

Locust Bulletin

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GENERAL SITUATION IN AUGUST-OCTOBER AND OUTLOOK TO JANUARY 2025

Australian Plague Locust

Chortoicetes terminifera

Locust populations were at low levels across inland eastern Australia with some localised small bands developing mainly in the Nyngan and surrounding areas of New South Wales since September 2024. Surveys conducted since early August did not identify any hopper bands in the Innamincka and surrounding areas where a large adult population formed during last autumn. Overwintering egg beds were discovered in the Girilambone-Nyngan-Nevertire areas and embryo development was closely monitored during winter. More than two dozen small hopper bands (some up to 300m long) have been identified in the Girilambone-Warren-Nevertire areas in September, with some visible from the air. Several small bands were also identified in the Broken Hill area in mid-September. Low-density nymphs and adults were identified by surveys in other parts of inland eastern Australia. Apart from several large catches of grasshoppers in late September by the light trap in Dulkaninna of South Australia, only a few locusts have been caught by light traps in Thargomindah of Queensland so far. No reports from other areas except those from the Nyngan and Broken Hill areas.

The inland eastern Australia received up to 25 mm of rainfall for September with less than 10 mm of rainfall over the arid interior, at average to very much below average levels historically, while October rainfall totals were slightly higher with some parts receiving over 100 mm of rainfall but again with less than 10 mm of rainfall over the arid interior, generally at average to below average levels. Although some heavy rains fell over the arid/semi-arid interior during late June to early July, locust habitat conditions were generally poor across inland eastern Australia by early spring. Winter temperatures over inland eastern Australia were 1–3 degrees above averages, largely attributed to the much warmer August. September temperatures continued the warm trend and October temperatures were 1–4 degrees above averages. Habitat conditions have generally been unfavourable this spring for further locust breeding and are likely to remain unfavourable over much of inland eastern Australia for the next three months with forecasts slightly above average rainfall but warmer temperatures and the absence of La Niña event developing.

The overall outlook is for low-density populations across inland eastern Australia, with localised medium to high densities of spring population nymphs and adults developing in Central West and Western districts of NSW. It is unlikely that any large bands or swarms will develop until January 2025, nor are any significant migrations likely to occur.

There is a very low likelihood of widespread infestations developing between now and early summer.

07 November 2024

Spur-throated Locust***Austracris guttulosa***

The overall population was at low levels across inland eastern Australia with some medium-density populations present in the arid interior. Surveys from early August to late October identified widespread Isolated to Scattered-density adults with some Numerous-density adults present mainly in the Channel Country of Queensland. No captures were recorded on the light traps at Dulkaninna (SA), White Cliffs (NSW) and Fowlers Gaps (NSW), but a few catches made by the light trap at Nooyeah Downs (Queensland) in late September. No nymphs were identified by survey, but some adults were caught with near-fully developed eggs in the Nyngan area of NSW in mid-October, indicating overwintering mature adults may have already undergone early breeding. Habitat conditions continue to remain unfavourable over much of inland eastern Australia, but some localised breeding is likely under favourable habitats.

There is a low risk of a widespread infestation. Though, some localised breeding is possible to occur in favourable habitats of tropical and sub-tropical Queensland between now and January 2025.

Migratory Locust***Locusta migratoria***

The overall population was at very low levels across inland eastern Australia. Some adults were identified in the Central Highlands of Queensland and surrounding areas by survey in addition to an individual found in the Nyngan area of NSW. Limited localised breeding is likely under favourable habitats, but high-density populations are unlikely to result from the current very low background population levels.

