Locust Bulletin

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GENERAL SITUATION IN JANUARY AND OUTLOOK TO APRIL 2025

Australian Plague Locust

Chortoicetes terminifera

The overall locust population remained at low to medium levels across much of inland eastern Australia with a moderate increase in the Central West district of New South Wales in January. Surveys conducted from mid-January identified frequent medium-density nymphs with occasional high-densities detected in the Warren-Mount Foster-Quambone-Coonamble-Baradine-Gilgandra-Collie areas, where consistent medium to high density adults were detected later. Medium-density nymphs and adult swarms were identified in the west of Tottenham. Some medium to high-density nymphs were also identified in other parts of western NSW with frequent medium density adults observed in the Menindee-Wilcannia-Ivanhoe aeras. Despite occasional medium density nymphs and adults detected in the Cunnamulla area, only lowdensity adults were identified in other parts of central Queensland with occasional nymphs identified. NSW Local Land Services received and assessed about two-dozen reports of locust banding and swarming activities from the Central West and North West districts since mid-January and most of these reported bands required landowner control. Westward redistributions of adults may have been encouraged by persistent troughs present in this region with a noticeable decrease of mature adults from APLC and LLS frequent inspections and landowner's observations. Nil capture was recorded by all APLC light traps in Dulkaninna of South Australia, Fowlers Gap and White Cliffs of NSW, and Thargomindah of Queensland for January. The UNSW insect monitoring radar in Hay was still not accessible due to the disruption of Telstra mobile network upgrade. No surveys were conducted in other parts of the inland eastern Australia, nor any locust reports received.

Most habitats remained unfavourable for locust breeding and became drier during January. The inland eastern Australia received nil – 10 mm of rainfall over much of the arid interior but 50 – 100 mm in its northeastern parts. January rainfall totals were below average to very much below average while temperatures were above average to very much above average levels (1–3 degrees warmer) over much of the inland eastern Australia. With the forecast for above average rainfall for February and March and above average temperatures, localised breeding is likely to continue under favourable habitat conditions, and a moderate increase of locust populations is possible in some parts of inland eastern Australia.

The overall outlook is for low-medium density populations across inland eastern Australia, with localised high densities of nymphs developing likely in parts of central west NSW and possibly in parts of inland Qld. Migration may occur under favourable weather conditions and spread locust population further into the arid/semi-arid interior. It is likely that some locust bands will develop from untreated populations or aggregated populations after migration/dispersal from late February onwards.

There is a low likelihood of widespread infestations developing during February and March.

14 February 2025



Spur-throated Locust

Austracris guttulosa

The overall population remained at low levels across inland eastern Australia with some localised medium-density populations identified in Central West of Queensland. Surveys conducted since mid-January identified consistent Isolated-Scattered density adults in central Queensland and New South Wales with occasional Numerous-density adults detected mainly in the Hughenden-Longreach areas. Surveys identified widespread Present-density nymphs in central Qld with occasional nymphs in NSW. Occasionally Numerous-density nymphs were also identified by survey. A single capture in late January was recorded by the light trap in White Cliffs of New South Wales with no captures by other light traps, which indicates low-density populations were present in the arid interior. With heavy rainfall in some parts of Queensland and NSW and the forecast for above average rainfall for February and March, habitat conditions should improve, and breeding is likely to continue under favourable habitat conditions. Localised high-density nymph populations may develop in some areas of Central West and North West Qld and northern NSW.

There is a low risk of a widespread infestation. Though, a general increase in numbers is likely to continue with forecast rainfall in favourable habitats during February and March.

Migratory Locust

Locusta migratoria

The overall population remained at very low levels across inland eastern Australia. Surveys conducted since mid-January identified a few adults in central Queensland. With heavy rainfall during January over some parts of the traditional locust habitats in Queensland and NSW and the forecast above average rainfall for February and March, localised breeding is likely to continue under favourable habitats. High-density populations are unlikely to result from the current very low background population levels.

