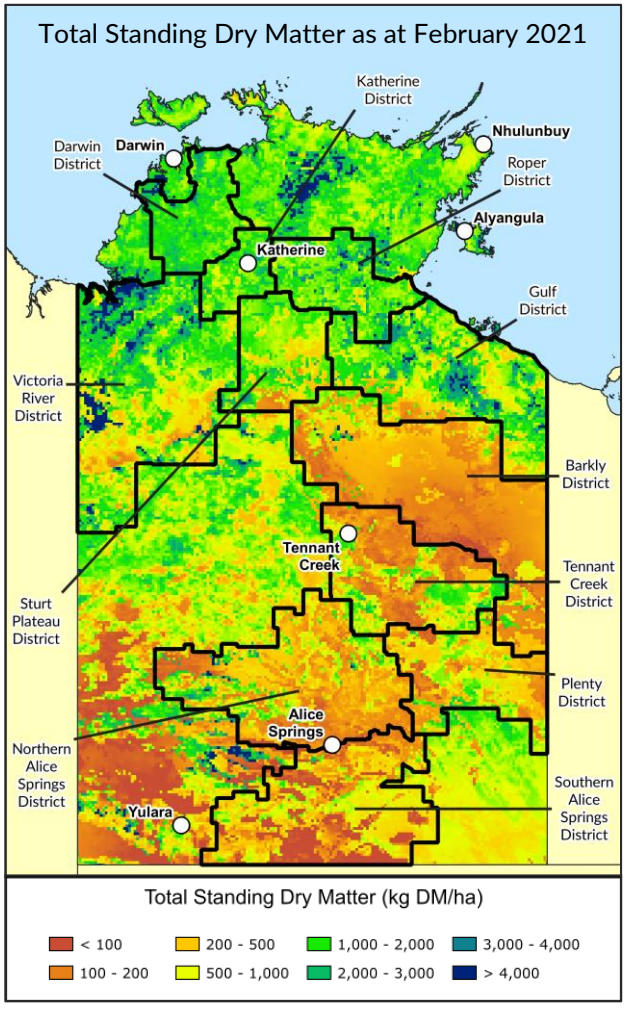
Northern Territory Pastoral Feed Outlook February to April 2021

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 here.

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.



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

Summary of current situation and trends – all districts – February 2021

With the exception of the Darwin and Katherine districts, the majority of the NT is coming off the back of a second consecutive year of **below-average** rainfall and **below-average** to **extremely low** pasture growth. Although the 2020/21 season has delivered **average** to **above-average** pasture growth across many districts, large areas south of Daly Waters are still experiencing **very low** (<500 kg/ha) to **critically low** (<200 kg/ha) levels of pasture biomass. **Critically low** pasture levels remain across large areas of the Barkly, Tennant Creek, Northern Alice Springs, Plenty and Southern Alice Springs districts. Large areas of the Southern Alice Springs district still have less than 100 kg/ha of pasture biomass.

Of concern is the lack of response from perennial grasses across large areas of the Alice Springs and Barkly regions where rainfall should have stimulated pasture growth. In early 2020, widespread death of perennial grass tussocks was observed as a result of the prolonged dry period, which will take at least two years of better seasonal conditions to recover.

Useful February 2021 rain has been recorded across parts of the Northern Alice Springs, Plenty and Southern Alice Springs districts and north of Katherine. Although totals vary widely, pasture growth is likely to occur, but follow-up rainfall is needed to sustain the response in those districts south of Katherine. Many pastures north of Katherine are likely to experience a slowing of growth, or pastures with lower nutritional value, due to nitrogen dilution caused by prolonged rainfall.

KEY	Green = low risk	Orange = watch	Red = high risk

KEY	↑ = increasing trend	↓ = decreasing trend	↔ = steady

	Northern Territory Pastoral Districts											
Indicator	**Darwin**	**Katherine**	**VRD**	**Sturt Plateau**	**Roper**	**Gulf**	**Barkly**	**Tennant Creek**	**Northern Alice Springs**	**Plenty**	**Southern Alice Springs**	**Comments**
2020/21 total pasture growth	↑	↔	↔	↔	↑	↑	↔	↔	↔	↑	↔	Arrows indicate trend compared to the long-term median (for this time of year)
Current estimated standing biomass	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	Arrows indicate trend since previous quarter
Current fire risk	↓	↓	↓	↓	↓	↓	↔	↔	↔	↑	↔	Arrows indicate the trend since previous quarter
Current seasonal outlook	↓	↓	↓	↓	↓	↓	↓	↑	↑	↑	↑	Arrows indicate the trend since previous quarter and taking into account the forecasted model predictions

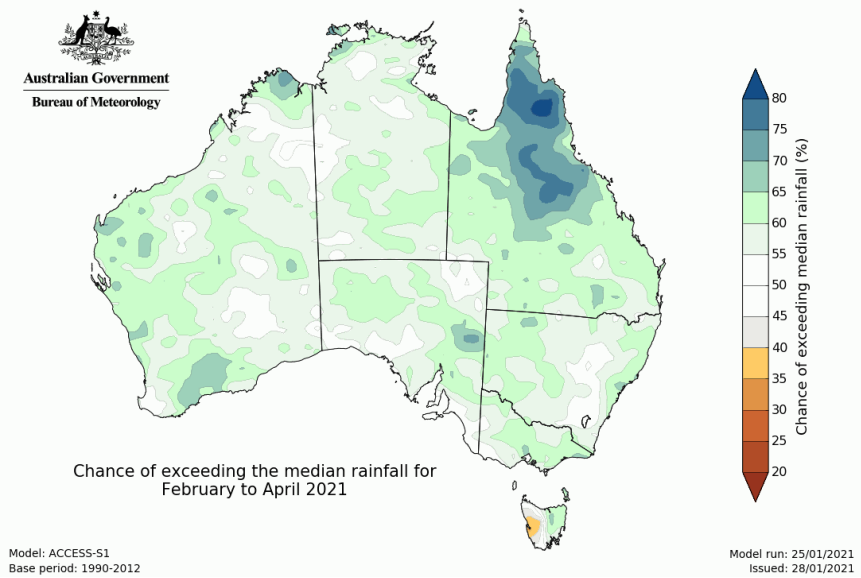
Northern Territory Seasonal Outlook as at February 2021*

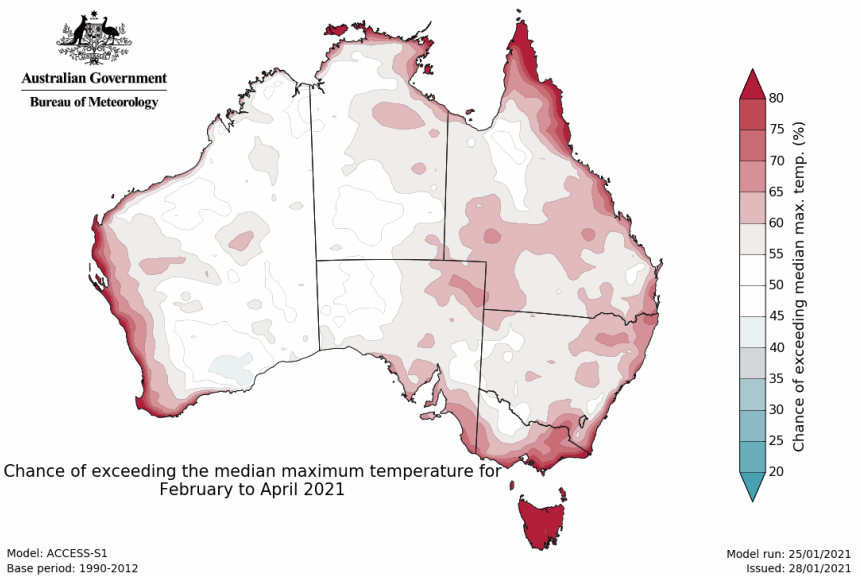
Sourced from the Australian Bureau of Meteorology (BoM)

