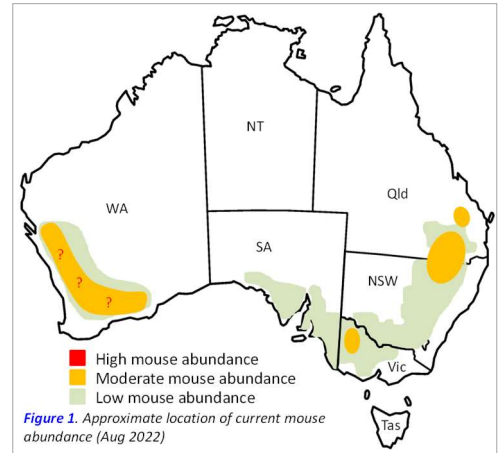


Monitoring mice in Australia – August 2022



Summary

- Mouse numbers are moderate in Victoria (parts of the Wimmera & Mallee), through large parts of WA and northern NSW/southern Qld (but patchy) (Figure 1). **Moderate numbers of mice are a serious concern for this time of year. Urgent action is required to minimise damage and losses as crops mature.** There is a short window of opportunity to act prior to harvesting. Mice will commence breeding soon, meaning numbers will increase further.
- Mouse numbers are low but patchy in many areas (Figure 1) but be vigilant. 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 twitter using @MouseAlert.



Management Recommendations

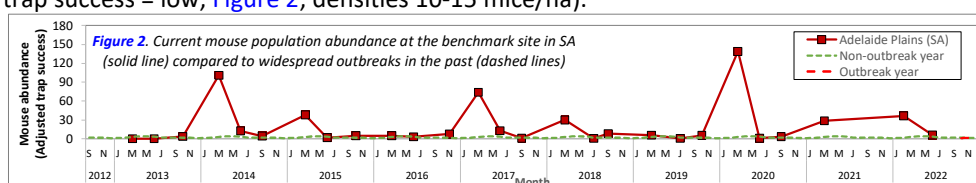
Mouse numbers normally decline through winter, but can still cause economic damage if numbers are high. Crops will compensate for minor damage, but cannot compensate for heavy damage or damage that occurs in late stages of crop maturity. If concerned, **consider management before crop comes into head.**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

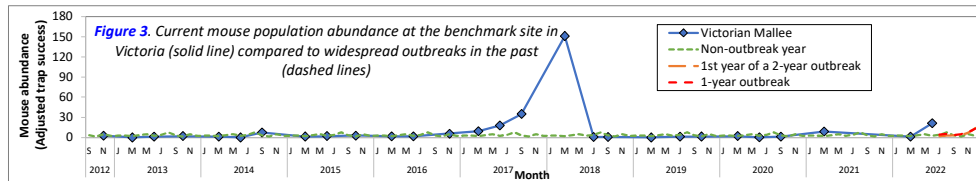
Mouse numbers and activity is relatively high for this time of year in parts of WA, Victoria, NSW and southern Queensland. This is particularly concerning as winter crops mature. Given the excellent conditions in many areas, mice will commence breeding early (lots of food, cover and moisture) and mouse numbers will only increase. Growers should remain vigilant and act accordingly if mouse abundance is of concern. 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 sustained grain loss last year (please report on *MouseAlert* www.mousealert.org.au).

- **South Australia:** Mouse numbers are variable but generally low. Eyre Peninsula: mice around but low activity. Yorke Peninsula: Nil activity on 11 sites, moderate activity on 1 site. Adelaide Plains: activity highly variable (nil activity on 3 sites, low activity on 1 site, moderate to high activity on 5 sites). 15 mice were caught on trap grids at Benchmark site at Adelaide Plains (= 6% trap success = low, Figure 2; densities 10-15 mice/ha).

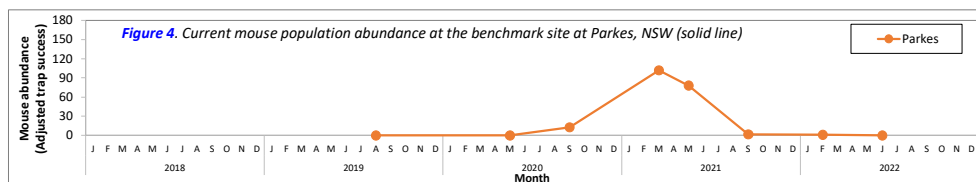


- **Queensland:** Mice are moderate but patchy. Target trapping for gene-flow study was moderate (~15% trap success) at 8 sites north of Goondiwindi and moderate (~15% trap success) at 8 sites on the Darling Downs (Brookstead, Dalby to Chinchilla). Moderate numbers occurring in parts of the North Burnett.

