

STARTING OFF THE VALUATION

INFORMATION REQUEST:

- > CURRENT INFRASTRUCTURE MAPPING
- > STOCKING HISTORY
- > RAINFALL RECORDS
- > "BLUE BOOK" OTHER LAND CONDITION REPORTS
- > RELAVENT CAP EX



Typical Inspection



Between 100km and 800km flying per property



Between 100km and 300km driving per property



Heavy reliance on up to date infrastructure mapping



150 to 450 infrastructure photos per lease



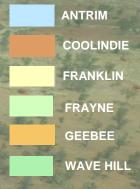
Estimating Carrying Capacity

- Apply the latest in scientific research data and methodology available to develop sustainable carrying capacity estimates for the land types of the NT.
- Combine this with the experience of NT producers, expert opinions and grazing records where available (and appropriate)
- We also needed:
- Land system data and relevant reports
- Accurate recording of all permanent and semi permanent water points
- to generate a map for the property here's an example:

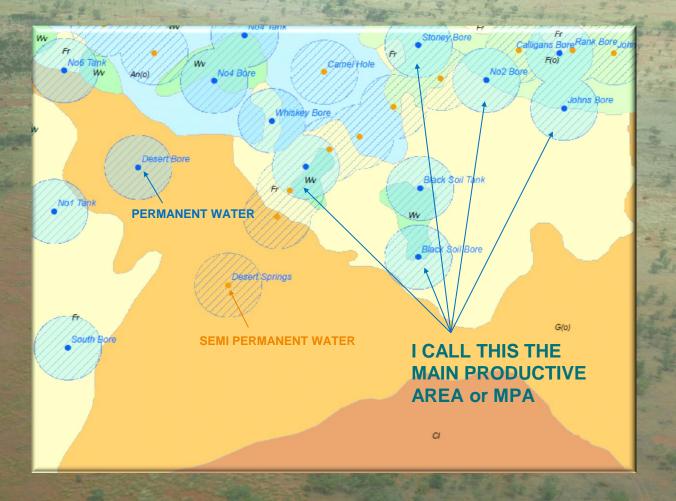




LAND SYSTEMS







LAND SYSTEMS

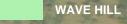








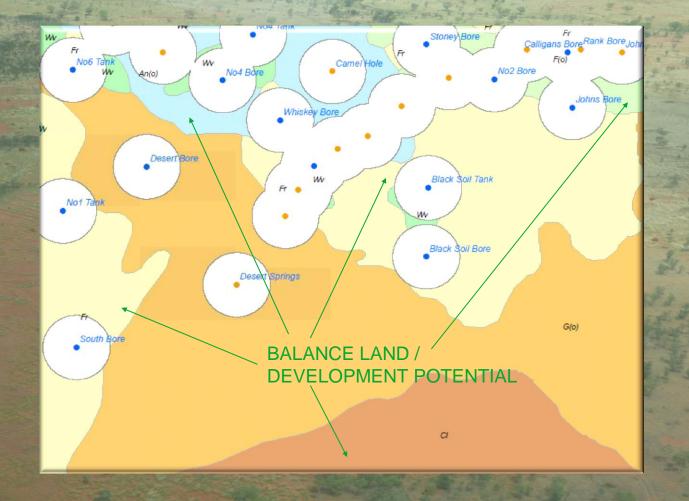




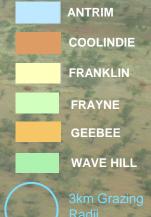


3km Grazing Radii





LAND SYSTEMS





DECIDE ON LAND CONDITION

Determines the capacity of grazing land to produce useful forage. A measure of how well the grazing land ecosystem is working.