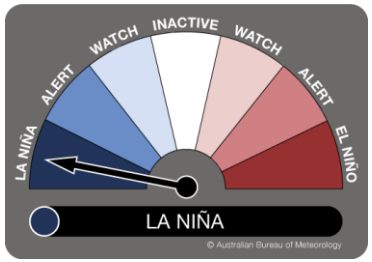
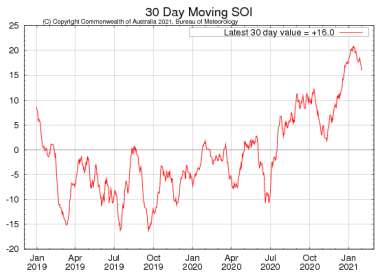
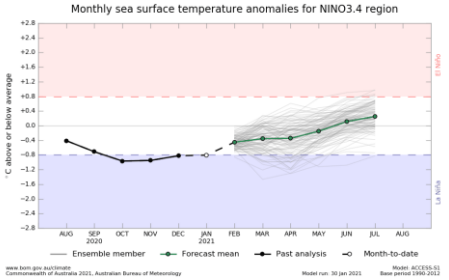
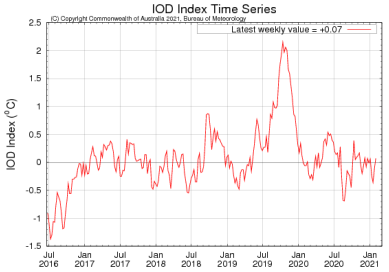
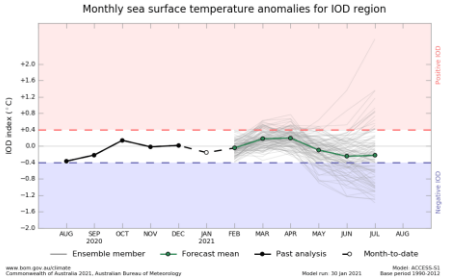
*This seasonal outlook was correct at the time of publication. For the most up-to-date seasonal outlook, please go to the "climate outlook" section of the BoM website.

The BoM outlook for February to April 2021 indicates that:

- **Wetter** than average conditions are predicted across the majority of the NT, with good past accuracy at this time of year. However, the majority of this prediction is influenced by **wetter** than average March conditions.
- **Warmer** than average days are expected across the majority of the NT in February, while **cooler** than average days are expected across much of the NT in March with the exception of the Barkly district and Arnhem Land coast.
- **Warmer** than average nights are very likely over the entire NT.





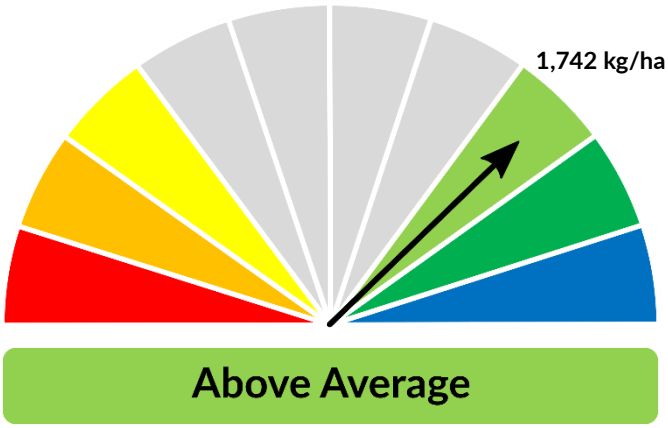
Climate Influences	**Comments** (sourced from the Australian Bureau of Meteorology)
El Niño Southern Oscillation (ENSO) ENSO status: **La Niña**  Pacific Ocean Update	**La Niña has likely passed its peak, but its influence continues** The 2020–21 La Niña is likely to have peaked with respect to atmospheric and oceanic patterns in the tropical Pacific. However impacts associated with La Niña, such as above-average rainfall in eastern and northern Australia, are expected to persist into early autumn, with climate outlooks indicating above-average rainfall is likely for parts of these regions.   All international climate models indicate a return to **neutral** conditions (neither El Niño nor La Niña) during the late southern summer or early autumn. La Niña increases the likelihood of above-average rainfall across much of Australia during spring, and across much of eastern Australia during summer. La Niña increases the chance of cooler than average daytime temperatures for large areas. It also increases the chance of tropical cyclones, and earlier first rains of the northern wet season. To see larger versions of these images, go to the Outlook and SOI tabs at Pacific Ocean Update
Indian Ocean Dipole (IOD) Current outlook: **Neutral** Indian Ocean Update	**Large parts of the Indian Ocean are warmer than average, but the Indian Ocean Dipole (IOD) is neutral.** The strongest warm anomalies are close to the Western Australian coast. Four of the five climate models expect the IOD to remain neutral through to early autumn. Typically IOD events are unable to form between December and April as the monsoon trough shifts south over the tropical Indian Ocean.   To see larger versions of these images, go to the Outlook tab and IOD Time Series
Southern Annular Mode (SAM) Current outlook: **Positive** Southern Ocean Update	**The Southern Annual Mode (SAM) is positive,** but is expected to tend towards **neutral** values around mid-February. La Niña tends to favour positive SAM during the spring to summer months, which typically enhances the La Niña wet signal in eastern Australia.

Seasonal Indicator	Comments (sourced from the Australian Bureau of Meteorology & the NT Department of Industry, Tourism & Trade)
Wet Season Onset Outlook: **Early** Northern Rainfall Onset Forecast	**The widely anticipated early rainfall onset did eventuate across some of the Northern Territory, but only in areas north of the Barkly district.** The onset was mixed, with large areas experiencing an average to late onset. For parts of the Barkly, Tennant Creek and Alice Springs districts, the onset was considered up to 28 days **late**. The northern rainfall onset date occurs when the rainfall total reaches 50 mm since the 1st of September. It is considered to be approximately the amount of rainfall required to stimulate plant growth. The onset observations for 2020/21 can be found here.
Madden–Julian Oscillation (MJO) Outlook: Moderate to Strong Tropics Update	At the time of publication, the MJO was **strong** and located over the western Pacific Ocean (Phase 6-7). Its influence on Australia is expected to weaken during the next fortnight as it moves east into the central Pacific. However, active tropical weather may persist across northern Australia due to other regional weather factors. Apart from the impact a monsoon would have on northern Australia, it could potentially transport significant amounts of moisture to parts of Australia further south, and contribute to the forecast wetter conditions expected across much of the continent in March.

Darwin District

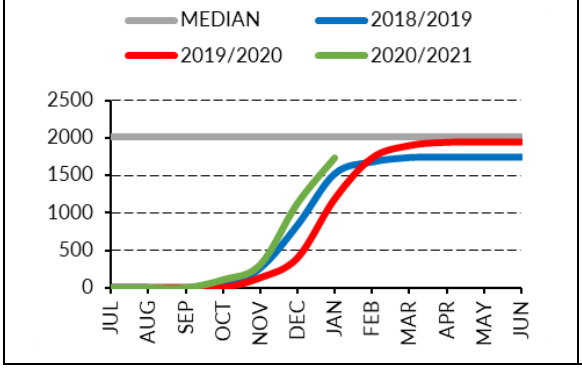
- The 2020/21 district pasture growth is considered **above-average** thus far, however this growth varies from **average** in the north-east to **extremely high** in the south-west.
- Although the 2019/20 pasture growth was **below-average**, it was only 3% lower than the long-term median and highlights that pasture growth tends to be limited by available soil nitrogen rather than soil moisture in this region.
- 21% of the district has burnt since 1 July 2020.
- Over the next three months pasture growth is likely to be nitrogen-limited and hence the chances of exceeding the median growth will be **extremely low** across much of the district.

