Northern Territory Pastoral Feed Outlook - July to September 2020

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 July 2020

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 – July 2020

With the exception of the Darwin and Katherine districts, the majority of the NT has experienced its second consecutive year of below-average rainfall. As at 1 July 2020, most districts have experienced below-average to extremely low pasture growth for the 2019/20 growing season. Further pasture growth may eventuate in the southern districts from southerly frontal systems, but grass growth is likely to be constrained by winter temperatures. Of concern is the lack of response from perennial grasses across large areas of the Alice Springs and Barkly regions that did receive sufficient summer rain to stimulate pasture growth. We have observed widespread death of perennial grass tussocks in these areas as a result of the recent prolonged period of below-average rainfall.

Large parts of the NT currently have very low levels (200-500 kg/ha) of standing pasture biomass. These include areas in the Victoria River District, Sturt Plateau, Roper and Gulf districts. Critically low pasture levels (less than 200 kg/ha) are <u>widespread</u> in the Barkly, Tennant Creek, Northern Alice Springs, Plenty and Southern Alice Springs districts. Large areas of the Northern and Southern Alice Springs districts currently have less than 100 kg/ha of standing pasture biomass.

KEY	Green = low risk	Orange = watch	Red = high risk	
KEY	1 = 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
2019/2020 total pasture growth	Ŷ	↓	↓	↓	↓	↓	↓	↓	\downarrow	↓	\downarrow	Arrows indicate trend compared to the long- term median (for this time of year)
Current estimated standing biomass	\downarrow	↓	\leftarrow	\leftarrow	\leftarrow	\leftarrow	↓	↓	\downarrow	\downarrow	\downarrow	Arrows indicate trend since previous quarter
Current fire risk	1	1	1	1	1	1	1	\leftrightarrow	\leftrightarrow	\leftrightarrow	⇔	Arrows indicate the trend since previous quarter
Current seasonal outlook	1	1	↑	1	1	↑	1	↑	↑	↑	1	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 July 2020*

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 August to October 2020 indicates that:

- Wetter than average conditions are predicted across the majority of the NT.
- Warmer than average days and nights are likely for the entire NT.



The El Niño–Southern Oscillation (ENSO) and the Indian Ocean Dipole (IOD) remain neutral. Temperatures in the tropical Pacific Ocean are likely to continue to cool, with La Niña thresholds potentially being reached during spring. This cooling is likely to be driving the wetter outlook for much of eastern Australia in the coming months.

Seasonal Indicator	Comments (sourced from the Australian Bureau of	of Meteorology)	
<section-header></section-header>	ENSO remains neutral but La Niña may form The Bureau's ENSO Outlook is at La Niña WATCH, indicating the chance of La Niña forming in 2020 is around 50%—roughly double the average likelihood. The surface and sub-surface of the tropical Pacific Ocean have cooled over recent months. While the cooling trend has eased compared to two weeks ago, over half of the surveyed international climate models anticipate this cooling will approach or exceed the threshold for Index (SOI), trade winds, and cloudiness near the To see larger versions of these images, go to the O	So Day Moving SOI 10 10 10 10 10 10 10 10 10 10	Monthly sea surface temperature anomalies for NIN03.4 regionImage: Image: Ima
Indian Ocean Dipole (IOD) Indian Ocean Update Current outlook: Neutral	The IOD remains neutralMuch of the eastern Indian Ocean remains warmer than average.Three of the 6 international climate models reach or exceed negative IOD thresholds during the winter or early spring, and remain so through spring. The other three models suggest a neutral IOD is most likely.A negative IOD typically brings above-average winter-spring rainfall to much of southern Austra typically increases the chance of above-average rTo see larger versions of these images, go to the	IDD Index Time Series	Monthly sea surface temperature anomalies for IOD region Image: Second
Southern Ocean Update	The Southern Annular Mode (SAM) is neutral but (westerly winds further south) can increase the ch	is forecast to increase to positive value nance of rain over the southern Alice Sp	es by the end of July. A "positive" SAM prings districts over summer.
Tropics Northern Rainfall Onset Forecast	The chance of the first rains arriving early in 2020 likelihood across central and some coastal parts o chances of an early or late rainfall onset for most the end of August and can be sourced from <u>North</u> having any widespread influence on rainfall patter easterly flow across parts of northern Australia.	D-21 is higher than average over much of f Queensland, and the southern Northo other coastal areas, the far north, and v <u>mern Rainfall Onset Forecast</u> . The Mado rns across northern Australia, though it	of inland northern Australia, with the highest ern Territory. There are roughly equal west. This forecast is updated regularly until den–Julian Oscillation (MJO) is not currently is contributing to a stronger than average

