
1100 ha Floodplains


2020- Soil Health Symposium

“In farming everything we do has a compounding and cascading effect”

Soil Health Academy

Spiralling Up - Becoming Healthier

Spiralling Down - Becoming Unhealthier

6 - Principles of Regen - Ag.

1. Diversity
2. Living Root in the ground at all times.
3. Cover on the soil at all times.
4. Limit Disturbance (Physical, Chemical, Biological)
5. Animal integration.
6. Context.

The Cattle Business

Tools

- Observation
- Plant Brix
- Feed Budget - SR:CC
- Faecal NIRS Analysis
- Supplementation / Medication Stock Water
- Time Controlled Grazing / Density

Observed Forage Brix

Forage Species	Brix %
Pangola (Rank)	2.5 %
Callide Rhodes	4 %
Paragrass	6 %
Couch	1 %
Broad Leaf Weeds (Blackberry, Cobblers Peg)	9 %

Plant Brix- ADG

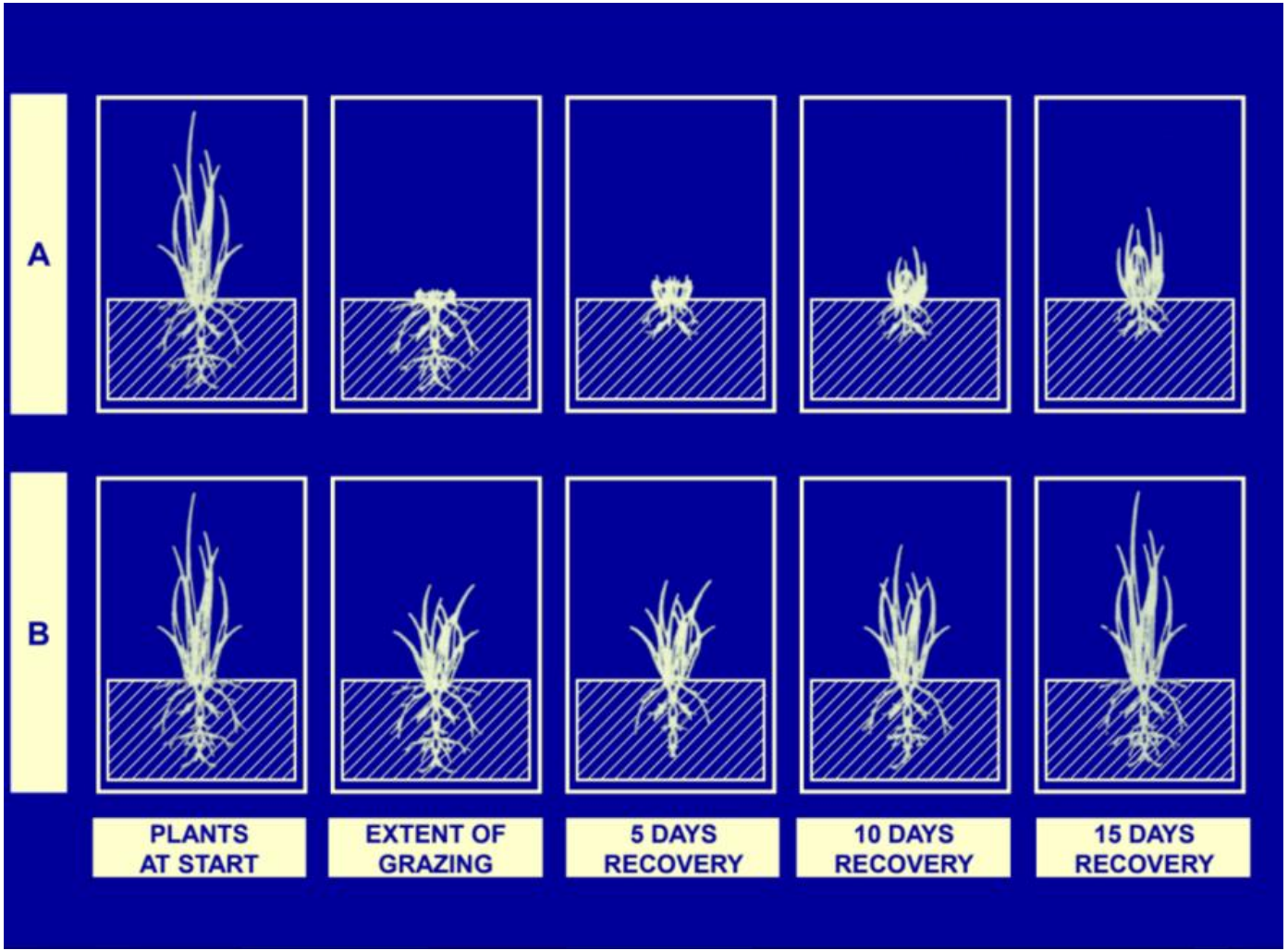
Plant Brix	Average Daily Gain
< 5%	Less than 0.45 kg
8-12 %	1.1 kg
12-15 %	1.25 kg
>15 %	1.35 kg