2020/21 Pasture Growth

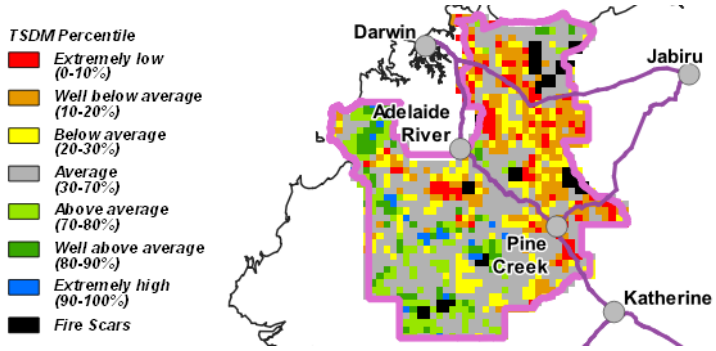


As at 1 February 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2020/21 Pasture Growth	0%	75%	23%	2%
Total Standing Dry Matter	0%	48%	45%	7%

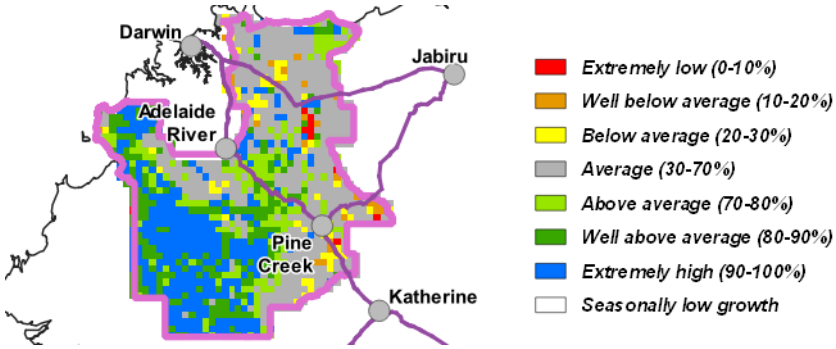
Median Pasture Growth (kg/ha) (Running Total)



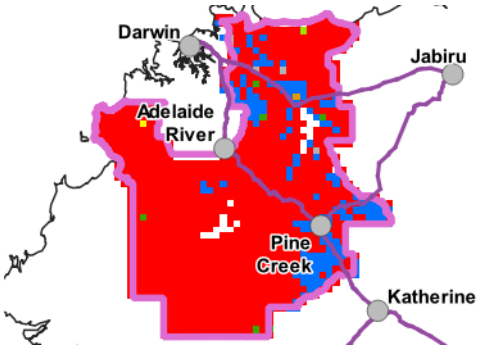
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



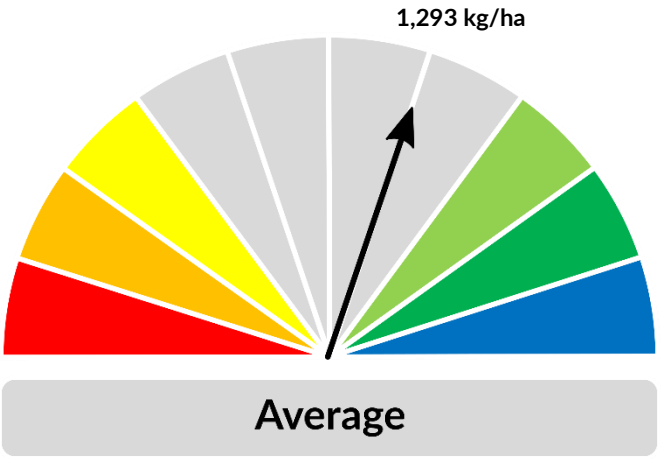
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Katherine District

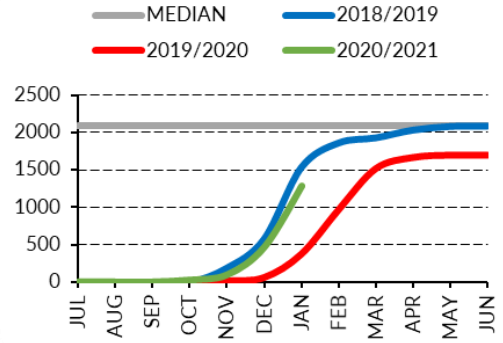
- The 2020/21 pasture growth across the district is considered **average** thus far, however it varies considerably from **average** across the central parts of the district, to **above-average** along the eastern and western sides.
- The 2019/20 pasture growth for the district was patchy and was considered **extremely low** by historical standards. That said, the district's pasture growth was only 20% lower than the long-term median, which highlights that pasture growth tends to be limited by available soil nitrogen rather than soil moisture in this region.
- 9% of the district has burnt since 1 July 2020.
- Over the next three months the chances of exceeding median pasture growth is likely to remain extremely variable depending on soil nitrogen levels and location.

2020/21 Pasture Growth

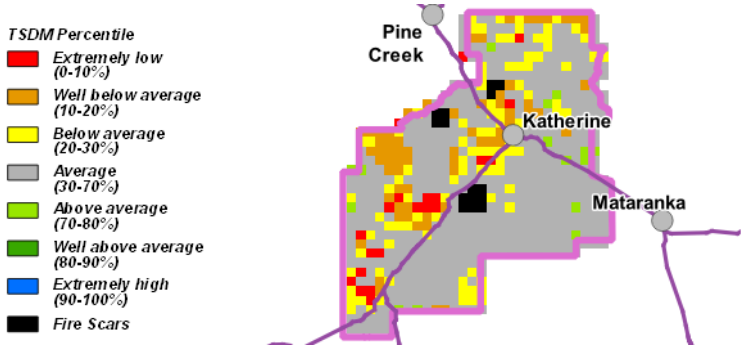


As at 1 February 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2020/21 Pasture Growth	23%	68%	9%	0%
Total Standing Dry Matter	4%	60%	31%	5%

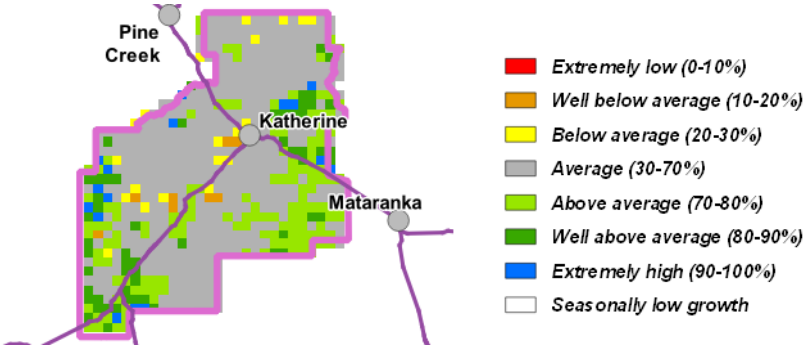
Median Pasture Growth (kg/ha) (Running Total)



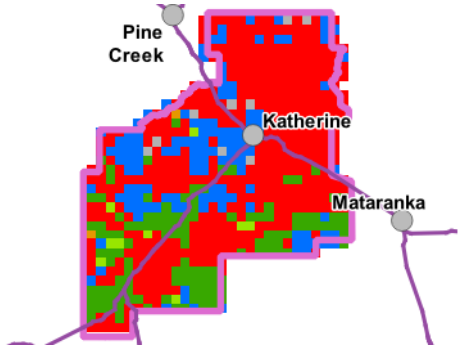
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



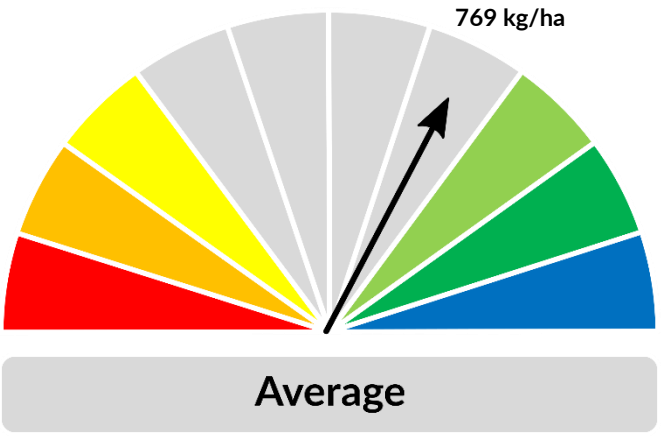
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Victoria River District

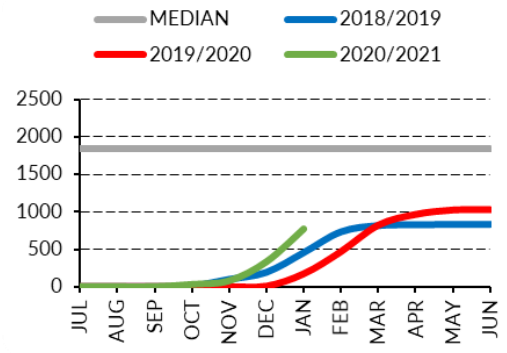
- The 2020/21 district pasture growth is considered **average** thus far. However, this growth varies across the district, with parts of the north-east and north-west experiencing **extremely high** growth.
- Two consecutive poor wet seasons have resulted in significant areas of the district having **very low** levels of pasture biomass (<500 kg/ha). However, pasture growth thus far in 2020/21 has significantly reduced the size of these areas, with persistent low growth now mostly confined to central and southern parts.
- Over the next three months the southern half of the district mostly has an **average** to **above-average** chance of exceeding the median pasture growth, while the northern half has an **extremely low** chance due to nitrogen limitation.