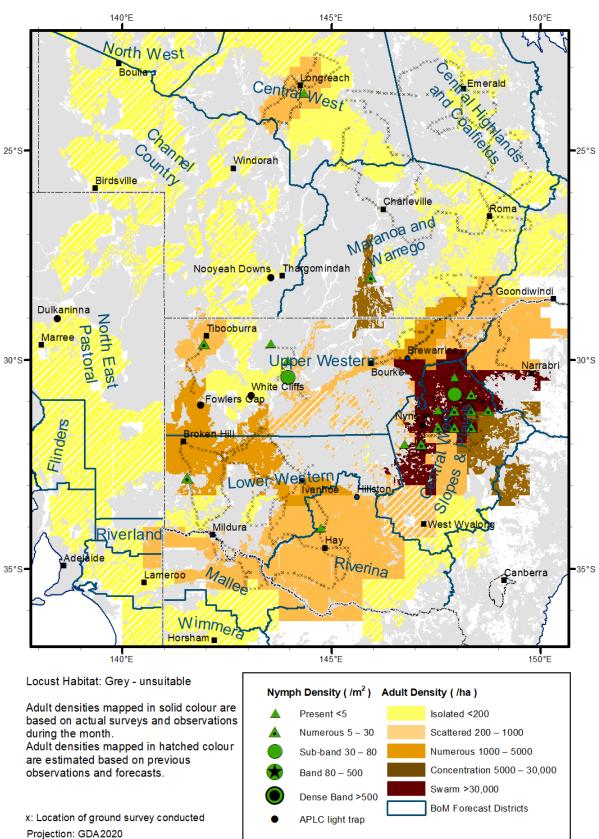
There is a very low risk of a widespread infestation developing during February and March.

It is important that any locust activity be reported as soon as possible to your local biosecurity authority or to the Commission. A toll-free call to the Commission can be made on 1800 635 962. An answering machine is attached to this locust hotline for after-hours calls. Reports can also be emailed to the Commission at locust.report@agriculture.gov.au or sent through the web page at https://www.agriculture.gov.au/pests-diseases-weeds/locusts/landholders/reporting_locusts.

Locust distribution map—Chortoicetes terminifera

Australian Plague Locust Distribution

13 January -- 07 February 2025



Australian Plague Locust

(Chortoicetes terminifera)

SITUATION IN JANUARY AND OUTLOOK TO APRIL 2025

NEW SOUTH WALES

NORTH WEST SLOPES & PLAINS

Northwest Local Land Services

Locusts and conditions

- Surveys conducted in mid-January identified Isolated-Scattered density adults in this district.
- A locust report of adult swarming was received from the Walgett-Narrabri areas in early February.
- In January variable 25 100 mm of rainfall was received over this district, generally at average levels. Some habitats should remain favourable for locust breeding.

Forecast

- Breeding is likely to continue under favourable habitat conditions, and a moderate increase may result from currently low background population.
- There is a low probability of any significant migrations during February and March.
- The general population density is expected to remain at low-medium levels during February and March with possible localised small bands developing under favourable habitat conditions.

Risks

• There is a low risk of a regional infestation developing during February and March.

CENTRAL WEST SLOPES & PLAINS

Central West Local Land Services

Locusts and conditions

- Surveys conducted since mid-January identified consistent Numerous-density nymphs with occasional Sub-Band density detected, and Numerous to Medium-Density-Swarm adults later in the Warren-Mountain Foster-Quambone-Coonamble-Baradine-Gilgandra areas. Some Numerous-density Nymphs and Numerous to Medium-Density-Swarm adults were also identified in the west of Tottenham with frequent Scattered-density adults detected in the Nyngan area.
- About 20 reports of locust banding and later swarming activities were received from this district since mid-January and most bands confirmed by Local Land Services staff required landowner control.
- Frequent inspection by both LLS and APLC staff indicated some migrations/redistributions had occurred during late January and early February. Consultation with landowners and analysis of weather patterns indicated a general westward movement of adults may have occurred resulting in a spread of the locust population further into the Western districts.
- 5 100 mm of rainfall were received over this district in January but with 50-100 mm of rainfall over much of the current locust infestation area (ranging at average levels historically).

Forecast

- Some migration/redistribution is likely to continue under favourable weather conditions.
- Localised bands of autumn generation may develop from late February onwards under favourable habitat conditions.
- The general population is expected to remain at low-medium levels with likely localised high densities developing during February and March.

Risks

• There is a moderate risk of regional infestations developing during February and March.

