# Northern Territory Pastoral Feed Outlook April to August 2022

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. This edition summarises modelled pasture growth from the end of July 2022. 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 August 2022

Individual District Summaries:

Darwin District

Katherine District

Victoria River District

Sturt Plateau District

Roper District

Gulf District

**Barkly District** 

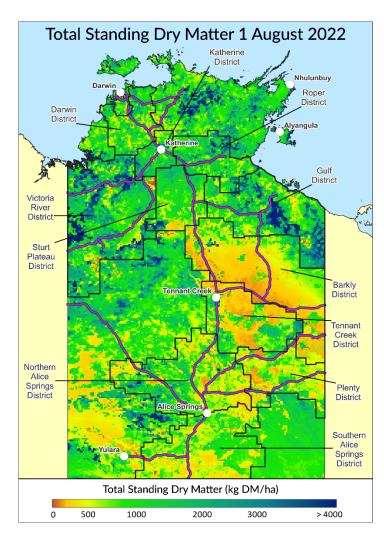
Tennant Creek District

Northern Alice Springs District

Plenty District

Southern Alice Springs District

For further information about this Outlook, please contact Chris Materne on 08 8951 8135





#### Summary of current situation and trends – all districts – August 2022

The 2021-2022 La Niña has resulted in average to above average growth across the Alice Springs and Darwin districts, however north of Tennant Creek many districts have generally experienced average to below average pasture growth, including large areas of extremely low growth, especially in the Roper District. This highlights that although an above average 2021/22 season was predicted due to La Nina conditions, the influence of ENSO is relatively slight in the NT and many La Nina years still receive below average rainfall. During a season other local short-term weather systems can over-ride the broader climate driver's (ENSO and IOD) influences. The BoM's shorter to medium term predictions, which incorporate all the potential drivers, and their interactions have generally been more reliable for 2021-2022. Most of the NT did experience an early 2021/22 wet season as predicted by the BoM.

Below average pasture biomass for this time of year is currently being experienced across much of the NT north of Ti Tree to Katherine due to the less than normal pasture growth in 2021/22 in these districts. Much of the Barkly and Tennant Creek districts are showing large areas of very low levels (>500kg/ha) and critically low levels (>200kg/ha) of pasture biomass.

An **earlier** than normal northern rainfall onset for the 2022–23 season is likely across most of the NT. Across the Northern NT, including the Darwin, Katherine, Roper, Sturt Plateau and Gulf districts, the chances of an earlier than normal onset are greater than 75%, while for the southern parts and the VRD the chances are closer to 65%.

The negative IOD and warmer eastern Indian Ocean increases the chances of above average winter-spring rainfall for much of southern and eastern Australia.

KEY		Green = I	ow risk			Orange	e = watch			Red =	high <mark>ri</mark> sk	
KEY		↑ = increa	sing trend			↓ = decr	easing trer	nd		⇔ =	= steady	
				N	orthern Te	rritory Pas	toral Distri	cts				
Indicator	Darwin	Katherine	VRD	Sturt Plateau	Roper	Gulf	Barkly	Tennant Creek	Northern Alice Springs	Plenty	Southern Alice Springs	Comments
2021/22 total pasture growth	$\Leftrightarrow$	⇔	→	$\downarrow$	↓	$\downarrow$	↓	↓	1	1	1	Arrows indicate trend compared to the long-term median (for this time of year)
Current estimated standing biomass	$\Leftrightarrow$	↓	↓	↓	↓	↓	$\downarrow$	$\downarrow$	$\Leftrightarrow$	$\Leftrightarrow$	$\leftrightarrow$	Arrows indicate trend since previous quarter
Current fire risk	1	1	1	1	1	1	↔	1	↑	↑	↑	Arrows indicate the trend since previous quarter
Current seasonal outlook	1	1	1	1	1	1	1	1	1	1	1	Arrows indicate the trend since previous quarter and taking into account the forecasted model predictions