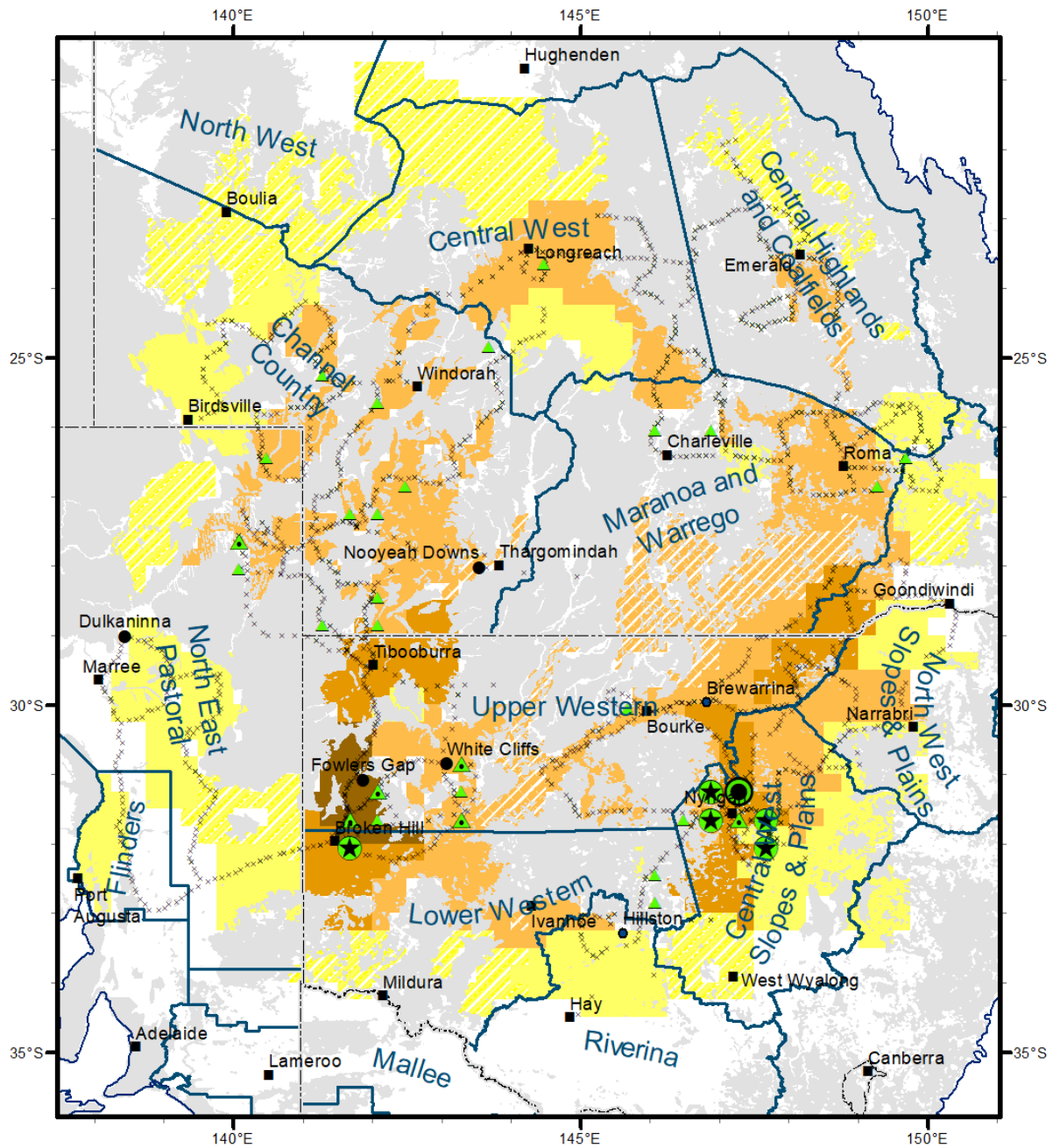
There is a very low risk of a widespread infestation developing during between now and January 2025.