2020/21 Pasture Growth

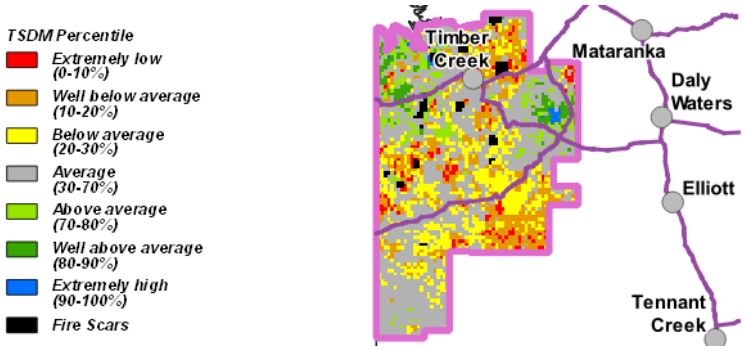


As at 1 February 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2020/21 Pasture Growth	60%	31%	8%	1%
Total Standing Dry Matter	26%	35%	24%	15%

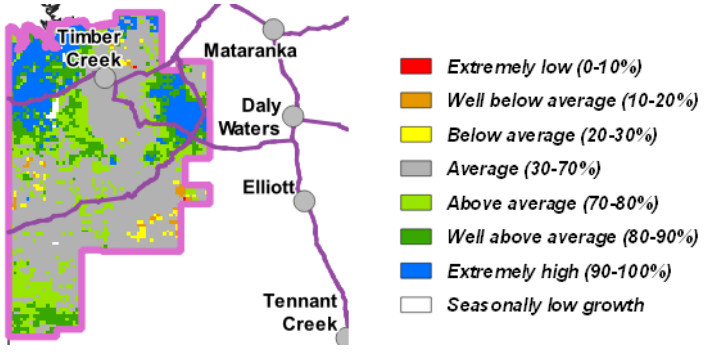
Median Pasture Growth (kg/ha) (Running Total)



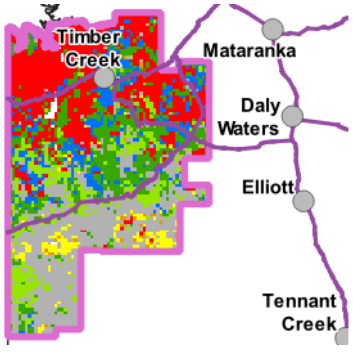
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



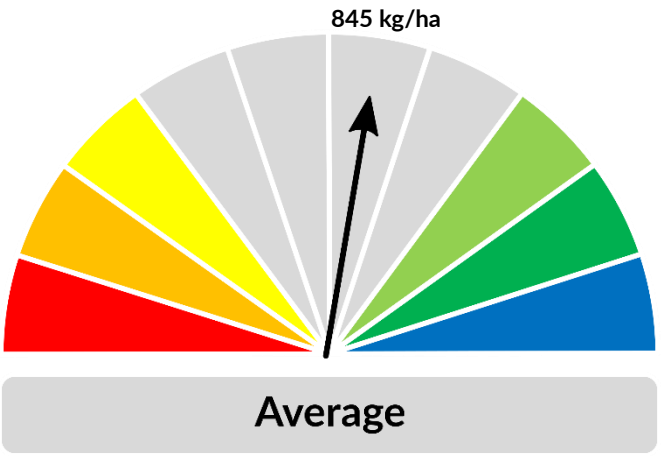
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Sturt Plateau District

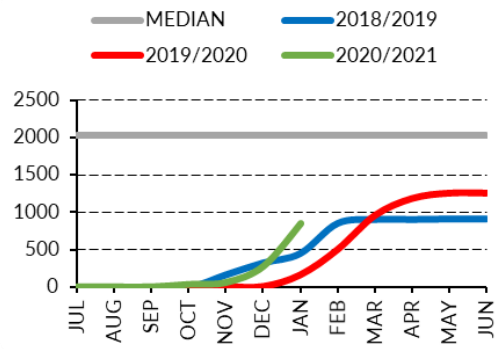
- The 2020/21 district pasture growth is considered **average** thus far. However, this growth is patchy, and varies from **above-average** to **below-average** depending on location.
- The previous two wet seasons had **extremely low** pasture growth.
- The **very low** levels of pasture biomass (<500 kg/ha) across the district have been reduced to small areas in the far south and east, some of which are still considered to be at **critically low** levels (<200 kg/ha).
- Over the next three months the chances of exceeding the median pasture growth will be influenced by nitrogen availability. Growth is expected to vary widely from **extremely high** across the north to **extremely low** across the western and southern parts of the district.

2020/21 Pasture Growth

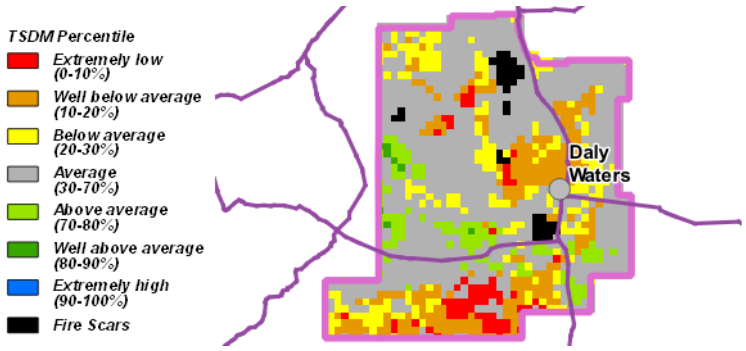


As at 1 February 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2020/21 Pasture Growth	61%	37%	2%	0%
Total Standing Dry Matter	31%	52%	15%	2%

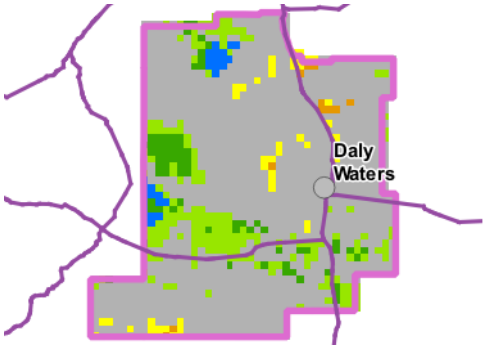
Median Pasture Growth (kg/ha) (Running Total)

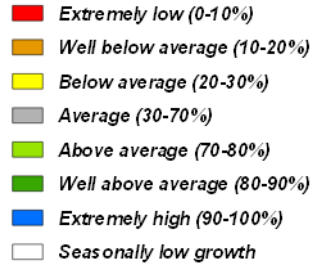


Total Standing Dry Matter Relative to Historical Records (1957-now)

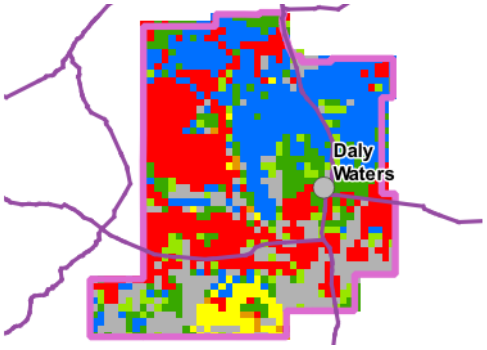


Last 6 Months Pasture Growth Relative to Historical Records (1957-now)