Plant Brix - DM Required

Forage Brix	% of LW Required
1-3	4.0
4-6	3.7
7-10	3.4
10-13	3.2
13-16	3.0
16-19	2.6
19 +	2.5

Feed Budget- Matching SR to CC

- Measure Pasture Dry Matter = 4000 kg/ha
- Determine what % you are going to take.= 50%
- Available DM =2000 kg/ha
- Determine number of cattle - 400
- Determine class and % DM /beast- 3%
- Weight - 400 kg
- Daily DM requirement - 12 kg
- Determine how often you wish to shift -Daily
- 2000/ 12 =166 head /ha so 400/166= 2.4 ha Cells /day


A
B
PLANTS AT START
EXTENT OF GRAZING
5 DAYS RECOVERY
10 DAYS RECOVERY
15 DAYS RECOVERY

% Leaf Volume Removed	% Root Growth Stoppage
10%	0%
20%	0%
30%	0%
40%	0%
50%	2-4%
60%	50%
70%	78%
80%	100%
90%	100%

Courtesy: R. Teague, TAMU

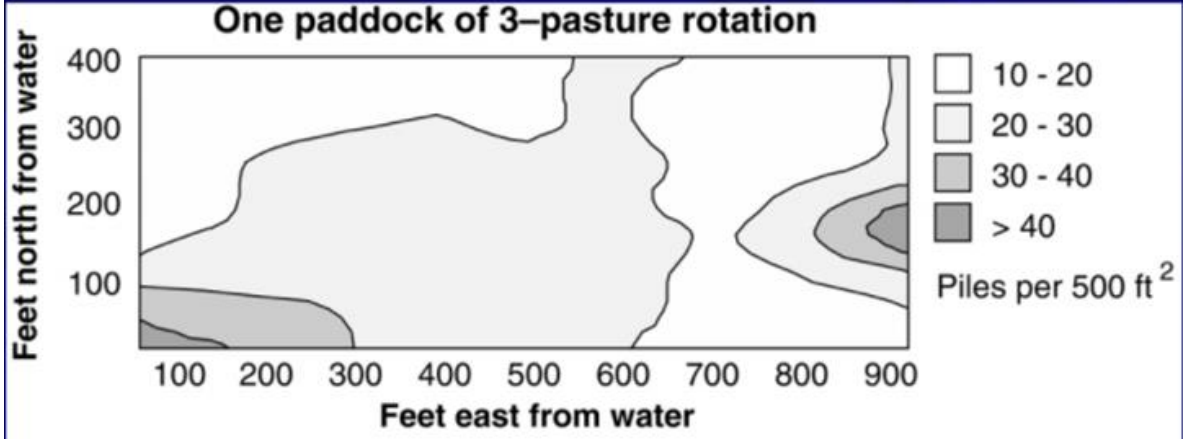
Cattle Manure Fertiliser Value

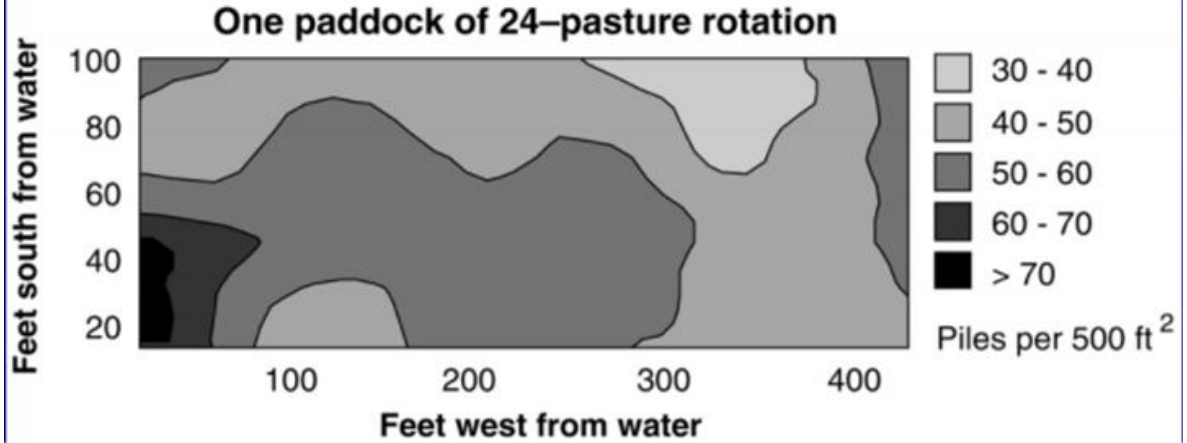
Question -How long does it take to fertilise pasture with manure?

Manure Distribution

Rotation Frequency	Years to Get 1 Pile/sq. yard
Continuous	27
14 day	8
4 day	4 – 5
2 day	2
1 time a day	**1**

Even Manure Distribution





250 cows x 400 kg LW x 1 ha grazing x 3 times /year

