor presence of perennial ryegrass, and some annual barley grass and silver grass. Ground cover is great, but nearly 100% annual species means it can be extremely variable and potentially very low. Pasture in this condition will only support a short period of good grazing value, and low annual production.

USING IT NOW

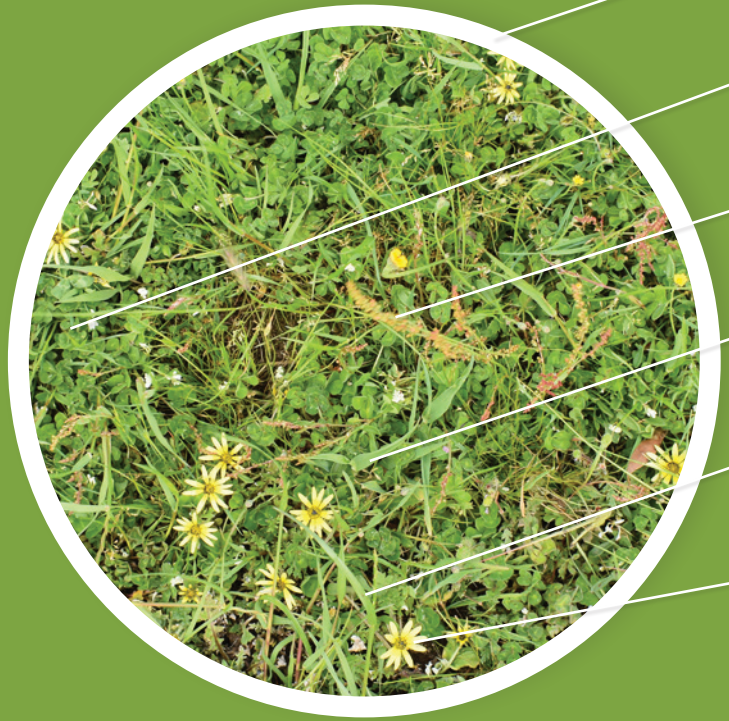
Current grazing value lies in using spring clover growth and grazing to keep annual grasses vegetative. There may be some winter grazing value if autumn conditions favour the growth of annuals. Don't rely on this pasture, but use the excellent feed quality of the clover when it's available.

HOW TO MOVE UP

Well planned total renewal will most effectively improve condition. Before this encourage clover growth to build nitrogen. Take opportunities to reduce annual grasses. Soil test and address nutrient limits to prepare for a new pasture, or to improve growth as an annual pasture. Pale colour and small clover leaf size and low grass density suggest nutrient limitations. Clover dominance can be a result of grub removal of ryegrass. Note this if selecting resowing options.

CONDITION 3

EXAMPLE 1



- ✓ Unassuming but 60% desirable species with potential for more!
- ✓ **Sub Clover** Present & flowering for the future
- ✗ **Sorrel** Not desirable, but perennial and difficult to control.
- ✓ **Phalaris** Scattered throughout, but small.
- ✓ **Perennial Rye** Well distributed but is it well adapted.
- ✗ **Capeweed** Control with competition.

Get the mix right. Feed, graze, rest, improve.

Score	1	2	3	4	5
Species Composition			●		
Desirable Grass Density			●		
% Clover			●		
Ground Cover				●	
Plant Vigour		●			
Overall Condition Score			3		

WHAT'S THERE?

This pasture is 60% desirable species, perennial ryegrass, phalaris and sub clover. The clover presence is promising, but the leaves small. There is a significant presence of ryegrass, with some phalaris, but they lack vigour and shoot density. Some annual grass weeds are present, plus broadleaf weeds, sorrel and capeweed. This pasture condition score can support only low to moderate livestock production. Ground cover is good, but the small plant bases of the perennials introduces risk in dry times.

USING IT NOW

This pasture will be low to moderately productive. Quality feed can be produced while the ryegrass and sub are growing. Late spring to early summer growth potential will be limited as the sub dies and ryegrass takes a siesta.

HOW TO MOVE UP

This pasture can do more. The pale leaf colour, small clover size and low grass shoot density indicate nutrient stress. Identify and address nutrient needs, and graze strategically to promote perennial ryegrass and phalaris tillers in winter and spring. The ryegrass presence will be vulnerable to dry and pest stresses. Avoid summer over-grazing. Optimising perennial growth will reduce capeweed, but so can spray grazing if needed.