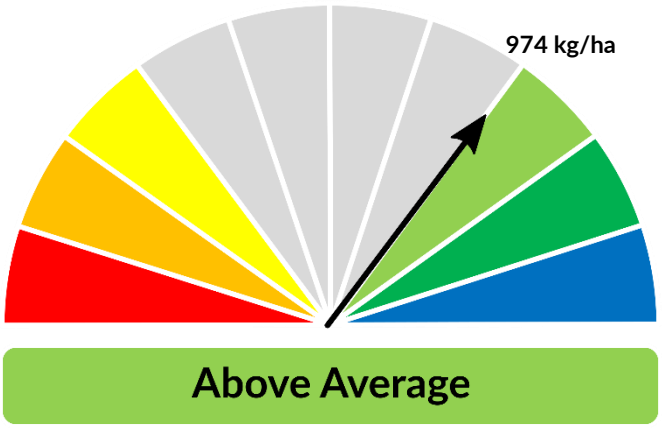
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Roper District

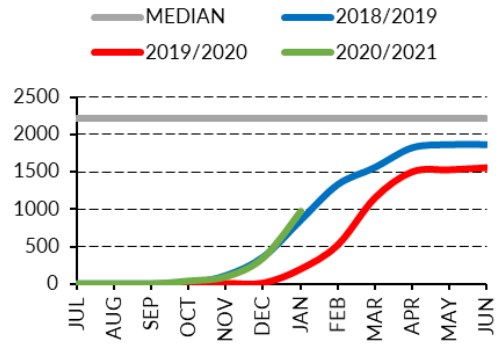
- The 2020/21 pasture growth for the district is **above-average** thus far, however growth varies from **average** in the west to **extremely high** in the east.
- Pasture growth last season was **extremely low** and followed a **below-average** year in 2018/19.
- **Average** to **above-average** district growth has reduced the extent of the district experiencing **very low** levels of pasture biomass (<500 kg/ha).
- 5% of the district has burnt since 1 July 2020.
- Over the next three months, central parts of the district have an **above-average** to **extremely high** chance of exceeding the median pasture growth, while most other parts of the district have an **extremely low** chance.

2020/21 Pasture Growth

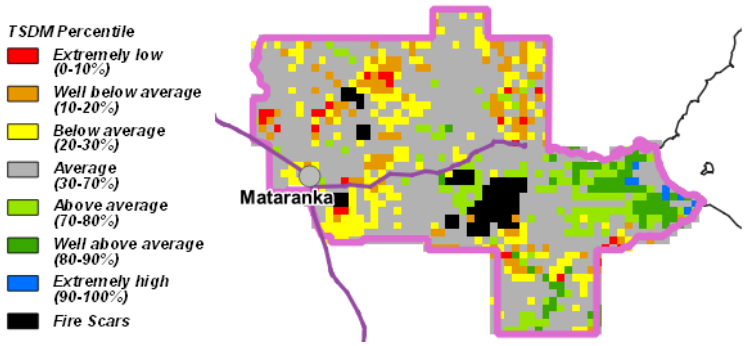


As at 1 February 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2020/21 Pasture Growth	53%	43%	4%	0%
Total Standing Dry Matter	4%	60%	24%	12%

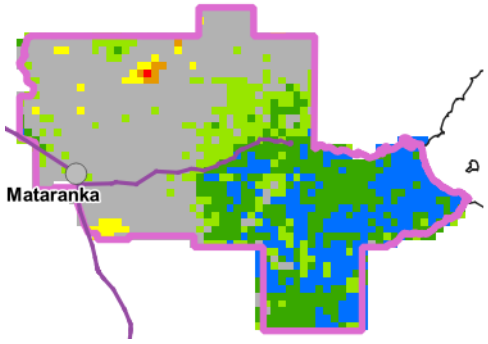
Median Pasture Growth (kg/ha) (Running Total)

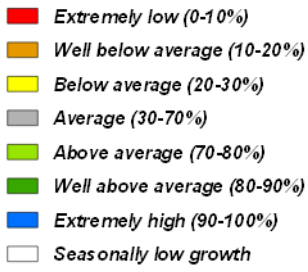


Total Standing Dry Matter Relative to Historical Records (1957-now)

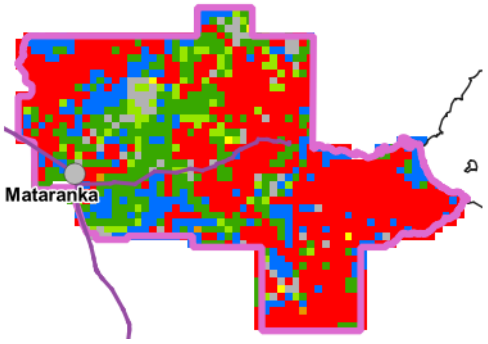


Last 6 Months Pasture Growth Relative to Historical Records (1957-now)





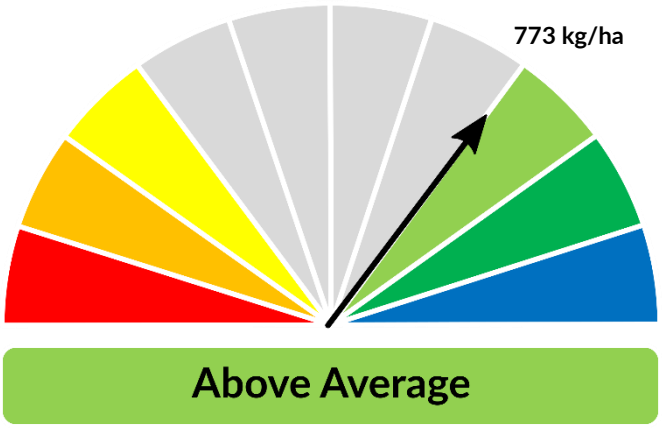
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Gulf District

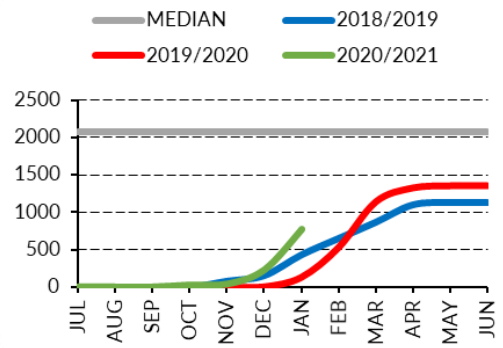
- The 2020/21 district pasture growth is considered to be **above-average** thus far. However, growth varies considerably from **well above-average** across northern and central parts, to **below-average** in small patches in the south.
- **Above-average** district growth has reduced the extent of **very low** levels of pasture biomass (<500 kg/ha) compared to the last outlook.
- 7% of the district has burnt since 1 July 2020.
- Over the next three months, central and southern parts of the district have an **average** to **above-average** chance of exceeding median pasture growth. Large areas in the northern half of the district have an **extremely low** chance.

2020/21 Pasture Growth

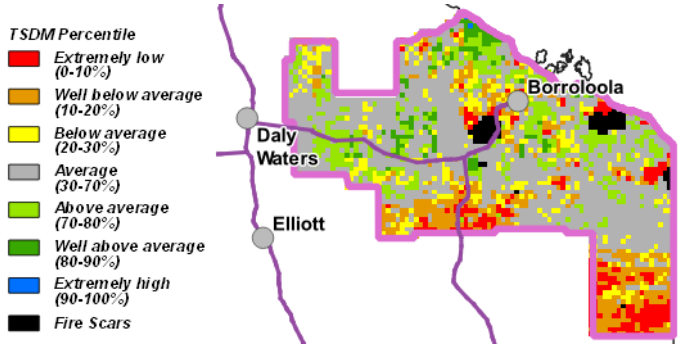


As at 1 February 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2020/21 Pasture Growth	66%	31%	3%	0%
Total Standing Dry Matter	26%	40%	21%	13%