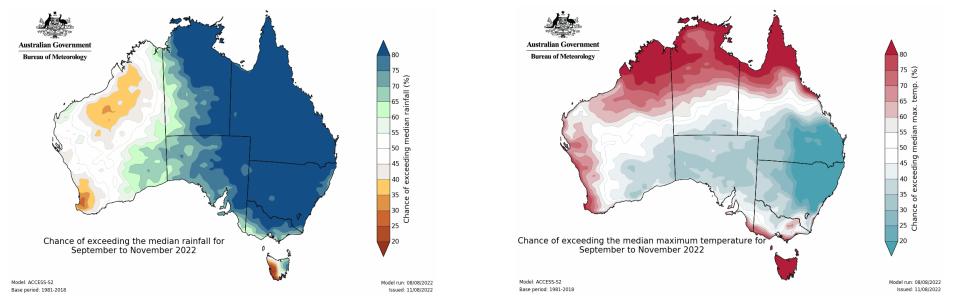
#### Northern Territory Seasonal Outlook as at 11<sup>th</sup> August 2022\*

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 BoM outlook for September to November 2022 indicates that:

- Wetter than average conditions are likely across most of the NT, with moderate to good past accuracy (55-75%). The likelihood of wetter than median rain is lower in the VRD and western NT. Higher than median rainfall during this period is consistent with a predicted earlier start to the wet season, but the NT is seasonally dry during this period, so rainfall totals are still likely to be low.
- Warmer than average days are likely across the northern half of the NT, while cooler than average temperatures are likely near the NT/SA boarder, both with good past accuracy (>65%).
- Warmer than average nights are very likely across the entire NT with moderate to good past accuracy (>55%).



**Influencing Climate drivers** 

- The negative Indian Ocean Dipole event (IOD), warmer than average waters around northern Australia, and
- Neutral to cool phase of the El Niño-Southern Oscillation (ENSO), are likely to be influencing this outlook.

Climate Influences	Comments (sourced from the Australian Bureau of Meteorology)
El Niño Southern Oscillation (ENSO) ENSO status: La Niña ALERT La Niña ALERT Currer Luce (Marcet) Pacific Ocean Update (As at 16 August 2022) Next Update: 30 August 2022	Chance of La Niña increases. ENSO is currently neutral. The Bureau's ENSO Outlook has been raised to La Niña ALERT. This is due to both renewed cooling in the tropical Pacific Ocean as well as climate models indicating La Niña is likely during the austral spring and early summer. Historically, when La Niña ALERT criteria have been met, La Niña has subsequently developed around 70% of the time; this is approximately triple the normal likelihood. Four of seven climate models surveyed by the Bureau suggest La Niña could return by early-to-mid spring, with the remainder maintaining ENSO-neutral until the end of 2022. La Niña events increase the chance of above average spring and summer rainfall across much of northern and eastern Australia. To see larger versions of these images, go to the Outlook and SOI tabs at <u>Pacific Ocean Update</u>
Indian Ocean Dipole (IOD) Current outlook: Negative Indian Ocean Update (As at 16 August 2022) Next Update: 30 August 2022	A negative IOD event is under way. The IOD index value has been continuously at or below the threshold (-0.4 C) since mid-June. All five international climate models surveyed by the Bureau anticipate a negative IOD is likely to continue until at least late spring. A negative IOD increases the chances of above average winter and spring rainfall across much of Australia. It also increases the chances of warmer days and nights for northern Australia. To see larger versions of these images, go to the Outlook tab and IOD Time Series
Southern Annular Mode (SAM) Current outlook: Neutral Southern Ocean Update (As at 15 August 2022) Next Update: 30 August 2022	<ul> <li>The SAM is currently neutral.</li> <li>Values are expected to be positive for the remainder of August, and generally positive throughout spring.</li> <li>Neutral SAM has little influence on Australian rainfall, while positive SAM has a drying influence for parts of south-west and south-east Australia at this time of year, but increases the likelihood of rainfall in eastern New South Wales, far eastern Victoria, and parts of southern Queensland.</li> <li>To see larger versions of these images, go to the Outlook tab and Southern Ocean Update</li> </ul>

