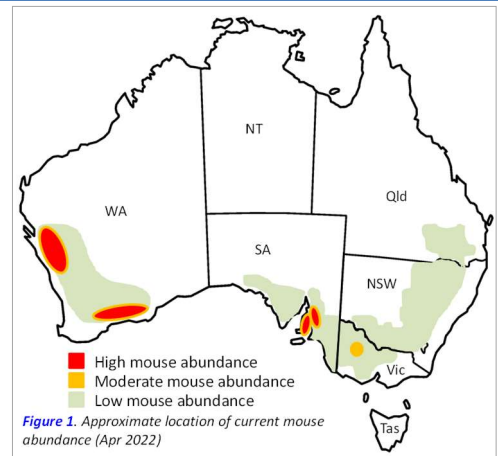


# Monitoring mice in Australia – April 2022



## Summary

- **Mouse numbers are high in parts of WA (Ravensthorpe & Geraldton) and SA (Yorke Peninsula & North Adelaide Plains) and moderate in the Wimmera (but patchy) (Figure 1). Urgent action is required to minimise damage and losses at sowing.** Moderate or high numbers of mice is a serious concern for this time of year. There is a short window of opportunity to act prior to sowing.
- **Mouse numbers are low but patchy in many areas (Figure 1) but be vigilant.** Low numbers of mice are not likely to cause significant damage to crops.
- **Growers should actively monitor mouse activity** (mouse chew cards and active burrow counts 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](http://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

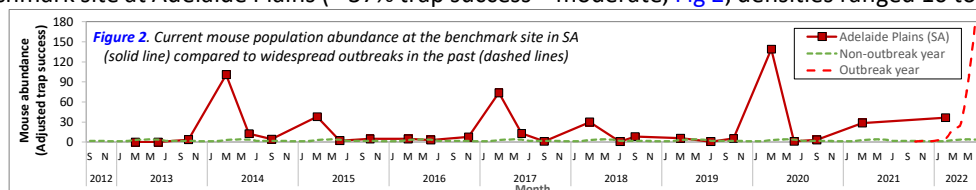
Mice are likely to cause economic damage at sowing in parts of WA and SA. Given the excellent conditions across much of this range, mice have been breeding through summer and autumn, with numbers peaking in April/May at the time of sowing winter crops. See GRDC [Mouse Control](http://www.mousecontrol.org.au) website for more details about control options.

1. Actively gauge numbers by walking into the paddock.
2. Remove as much residual food as possible.
3. Bait six weeks out from sowing if pressure is excessive (baiting six weeks prior to sowing allows enough time to overcome sub-lethal doses/aversion).
4. If mice are present at sowing, bait off the back of the seeder to prevent damage to the freshly sown crop.
5. Baiting at sowing is most effective if no other food sources are available.
6. **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.

## Current situation

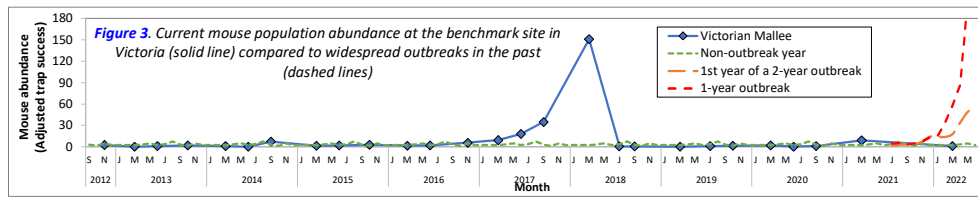
Mouse numbers and activity is high for this time of year in parts of WA and SA, and moderate but patchy in the Wimmera (Victoria). This is a particular concern leading up to sowing of winter crops. Mice will still be breeding and numbers will continue to increase leading to potential damage at sowing. 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 (particularly barley) last year (please report on *MouseAlert* [www.mousealert.org.au](http://www.mousealert.org.au)).

- **South Australia: Mouse numbers are highly variable.** Eyre Peninsula: mice around but low activity. Yorke Peninsula: Highly variable. Nil activity on 2 sites, low activity on 3 sites, moderate on 3 sites, high activity on 3 sites. Adelaide Plains: activity highly variable (nil activity on 2 sites, low activity on 3 sites, moderate to high activity on 5 sites). 68 mice caught on trap grids at Benchmark site at Adelaide Plains (= 37% trap success = moderate, Fig 2; densities ranged 10 to 120-180 mice/ha).