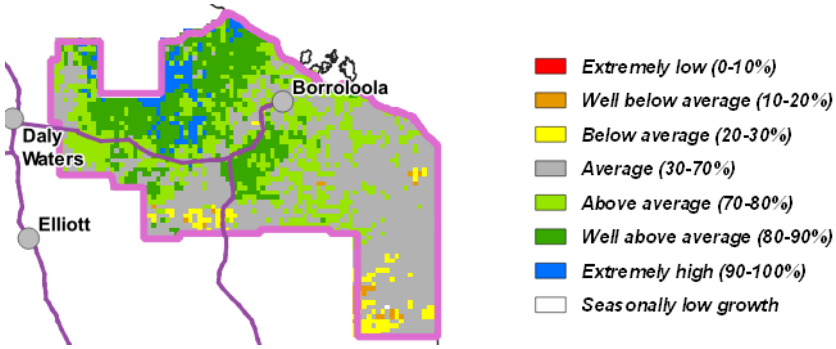
Median Pasture Growth (kg/ha) (Running Total)



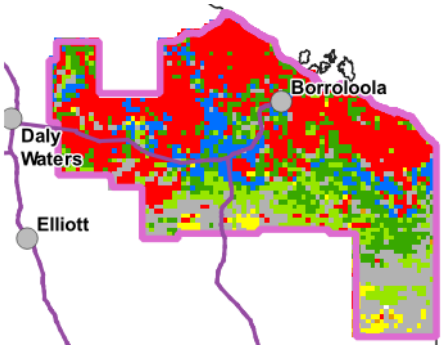
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



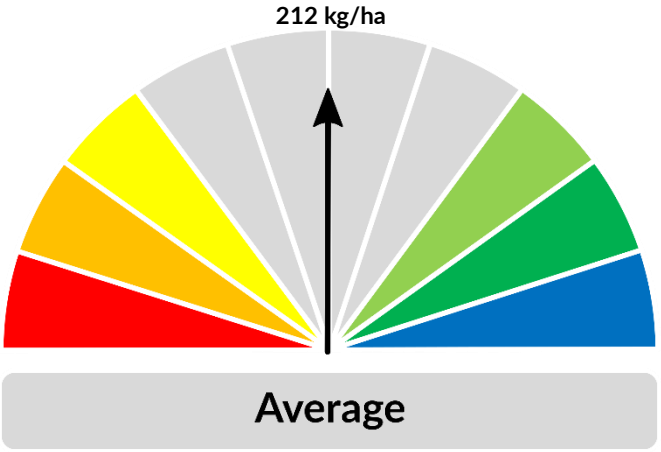
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Barkly District

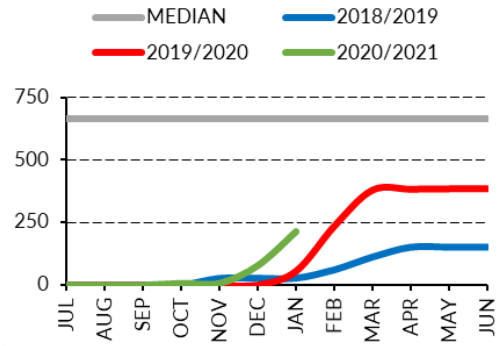
- The 2020/21 pasture growth is considered **average** for this time of year. However, pasture response is patchy across the district, with small areas in the southern parts experiencing **above-average** growth.
- Last season's pasture growth was **below-average**, and the 2018/19 growth was **extremely low**. The combination of a low starting level of pasture biomass, and patchy growth thus far, has resulted in much of the district continuing to experience **very low** (<500 kg/ha) to **critically low** (<200 kg/ha) pasture levels.
- Over the next three months, most of the district has an **average** to **below-average** chance of exceeding median pasture growth.

2020/21 Pasture Growth

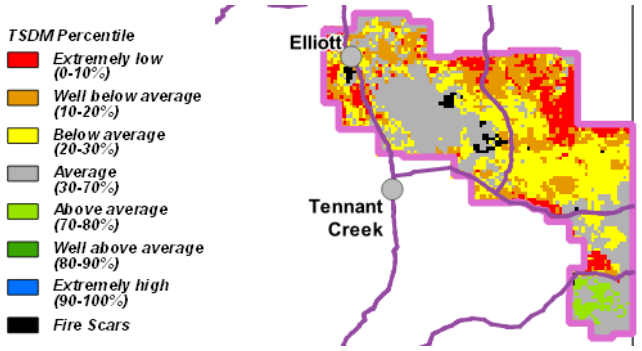


As at 1 February 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2020/21 Pasture Growth	60%	35%	3%	2%
Total Standing Dry Matter	33%	46%	12%	9%

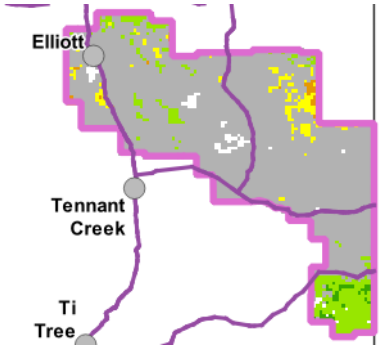
Median Pasture Growth (kg/ha) (Running Total)

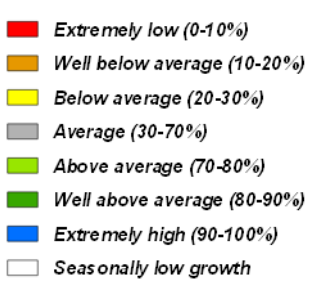


Total Standing Dry Matter Relative to Historical Records (1957-now)

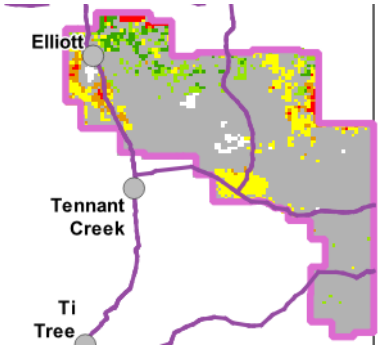


Last 6 Months Pasture Growth Relative to Historical Records (1957-now)





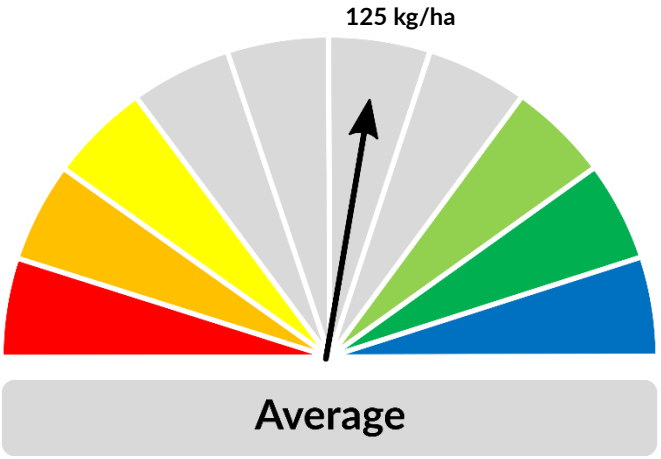
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Tennant Creek District

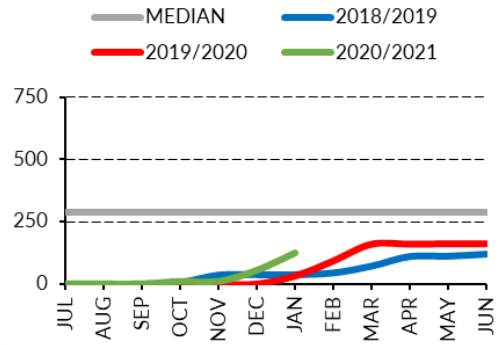
- The 2020/21 pasture growth for the district is **average** thus far, with small areas in the southern and western parts experiencing **above-average** growth.
- Pasture growth in 2018/19 and 2019/20 was **below-average**, and although better growth has been experienced across much of the district in 2020/21, areas of **very low** pasture biomass (<200 kg/ha) persist across large areas.
- Over the next three months, most of the district has an **average** chance of exceeding median pasture growth, with small areas in the south tending towards an **above-average** chance.

