# Northern Territory Pastoral Feed Outlook - December 2019

The purpose of this quarterly outlook is to summarise information relevant to the pastoral industry such as current feed supplies, seasonal conditions, the development of drought conditions and relative fire risk. You can subscribe to receive the Outlook <u>here</u>.

You can see the entire document and all districts by continuing to scroll through this file. If you are interested in selected sections, you can click on the links below.

Summary of current situation & trends - all districts

Northern Territory Seasonal Outlook - as at December 2019

Individual District Summaries:

Darwin District

Katherine District

Victoria River District

Sturt Plateau District

Roper District

Gulf District

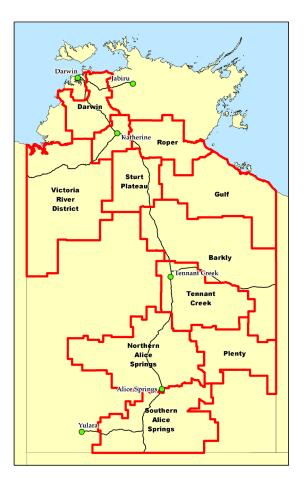
**Barkly District** 

Tennant Creek District

Northern Alice Springs District

Plenty District

Southern Alice Springs District





#### Summary of current situation and trends – all districts – December 2019

As at 1 December 2019, all districts have experienced below-average to extremely low pasture growth so far this growing season.

Critically low pasture levels (less than 200 kg/ha) are widespread in the Barkly, Sturt Plateau and Northern Alice Springs districts. There would be individual properties in most other districts in a similar situation due to the patchy rainfall received in the past 12 months. Furthermore, large parts of the NT have very low levels (200-500 kg/ha) of standing pasture biomass. These include areas in the Darwin, Katherine, Victoria River District, Gulf, Tennant Creek, Plenty and Southern Alice Springs districts. The Bureau of Meteorology predicts that average to drier-than-average conditions are expected across much of the NT between December and February. This is the key pasture growing period for the NT, so this outlook is concerning for some districts (highlighted in red below).

	KEY		Green = lo	ow risk		O	range = wa	tch		Red =	high risk	
	KEY		<b>†</b> = increa	sing trend		↓ =	e decreasing	g trend		⇔	= steady	
				I	Northern Te	rritory Pasto	oral Districts	;				
Indicator	Darwin	Katherine	VRD	Sturt Plateau	Roper	Gulf	Barkly	Tennant Creek	Northern Alice Springs	Plenty	Southern Alice Springs	Comments
2019/2020 total pasture growth	↔	↓	↓	→	Ļ	↓	↓	↓	↓	↓	↓	Arrows indicate trend compared to the long- term median (for this time of year).
Current estimated standing biomass	↓	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	↓	$\downarrow$	↓	$\downarrow$	¥	↓	Arrows indicate trend since previous quarter.
Current fire risk	Ŷ	$\leftrightarrow$	↔	$\Leftrightarrow$	$\Leftrightarrow$	$\leftrightarrow$	$\downarrow$	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	$\downarrow$	Arrows indicate the trend since previous quarter.
Current seasonal outlook	1	1	↑	↓	⇔	Ŷ	⇔	Ŷ	↑	⇔	↑	Arrows indicate the trend since previous quarter and taking into account the forecasted model predictions.

For further information about this Outlook, please contact Chris Materne on 08 8951 8135 or Dionne Walsh on 08 8999 2178

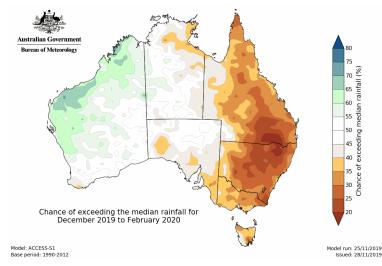
#### Northern Territory Seasonal Outlook as at December 2019\*

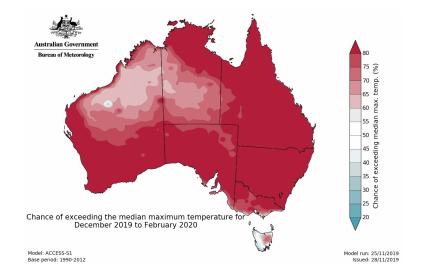
Sourced from the Australian Bureau of Meteorology (BOM)

\*This seasonal outlook was correct at the time of publication. For the most up-to-date seasonal outlook, please go to the "climate outlook" section of the BOM website.