Darwin District

- The 2019/20 pasture growth for the district was below-average compared to long-term records.
- A late start (about 14-28 days late) and patchy rain resulted in wide variation in pasture growth depending on location.
- 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 on upland country is quite low. Whilst growth is below-average this year, the actual growth on the upland country may only be about 3% below the long-term median.
- 51% of the district has burnt since 1 July 2019, 22% of this has been since 1 January 2020.



As at 1 July 2020						
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha		
2019/20 Pasture Growth	0%	54%	42%	4%		
Total Standing Dry Matter	19%	66%	12%	3%		



July 2019 – June 2020 Pasture Growth Relative to Long Term

Chance of Exceeding Median Pasture Growth (July – September 2020)



Katherine District

- The 2019/20 pasture growth for the district was patchy and extremely low (a 1 in 20 year event).
- That said, the district's pasture growth is 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.
- The start to the wet season was late across the entire district but varied considerably from 7-14 days late (in the west) to 28-42 days late (in the south). The shorter growing season contributed to low pasture growth.
- 22% of the district has burnt since 1 July 2019, 9% of this has been since 1 January 2020.



As at 1 July 2020						
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha		
2019/20 Pasture Growth	<1%	77%	23%	0%		
Total Standing Dry Matter	18%	67%	13%	2%		





Victoria River District

- The 2019/20 pasture growth was patchy and well below-average (a 1 in 10 to 1 in 5 year event). District pasture growth was 56% lower than the long-term median.
- The start to the wet season varied considerably, ranging from 1-7 days late (in the NW) to as much as 42-70 days late (in the SE). The shorter growing season contributed to low pasture growth in some areas.
- Pasture growth was also extremely low in 2018/19 (in the lowest 6% of years on record).
- Areas in the southern half of the district have low levels of pasture biomass (<500 kg/ha).
- Less than 1% of the district has burnt since 1 July 2019.



As at 1 July 2020				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2019/20 Pasture Growth	49%	34%	17%	<1%
Total Standing Dry Matter	35%	42%	15%	8%





Sturt Plateau District

- The 2019/20 pasture growth was extremely low (a 1 in 10 year event). The district pasture growth was 48% lower than the long-term median.
- The start to the wet season was late across the entire district but varied between 28-42 days late (in the west) to as much as 42-70 days late in the east. The shorter growing season contributed to low pasture growth.
- The 2018/19 wet season pasture growth was also extremely low (lowest 3% of years on record).
- Areas in the southern half of the district are showing low levels of pasture biomass (<500 kg/ha), and an area in the far south is showing critically low levels (<200 kg/ha).
- 1% of the district has burnt since 1 July 2019.



As at 1 July 2020				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2019/20 Pasture Growth	35%	57%	8%	0%
Total Standing Dry Matter	34%	58%	7%	1%





Roper District

- The 2019/20 pasture growth was extremely low (a 1 in 20 year event). The district pasture growth was 30% lower than the long-term median.
- With the exception of a small area in the east, the entire district experienced a late start to the wet season. The start varied considerably between 28-42 days late (in the north) to as much as 42-70 days late (in the south). The shorter growing season contributed to low pasture growth.
- The 2018/19 pasture growth for the district was also below-average (lowest 21% of years on record). However, growth was very variable across the district.
- 20% of the district has burnt since 1 July 2019, 8% of this has been since 1 January 2020.



As at 1 July 2020				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2019/20 Pasture Growth	3%	78%	18%	1%
Total Standing Dry Matter	9%	60%	25%	6%



July 2019 – June 2020Chance of ExceedPasture Growth Relative to Long Term(July –





Gulf District

- The 2019/20 pasture growth was well belowaverage (a 1 in 10 to 1 in 5 year event). The district pasture growth was 35% lower than the long-term median.
- The entire district experienced a late start to the wet season, ranging from 21-28 days late (in the south), to 42-70 days late (in the NW). The shorter growing season contributed to low pasture growth.
- The 2018/19 pasture growth was also extremely low (lowest 6% of years on record). A narrow strip along the coast was the exception, with average growth last year.
- Western and southern parts of the district are showing low levels of pasture biomass (<500 kg/ha).
- 10% of the district has burnt since 1 July 2019.