2020/21 Pasture Growth

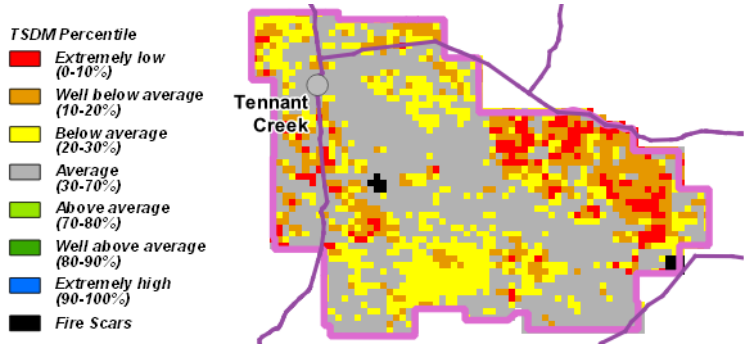


As at 1 February 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2020/21 Pasture Growth	89%	10%	1%	0%
Total Standing Dry Matter	31%	20%	18%	31%

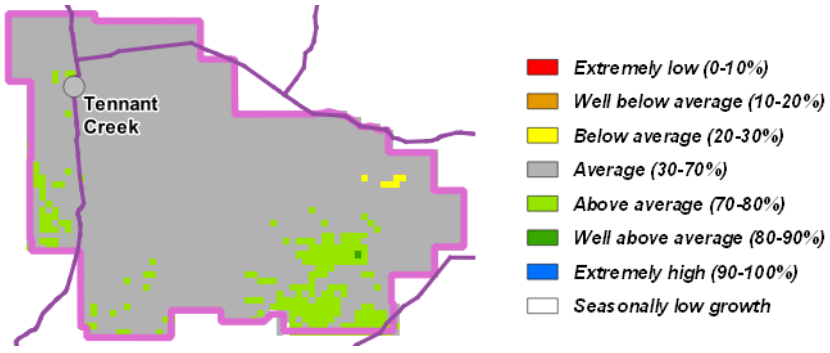
Median Pasture Growth (kg/ha) (Running Total)



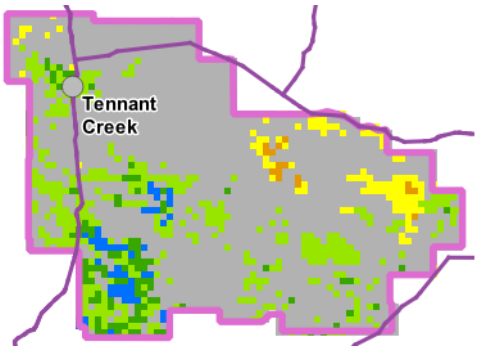
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



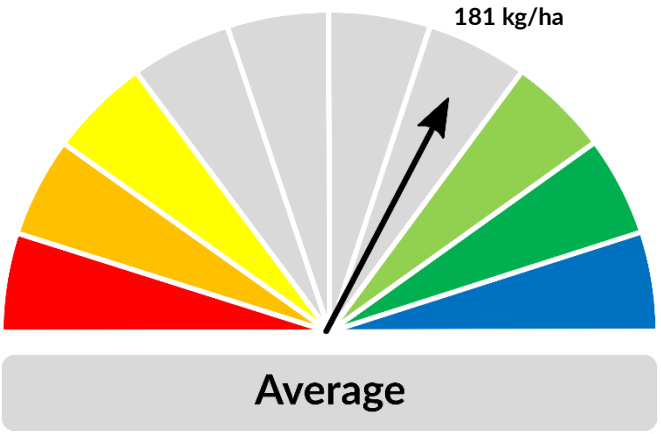
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Northern Alice Springs District

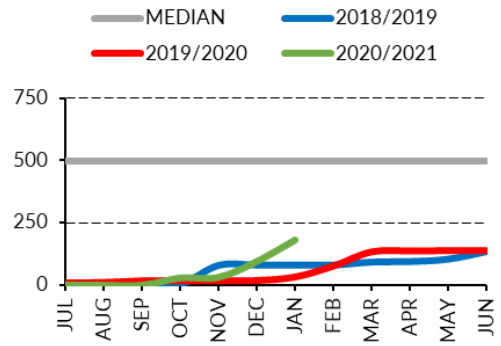
- The 2020/21 pasture growth for the district as a whole is considered **average** thus far. However, growth varies considerably across the district, with large areas in the north-east experiencing **above-average** growth.
- The 2019/20 district pasture growth was **well below-average** and followed **extremely low** growth in 2018/19.
- Although **average** growth has been experienced across much of the district, areas of **very low** (<200 kg/ha) to **critically low** (<100 kg/ha) levels of pasture biomass persist across the district.
- Over the next three months the district has an **average** to **extremely high** chance of exceeding median pasture growth, depending on location.

2020/21 Pasture Growth

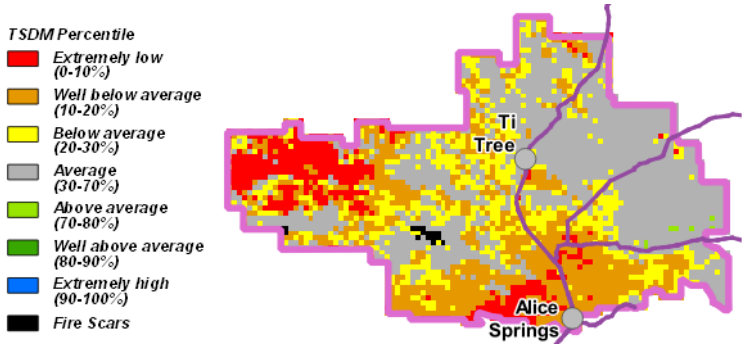


As at 1 February 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2020/21 Pasture Growth	74%	23%	3%	0%
Total Standing Dry Matter	50%	19%	13%	18%

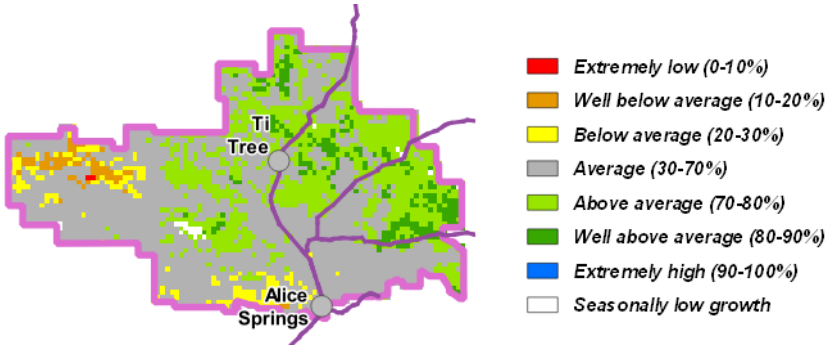
Median Pasture Growth (kg/ha) (Running Total)



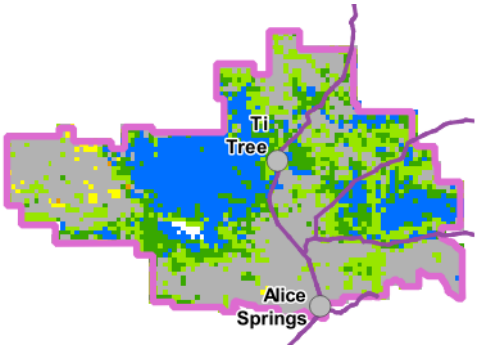
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



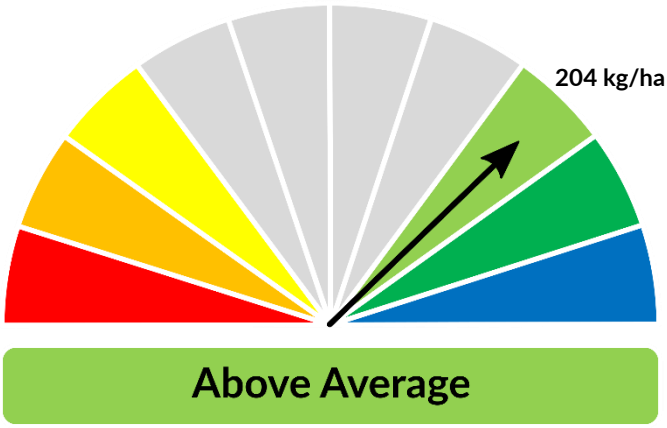
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Plenty District

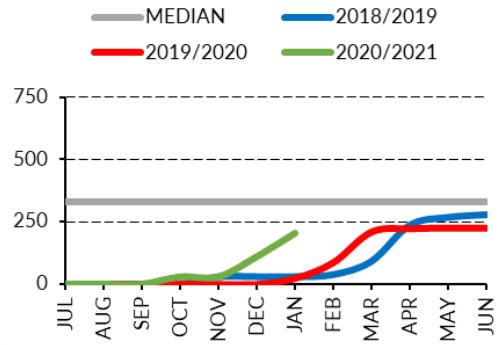
- The 2020/21 pasture growth for the district is considered to be **above-average**.
- The district as a whole received **average** growth in 2019/20 and 2018/19.
- Although the district as a whole has received **above-average growth** thus far, areas in the far western and eastern parts of the district are still experiencing **very low** levels of pasture biomass (<200 kg/ha).
- Over the next three months the chances of exceeding median pasture growth is **average** to **above-average** across the district depending on location.