The outlook for December 2019 to February 2020 indicates that:

- Drier than average conditions are expected across most of the NT for the remainder of 2019
- Wetter than average conditions are predicted in January 2020 for the western half of the NT
- Warmer than average days and nights are likely for almost the entire NT





In addition to the natural drivers such as ENSO and the IOD, Australian climate patterns are being influenced by the long-term increasing trend in global air and ocean temperatures.

#### 2019-20 Wet Season Onset

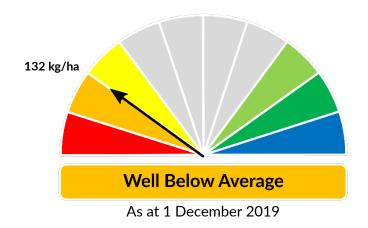
The chance of an early northern rainfall onset for the 2019-20 season is low over large parts of northern Australia. Areas which have a less than 30% chance of an early rainfall onset include much of the Top End and central parts of the NT. In other words, these areas have a greater than 70% chance of a late rainfall onset. The northern rainfall onset outlook gives an indication of whether the first significant rains after 1 September are likely to be earlier or later than normal and can be found here <a href="http://www.bom.gov.au/climate/rainfall-onset/">http://www.bom.gov.au/climate/rainfall-onset/</a>

Seasonal Indicator	Comments (sourced from the Australian Bureau of Meteorology)
El Niño Southern Oscillation (ENSO) Bureau of Meteorology ENSO Wrap-Up	The El Niño Southern Oscillation (ENSO) is currently neutral
Current outlook: Neutral ENSO status: INACTIVE	Most climate models indicate the tropical Pacific is likely to remain ENSO-neutral for the rest of 2019 and into early 2020, meaning other climate drivers, like the IOD, are likely to remain as the primary influences on Australian and global weather.
Indian Ocean Dipole (IOD) Bureau of Meteorology ENSO Wrap-Up	Positive IOD for the rest of 2019
Current outlook: Positive	Typically, a positive IOD brings below- average winter-spring rainfall for southern and central Australia. While the IOD continues to show signs it will persist later than usual this year, it remains unlikely that the positive IOD will persist into the second half of summer. IOD events dissipate as the monsoon trough moves into the southern hemisphere.
	<ul> <li>IOD events typically have little influence on Australian climate from December to April, meaning the strong dry signal should start to weaken.</li> <li>To see larger versions of these images, go to <u>IOD Time Series</u> and the Indian Ocean tab at <u>Bureau of Meteorology ENSO</u> <u>Wrap-Up</u></li> </ul>

# **Darwin District**

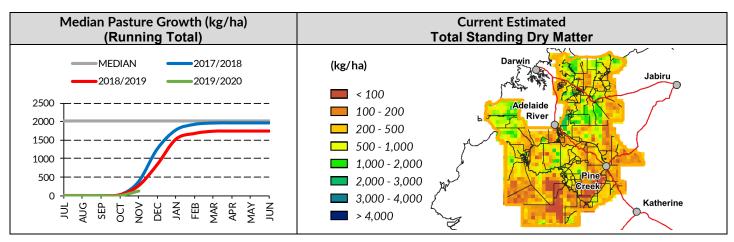
- Some pasture growth has occurred in the northern parts of the district since September.
- At this point of the wet season, pasture growth has been well below-average compared to long-term records.
- Last wet season the pasture growth for the district as a whole was average. However, the patchy rainfall across the district resulted in wide variation in growth depending on location.
- 60% of the district has been burnt since 1 January 2019. 31% of this has occurred since 1 July 2019.

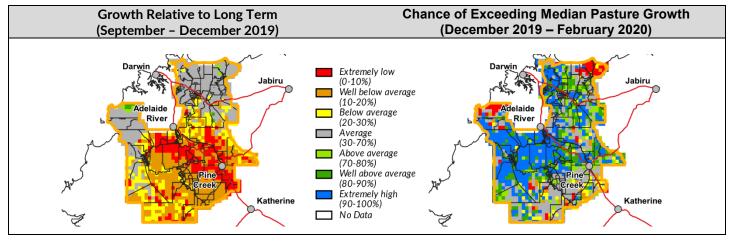
2019/20 Pasture Growth



In a typical wet season, pasture growth in the Darwin region tends to be limited by available soil nitrogen rather than soil moisture. Therefore, a poor wet season may not generally affect the total quantity of pasture grown on upland country.