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

05 August - 30 October 2024

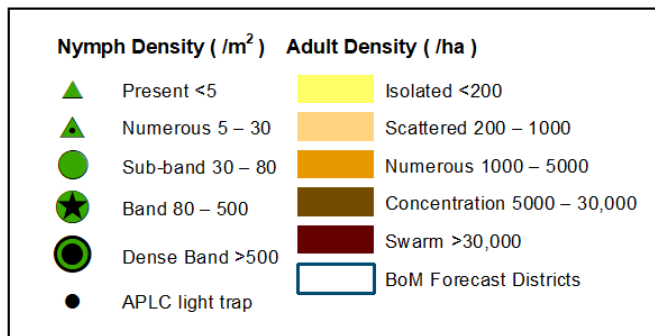


Locust Habitat: Grey - unsuitable

Adult densities mapped in solid colour are based on actual surveys and observations during the month. Adult densities mapped in hatched colour are estimated based on previous observations and forecasts.

x: Location of ground survey conducted

Projection: GDA2020



Australian Plague Locust**(*Chortoicetes terminifera*)****SITUATION IN AUGUST-OCTOBER AND OUTLOOK TO JANUARY 2025****NEW SOUTH WALES****NORTH WEST SLOPES & PLAINS****Northwest Local Land Services****Locusts and conditions**

- Surveys in October only identified some Isolated to Scattered-density adults in this district with no nymphs detected.
- No locust reports were received from this district in spring.
- This district received 10 – 70 mm of rainfall (ranging from average to above average levels) in September with higher amount over eastern parts, and 25 – 50 mm of rainfall (at average levels) over much of this district in October.

Forecast

- Limited localised breeding is possible under favourable habitat conditions.
- There is a low probability of any significant migrations between now and January 2025.
- The general population density is expected to remain at low levels between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

CENTRAL WEST SLOPES & PLAINS**Central West Local Land Services****Locusts and conditions**

- Overwintering egg beds were discovered in early July in the Girilambone-Nyngan-Nevertire areas where locust adults were reported swarming and egg-laying in late April. A few egg pods were identified as diapause eggs from the Girilambone area while the majority from the Nevertire area did not enter diapause after another examination done in mid-August. About 10% eggs were parasitised by *Scelio* wasps. Nymphs were reported hatching from late August to early September from these egg beds, indicating the co-existence of diapause and non-diapause eggs as well as staggered egg-laying in different dates.
- Surveys in September and October identified more than a dozen small bands with some at Sub-Band density. Several bands of up to 300 m in size were observed in the Girilambone-Nyngan areas. Frequent Isolated to Scattered-density adults were identified by survey with some Numerous-density adults found in late October.
- Several locust reports of hopper bands were received from this district in spring with most of these controlled by landowners.
- This district received less than 10 mm of rainfall in September with less than 5 mm of rainfall (below average to very much below averages levels) over the Girilambone-Nevertire areas, and 10–50 mm of rainfall at average levels in October.

Forecast

- Breeding is likely to occur under favourable habitat conditions generated from rains since mid-October.
- There is a low-medium probability of migrations between now and mid-December. Summer generation nymphs may commence hatching from early December onwards with possible bands developing.
- The general population is expected to remain at low-medium levels between now and January 2025.

Risks

- There is a low-moderate risk of regional infestations developing during late spring and early summer.

RIVERINA

Riverina, Murray Local Land Services

Locusts and conditions

- Surveys in late September in the northern part of this district identified Isolated to Scattered-density adults with no nymphs detected.
- No reports of locust activity were received from this district in spring.
- The UNSW insect monitoring radar in Hay did not detect any overflight locusts.
- This district received similar amount rainfall of 15–50 mm for September and October ranging from below average to average levels.

Forecast

- Limited breeding is possible under favourable habitats, but bands are unlikely to form between now and January 2025.
- There is a low probability of migration events between now and January 2025.
- The population level is likely to remain low for the remainder of 2024.

Risks

- There is a low risk of regional infestation developing during late spring and early summer.