As at 1 July 2020							
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha			
2019/20 Pasture Growth	29%	55%	16%	<1%			
Total Standing Dry Matter	23%	51%	18%	8%			





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2019/20 Pasture Growth

Barkly District

- The 2019/20 pasture growth for the district was below-average (58% lower than the longterm median), with of parts of the west and NE experiencing extremely low growth. Parts of the west and SE experienced average growth.
- The entire district experienced a late start to the wet season, but varied from 21-28 days late (in the mid-north) to as much as 42-70 days late (in the NW, centre and SE). The shorter growing season contributed to low pasture growth.
- The 2018/19 pasture growth for the district as a whole was extremely low (lowest 3% of years on record).
- The majority of the district is showing low levels of pasture biomass (<500 kg/ha) with large areas showing critically low levels (<200 kg/ha).



As at 1 July 2020						
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha		
2019/20 Pasture Growth	27%	39%	29%	5%		
Total Standing Dry Matter	31%	38%	22%	9%		





Tennant Creek District

- The 2019/20 pasture growth for the district as a whole was average to below-average. Some parts of the north and NE finished with well below-average to extremely low pasture growth.
- The district pasture growth was 56% lower than the long-term median.
- The entire region experienced a late start to the wet season, but timing varied considerably (between 21 and 70 days late).
- Large areas of the district are now showing low levels of pasture biomass (<200 kg/ha).
- 2% of the district has burnt since 1 July 2019.

2019/20 Pasture Growth



As at 1 July 2020						
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha		
2019/20 Pasture Growth	72%	21%	5%	2%		
Total Standing Dry Matter	22%	25%	19%	34%		





Northern Alice Springs District

- The 2019/20 pasture growth for the district was well below-average but varied considerably from extremely low growth in the west (a 1 in 20 year event) to average in the east. The district pasture growth as a whole was 72% lower than the long-term median.
- The 2018/19 pasture growth for the district was also extremely low (in the lowest 6% of years on record).
- Much of the district is now showing low levels of pasture biomass (<200 kg/ha), while areas in the southern parts and far west are now showing critically low levels.



As at 1 July 2020						
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha		
2019/20 Pasture Growth	87%	13%	<1%	0%		
Total Standing Dry Matter	41%	26%	12%	21%		





Plenty District

- The 2019/20 pasture growth for the district was average, however this pasture growth was still 31% lower than the long-term median. A small area in the centre of the district experienced above-average pasture growth.
- The 2018/19 pasture growth for the district was also average. This was largely due to rain received from ex-cyclone Trevor in southern and eastern parts.
- Although the district as a whole received average growth, small areas in the western and far eastern parts of the district are now showing low levels of pasture biomass (<200 kg/ha).



As at 1 July 2020						
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha		
2019/20 Pasture Growth	55%	29%	12%	4%		
Total Standing Dry Matter	13%	24%	33%	30%		





Southern Alice Springs District

- The 2019/20 pasture growth for the district was well below-average (a 1 in 10 year event), with growth 86% lower than the long-term median. The entire western two-thirds of the district has experienced extremely low growth (a 1 in 20 year event). Therefore, minimal pasture growth has been experienced across the majority of the district.
- The 2018/19 district pasture growth was also below-average (lowest 29% of years on record). However, growth was patchy with much of the western half of the district experiencing average pasture growth, whilst the SW experienced above-average growth in 2018/19.
- Large areas of the district are now showing low levels of pasture biomass (<200 kg/ha), and some areas are showing critically low levels (<100 kg/ha).



As at 1 July 2020						
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha		
2019/20 Pasture Growth	95%	5%	<1%	0%		
Total Standing Dry Matter	35%	18%	31%	16%		



July 2019 – June 2020 Pasture Growth Relative to Long Term

Chance of Exceeding Median Pasture Growth (July – September 2020)



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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