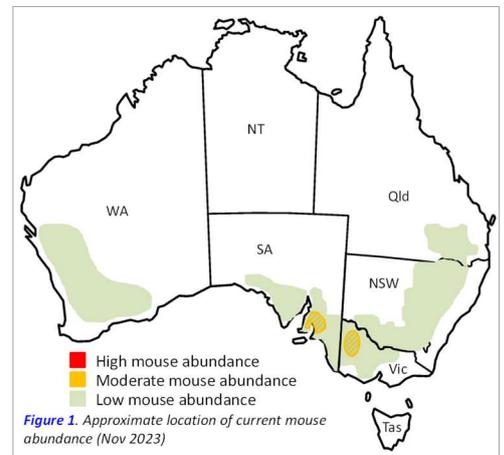


Monitoring mice in Australia – November 2023



Summary

- **There is low-moderate mouse activity in parts of the north Adelaide Plains and in the Victorian Mallee and Wimmera (Figure 1).** Mouse activity is very patchy (moderate in one field, but low in the next). Growers should remain vigilant, as lots of ground cover can mask signs of mouse activity. Low numbers of mice are not likely to cause significant crop damage.
- **Growers should actively monitor mouse activity** (mouse chew cards are useful at this time of year). There is always a chance of isolated patches of higher mouse activity (masked by maturing crops).
- 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 X (formerly Twitter) using *@MouseAlert*.



Management Recommendations

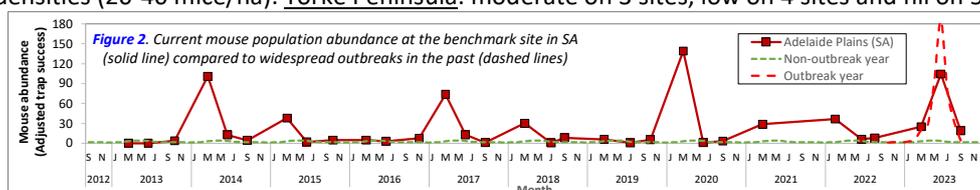
Although mouse numbers and activity are generally low, there are patches of low-moderate activity. Crop yields are likely to be average to high in many areas, which might mask mouse activity. Given abundant high-quality food, mouse activity could increase rapidly when conditions become favourable, which will be a concern for seeding in autumn 2024. It is therefore critical to harvest as cleanly as possible (avoid grain loss) to ensure there is no high-quality food available for mice. Low background food will increase the chance that mice will encounter rodenticide baits (if baiting is warranted). Monitoring in March 2024 will be important to track progress. See GRDC [Mouse Control](#) website for more details about control options.

1. **Harvest as cleanly as possible to reduce mouse food availability.** Food resources left in paddocks could sustain mouse breeding, leading to higher mouse numbers at seeding next year.
2. If mouse damage is evident in maturing crops **apply zinc phosphide mouse bait** (adhere to label/permit conditions and be aware of the 14-day withholding period before harvest). Once seeds have developed on heads, mice are reluctant to go for zinc phosphide baits, if so, bait well before seed set.
3. **Talk to bait suppliers** and ask for **50 g ZnP/kg bait** to ensure best chance of success. Be aware there may be supply lead times in some locations so talk to your supplier.

Current situation

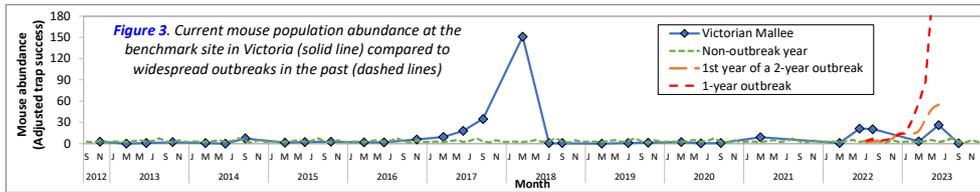
Mouse numbers are generally low in all areas, but there are localised areas of moderate activity in some regions (Adelaide Plains, Victorian Mallee and Wimmera). Mouse activity has declined in WA. Because of patchy activity between paddocks, growers are advised to monitor across multiple paddocks to gauge mouse numbers to inform management decisions. Focus on paddocks that are likely to have head loss (particularly barley). Monitoring in March 2024 will be important to track progress (please report on *MouseAlert* www.mousealert.org.au).