UPPER and LOWER WESTERN

Western Local Land Services

Locusts and conditions

- Surveys were conducted mainly in the Upper Western district from late September to late October. Frequent nymphs from Present to Band-density were identified in the Broken Hill-White Cliffs areas with occasional nymphs detected in other areas. The bands in the Broken Hill area were small, 10 – 20 m long, but a Sub-Band of nymphs was about 100 m long. Consistent Isolated to Scattered-density adults were identified by survey with some Numerous to Concentration-density adults identified in the western part of the district.
- Several reports of locust banding were received from the Broken Hill area in mid-September, and these were confirmed by APLC staff.
- The light traps at White Cliffs and Fowlers Gap did not capture any locusts in spring.
- Much of the Upper Western district received nearly nil to 10 mm of rainfall, at below average to average levels; while the Lower Western district received almost nil to 20 mm of rainfall, ranging from very much below average to average levels. October rainfall totals were from nearly nil in the Broken Hill area to 30-40 mm in eastern parts, ranging from below average levels in the Broken Hill area to above average levels in the Brewarrina area.

Forecast

- Some localised sporadic breeding is possible under favourable habitat conditions, and some small swarms may develop.
- There is a low probability of migration/dispersal events between now and January 2025.
- The overall population is likely to remain at low levels for the remainder of 2024.

Risks

- There is a low risk of regional infestations developing between now and January 2025.

All locust activity should be reported to your nearest [Local Land Services Biosecurity Officer](#) 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 locust.report@agriculture.gov.au 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 in late October identified consistent Isolated-density adults with no nymphs detected in this district.
- No reports of locust activity were received from this district in spring.
- September rainfall totals were nil to 10 mm over much of this district, ranging from below average to average levels. October rainfall totals were from 15 mm to 65 mm, generally at average levels.

Forecast

- Localised breeding is possible under favourable habitat conditions, but any resulting population is likely to remain at low levels.
- There is a very low probability of any significant migration events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

DARLING DOWNS AND GRANITE BELT**Western Downs and Goondiwindi Regional Councils****Locusts and conditions**

- Surveys in late October identified some Isolated to Scattered-density adults in this district with no nymphs detected.
- A report of hopper activity was received from the southern part of this district in late September and was confirmed later as grasshopper nymphs by Queensland Biosecurity staff.
- This district received from 5 mm in the northern part to 70 mm of rainfall in the southern part in September, ranging from below average to above average levels. October rainfall totals were from 20 mm to 70 mm, ranging from below average to average levels.

Forecast

- Sporadic breeding is possible, but any resulting population is likely to remain at low levels.
- There is a very low probability of any significant migration events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

CENTRAL WEST**Barcaldine, Longreach, and Blackall-Tambo Regional Council; Flinders and Winton Shires****Locusts and conditions**

- Surveys during late September and October identified consistent Isolated to Scattered-density adults in this district with occasional nymphs detected.
- No locust reports were received from this district in spring.
- This district received less than 5 mm of rainfall in September, at below average to average levels. This district received nearly nil in the northwestern part to 30 mm of rainfall in October, ranging from below average to average levels.

Forecast

- Sporadic breeding is possible, but any resulting population is likely to remain at low levels.
- There is a very low probability of any significant migration events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

MARANOA AND WARREGO

Maranoa Regional Council; Murweh, Paroo, and Balonne Shires

Locusts and conditions

- Surveys conducted in late October in the northeastern part of this district identified consistent Isolated-density adults and occasional Scattered to Numerous-density adults with some Present-density nymphs detected.
- No locust reports were received from this district in spring.
- This district received nil to 10 mm of rainfall in September, generally at average levels. October rainfall totals were from almost nil in the southwestern part to 25-50 mm in the northeastern part, ranging from the lowest on record to below average to average levels.

Forecast

- Sporadic breeding is possible, but any resulting population is likely to remain at low levels.
- There is a very low probability of any significant migration events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

NORTH WEST

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

Locusts and conditions

- No surveys were conducted in this district in spring.
- No locust reports were received from this district in spring.
- This district received no rain over much of this district in September except for a few millimetres in the southwest and southeast corners, at below average and average levels. October rainfall totals were from nearly nil to 25 mm, generally at average levels.