Madden–Julian Oscillation (MJO) Outlook: Weak <u>Tropics Update</u>	The MJO is currently weak. The MJO is currently weak, but may potentially re-streng Ocean in the coming days.	4 Model: ACCESS-S2	tialised: 15 August 2022 ( 33 member )
		7 West	21
(As at 15 August 2022) Next Update: 30 August 2022	A weak MJO means it is likely to exert little or no influence	3 8	fic 5 Contribution 4 an 1 2 3 4 5 Contribution 5 Contribution 6 Contribution 5 Contribution 5 Contribution 6 Contribution 5 Contri Contribution 5 Contribution 5 Contribution 5 Contribu
Wet Season Onset Outlook 2022/23: Early <u>Northern Rainfall Onset Outlook</u> (As at 11 August 2022) Next update 25 August 2022	An early start to the 2022/23 wet season is predicted for most of the NT. An earlier than normal northern rainfall onset for the 2022-23 season is likely across most of the NT. Northern NT including the Darwin, Katherine, Roper, Sturt Plateau and Gulf districts, has a greater than 75%, chance of early onset, while for the southern parts and the VRD the chances are closer to 65%. However Northern rainfall onset accuracy is only about 50-55% in August. 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 their median date. The onset outlook can be found <u>here</u> .	20 25 30 35 40 45 50 55 60 65 70 75 80	interest of the second se

2021/22 Pasture Growth

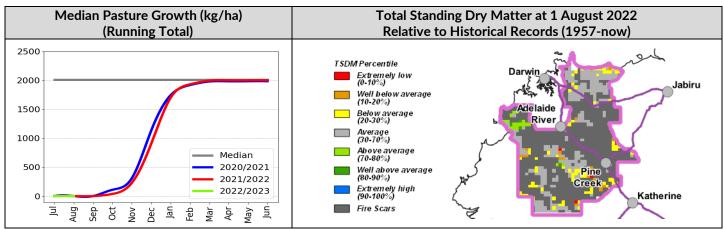
## **Darwin District**

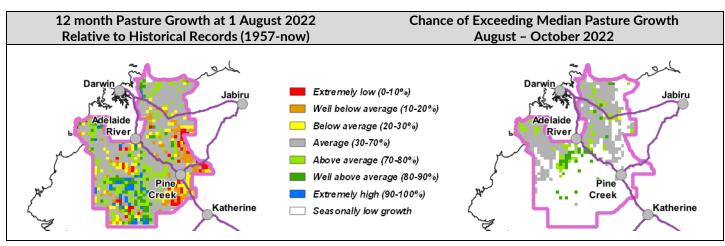
- The 2021/22 district pasture growth was average compared to long-term records.
- In a typical wet season, pasture growth in the Darwin region tends to be limited by available soil nitrogen rather than soil moisture. This means that the annual variation in growth and relative pasture biomass on upland country is quite low.
- Over the next three months, the chances of exceeding the median growth generally varies between **average** and **above average**. However, pasture growth during this time of year is regarded as seasonally low.
- 42% of the district has burnt since 1 January 2022 of which 5% has burnt since 1<sup>st</sup> July 2022.

2000 kg/ha

Average

As at 1 August 2022				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	0%	50%	46%	4%
Total Standing Dry Matter	23%	60%	14%	3%

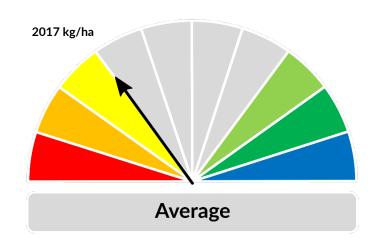




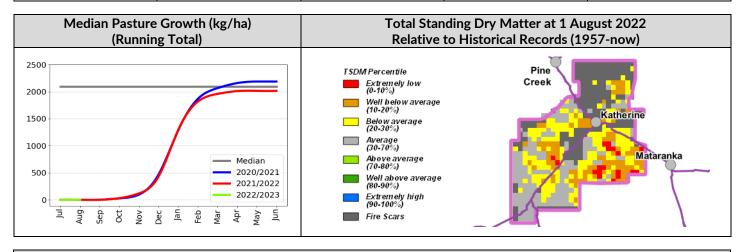
## Katherine District

- The 2021/22 pasture growth across the district was **average**, with large areas in the south indicating **extremely low** growth.
- However, in a typical wet season, pasture growth in the Katherine region tends to be limited by available soil nitrogen rather than soil moisture. This means that the annual variation in growth and relative pasture biomass is quite low.
- Over the next three months pasture growth is seasonally low and useful growth is not expected.
- 17% of the district has burnt since the 1 January 2022. 2% has burnt since 1 July 2022.