Rating	Soil	Pasture	Weed	Woodland	Pasture Growth
A	No erosion and good	Good coverage of 3P	Few weeds and no	No signs of	
All of these	surface condition	grasses*, little bare ground	significant	woodland	Max 100%
features		(<30%) in most years	infestations	thickening	Widx 10070
В	Some signs of previous	Some decline in the presence	Small infestations	Some thickening	
(At least one or	erosion and some	of 3P grasses and/or bare	of weeds	in the density of	Falls to 75%
more of these	current signs of	ground(more than 30%, but		woodland plants	1 alis to 13%
features)	erosion	less than 50% in most years)			
С	Obvious signs of past	General decline in the	Obvious presence	General	
(One or more of	erosion and/or current	presence of 3P species and/or	of weeds	thickening in the	Falls to 45%
these features)	susceptibility to	bare ground (>50% in most		density of woody	FallS to 45%
	erosion	years)		plants	
D	Severe erosion,	General lack of and perennial	Large weed	Thickets of woody	
(One or more of	scalding or compaction	grasses or forbs	infestations	plants that cover	
these features)	resulting in a hostile		covering significant	significant areas	Falls to 20%
	environment for plant		areas		
	growth				
*3P grasses = Pa	alatable, Productive, Pere	ennial		Sou	rce: NT Government

^{*3}P grasses = Palatable, Productive, Perennial



Calculating Carrying Capacity

Land System		3km GR (sqkm)	Pasture kg/Ha	Utlsn	Access		Land Condition	AE/sqkm	CC (AE)
Main Productive Area									
Grazing access year-round:									
Wave Hill	Grey or brown cracking clays, small areas of brown loams to red clays. Mainly Bluegrass, Mitchell, Panicum, Feathertop, small areas of ribbon or limestone.	57.9	2,425	20%	100%	2,920	В	16.6	962
Frayne	Mainly brown loams, some cracking clay. Mainly Kangaroo, White, Ribbon, some Bluegrass, Panicum, Feathertop.	67.3	1,700	15%	100%	2,920	В	8.7	587
Antrim	Mostly rocky outcrops with basalt boulders and pockets of red clay soils. Limestone grass, Spinifex, Annual Sorghum.	37.8	1,900	10%	100%	2,920	В	6.5	246
Geebee	Sandy loams and clay loams over laterite. Soft Spinifex, Wiregrass.	43.9	850	10%	100%	2,920	В	2.9	128
Franklin	Mainly shallow reddish soils with laterite, some loam and clay soils. Mainly Soft spinifex, Annual Sorghum, some Themeda, Whitegrass.	169.4	700	5%	90%	2,920	В	1.1	183
Coolindie	Deep red and yellow sands. Soft Spinifex.	0.0	650	5%	100%	2,920	В	1.1	0
Total: Year-round grazing		376						5.6	2,106
Wet season grazing only: *									-
5% highly productive (20.8 AE/sqkm), 81% moderate (8.1 - 10.9) & 14% low productivity (1.1 - 2.9)		115					A-B	6.9	795
Main Productive Area		491						5.9	2,901
Area Outside 3km radii comprising:									
Land suitable for grazing expansion							A-B		
2% highly productive (20.8 AE/sqkm), 17% moderate (8.1 - 10.9) & 81%		1,069			Po	<u>stential</u> a	dditional CC:	4.9	5,257
Land NOT suitable for grazing expansion									
100% low productivity (1.3 - 1.4AE/sqkm)		712						<u>1.4</u>	
Sub Total: balance Land outside of 3km radii		1,782							
Total				•	•				2,901
Adopt		2,273						1.3	2,900



Carrying Capacity Challenges

- Often "back of the envelope" stocking history
- Land condition sometimes difficult to accurately estimate
- Limited GRASP model calibration data
- Limited sustainable utilisation rates for lighter soils
- Variable resolution land type mapping across the NT
- Accounting for impact of supplement
- Impact of Buffel grass (mainly in Alice Springs region)