CONDITION 3

EXAMPLE 2

Perennial Cocksfoot
Density is too low and plant bases too small.

Annual Sub Clover
Looking lovely but highlighting the lack of grass.

Ground Cover
OK now but not when the sub dies.

Whilst the species are great, stronger perennial grasses are needed to grow more feed and cover more ground.

Score	1	2	3	4	5
Species Composition			●		
Desirable Grass Density		●			
% Clover			●		
Ground Cover				●	
Plant Vigour			●		
Overall Condition Score			3		

WHAT'S THERE?

This pasture comprises 90% desirable species, cocksfoot and sub clover, but there are too few cocksfoot plants and proportionally too much clover for optimal pasture growth. This pasture condition score can deliver moderate but variable livestock production. Ground cover is good at present, but the cocksfoot is too sparse. The high proportion of cover dominated by sub clover exposes the pasture to future ground cover risk.

USING IT NOW

This pasture will be only moderately productive. Quality feed can be produced in the winter-spring period. Late spring-early summer growth potential will be limited by the lack of cocksfoot and death of annual sub clover.

HOW TO MOVE UP

Small cocksfoot plants, small sub clover leaflet size, and a pale appearance suggest low vigour and nutritional limits. Identifying and addressing nutrient needs, plus strategic rest or rotational grazing can increase plant vigour. Keeping cocksfoot leafy in spring will encourage increased shoot density. Providing summer rest will favour cocksfoot growth. Increasing the area of cocksfoot cover is key, as weak cocksfoot seedlings are unlikely to establish from seed shed. Improvement is feasible without resowing.

CONDITION 4

EXAMPLE 1

✓ Productive & desirable.
Perennial grasses
dominate.

✓ **Perennial Ryegrass**
Desirable, productive,
but needy.

✓ **Lots of Cocksfoot**
Desirable and tough
as nails.

✗ **No Clover**
To drive quality & fix
nitrogen for growth.

✗ **Some Flatweed**
No more required.

● **Ground Cover**
Great, its perennial.

Strong and durable,
it just needs a sensitive
side. Clover.

Score	1	2	3	4	5
Species Composition				●	
Desirable Grass Density				●	
% Clover	●				
Ground Cover					●
Plant Vigour				●	
Overall Condition Score				4	

WHAT'S THERE?

This pasture comprises more than 95% desirable species, as cocksfoot and perennial ryegrass. There is complete ground cover but no sub clover. This pasture condition score can deliver strong animal production.

USING IT NOW

This pasture will be productive and can supply high quality feed. The cocksfoot can be a dependable production base, responding well to spring, summer and autumn rainfall. Without adequate clover, feed quality will be restricted, as will the supply of nitrogen. This pasture will effectively feed productive livestock, but higher clover pasture will be better suited to young growing stock. The density of this cocksfoot will tolerate pasture grub attack, which may in turn provide space for clover

HOW TO MOVE UP

More clover will improve pasture condition increasing feed quality and nitrogen supply to fuel animal production. Nitrogen fixation adds fertiliser naturally and free. Control the cocksfoot in spring and summer to allow sub clover growth, seedset and germination. Build the sub clover seedbank or strategically introduce sub clover seed. Avoid summer rest, it will add to cocksfoot dominance and dry the soil to the detriment of clover recruitment.

CONDITION 4

EXAMPLE 2

Perennial Cocksfoot
A strong backbone to a persistent pasture.

Annual Sub Clover
Everywhere as it needs to be.

Annual Barley Grass
An invasive weed. Too much creeping in.

Perennial Phalaris
Complementing the Cocksfoot. Adding resilience.

Ground Cover
Still strong.

This pasture is desirable at its core but barley grass threatens feed value and utilisation, shading the desirables.

Score	1	2	3	4	5
Species Composition			●		
Desirable Grass Density				●	
% Clover					●
Ground Cover					●
Plant Vigour				●	
Overall Condition Score				4	

WHAT'S THERE?