As at 1 December 2019						
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha		
2019/20 Pasture Growth	100%	0%	0%	0%		
Total Standing Dry Matter	78%	18%	4%	0%		

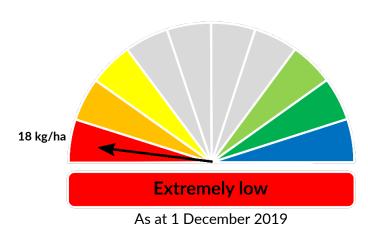




#### Katherine District

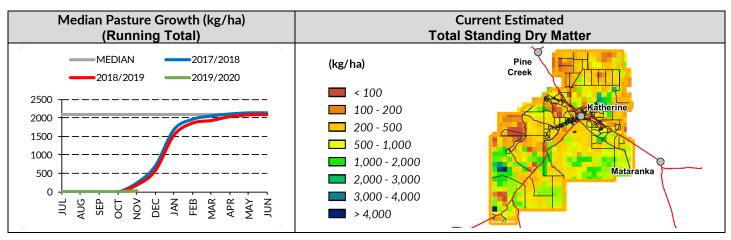
- A small amount of pasture growth has occurred in the district since September.
- At this point of the wet season, pasture growth has been extremely low compared to long-term records.
- Last wet season the pasture growth for the district as a whole was average. However, the patchy rainfall across the district resulted in wide variation in growth depending on location.
- 29% of the district has been burnt since 1 January 2019. 18% of this has occurred since 1 July 2019.

2019/20 Pasture Growth



In a typical wet season, pasture growth in the Katherine region tends to be limited by available soil nitrogen rather than soil moisture. Therefore, a poor wet season may not generally affect the total quantity of pasture grown.

As at 1 December 2019					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	68%	26%	5%	1%	

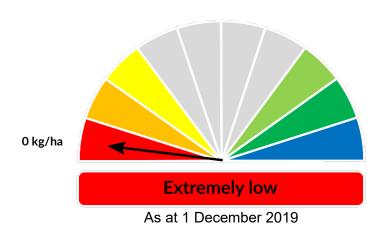


**Growth Relative to Long Term Chance of Exceeding Median Pasture Growth** (September - December 2019) (December 2019 – February 2020) Pine Pine Extremely low Creek Cree (0-10%) Well below average (10-20%) Below average Katherin (20-30%) Average (30-70%) . Above average (70-80%) Mataranka Well above average (80-90%) Extremely high (90-100%) No Data

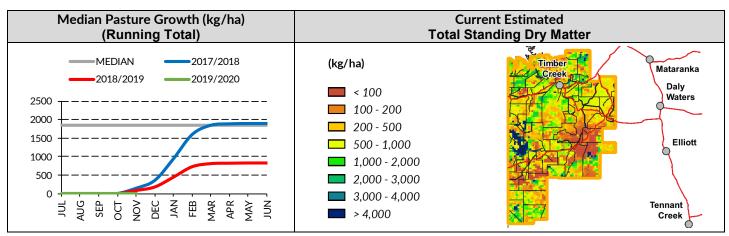
#### Victoria River District

- There has not been any significant pasture growth yet this wet season. Historical records suggest that this is unusual as some growth would normally have occurred by this point of the year.
- Last wet season the pasture growth for the district as a whole was extremely low (in the lowest 6% of years on record or a 1 in 20 year event).
- The far north-east corner was the exception, showing average to above-average growth.
- 11% of the district has been burnt since 1 January 2019. 3% of this has occurred since 1 July 2019.

2019/20 Pasture Growth

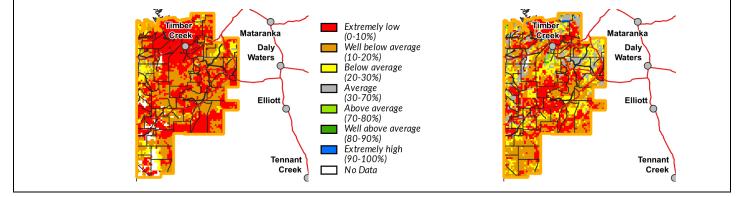


As at 1 December 2019					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	65%	25%	5%	5%	