- **Western Australia:** Mouse activity is moderate around Geraldton and Ravensthorpe and throughout the grain belt; this is a serious concern for this time of year. Check paddocks and bait before seed-set if warranted. Geraldton: early baiting at seeding has kept mouse numbers down, but will keep monitoring the situation into spring. Ravensthorpe: mice are still an issue in many places but have dropped off a little in some. Other areas: mice present as widespread isolated populations, particularly in ungrazed stubbles (in chaff lines) and in canola – vigilance is important.
- **Victoria:** Mouse abundance is highly variable (but patchy). Mouse activity is relatively high for this time of year. Mallee: high activity on 1 site, but nil on 7 sites. 39 mice caught on trap grids at Benchmark site at Walpeup (=21% trap success = moderate, Figure 3) with 20-80 mice/ha, which is relatively high for this time of year. Wimmera: Highly variable, some sites with moderate activity (4 sites with 25-75 active burrows/ha), some nil (7 sites).



- **New South Wales (Northern, Central & Southern):** Mice are generally low in all areas, but patchy. Central West: low activity: moderate activity at 1 site (2 active burrows and 5 active chew cards), nil at 7. Parkes: nil activity at 6 sites, low activity at 3 sites. Nil mice caught at Benchmark site at Parkes (Figure 4). Northern Moree: nil activity on 7 sites, low activity on 2 sites. Target trapping for gene study was moderate (~15% trap success). Gin Gin: low activity on 1 site, nil on 9 sites. Northern Liverpool Plains: nil activity at 8 sites, low activity at 2 sites. Southern: nil activity from 4 sites. We thank North West Local Land Services, Central West Farming Systems and NSW DPI for mouse monitoring.



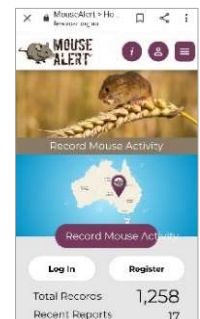
The ‘Mouse Forecast’

Northwest Victoria and Adelaide Plains: The models will be next run in October once April-October rainfall is available.

Central Darling Downs: Assuming “moderate” mouse activity, the “Long-term” model was “**inconclusive**” for an outbreak in May 2023; meaning further monitoring is warranted. The model will be run again in September.

Future activities

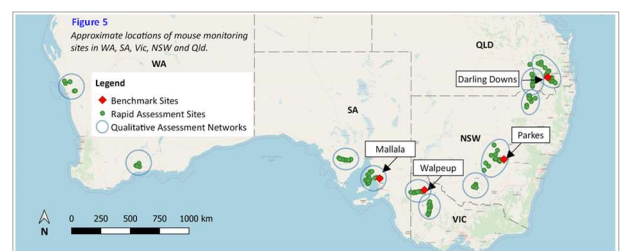
The next scheduled monitoring is set for August/September 2022 in all regions. Please continue to report mouse abundance on your farm (presence and absence!) using **MouseAlert** (www.mousealert.org.au). Download the **MouseAlert** App from [iTunes app store](https://itunes.apple.com/au/app/mousealert/id1441111111) or [Google play](https://play.google.com/store/apps/details?id=org.mousealert) (click on hyperlink to download). You can also follow progress on **Twitter** ([@MouseAlert](https://twitter.com/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 2022 (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 Mallala (SA), Walpeup (Vic), Darling Downs (Qld), and Parkes (NSW).
- **Quantitative rapid-assessment sites (●):** mouse chew cards & active mouse burrows (130 transects, 11 areas).
- **Qualitative monitoring networks (○):** from farmers and agronomists in 11 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 Department of Ag., Water and the Env. (DAWE): <https://www.awe.gov.au/agriculture-land/farm-food-drought/mouse-infestation>