2021/22 Pasture Growth



As at 1 August 2022					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2021/22 Pasture Growth	0%	48%	51%	1%	
Total Standing Dry Matter	14%	60%	23%	3%	

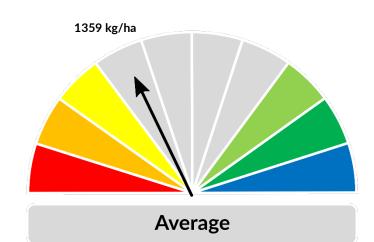


#### 12 month Pasture Growth at 1 August 2022 **Chance of Exceeding Median Pasture Growth** Relative to Historical Records (1957-now) August – October 2022 Pine Pine Creek Creek Extremely low (0-10%) Well below average (10-20%) Katherine Katherine Below average (20-30%) Average (30-70%) Mataranka Above average (70-80%) Mataranka Well above average (80-90%) Extremely high (90-100%) Seasonally low growth

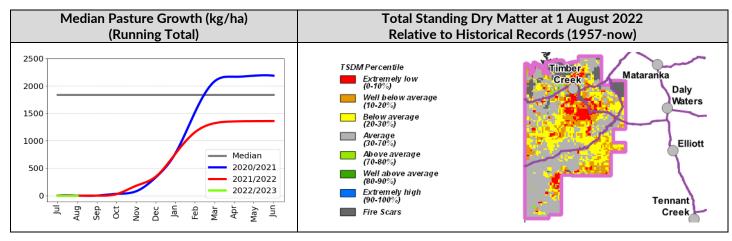
#### Victoria River District

- The 2021/22 district pasture growth was average. However, growth across the district varied considerably from above average in the north to below average to extremely low through the central parts.
- Over the next three months pasture growth is seasonally low and useful growth is not expected.
- 11% of the district burnt since 1 January 2022. 1% has burnt since 1 July 2022.

2021/22 Pasture Growth

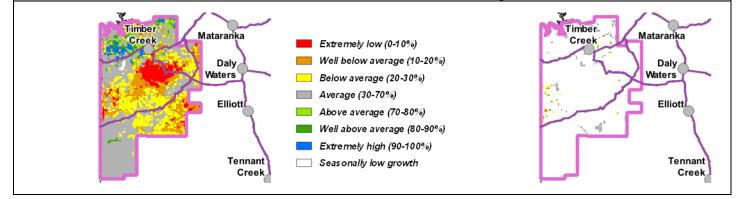


As at 1 August 2022					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2021/22 Pasture Growth	33%	38%	24%	5%	
Total Standing Dry Matter	16%	43%	25%	16%	



