

USING 'SAFE TO FAIL' AREAS

AN EXAMPLE

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What is a safe-to-fail (STF) area?

- The grazing-specific idea was developed by Graeme Hand to test different effects of recovery and animal impacts (and any other treatment by comparison).
- An area which is small enough such that it requires little change to implement, and won't matter if things don't work – simply a small test.
- Ideally set up in combination with other areas, to test the effectiveness of other treatments, and no treatments at all.
- This example was rather informal – no formal ongoing monitoring done other than photographic comparisons between the STF and surrounding paddock.

Site selection

This particular STF was done in what is probably the most infertile area on my farm, if visual indicators were anything to go by – quite a bit of bare dirt between lots of flatweeds and the occasional bit of grass.

Paddock has historically had patchy productivity, set stocked, and often for long periods during calving. I deliberately chose a very poor area for the STF site.

The brick

- This was a great reference point – already on location and was within the STF area.
- Photo taken November 3rd, 2019, after 3.5 months ‘recovery’ from prior grazing.



STF established

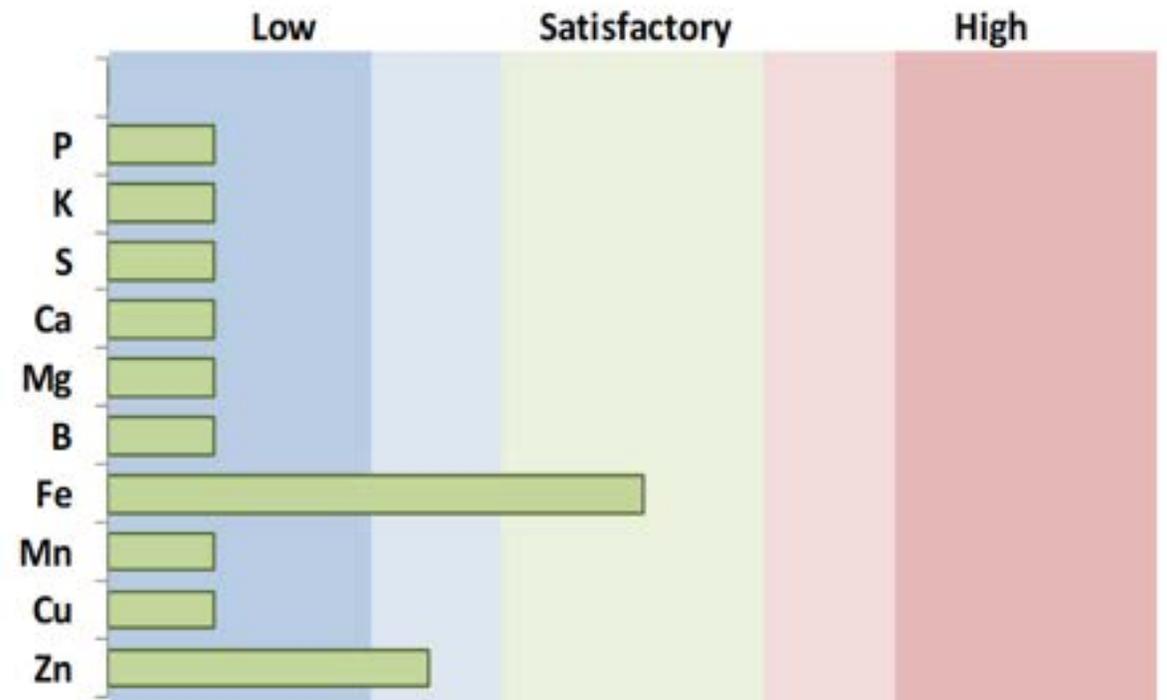
- November 3rd, 2019 after prior grazing on July 17th (3.5 months recovery)
- Fenced with single electric wire to keep cattle out.
- Brick is marked showing context.



Soil tests in STF area

Confirmed low nutrient levels.

Analyte	Desired Level (kg/ha)	Measured Level (kg/ha)
Phosphorus	49.1	10.4
Potassium	226.8	33.3
Sulphur	21.55	3.49
Calcium	1633.0	184.5
Magnesium	226.8	38.2
Boron	3.1	0.2
Iron	100.17	155.45
Manganese	33.3	4.6
Copper	4.7	0.2
Zinc	5.0	1.3



- The surrounding paddock was next grazed 6 months later, May 3rd, 2020 (pictured). STF was still locked up.
- Surrounding paddock grazed again another 7 months later, December 14th 2020, at high density, STF still locked up.
- There were some ‘incursions’ into the STF area by one or three calves during its recovery period – so the recovery wasn’t quite as good as it should’ve been.
- Note that the surrounding paddock was also receiving longer recoveries and higher density than ‘standard management’ had allowed, but not as long recoveries as the STF area.





**Surrounding
paddock**

Recovery: 8.5 months

STF

Recovery: 22 months
(with some incursions)

Photo August 31st 2021, just before grazing everything

GRAZING – SEPTEMBER 2021

- This is the surrounding paddock. On the right the grass has been grazed already (nearly a week earlier due to progressive feeding using the temporary fencing pictured).
- On the left is the area currently being grazed in the photo, broken up at regular intervals as indicated by the 45° struts on temporary end assemblies.
- The STF was treated as part of the surrounding paddock – fence removed and STF fed out along with surrounding paddock in the fashion pictured. No special treatment.



Note...

- In this case, both the STF and the surrounding paddock were subject to changed management: longer recoveries and higher density grazing.
- The STF just had a MUCH longer recovery, but the grazing density was the same as for the surrounding paddock under the new approach.
- As such, there was no 'control' area in the paddock which had no changes at all, to compare to.
- There was improvement in both the STF and the surrounding paddock, but notably more in the STF area - with the only difference between the areas being recovery times.

What it looks like now

- Photo November 20th, 2021.
- 2.5 months after grazing.
- Fence is no longer around the STF area but you can easily see where it starts and ends – note the beginning of the red tinge of predominant sorrel in the background. That's where the STF area ends and the surrounding paddock begins (see next slide).



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A blue arrow pointing downwards and to the right, containing white text. The arrow is positioned in the upper right quadrant of the image, pointing towards a brick that is partially obscured by grass. The text inside the arrow reads: "The brick, now marked by a post because it's hard to find!".

The brick, now marked by a post because it's hard to find!





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STF

Before 22mths recovery + high density grazing

After 22mths recovery + high density grazing



Nov 2019, 3.5 months' regrowth



Nov 2021, 2.5 months' regrowth

STF

Before long recovery + high density grazing



After long recovery + high density grazing



Nov 2021, 2.5 months' regrowth

A photograph of a large herd of black sheep grazing in a lush green field. The sheep are clustered together in the middle ground, with some individuals showing reddish-brown patches. The field is vibrant green, and the background is filled with tall, leafy trees under a clear blue sky. The scene is brightly lit, suggesting a sunny day.

HIGH DENSITY GRAZING

How high? This is roughly what we're aiming for.

LONG RECOVERIES

How long? On my place, I'm aiming for 9 – 12 months. On poorer soils, longer recoveries are more beneficial.

The STF area in these slides was grazed at 22 months recovery. More STF trials would be required to show whether such a long recovery gave any extra benefits over, say, 12 month and 18 month recoveries.

However, the basic principle is clear...





LONG RECOVERIES

+

HIGH DENSITY GRAZING

=

PROFOUND IMPROVEMENTS

(WITH ZERO IRRIGATION OR FERTILISER)

**WHY
WOULDN'T
YOU TRY IT?**