2020/21 Pasture Growth

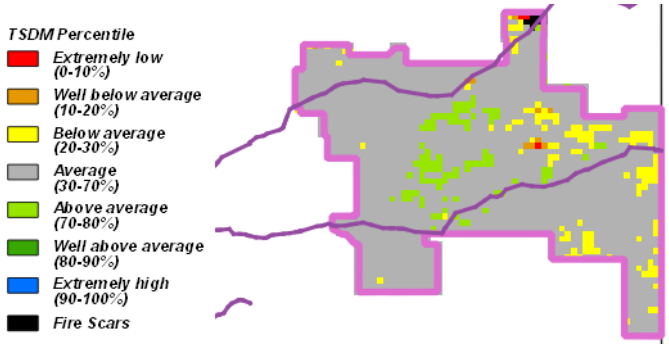


As at 1 February 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2020/21 Pasture Growth	63%	32%	5%	0%
Total Standing Dry Matter	11%	28%	34%	27%

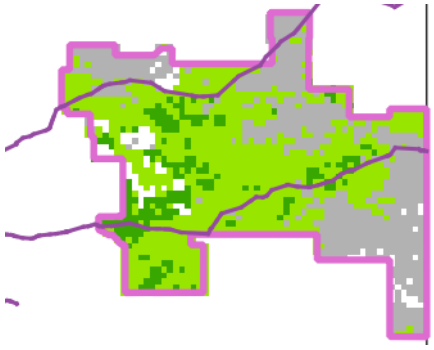
Median Pasture Growth (kg/ha) (Running Total)



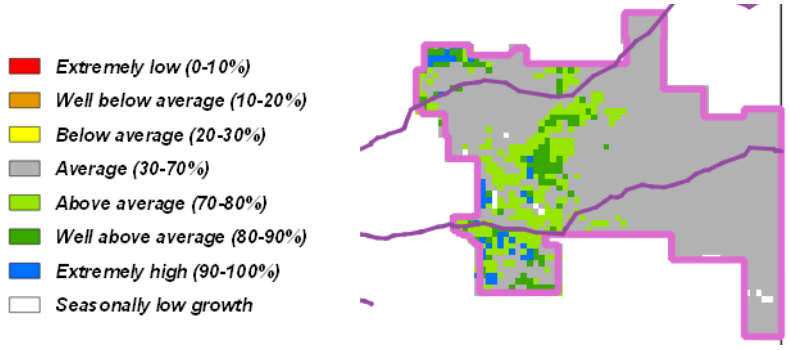
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



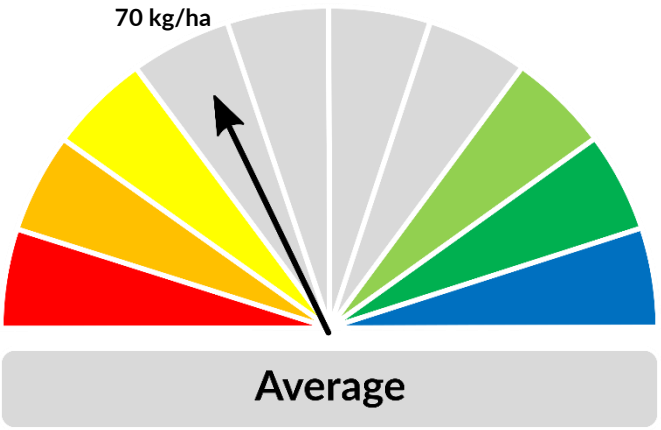
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Southern Alice Springs District

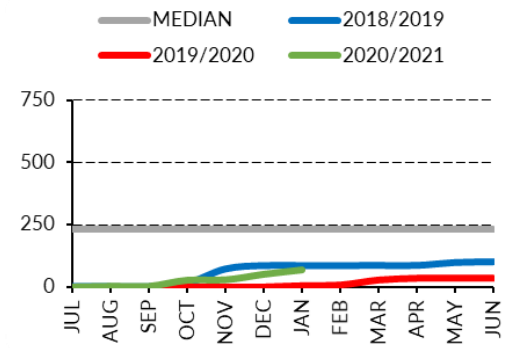
- The 2020/21 pasture growth for the district is **average** for this time of the year. However, growth is highly variable, with much of the western two-thirds of the district experiencing **below-average** to **extremely low** growth. An area in the north–eastern corner is experiencing **above-average** growth.
- Pasture growth for the district in 2019/20 and 2018/19 was **well below-average** (a 1 in 10 year event) to **extremely low** growth (a 1 in 20 year event).
- Minimal 2020/21 growth thus far, combined with consecutive poor seasons, has resulted in large areas of the district experiencing **critically low** levels of pasture biomass (<100 kg/ha).
- Over the next three months the majority of the district has an **average** chance of exceeding median pasture growth.

2020/21 Pasture Growth

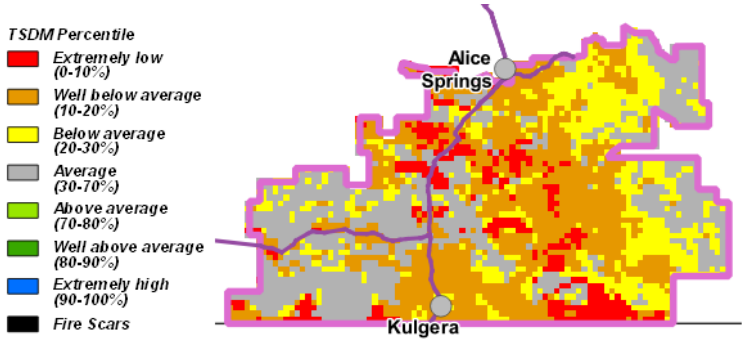


As at 1 February 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2020/21 Pasture Growth	93%	5%	2%	0%
Total Standing Dry Matter	33%	19%	37%	11%

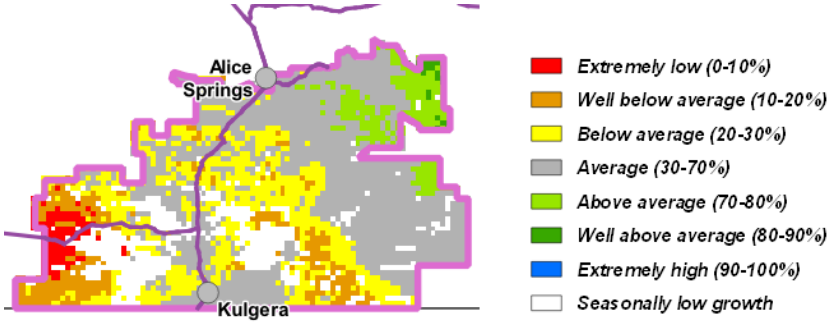
Median Pasture Growth (kg/ha) (Running Total)



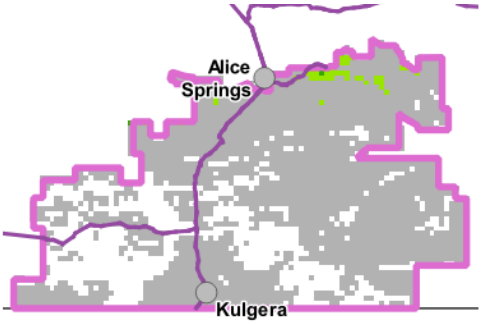
Total Standing Dry Matter Relative to Historical Records (1957-now)



Last 6 Months Pasture Growth Relative to Historical Records (1957-now)



Chance of Exceeding Median Pasture Growth in the Next 3 Months



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