#### 12 month Pasture Growth at 1 August 2022 Relative to Historical Records (1957-now)

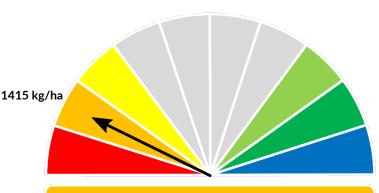




#### Sturt Plateau District

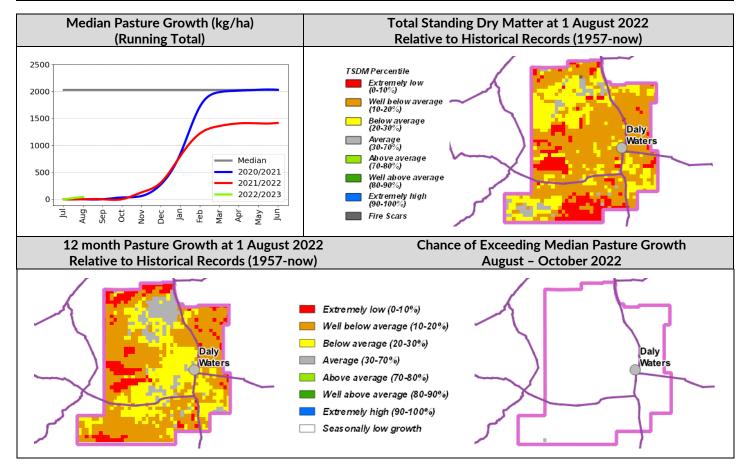
- The 2021/22 district pasture growth finished well below average.
- In 2020/21 the district's growth was considered average. However, it followed two consecutive below average seasons that resulted in areas in the south with critically low pasture biomass. Areas with critically low biomass (<500kg/ha) still remain across the southern parts of the district.
- Over the next three months pasture growth is seasonally low and useful growth is not expected.
- 1% of the district has burnt since 1 January 2022. None of it has burnt since 1 July 2022.

2021/22 Pasture Growth



#### **Well Below Average**

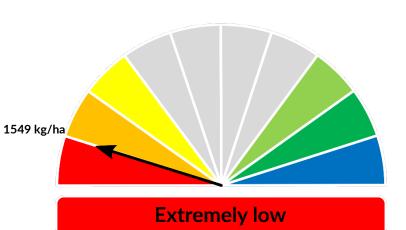
As at 1 August 2022					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2021/22 Pasture Growth	28%	59%	13%	0%	
Total Standing Dry Matter	30%	57%	10%	3%	



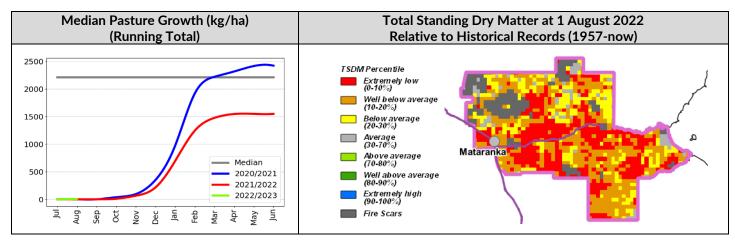
#### **Roper District**

- The 2021/22 district pasture growth was extremely low.
- Although pasture growth was extremely low only small scattered patches of critically low biomass (<500kg/ha) are showing across the district.
- Over the next three months pasture growth is seasonally low and useful growth is not expected.
- 13% of the district has burnt since 1 January 2022. 1% has burnt since 1 July 2022.

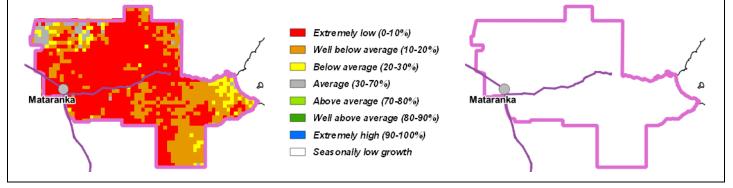
2021/22 Pasture Growth



As at 1 August 2022					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2021/22 Pasture Growth	11%	66%	22%	1%	
Total Standing Dry Matter	16%	60%	14%	10%	



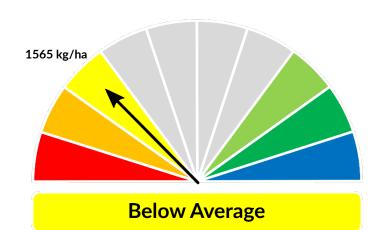
# 12 month Pasture Growth at 1 August 2022Chance of Exceeding Median Pasture GrowthRelative to Historical Records (1957-now)August - October 2022