RIVERINA

Riverina, Murray Local Land Services

Locusts and conditions

- Surveys in mid-January identified Isolated-Scattered density adults with occasional Present-density nymphs detected in the western part of this district.
- No reports of locust activities were received from this district in January.
- The UNSW insect monitoring radar in Hay was still not accessible due to the disruption of Telstra mobile network upgrade.
- Less than 5 mm of rainfall was received by the western part of this district in January, but the January rainfall totals over this part were at average levels historically, indicating a normal dry summer month.

Forecast

- Only sporadic breeding is possible under favourable habitats, but any resulting populations will remain at low levels.
- There is a low probability of any significant migration events during February and March.
- The population is likely to remain at low levels for February and March.

Risks

• There is a low risk of regional infestation developing during February and March.

UPPER and LOWER WESTERN

Western Local Land Services

Locusts and conditions

- Numerous-density adults were identified frequently in the Menindee-Wilcannia-Ivanhoe areas and
 occasionally in other parts of these two districts by January survey. Occasional Present to Sub-Band
 density nymphs were identified by survey.
- Light traps at White Cliffs and Fowlers Gap did not capture any locusts in January.
- No locust reports were received from these two districts in January.
- Less than 10 mm of rainfall was received by much of these two districts in January with nil rainfall over much of the centre (including the area with high locust densities), ranging at very much below average to below average levels.

Forecast

- Sporadic breeding is possible under favourable habitat conditions with some medium-density nymphs
 may develop in the northeastern part where immigration may have occurred and sufficient rainfall may
 have been received from localised storms.
- There is a low-moderate probability of migration/dispersal events during February and March.
- The overall population is likely to remain at low levels with possible localised medium-density populations developing during February and March.

Risks

There is a low risk of regional infestations developing during February and March.

All locust activity should be reported to your nearest <u>Local Land Services Biosecurity Officer</u> on 1300 795 299 or to the Commission. A toll-free call to the Commission can be made on 1800 635 962. An answering machine is attached to this phone for after-hours calls. Reports can also be emailed to the Commission at <u>locust.report@agriculture.gov.au</u> or sent through the web page at https://www.agriculture.gov.au/pests-diseases-weeds/locusts/landholders/reporting_locusts.

QUEENSLAND

CENTRAL HIGHLANDS AND COALFIELDS

Isaac and Central Highlands Regional Councils; Banana Shire

Locusts and conditions

- Surveys conducted during the end of January and beginning of February identified occasional Isolated-density adults in this district without any nymphs detected.
- No reports of locust activity were received from this district in January.
- January rainfall totals were from 50 mm to 100 mm over much of this district, generally at average levels.

Forecast

- Localised breeding is possible under favourable habitat conditions, but general population is likely to remain at low levels.
- There is a very low probability of any significant migration events during February and March.

Risks

• There is a very low risk of a regional infestation developing during February and March.

DARLING DOWNS AND GRANITE BELT

Western Downs and Goondiwindi Regional Councils

Locusts and conditions

- Limited surveys conducted in this district identified some Isolated-Scattered density adults in January with no nymphs detected.
- No report of locust activity was received this district in January.
- 30 100 mm of rainfall was received by much of this district in January, generally at average levels.

Forecast

- Breeding is likely to continue under favourable habitat conditions with possible localised mediumdensity nymphs developing.
- There is a low probability of migration events during February and March.

Risks

• There is a low risk of a regional infestation developing during February and March.

CENTRAL WEST

Barcaldine, Longreach, and Blackall-Tambo Regional Council; Flinders and Winton Shires

Locusts and conditions

- Surveys identified consistent Isolated-density adults in the Longreach area with occasional Scattered-density adults and Present-density nymphs detected in January. Some Isolated-Scattered density adults were identified over other southeastern part of this district.
- No locust reports were received from this district in January.
- Variable rainfall of 5 80 mm was received by this district in January, ranging from very much below average to average levels.

Forecast

- Sporadic breeding is possible under favourable habitat conditions with possible localised higher densities.
- There is a low probability of any significant migration events during February and March.

Risks

• There is a low risk of a regional infestation developing during February and March.