#### Growth Relative to Long Term (September - December 2019)

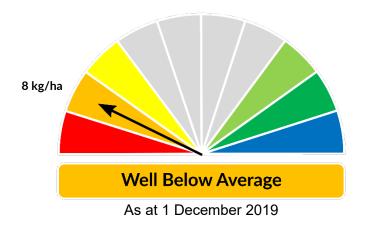
Chance of Exceeding Median Pasture Growth (December 2019 – February 2020)



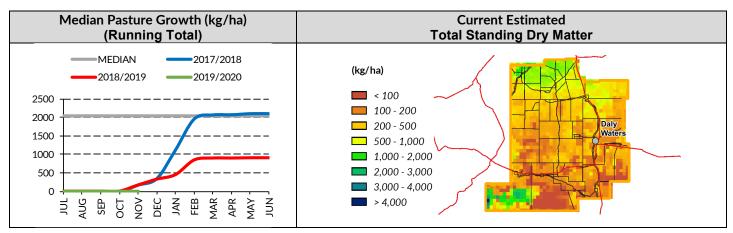
#### **Sturt Plateau District**

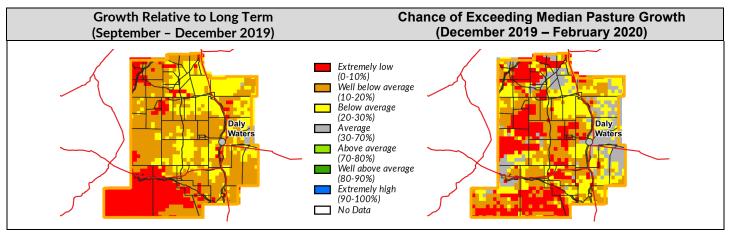
- There has been limited pasture growth to date this wet season. This small amount of growth is well below-average compared to the historical record at this point of the year.
- Last wet season pasture growth was extremely low (lowest 3% of years on record or about a 1 in 30 year event).
- A small area in the north of the district was the exception, experiencing average growth.
- Much of the district, with the exception of the far north and south western corner, is showing low levels of pasture biomass (<500 kg/ha).</li>
   Some areas are showing extremely low levels (<100 kg/ha).</li>
- 1% of the district has been burnt since 1 January 2019.

2019/20 Pasture Growth



As at 1 December 2019					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	85%	12%	2%	1%	

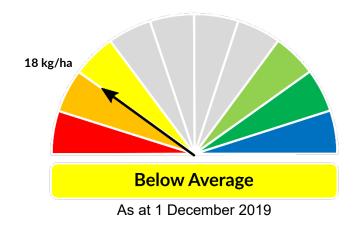




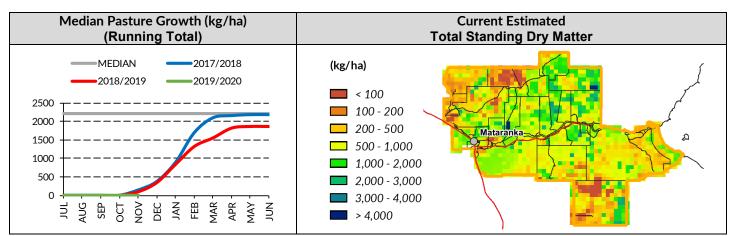
### **Roper District**

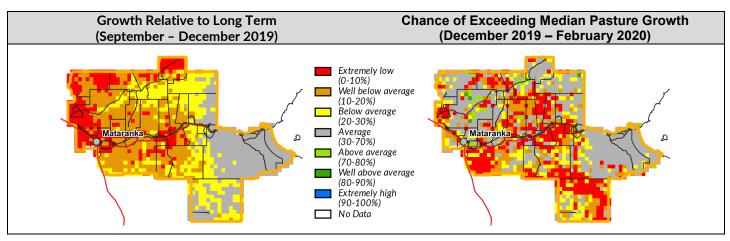
- There has been limited pasture growth to date this wet season. This small amount of growth is below-average compared to the historical record at this point of the year.
- The 2018/19 pasture growth for the district as a whole was below-average (lowest 21% of years on record). However, growth was very variable across the district.
- The western half of the district generally experienced average to above-average growth, while the eastern half experienced belowaverage to extremely low pasture growth (lowest 10% of years on record).
- 23% of the district has been burnt since 1 January 2019. 11% of this has occurred since 1 July 2019.