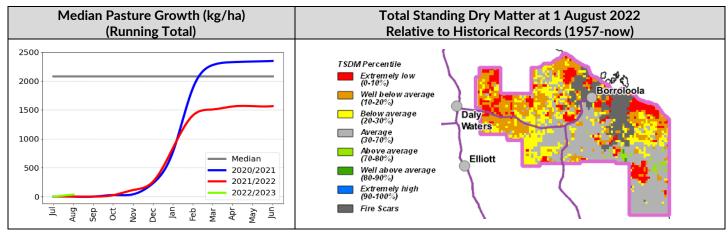
## **Gulf District**

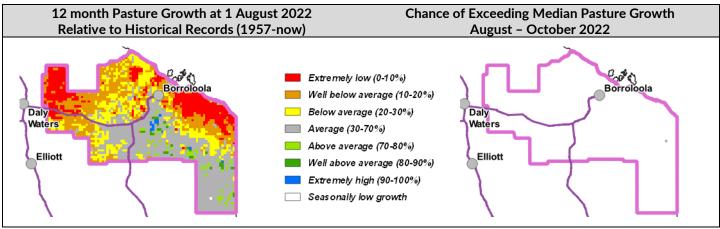
- The 2021/22 district pasture growth was **below average**, with large areas in the west and along the coast experiencing **extremely low** growth.
- Although pasture growth was below average only small scattered patches of critically low biomass (<500kg/ha) are showing across the district in areas that had experienced extremely low growth.
- Over the next three months pasture growth is seasonally low and useful growth is not expected.
- 10% of the district has burnt since 1 January 2022. 1% has burnt since 1 July 2022.

2021/22 Pasture Growth



As at 1 August 2022					
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha	
2021/22 Pasture Growth	18%	53%	27%	2%	
Total Standing Dry Matter	20%	45%	18%	17%	

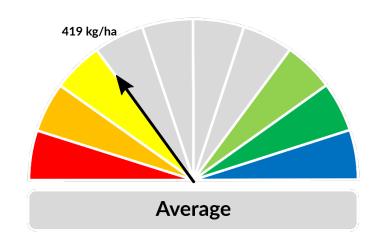




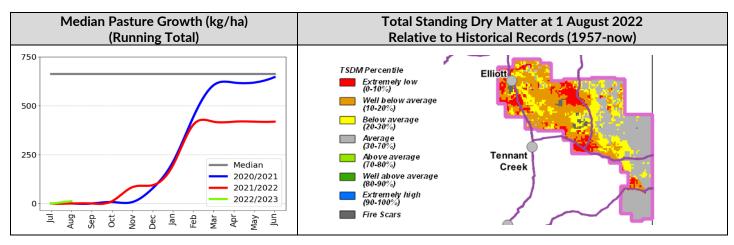
## **Barkly District**

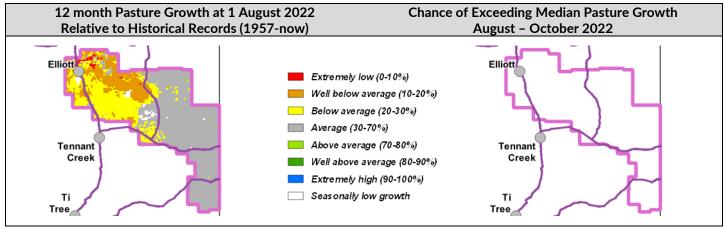
- The 2021/22 pasture growth was average. However, growth varied significantly across the district from average in the south east to generally below average to extremely low across the central and western portions.
- As a result of the 2021/22 season and below average growth in two out of the three previous seasons, large areas of very-low pasture biomass (500kg/ha) are showing across much of the district, with critically low levels (<200kg/ha) appearing in the southern and western portions.
- Over the next three months pasture growth is seasonally low and useful growth is not expected.
- Less than 1% of the district has burnt since 1 January 2022.

2021/22 Pasture Growth



As at 1 August 2022					
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha	
2021/22 Pasture Growth	18%	46%	28%	8%	
Total Standing Dry Matter	27%	33%	25%	15%	