Forecast

- Sporadic breeding is possible in suitable habitats, but the locust population is likely to remain at low levels.
- There is a very low probability of any significant migration/redistribution events between now and January 2025.

Risks

- There is a low risk of a regional infestation developing during late spring and early summer.

CHANNEL COUNTRY

Boulia, Diamantina, Barcoo, Quilpie, and Bulloo Shires

Locusts and conditions

- Surveys during early August to mid-October identified consistent Isolated and Scattered-density adults with occasional Present-density nymphs in this district.
- No locust reports were received from this district in spring.
- The light trap in Thargomindah recorded a few adults in late September.
- This district received 1-6 mm of rainfall in September, generally at below average to average level. October rainfall totals were 1-10 mm over much of this district, 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 very low probability of migration/redistribution events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

All locust activity should be reported to [Department of Agriculture and Fisheries](#) via the [Customer Service Centre](#) on 13 25 23, online reporting form at <https://www.daf.qld.gov.au/contact/report-a-biosecurity-pest-or-disease>, 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 locust.report@agriculture.gov.au.

SOUTH AUSTRALIA

NORTH EAST PASTORAL and FLINDERS**Locusts and conditions**

- Surveys conducted during early August to mid-October identified some Isolated and Scattered-density adults in the North East district with some Present-density and occasional Numerous-density nymphs. Only occasional adults were identified in the Flinders district.
- No locust reports were received from this district in spring.
- The light-trap at Dulkaninna did not capture any locusts in spring other than a large amount of Sand Grasshoppers (*Urnisa guttulosa*), thousands on the nights of 23 and 24 September.
- Much of these two districts received less than 5 mm of rainfall in September with parts receiving 5 to 25 mm of rainfall, generally at average levels with parts in above average levels or below to very much below average levels. October rainfall totals were from less than 5 mm in northern parts to 30 mm in southern parts, varying from below average to above average levels.

Forecast

- Limited sporadic breeding is possible, but any resulting population is likely to remain at low levels.
- Locust bands and swarms are unlikely to form between now and January 2025.
- There is a very low probability of any significant migration/dispersal events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

RIVERLAND and MURRAYLANDS**Locusts and conditions**

- No surveys were conducted in spring in the two districts.
- No locust reports were received from these two districts in spring.
- September rainfall totals were from nearly nil in the northeastern part to 25 mm in the southern part, ranging from very much below average to below average levels. October rainfall totals were 25 – 35 mm over much of these two districts, generally at 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 any significant migration/dispersal events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

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 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 email at locust.report@agriculture.gov.au.

VICTORIA

MALLEE**Mildura and Swan Hill Rural Cities; Yarriambiack and Buloke Shires****Locusts and conditions**

- No surveys were conducted in spring in this district.
- No reports were received from this district in spring.
- September rainfall totals were 5 – 10 mm over much of this district, at very much below average to below average levels. October rainfall totals were 25 to 50 mm, generally at average to above 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 between now and January 2025.
- There is a low probability of any significant migration events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

WIMMERA**Hindmarsh and West Wimmera Shires****Locusts and conditions**

- No surveys were conducted in spring in this district.
- No locust reports were received from this district in spring.
- This district received 5 mm in the northern part to 50 mm of rainfall in the southern part in September, ranging from very much below average to above average levels. The October rainfall totals 15 – 30 mm, generally at below 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 between now and January 2025.
- There is a very low probability of any significant migration events between now and January 2025.

Risks

- There is a very low risk of a regional infestation developing during late spring and early summer.

All locust activity should be reported to [Agriculture Victoria](#) via the [Customer Contact Centre](#) 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 per m ²		Number per 250 m ²	
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	Department of Agriculture and Fisheries
South Australia	Department of Primary Industries and Regions
Victoria	Agriculture Victoria

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