2019/20 Pasture Growth



As at 1 December 2019					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	51%	38%	9%	2%	

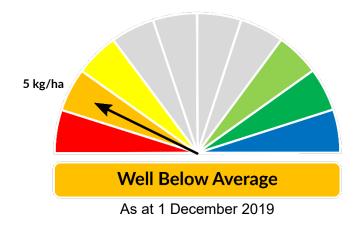




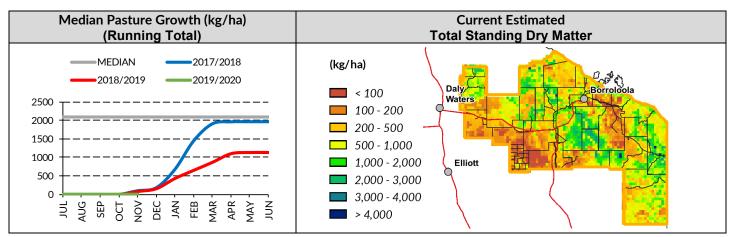
### **Gulf District**

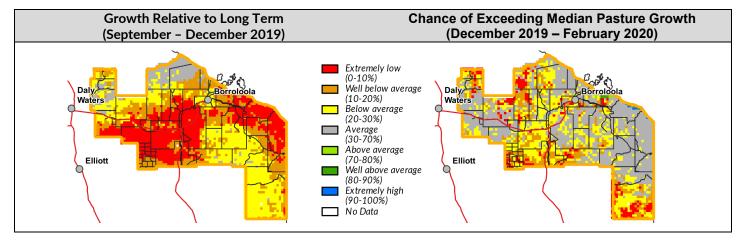
- There has been limited pasture growth to date this wet season. This small amount of growth is well below-average compared to the historical record at this point of the year.
- The 2018/19 pasture growth was extremely low (lowest 6% of years on record or about a 1 in 20 year event).
- A narrow strip along the coast from Borroloola to the Queensland border was the exception, with average growth.
- Large areas throughout the district are now showing extremely low levels of pasture biomass (<500 kg/ha).
- 10% of the district has been burnt since 1 January 2019. 4% of this has occurred since 1 July 2019.

2019/20 Pasture Growth



As at 1 December 2019					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	64%	24%	10%	2%	



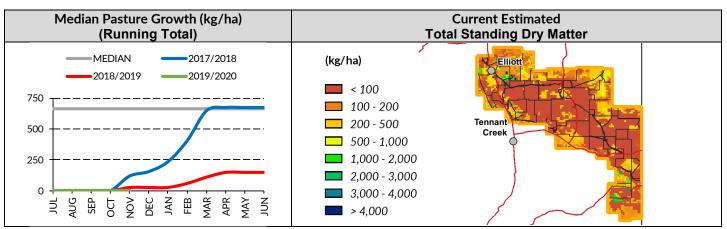


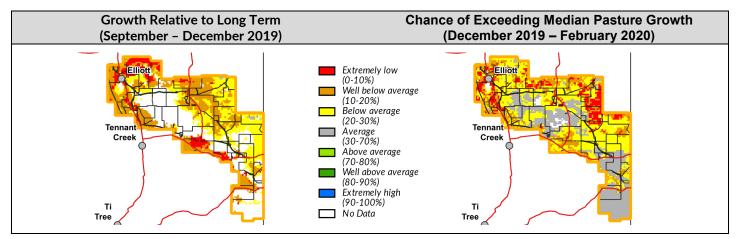
#### **Barkly District**

- There has been no significant pasture growth to date this wet season. This is well below-average compared to the historical record at this point of the year, but not uncommon for this district.
- The 2018/19 pasture growth for the district as a whole was extremely low (lowest 3% of years on record or about a 1 in 30 year event).
- Much of the district experienced extremely low to no pasture growth with the exception of the far south, which had average growth after receiving rainfall from ex-cyclone Trevor.
- A large proportion of the district is now showing critically low levels of pasture biomass (<100 kg/ha).</li>
- Less than 1% of the district has been burnt since 1 January 2019.