MARANOA AND WARREGO

Maranoa Regional Council; Murweh, Paroo, and Balonne Shires

Locusts and conditions

- Surveys conducted in mid-January identified a Concentration-density of fledging adults with Numerous-density late-instar nymphs north of Cunnamulla. Some Isolated-density adults were identified during mid-January to early February.
- No locust reports were received from this district in January.
- This district received 8 25 mm of rainfall in its western part and 25 50 mm of rainfall in much of its eastern part in January, ranging from very much below average to average levels.

Forecast

- Breeding is possible under favourable habitat conditions resulting localised medium-high densities.
- There is a low-moderate probability of migration events during February and March.

Risks

There is a low risk of a regional infestation developing during February and March.

NORTH WEST

Mt Isa, Cloncurry, McKinlay, Boulia, and Winton Shires

Locusts and conditions

- No surveys were conducted in this district in January.
- No locust reports were received from this district in January.
- This district received 5 50 mm of rainfall with higher volume in the north in January, generally at very much below average to below average levels.

Forecast

- Sporadic breeding is possible, but the locust population is likely to remain at low levels.
- There is a low probability of any significant migration/redistribution events during February and March.

Risks

There is a low risk of a regional infestation developing during February and March.

CHANNEL COUNTRY

Boulia, Diamantina, Barcoo, Quilpie, and Bulloo Shires

Locusts and conditions

- No surveys were conducted in this district in January.
- No locust reports were received from this district in January.
- The light trap in Thargomindah did not capture any locusts in January.
- This district received nil 15 mm of rainfall in January, generally at below average to average levels.

Forecast

- Sporadic breeding is possible, but any resulting population is likely to remain at low levels.
- There is a low-moderate probability of migration/redistribution events during February and March.

Risks

There is a low risk of a regional infestation developing during February and March.

All locust activity should be reported to <u>Department of Primary Industries</u> via the <u>Customer Service Centre</u> on 13 25 23, online reporting form at https://www.daf.qld.gov.au/contact/report-a-biosecurity-pest-or-disease?form=other-1554285, email at info@daf.qld.gov.au, or to the Commission. A toll-free call to the Commission can be made on 1800 635 962. An answering machine is attached to this locust hotline for after-hours calls. Reports can also be sent to the Commission through the web page at https://www.agriculture.gov.au/pests-diseases-weeds/locusts/landholders/reporting_locusts or emailed at locusts-report@agriculture.gov.au.

SOUTH AUSTRALIA

NORTH EAST PASTORAL and FLINDERS

Locusts and conditions

- No surveys were conducted in these two districts in January.
- The light-trap at Dulkaninna did not capture any locusts in January.
- No locust reports were received from these two districts in January.
- In January nil to less than 10 mm of rainfall was received over much of these two districts, generally at very much below average to below average levels.

Forecast

- Sporadic breeding is possible under favourable habitat conditions, but any resulting population is likely to remain at low levels.
- There is a low probability of migration/dispersal events during February and March.

Risks

There is a very low risk of a regional infestation developing during February and March.

RIVERLAND and MURRAYLANDS

Locusts and conditions

- No surveys were conducted in the two districts in January.
- No locust reports were received from these two districts in January.
- January rainfall totals were less than 10 mm in these two districts, generally at very much below average to below average levels.

Forecast

- Limited sporadic breeding is possible, but any resulting population is likely to remain at low levels.
- There is a very low probability of migration/dispersal events during February and March.

Risks

• There is a very low risk of a regional infestation developing during February and March.

All locust activity should be reported to Primary Industries and Regions South Australia via the Exotic Plant Pest Hotline on 1800 084 881, online plant pest reporting form at https://form.jotform.co/70732909804864, or to the Commission. A toll-free call to the Commission can be made on 1800 635 962. An answering machine is attached to this locust hotline for afterhours calls. Reports can also be sent to the Commission through the web page at https://www.agriculture.gov.au/pests-diseases-weeds/locusts/landholders/reporting_locusts or email at locust-report@agriculture.gov.au.

VICTORIA

MALLEE

Mildura and Swan Hill Rural Cities; Yarriambiack and Buloke Shires

Locusts and conditions

- Limited surveys conducted in mid-January identified some Isolated-Scattered adults in the northwestern part of this district.
- No reports were received from this district in January.
- January rainfall totals were 5 14 mm over this district, generally at average levels.

