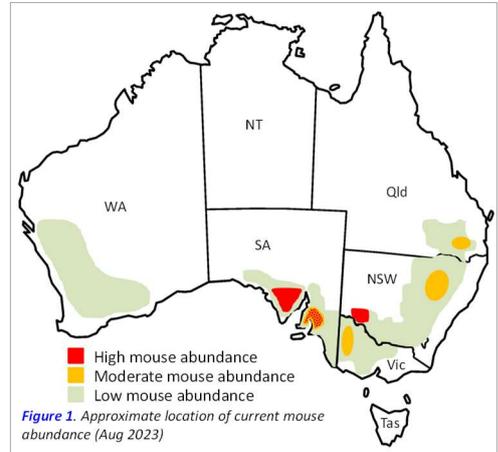


Monitoring mice in Australia – August 2023



Summary

- There are moderate to high numbers of mice in the Eyre Peninsula and parts of southern NSW, moderate to high mouse activity on the north Adelaide Plains and moderate mouse numbers in the Victorian Mallee and Wimmera, parts of northern NSW and parts of the Queensland Darling Downs (Figure 1). Mouse activity is very patchy (high 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.
- 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

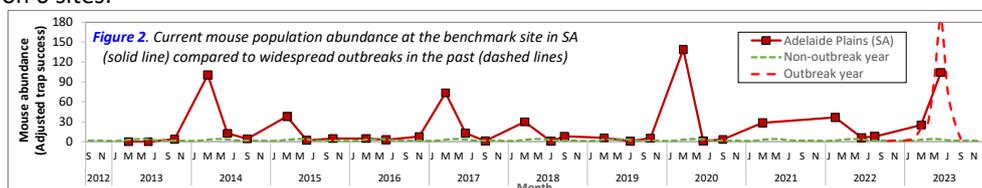
Mouse numbers normally decline through winter, but can still cause economic damage if numbers are high. Crops will compensate for minor damage, but cannot compensate for heavy damage or damage that occurs in late stages of crop maturity. If concerned, **consider management before crop comes into head**. See GRDC [Mouse Control](#) website for more details about control options. Apply control over large areas if possible.

1. **Monitor** crops for signs of mouse activity. Use chew cards (find [here](#)) or a walk through crops.
2. **Bait:** If mouse damage is evident in maturing crops, **aerially apply zinc phosphide mouse bait** (adhere to label/permit instructions and be aware of the 14-day withholding period before harvest). Once seeds have developed on heads, mice may not go for zinc phosphide baits, so, if need be, **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 are significant lead times in some locations so talk to your supplier as early as possible.
4. **Control weeds and grasses** along fence lines and crop margins before seedset by spraying or slashing.
5. **Mouse-proof** houses and grain and stock feed storages.
6. **Apply bait around buildings** if necessary. Please check and comply with label conditions.

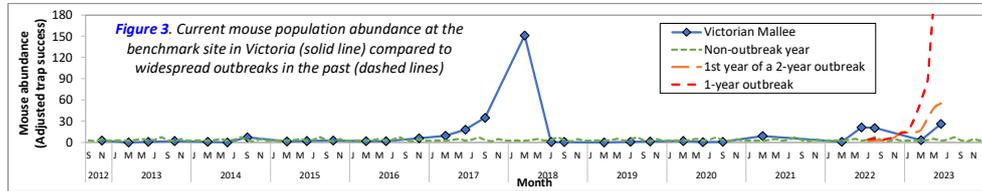
Current situation

Moderate or high mouse numbers are a concern for this time of year, particularly as winter crops mature. High numbers of mice mean that there is a large population at the start of the breeding season and mouse numbers will further increase. Mouse numbers are highly patchy and could be dependent on paddock history (late harvest, high yielding crop, storm affected crop, and lots of ground cover masking signs of mouse activity). Winter cereals can compensate for some damage, but the ability to compensate lessens as crops mature. Because of patchy activity between paddocks, growers are advised to monitor across multiple paddocks to gauge mouse numbers to inform management decisions. Please report on *MouseAlert* www.mousealert.org.au.