0 kg/ha Extremely low As at 1 December 2019

As at 1 December 2019					
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	67%	16%	13%	4%	

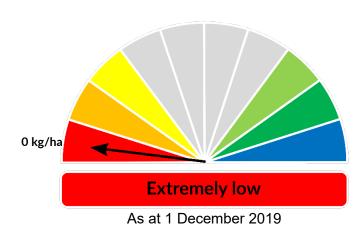




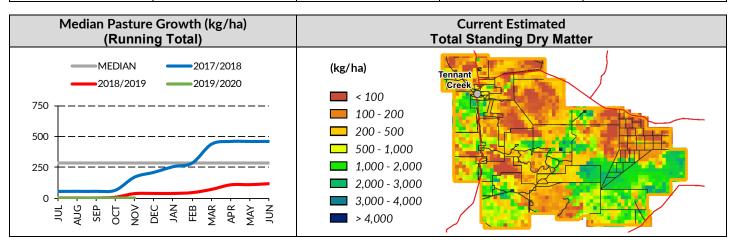
#### **Tennant Creek District**

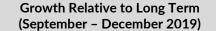
- There has been no significant pasture growth to date this wet season. This is well below-average compared to the historical record at this point of the year, but not uncommon for this district.
- Last wet season, some central and southeastern areas experienced average growth largely due to ex-cyclone Trevor. However, the wider district experienced below-average growth (lowest 30% of years on record) to extremely low growth (lowest 10% of years on record).
- A large part of the district is now showing critically low levels of pasture biomass (<200 kg/ha).
- 3% of the district has been burnt since 1 January 2019. All of this has occurred since 1 July 2019.

2019/20 Pasture Growth

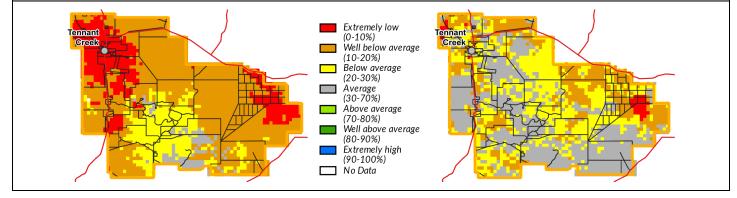


As at 1 December 201	9			
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2019/20 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	23%	21%	23%	33%





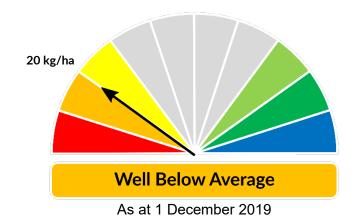
Chance of Exceeding Median Pasture Growth (December 2019 – February 2020)



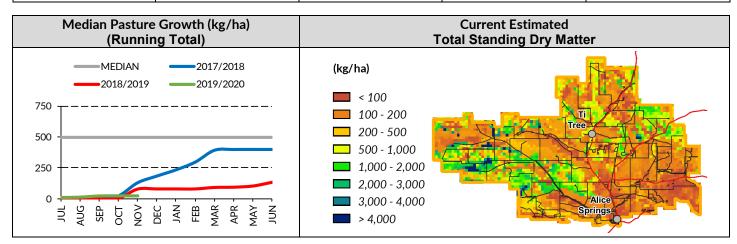
### Northern Alice Springs District

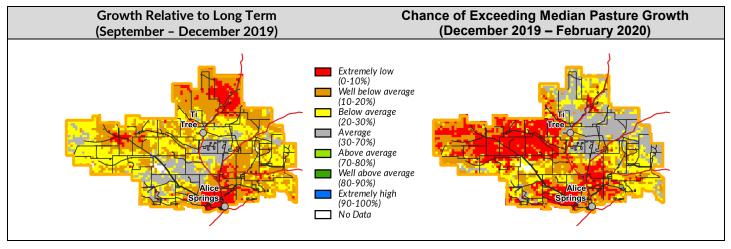
- There has been limited pasture growth to date this financial year. This small amount of growth is well below-average compared to the historical record at this point of the year.
- The 2018/19 pasture growth for the district as a whole was extremely low (lowest 6% of years on record or about a 1 in 20 year event).
- Large areas of the district are now showing critically low levels of pasture biomass (<200 kg/ha).
- Less than 1% of the district has been burnt since 1 January 2019.