This pasture comprises up to 65% desirable species, as phalaris, cocksfoot and sub clover. There is complete ground cover, but a significant proportion of barley grass rolling in to the composition. This pasture condition score can deliver high animal production, but species composition can be improved to increase utilisation.

USING IT NOW

Productive and resilient, this pasture can supply high quality feed. The cocksfoot is a dependable production base, responding well to spring, summer and autumn rainfall. Phalaris strengthens the drought and grub tolerance. Adequate clover provides feed quality and nitrogen. This pasture will effectively feed productive livestock, particularly if the proportion of barley grass is controlled.

HOW TO MOVE UP

Condition is compromised by the invading barley grass. Tip the balance with competition using rotational grazing and summer rest, and control with spray topping or a winter clean. Perennial grass dominance can reduce sub clover recruitment and growth. Periodic rebalancing may be required to control grass in spring, before sub flowering and before the autumn break. Cocksfoot and phalaris can tolerate pasture grubs. They may even help provide space for clover. Monitor, manage.

CONDITION 5

EXAMPLE 1

- 95% desirable species and balancing of clover and grass.
- Production. Quality. Reliability. Who could ask for more.
- **Sub Clover**
  Grazing to control grass will get it to 30%
- **Cocksfoot**
  Underrated, but productive, resilient and full of energy if it's managed.
- **Ground Cover**
  Great and perennial.

It's great. But there's no room for complacency. Monitor, manage, make it all worthwhile.

Score	1	2	3	4	5
Species Composition					●
Desirable Grass Density					●
% Clover			●		
Ground Cover					●
Plant Vigour					●
Overall Condition Score					5

WHAT'S THERE?

This pasture comprises 95% desirable species, cocksfoot and sub clover, with some phalaris and ryegrass. Weeds include some annual silver grass and brome grass. Sorrel is also present. Ground cover is near complete, but could allow more space for clover. Currently there is about 15% sub clover. More would be better.

USING IT NOW

The desirable plants are vigorous and robust with large leaves, indicating strong plant health. This pasture will respond well to growth conditions and rest to provide high livestock production. The cocksfoot provides a resilient base that can withstand tough conditions and pests. Cocksfoot kept vegetative in spring can grow into summer. Some high utilisation summer grazing can be tolerated and may benefit sub clover composition. Alternatively summer rest can grow useful feed, or set up an autumn feed wedge.

HOW TO KEEP IT UP

Feed the pasture and graze the feed. Manage grazing and rest to recover from compromises and tough times. Control spring grass growth to keep leafy and improve clover content. Avoid repeated grazing of cocksfoot shoots in dry summers. Maintain this valuable resource.

CONDITION 5

EXAMPLE 2

Perennial Cocksfoot
Desirable and everywhere.

Annual Sub Clover
Everywhere in between to make 30%.

Great Ground Cover
That can remain even as the sub dies.

A great balance of 90% desirable grass and clover with very well distributed cocksfoot. It's productive, durable, able to withstand challenge. Keep it going!

Score	1	2	3	4	5
Species Composition					●
Desirable Grass Density					●
% Clover					●
Ground Cover					●
Plant Vigour				●	
Overall Condition Score					5

WHAT'S THERE?

This unassuming pasture scores 5 because it has 90% desirable species, cocksfoot and sub clover. Weeds include a few annual grasses. Ground cover is great and there is about 30% sub clover. Whilst the vigour and density of the sub and cocksfoot can still improve, the distribution of cocksfoot tillers is excellent, and allows the sub to work its way into the pasture.

USING IT NOW

Desirable cocksfoot provides a robust base for growth and dry time resilience. This pasture is a dependable part of an improved pasture base. Use it well. The pasture will respond to growth conditions and rest. Following good spring growth, some clean up in summer may be needed to reduce cocksfoot trash and assist sub clover germination in autumn.

HOW TO KEEP IT UP

Feed the pasture to improve the vigour, growth and size of cocksfoot and sub clover plants and leaves. The pale colour suggests a check of clover nodulation and nitrogen fixation. Rotationally graze or actively manage grazing pressure to control spring biomass. Reduce grazing pressure at the start of sub flowering to assist seed set. Monitor the annual grasses. Nurture in the good times and it will capably survive the tough times.

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The Derwent Catchment Project

Increasing Productivity. Restoring Landscapes

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