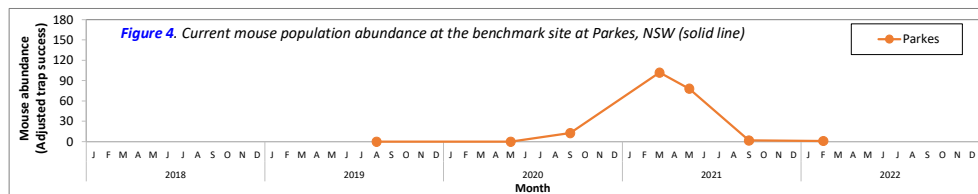


- **Western Australia: Mouse activity is moderate to high around Geraldton and Ravensthorpe; this is a serious concern for this time of year.** Mice are still breeding. Vigilance is important. Check paddocks and bait at sowing if warranted. Geraldton: lots of reports of mouse activity in numerous areas, but variable in others. Ravensthorpe: lots of reports of mouse activity from 13 sites but low from 4 sites.

- **Victoria: Mouse abundance is low to moderate (but patchy).** Mouse activity is relatively low for this time of year. Mallee: low activity. 6 mice caught on trap grids at Benchmark site at Walpeup (=2% trap success = low, [Figure 3](#)). Wimmera: Highly variable, some sites with moderate activity (4 sites with ~50 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: 1-2 nibbles on chew cards and 1-2 active burrows from 7 sites. Parkes: low activity at 2 sites, nil from 7 sites. 3 mice caught at Benchmark site at Parkes (= 1% trap success = very low, [Figure 4](#)). Northern Moree: nil activity on all 9 sites. Northern Liverpool Plains: low activity at 1 site, nil activity at 9 sites. Southern: nil activity from 4 sites, but some baiting near Wagga. We thank North West Local Land Services, Central West Farming Systems and NSW DPI for mouse monitoring.



- **Queensland: Mice are low but patchy.** Heavy rain and flooding have hampered monitoring. Ring around with growers indicates mice are not a concern, except near Jimbour where mice were damaging early sown sorghum and were baited: ongoing vigilance is important. No trapping has been conducted since early 2021, so trapping graph not provided.

## The ‘Mouse Forecast’

**Northwest Victoria:** The Walpeup model predicted a **low to moderate** mouse abundance in autumn 2022, which appears to be on track. Mouse abundance in other regions of Victoria (Wimmera) are higher and could cause damage at sowing.

**Adelaide Plains:** The forecast for Adelaide Plains in autumn 2022 was **0.36 (moderate) to 0.53 (high)**, which appears to be on track. Some damage at sowing is likely.

**Central Darling Downs:** Flooding prevented access to sites. We ran some scenarios for the “Short-term” model: assuming mouse activity was “low”, the model indicated that mouse densities in May 2022 would most likely be **Low**.

## Future activities

The next scheduled monitoring is set for June/July 2022 in all regions. Please continue to report mouse abundance on your farm (presence and absence!) using **MouseAlert** ([www.mousealert.org.au](http://www.mousealert.org.au)) on your smart phone, tablet or computer and to check what other mouse activity is being reported locally and regionally (now >2,700 records). We welcome any information at any time. You can also follow progress on **Twitter** ([@MouseAlert](https://twitter.com/MouseAlert)). Instructions on how to use **MouseAlert** [here](#). Download the **MouseAlert** App from [iTunes app store](#) or [Google play](#) (click on hyperlink to download).

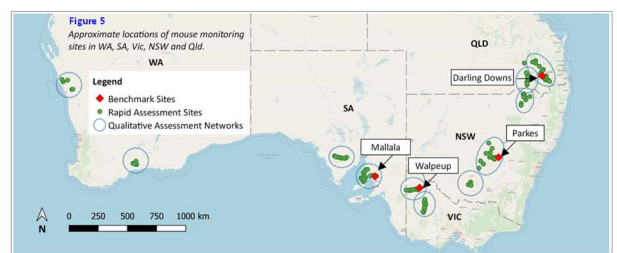


MouseAlert Smartphone app → [www.mousealert.org.au](http://www.mousealert.org.au)

## Background

This is an update on mouse abundance and activity for September for all regions. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, NSW and Qld during autumn 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 2021) to monitor mouse populations and forecast the likelihood of mouse outbreaks (the project was extended for an additional 3 years; to Dec 2024).

- **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 and 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>