- **South Australia:** Mouse numbers are low-moderate on the Adelaide Plains and Yorke Peninsula, and generally low elsewhere. Eyre Peninsula: mouse activity has declined to low levels (especially areas treated with ZnP50). Adelaide Plains: activity is highly variable: moderate mouse activity on 3 sites (up to 100 burrows/ha), low mouse activity on 4 sites, and nil on 2 sites. 86 mice caught on trapping grids at Benchmark site at Mallala (=19% trap success), which is moderate (Figure 2) with low densities (20-40 mice/ha). Yorke Peninsula: moderate on 3 sites, low on 4 sites and nil on 5 sites.

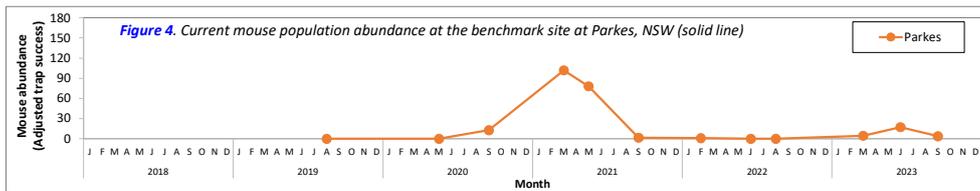


- **Queensland:** Darling Downs: nil activity on 13 sites across southern, central and northern Downs. Goondiwindi-Moonie: low activity on 2 site, nil on 7 sites.
- **Western Australia:** Mouse activity is low in all areas. We thank [Farmanco](#) for coordinating monitoring.

- **Victoria: Mouse abundance is highly variable with low-moderate activity at some sites.** Mallee: moderate on 7 sites (25-75 burrows/ha, 10-30% chew cards), low on 1 sites (10-20% chew cards) and nil on 3 sites. One mice caught on trap grids at Benchmark site at Walpeup (<1% trap success = very low, [Figure 3](#)) with very low density (1 mouse/ha). Wimmera: low-moderate on 5 sites (25-50 burrows/ha), and nil on 6 sites.



- **New South Wales (Northern, Central & Southern):** Mouse activity low. Parkes: in late October 2023, nil activity at 9 sites. Trangie: nil activity on 2 sites. Northern Moree: in late October 2023, low activity at 1 site, nil activity at 8 sites. Gin Gin: nil on 10 sites. Liverpool Plains: nil on 10 sites. Southern (Coleambally): moderate at 1 site (75 burrows/ha), low at 3 sites. Riverina: in late October 2023, no mouse activity at 9 sites. We thank North West Local Land Services, Central West Farming Systems and NSW DPI for mouse monitoring.



The ‘Mouse Forecast’

Northwest Victoria: The probability of an outbreak in autumn 2024 is **0.33-0.42 (low-moderate)** (depending on November rainfall). Peak abundance will be **low-moderate** in autumn (around **40-60 mice/ha**).

Adelaide Plains: The probability of an outbreak in autumn 2024 is **0.35-0.43 (low-moderate)** (depending on November rainfall).

Central Darling Downs: Mouse activity was **very low**, and the Mid-Term Plague Prediction was “**Very Low**” to “**Low**” for an outbreak in May 2024.

Future activities

The next scheduled monitoring is set for March 2024 in all regions. Please continue to report mouse abundance on your farm (presence and absence!) using **MouseAlert** (www.mousealert.org.au). Download the **MouseAlert** App from [iTunes app store](#) or [Google play](#) (click on hyperlink to download). You can also follow progress on **Twitter** ([@MouseAlert](#)). Instructions on how to use **MouseAlert** [here](#).



Background

This is an update on mouse abundance and activity for Sep/Oct for all regions. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, NSW and Qld during spring 2023 ([Figure 5](#)). The monitoring provides data on the size (abundance) of mouse populations, breeding status and overall activity. This information is used in models that have been developed over the last 20-30 years to predict mouse outbreaks. This project is funded by the GRDC (until Dec 2024) to monitor mouse populations and forecast the likelihood of mouse outbreaks.

- **Benchmark sites (◆):** live trapping data collected for use in models in SA, Vic, Qld, and NSW.
- **Quantitative rapid-assessment sites (●):** mouse chew cards & active mouse burrow counts (160 transects, 15 areas).
- **Qualitative monitoring networks (○):** from farmers and agronomists in 15 local areas.



Further information & Handy resources

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- 1 GRDC Mouse Control website: <https://grdc.com.au/resources-and-publications/resources/mouse-management>
- 2 MouseAlert (hosted by FeralScan): <https://www.feralscan.org.au/mousealert/>
- 3 Dept of Ag., Fisheries & Forestry (DAFF): <https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/mouse-infestation>
- 4 CSIRO rodent management: <https://research.csiro.au/rm/>