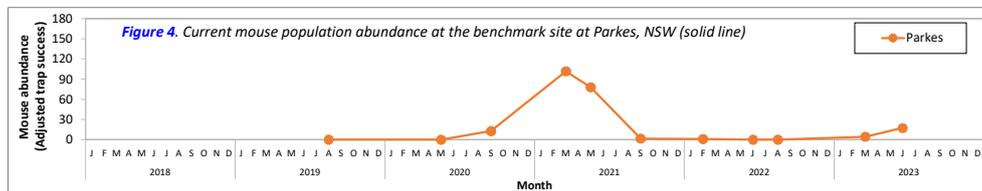
- **South Australia:** Mouse numbers are high in parts of the EP, and moderate on the Adelaide Plains, and generally low elsewhere. Eyre Peninsula: mouse activity is high in parts of the EP – growers need to be vigilant and protect crops. Adelaide Plains: activity is highly variable: high mouse activity on 3 sites (with 100-300 burrows/ha), moderate mouse activity on 2 sites, and nil on 5 sites. 190 mice caught on trapping grids at Benchmark site at Mallala (=105% trap success), which is high (Figure 2) with moderate-high densities (100-200 mice/ha). Yorke Peninsula: moderate on 2 sites, low on 2 sites and nil on 6 sites.



- **Queensland:** Darling Downs: highly variable across southern, central and northern Downs: high on 6 sites (>70% active cards or 150-500 burrows/ha), moderate on 1 site and nil on 6 sites. Goondiwindi-Moonie: moderate activity on 1 site, nil on 8 sites.
- **Western Australia:** **Generally low mouse activity.** No significant reports. Areas that baited at sowing remain on alert.
- **Victoria:** **Mouse abundance is highly variable with high activity at some sites.** Mallee: High on 2 sites (15-175 burrows/ha), moderate on 1 site (50% chew cards), low on 7 sites (10-20% chew cards) and nil on 1 site. 67 mice caught on trap grids at Benchmark site at Walpeup (=26% trap success = moderate, [Figure 3](#)) with 50-150 mice/ha. Wimmera: high on 1 site (100 burrows/ha), moderate on 3 sites (50 burrows/ha or 50% chew card), low on 1 site and nil on 4 sites.



- **New South Wales (Northern, Central & Southern):** Mouse activity highly variable, with high activity on some sites and moderate activity on others. Parkes: (May 2023) high activity on 1 site, nil on 5 sites; (July 2023) moderate on 1 site, low on 1 site and nil on 3 sites, with 48 mice caught at Benchmark site at Parkes (=18% trap success; density of 5 mice/ha) ([Figure 4](#)). Trangie: nil activity on 2 sites. Northern Moree: high on 1 site (175 burrows/ha), moderate on 1 site, nil on 7 sites. Gin Gin: low on 2 sites, nil on 6 sites. Liverpool Plains: low on 1 site, nil on 9 sites. Southern (Coleambally): high at 1 site, nil on 3 sites. We thank North West Local Land Services, Central West Farming Systems and NSW DPI for mouse monitoring.

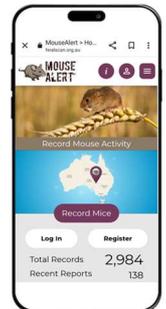


The ‘Mouse Forecast’

Northwest Victoria and Adelaide Plains: The models will be next run in October once April-October rainfall data is available.
Central Darling Downs: Assuming “moderate” mouse activity, the “Long-term” model was “**inconclusive**” for an outbreak in May 2024; meaning further monitoring is warranted. The model will be run again in September.

Future activities

The next scheduled monitoring is set for September 2023 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 June/July for all regions. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, NSW and Qld during winter 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/>