2019/20 Pasture Growth



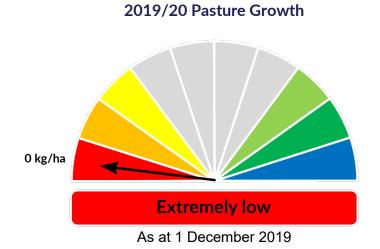
As at 1 December 2019					
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	39%	27%	11%	23%	



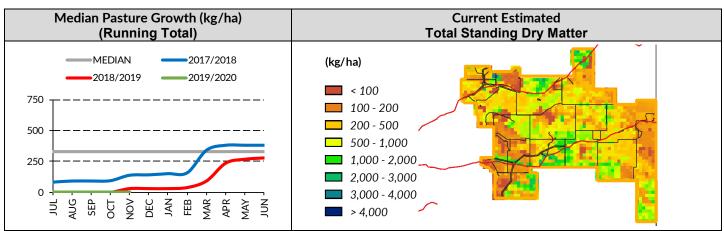


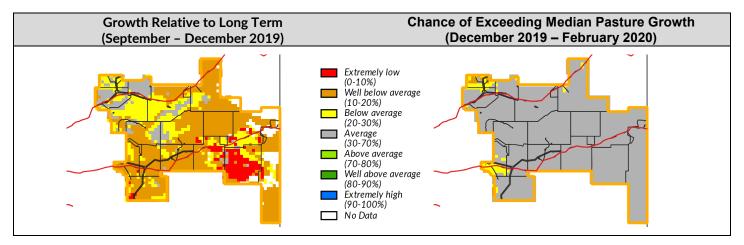
## **Plenty District**

- There has been no significant pasture growth to date this financial year. This is well below-average compared to the historical record at this point of the year, but not uncommon for this district.
- The 2018/19 pasture growth for the district as a whole was average. This was largely due to rain received from ex-cyclone Trevor in southern and eastern parts.
- However, areas in the western and northern parts of the district experienced below-average growth (lowest 30% of years on record).
- Large areas of the district are currently showing very low pasture biomass (<500 kg/ha).
- Less than 1% of the district has been burnt since 1 January 2019.



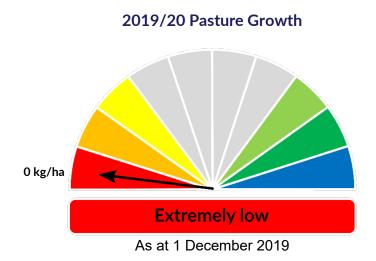
As at 1 December 2019					
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha	
2019/20 Pasture Growth	100%	0%	0%	0%	
Total Standing Dry Matter	17%	26%	31%	26%	



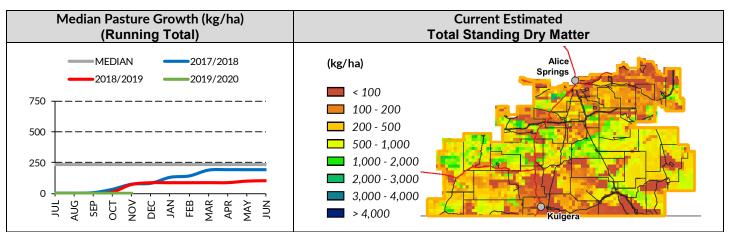


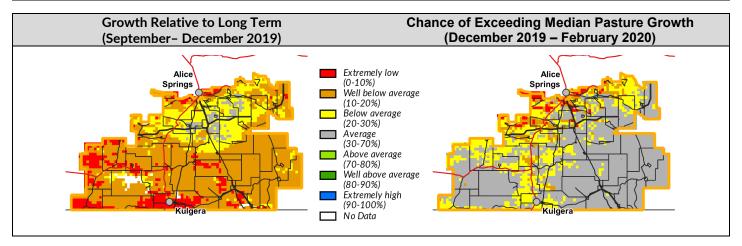
### **Southern Alice Springs District**

- There has been no significant pasture growth to date this financial year. This is well below-average compared to the historical record at this point of the year, but is not uncommon for this district.
- The 2018/19 pasture growth for the district as a whole was below-average (lowest 29% of years on record). However, growth was patchy: much of the western half of the district experienced average pasture growth, and above-average growth was experienced in the south-western part.
- Large areas of the district are now showing low levels of pasture biomass (<500 kg/ha), with some areas at critically low levels (<100 kg/ha).
- Less than 1% of the district has been burnt since 1 January 2019.



As at 1 December 2019				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2019/20 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	31%	18%	31%	20%





#### Pasture information

The pasture and fire information in this document is derived from AussieGRASS. AussieGRASS is a model that simulates pasture growth and standing biomass using climate data, vegetation mapping, fire history and regional estimates of grazing pressure. The model can be used to track simulated pasture growth and total standing pasture biomass at the landscape scale.

Note that the model does not use stocking rate data for individual properties. Where stock numbers are significantly higher or lower than typical for a district, model estimates of total standing dry matter may be erroneous.

#### Disclaimer

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