

## Supplementary Material

### **Do regenerative grazing management practices improve vegetation and soil health in grazed rangelands? Preliminary insights from a space-for-time study in the Great Barrier Reef catchments, Australia**

*Rebecca Bartley<sup>A,\*</sup>, Brett N. Abbott<sup>B</sup>, Afshin Ghahramani<sup>C</sup>, Aram Ali<sup>C</sup>, Rod Kerr<sup>D</sup>, Christian H. Roth<sup>E</sup> and Anne Kinsey-Henderson<sup>A</sup>*

<sup>A</sup>CSIRO Environment, Brisbane, Qld 4068, Australia

<sup>B</sup>CSIRO Environment, Townsville, Qld 4811, Australia

<sup>C</sup>University of Southern Queensland, Toowoomba, Qld 4350, Australia

<sup>D</sup>NQ Dry Tropics, Townsville, Qld 4810, Australia

<sup>E</sup>SeeSide Dialogue (formerly CSIRO, Brisbane, Qld 4068, Australia)

\*Correspondence to: Email: [rebecca.bartley@csiro.au](mailto:rebecca.bartley@csiro.au)

## Supplementary data

Table 1: Comparison of % ground cover measured on the ground and using Landsat remote sensing for the 1 ha sites at each site for the pre and post wet season data

Property		Time period	Year	% Ground cover (1 ha site)		Absolute difference	% difference
				Measured (Botanal)	Landsat		
R1	Control	End of dry (Sept to Nov)	2020	69.30	88.92	19.61	22.06
		End of wet (Mar - May)	2021	87.00	94.75	7.75	8.18
	Treatment	End of dry (Sept to Nov)	2020	66.05	79.64	13.58	17.06
		End of wet (Mar - May)	2021	72.00	97.82	25.82	26.39
R2	Control	End of dry (Sept to Nov)	2020	52.87	85.20	32.33	37.95
		End of wet (Mar - May)	2021	71.90	98.90	27.00	27.30
	Treatment	End of dry (Sept to Nov)	2020	56.50	85.45	28.96	33.89
		End of wet (Mar - May)	2021	90.70	97.73	7.03	7.19
R3	Control	End of dry (Sept to Nov)	2020	72.60	79.58	6.99	8.78
		End of wet (Mar - May)	2020	94.00	94.33	0.33	0.35
	Treatment	End of dry (Sept to Nov)	2020	81.86	84.40	2.54	3.01
		End of wet (Mar - May)	2020	98.00	96.60	-1.40	-1.45
R4	Control	End of dry (Sept to Nov)	2020	56.13	82.00	25.87	31.55
		End of wet (Mar - May)	2021	86.20	98.00	11.80	12.04
	Treatment	End of dry (Sept to Nov)	2020	94.15	92.00	-2.15	-2.34
		End of wet (Mar - May)	2021	92.60	97.50	4.90	5.03

R5	Control	End of dry (Sept to Nov)	2020	58.53	69.83	11.30	16.18
		End of wet (Mar - May)	2021	95.00	96.58	1.58	1.64
	Treatment	End of dry (Sept to Nov)	2020	96.06	95.36	-0.70	-0.73
		End of wet (Mar - May)	2021	76.00	99.45	23.45	23.58
R6	Treatment	End of dry (Sept to Nov)	2020	77.00	81.54	4.54	5.57
		End of wet (Mar - May)	2021	87.00	100.00	13.00	13.00