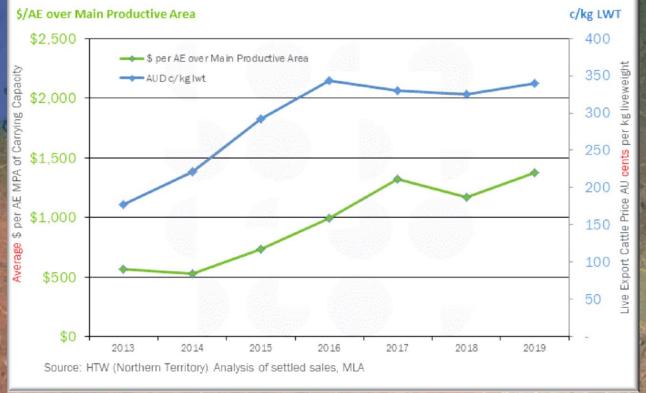
VALUATION CALCULATIONS

Country Classification	Area sakm	CC Rate (AE/sqkm)	AE's	\$/sqkm Ex Struct Rate	\$/AE Ex Struct Rate	Value		
Main Productive Area (MPA) Year-round grazing		() - 1 - 7						
14% highly productive (16.6 AE/sqkm), 16% moderate (6.5 - 8.7) & 81% low (1.1 - 2.9)	376	5.6	2,106	\$5,598	\$1,000	\$2,105,869		
Wet season grazing * 5% highly productive (20.8 AE/sqkm), 81% moderate (8.1 - 10.9) & 14% low productivity (1.1 - 2.9)	115	6.9	795	\$6,902	\$1,000	\$795,164		
Sub total MPA	491	5.9	2,901	\$5,903	\$1,000	\$2,901,034		
Area outside of MPA comprising: Land suitable for grazing expansion 2% highly productive (20.8 AE/sqkm), 17% moderate (8.1 - 10.9) & 81% low productivity (1.1 - 2.9)	1,069	Potential add	ditional CC: 5,257	\$2,421	\$/ <u>Potential</u> AE: \$492	\$2,588,796		
Land NOT suitable for grazing expansion 100% low productivity (1.3 - 1.4AE/sqkm)	712	1.4				Nil		
Land Improved Ex Struct	2,273			\$2,415	\$1,892	\$5,489,829		
Plus added value of buildings & yards				0 111/1 =		\$1,200,000		
Total Adopt	2.273	1.3	2,900	Overall Value R: \$2,947	\$2,310	\$6,689,829 \$6.700.000		
* Country grazed over the wet season based on seasonal waters (effectively spelled over the dry).								

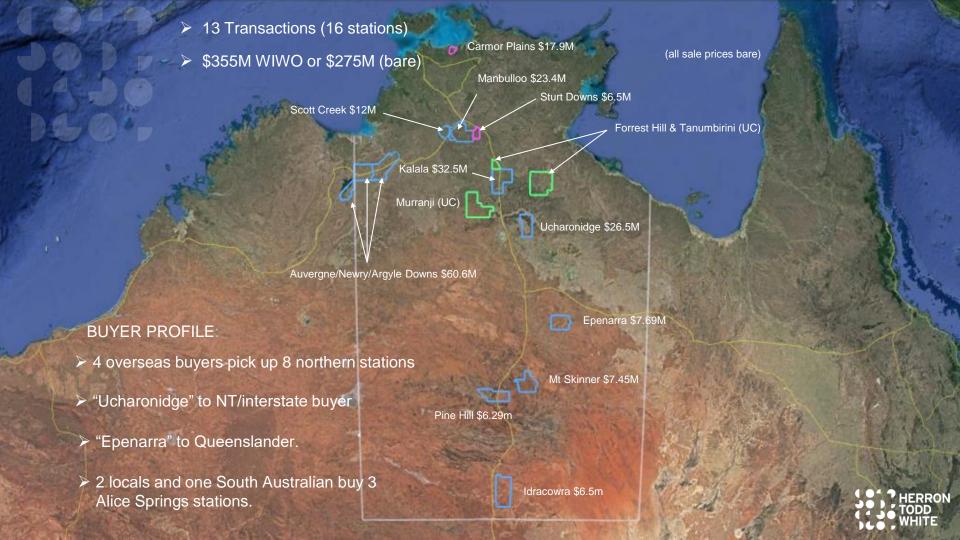




NT Pastoral Prices (\$/AE over MPA) vs Live Export Cattle Prices















NT FREEHOLD SALES Darwin

Douglas Daly

atherine

Balongilly Farms (691ha)

March 2019 for \$6.65M

\$27,850 per planted ha

Kingfisher (2,024ha) \$3.25M \$3,500/ha cleared/pasture improved 135% pa increase on \$1,500/ha 2017 price







Disclaimer

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