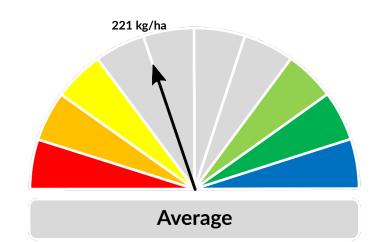




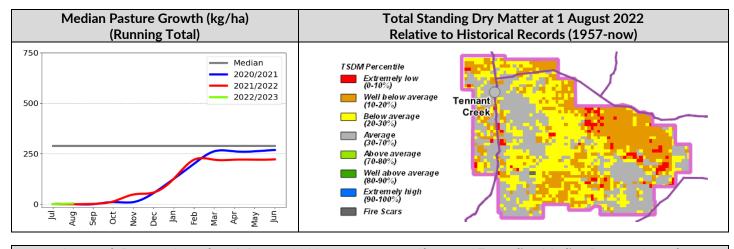
#### **Tennant Creek District**

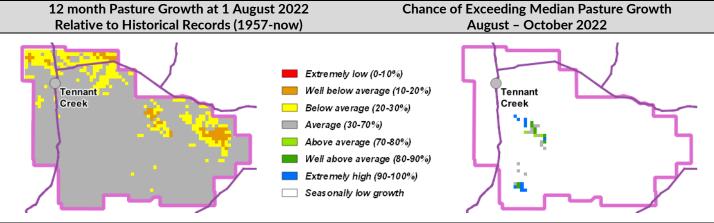
- The 2021/22 pasture growth for the district was **average**. However, **below average** growth was experienced across areas north of Tennant Creek and in the eastern portion of the district.
- Although, the 2020/21 season was considered average, the previous two consecutive **below average** seasons has resulted in very large areas of **very-low** pasture biomass (500kg/ha) across the district.
- Over the next three months pasture growth is seasonally low and although possible, useful growth is not expected.
- Less than 1% of the district has burnt since 1 January 2022.

2021/22 Pasture Growth



As at 1 August 2022				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	59%	26%	12%	3%
Total Standing Dry Matter	31%	18%	19%	32%

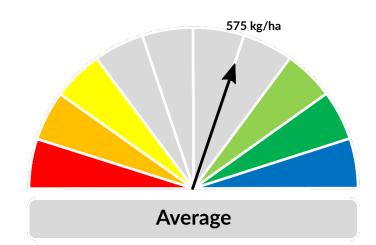




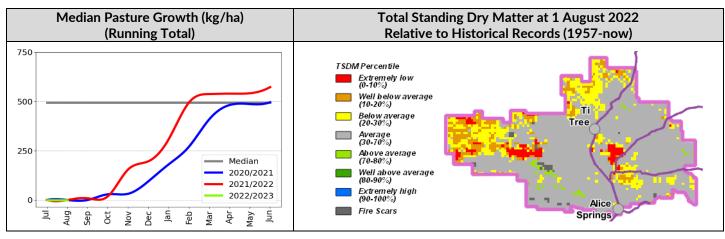
#### **Northern Alice Springs District**

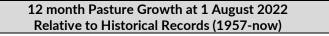
- The 2021/22 pasture growth for the district was average. However, growth varied significantly across the district from above average through the central portion to patches of below average growth in the west.
- Although, much of the district has experienced good seasonal growth, the result of two previous below average seasons out of three seasons, are areas of very-low pasture biomass (<500kg/ha) appearing in the north and western parts of the district.
- Over the next three months, although pasture growth is regarded as seasonally low, areas of **average** to **above average** chance of exceeding median growth are showing across the district.
- 3% of the district has burnt since 1 January 2022.

2021/22 Pasture Growth

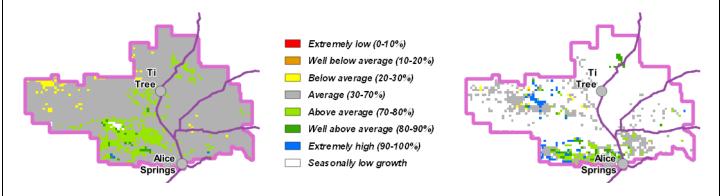


As at 1 August 2022				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	11%	30%	38%	21%
Total Standing Dry Matter	4%	20%	34%	42%





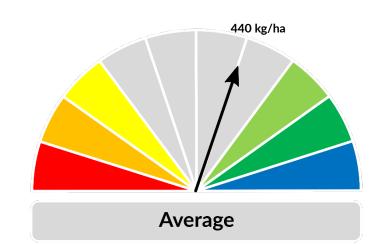
Chance of Exceeding Median Pasture Growth August – October 2022