N 69 kg/ha
P 10 Kg/ha
K 90 kg/ha

$245 /ha Fertiliser Value.

Chemistry Laboratory Manager, Brisbane

Environmental and

mation - *Client/Sampler Supplied*

D	Sample Description
1	Callide East

sults

nalyte	Method	LOR	Units	B951890/1
ein	CF086 - Faecal NIR	0.5	%	5
	CF086 - Faecal NIR	0.5	%	14
Digest	CF086 - Faecal NIR	0.5	%	59
	CF086 - Faecal NIR	0.5	%	17
	CF086 - Faecal NIR	0.5	%	1.5
N	CF086 - Faecal NIR	0.5	MJ/100 kg LWt	13.1
	CF086 - Faecal NIR	0.5	%	5.2
Faecal	CF086 - Faecal NIR	0.25	mg/kg	2800

B929211/1	SPG - SCRUB PDK

Analytical Results

Compound/Analyte	Method	LOR	Units	B929211
Diet Crude Protein	CF086 - Faecal NIR	0.5	%	7
Delta-13C	CF086 - Faecal NIR	0.5	%	14
Est in vivo DM Digest	CF086 - Faecal NIR	0.5	%	60
Ash % Faecal	CF086 - Faecal NIR	0.5	%	17
Faecal N	CF086 - Faecal NIR	0.5	%	1.7
ME intake MEAN	CF086 - Faecal NIR	0.5	MJ/100 kg LWt	17.6
Non-Grass#	CF086 - Faecal NIR	0.5	%	6.9
Phosphorus for Faecal NIR Sample	CF086 - Faecal NIR	0.25	mg/kg	4800

Analysis Location


NUTRIDOSE
POA
PARADISE OUTDOOR ADVERTISING


Not Grazed.
Grazed 200 LSU’s / ha- 1 Day

Questions ?