Forecast

- Limited sporadic breeding is possible under suitable habitats, but any resulting population is likely to remain at low levels.
- It is unlikely that any bands or swarms developing during February and March.
- There is a very low probability of any significant migration events during February and March.

Risks

• There is a very low risk of a regional infestation developing during February and March.

WIMMERA

Hindmarsh and West Wimmera Shires

Locusts and conditions

- No surveys were conducted in this district in January.
- No locust reports were received from this district in January.
- January rainfall totals were 5 14 mm over this district, ranging from very much below average to average levels.

Forecast

- Limited sporadic breeding is possible under suitable habitat conditions, but any resulting population is likely to remain at low levels.
- It is unlikely that any bands or swarms developing during February and March.
- There is a very low probability of any significant migration events during February and March.

Risks

• There is a very low risk of a regional infestation developing during February and March.

All locust activity should be reported to <u>Agriculture Victoria</u> via the <u>Customer Contact Centre</u> on 136 186, online form at https://forms.bio.vic.gov.au/locusts, or to the Commission. A toll-free call to the Commission can be made on 1800 635 962. An answering machine is attached to this locust hotline for after-hours calls. Reports can also be sent to the Commission through the web page at https://www.agriculture.gov.au/pests-diseases-weeds/locusts/landholders/reporting_locusts, or emailed at locust.report@agriculture.gov.au.

Glossary of locust terms and density categories used in the Locust Bulletin

Term	Definition
adult	A fully developed, sexually mature locust capable of flight and reproduction
band	Dense congregation of nymphs (hopper band), usually marching together
diapause	Period of dormancy induced in anticipation of unfavourable environmental conditions
dispersal	Spreading of individuals away from others (adaptation)
egg bed	An area of soil containing many egg pods (usually hundreds per square metre)
fledge	Final instar moulting to a soft-bodied adult (fledgling) incapable of long-distance flight
hatch	A young nymph (hatchling) emerging from an egg
instar	A discrete stage of nymphal development after hatch/moult
laying	Female locusts depositing clutches of 20–60 eggs into the ground in froth-lined egg pods
migration	Seasonal collective movements from one place to another (behaviour)
nymph	An immature locust (hopper) having the same morphological appearance as the adult
quiescence	Cessation of growth and reduction of metabolic activity under unfavourable conditions
swarm	Dense congregation of adults, milling at the same spot or flying closely together

Locust density categories

Where higher densities occur, a large proportion of the regional population is concentrated in very small areas with lower densities elsewhere, so the higher densities cannot be extrapolated over the area of an entire region. A range of density classes is usually found within a surveyed region.

Nymph Densities	Number per m ²			
Present	1	_	5	
Numerous	6	_	30	
Sub-band	31	_	80	
Band	81	_	500	
Dense Band	>500			

Adult Densities	Number p	er m²	2	Number pe	r 25 () m²
Isolated		<	0.02	1	_	5
Scattered	0.024	_	0.1	6	_	25
Numerous	0.104	_	0.5	26	_	125
Concentration	0.504	_	3	126	_	750
Low Density Swarm	4	_	10	751	_	2,500
Medium Density Swarm	11	_	50	2,501	_	12,500
High Density Swarm	>50			>12,500		

General density classes	Nymph densities	Adult densities
very low, occasional	Nil – Present	Nil – Isolated
low	Present – Numerous	Isolated – Scattered
medium	Numerous - Sub-band	Scattered – Numerous
high	Bands	Concentration - Swarms

Reporting locust infestations

It is important that all locust activity be reported as soon as possible to your nearest state biosecurity agency office or to the Australian Plague Locust Commission.

State Authority for reporting locusts

New South Wales Local Land Services (LLS)

Queensland <u>Department of Agriculture and Fisheries</u>
South Australia <u>Department of Primary Industries and Regions</u>

Victoria <u>Agriculture Victoria</u>

Reports to the **Australian Plague Locust Commission** can be made by:

Free call (Canberra): 1800 635 962 (24 hours)

Email: locust.report@agriculture.gov.au

Website: https://www.agriculture.gov.au/pests-diseases-

weeds/locusts/landholders/reporting_locusts