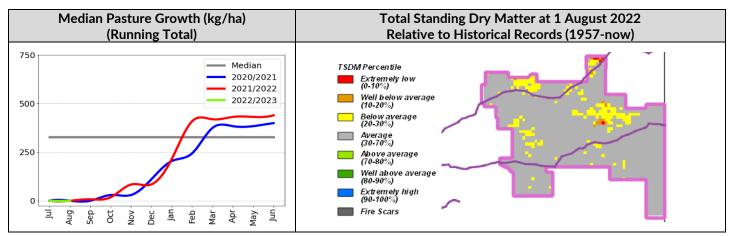
## **Plenty District**

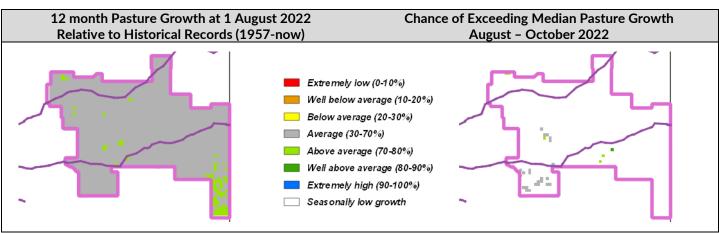
- The 2021/22 pasture growth for the district as a whole was **average**. Scattered small areas of **above average** growth are showing, especially in the southeast.
- Scattered small patches of **very-low** pasture biomass (<200 kg/ha) are still showing across the western parts of the district.
- Over the next three months pasture growth is possible across the district, although regarded as seasonally low.
- Less than 1% of the district has burnt since 1 January 2022.

2021/22 Pasture Growth



As at 1 August 2022						
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha		
2021/22 Pasture Growth	26%	36%	33%	5%		
Total Standing Dry Matter	9%	21%	45%	25%		

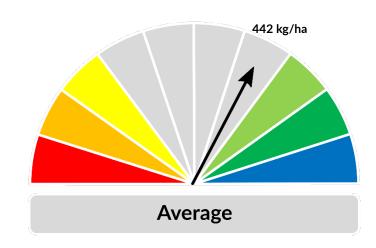




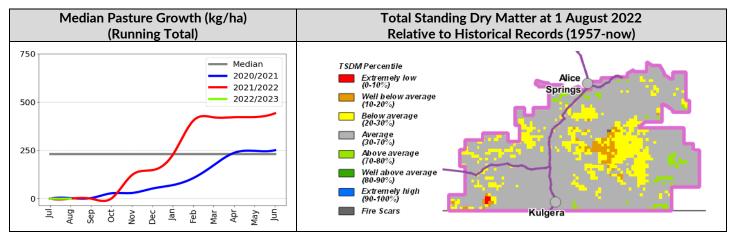
#### **Southern Alice Springs District**

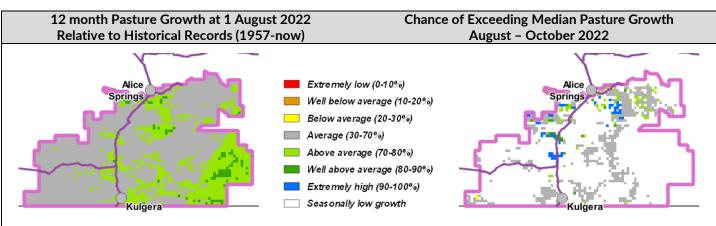
- The 2021/22 pasture growth for the district as a whole was **average**. However, large areas across the district has experienced **above average** growth.
- Due to two out of three prior below average seasons, areas of very-low levels of pasture biomass (<200 kg/ha) remain throughout the district.
- Although pasture growth across the district over the next three months is regarded as seasonally low, areas of average to above average chance of exceeding median pasture growth are beginning to appear across the district.
- Less than 1% of the district has burnt since 1 January 2022.

2021/22 Pasture Growth



As at 1 August 2022					
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha	
2021/22 Pasture Growth	25%	39%	31%	5%	
Total Standing Dry Matter	2%	29%	40%	29%	





## 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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