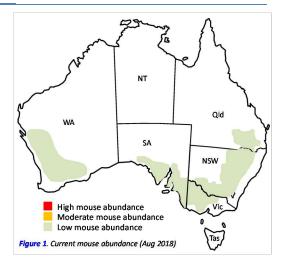
Monitoring mice in Australia – August 2018





Summary

- Mouse numbers have declined in all areas and are now low in all areas, but there are some isolated patches of activity (Figure 1)
 There is a low risk of damage of crops leading into spring.
- Mouse numbers will continue to decline through winter, they will not breed again until early spring. There are very dry across most regions.
- Growers should actively monitor mouse activity (mouse chew cards or active burrow counts). Take a walk through paddocks.
- Please report and map mouse activity using MouseAlert (www.mousealert.org.au) so other growers can see what mouse activity is being observed in their neighbourhood. Follow on twitter using @MouseAlert.



Management Recommendations

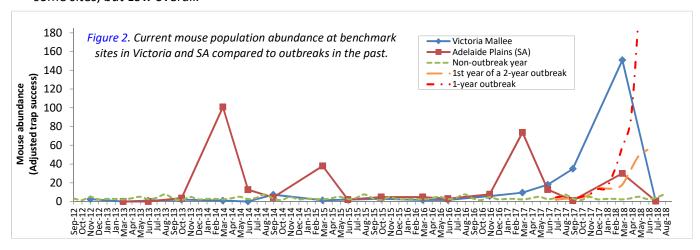
Mouse numbers decline through winter, but can still cause economic damage if numbers are high. Crops will compensate for minor damage, but cannot compensate for heavy damage.

- 1. Control weeds and grasses along fence lines and crop margins before seedset by spraying or slashing.
- 2. Mouse-proof houses and grain and stock feed storages.
- 3. Apply bait around buildings if necessary.
- 4. Monitor for signs of mouse activity.

Current situation

Mouse numbers have declined across Western, Southern and Northern regions, largely because of very dry conditions (Figure 1). Mice will continue to decline through until spring when breeding starts. Growers should remain vigilant and act accordingly if damage is likely. Because of patchy activity between paddocks, growers are advised to monitor across multiple paddocks to gauge mouse numbers and inform their management decisions. Please continue to report activity on *MouseAlert* (www.mousealert.org.au).

- South Australia: Mouse numbers declined to Low in North Adelaide Plains, Mallee, Eyre and Yorke Peninsulas
 (Figure 2). Trap success at Mallala (north of Adelaide) was 1% in July (Very Low). There was some activity on
 some sites, but Low overall.
- <u>Victoria</u>: Mouse abundance declined to Low in all locations. Mouse numbers are Low across Mallee and Wimmera regions (Figure 2). Trap success was 1% at Walpeup in July (Very Low). There was some activity on some sites, but Low overall.



- Queensland: Mouse activity is low but some localised patches of activity: Northern transect near Dalby had 1 active burrow in sorghum stubble. Central Downs had low to moderate activity (12 active burrows). Nil mice caught on long-term trapping site. Nil-low activity on southern transect towards Warwick.
- Northern, Central & Southern NSW: Mouse numbers are low in Southern, Central & Northern locations. Very few sites with chew card activity.
- Western Australia: Mouse activity is low in Ravensthorpe and Esperance areas.

The 'Mouse Forecast'

Northwest Victoria: There was a moderate likelihood of an outbreak for autumn 2018. There was economic damage at sowing 2018. The model will be re-run in September 2018 to estimate the likelihood of an outbreak in autumn 2019.

Central Darling Downs (QLD): The expected May 2019 population density index will be Low. The probabilities for May 2019 are High (0.01), Moderate (0.04), Low (0.33) and Very Low (0.62).

Future activities

The next scheduled monitoring is set for September 2018 across all sites. Please continue to report mouse abundance on your farm (presence and absence!) using **MouseAlert** (<u>www.mousealert.org.au</u>) on your smart phone, tablet or computer and to check what other mouse activity is being reported locally and regionally. We welcome any information at any time. You can also follow progress on **Twitter** (<u>@MouseAlert</u>). Download the **MouseAlert** App from <u>iTunes app store</u> or <u>Google play</u> (click on hyperlink to download).



Background

MouseAlert Smartphone app www.mousealert.org.au

This is an update on surveillance of mice across the grain-belt of Australia for June/July 2018. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, Qld and NSW during winter 2018 (June/July). The monitoring provides data on the size (abundance) of mouse populations, their breeding status and overall activity. This information is used in models that have been developed progressively over the last 20-30 years to predict mouse outbreaks. Monitoring was conducted on a range of sites (Figure 3):

- Benchmark sites: live trapping data collected for use in models in Adelaide Plains (SA), Walpeup (Vic) & Darling Downs (Qld).
- Quantitative rapid-assessment sites: mouse chew cards & active mouse burrows assessments on 110 transects across 11 sites.
- Qualitative monitoring networks: from farmers and agronomists in 11 local areas.

This is part of a study funded by the GRDC to monitor mouse populations and forecast the likelihood of mouse outbreaks. This project has been funded by GRDC until Dec 2021.

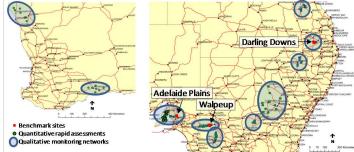


Figure 3. Approximate locations of mouse monitoring occurring in WA. SA. Vic. NSW and Old.

Further information

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