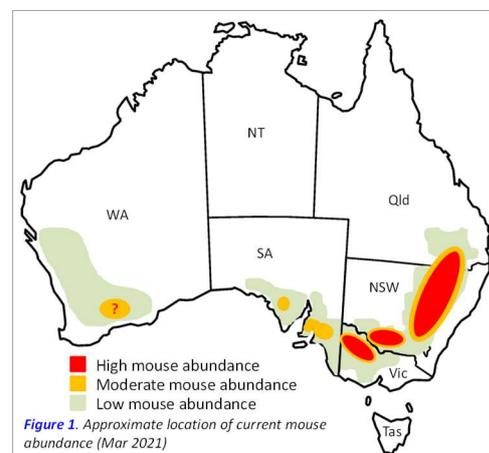


# Monitoring mice in Australia – March 2021



## Summary

- **Mouse numbers are moderate to high in many regions of southern Queensland, northern, central and southern NSW, northwestern Victoria, parts of South Australia and around Ravensthorpe, WA (Figure 1)** – Moderate or high numbers of mice at this time of year are of concern. Mice are causing damage to maturing summer crops in northern regions, and will likely cause damage at sowing for winter crops in all regions.
- **Mouse numbers are low in other areas (Figure 1)** but can be patchy (depending on paddock history); not likely to cause damage at sowing.
- Mice have continued to breed through summer/autumn, to reach a peak at sowing of winter crops. It has been very wet in many areas, and it is unclear what impact flooding rains have on mouse populations.
- Growers should actively monitor mouse activity (mouse chew cards or 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

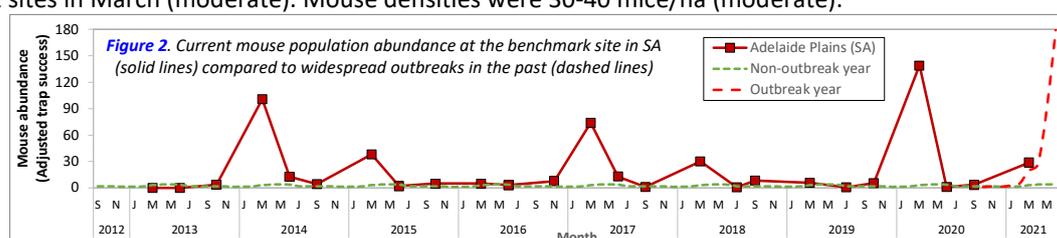
Mice are likely to cause economic damage at sowing in a band from southern Queensland through NSW, parts of Victoria and parts of South Australia and Western Australia. Given the excellent conditions across much of this range, mice have been breeding through summer and autumn, with numbers likely to peak in April/May at the time of sowing winter crops. See GRDC [Mouse Control](#) 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 planter to prevent damage to the freshly sown crop.
5. Baiting at sowing is most effective if no other food sources are available.
6. If you are going to bait, contact your bait supplier to ensure product is available when needed.

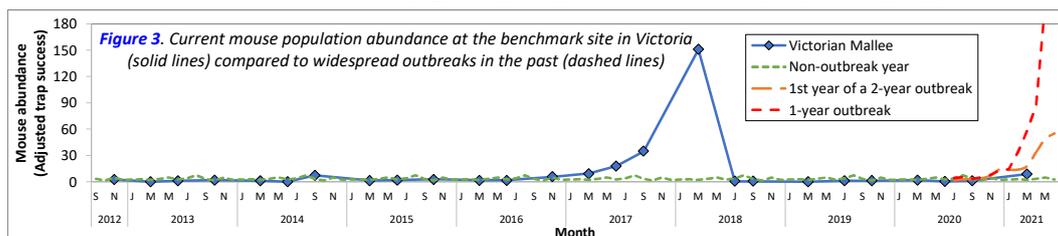
## Current situation

Mouse numbers are moderate to high in many areas (Figure 1). Mice will reach a peak in late autumn 2021 coincident with sowing of winter crops. Mice will appear in houses and sheds as temperatures drop. 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](http://www.mousealert.org.au)).

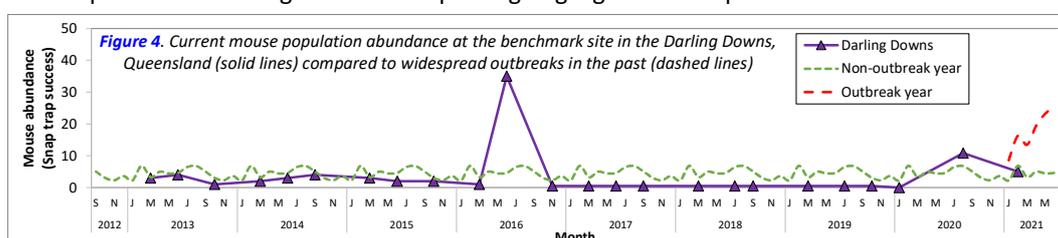
- **Western Australia:** Mouse activity is moderate to high around Ravensthorpe: 8/15 surveyed farmers have observed mouse activity with some likely to bait. Mouse activity is low in Geraldton.
- **South Australia:** Mouse numbers are patchy with moderate mouse numbers in North Adelaide Plains, Yorke Peninsula and western Eyre Peninsula, but low elsewhere (Figure 2). Trap success at Mallala (north of Adelaide) was 30% at two different sites in March (moderate). Mouse densities were 30-40 mice/ha (moderate).



- **Victoria: Mouse abundance is moderate to high (but patchy).** Mouse activity is highly variable with moderate to high activity in the Wimmera and southern Mallee (Figure 3). Trap success was low (9%) at Walpeup; with 30-100 mice/ha.



- **New South Wales (Northern, Central & Southern): Mice are very high in parts of the Central West and northern NSW (Moree, Liverpool Plains), but moderate to high elsewhere.** Mouse activity highly variable in Moree: chew card activity low on 5 sites and moderate on 1 site, high burrow activity on 2 sites. Trap success was high at Parkes (100% overall, but ranged 26% to 200% in two different stubbles), with densities of 450 mice/ha, and variable activity from chewed cards: 3 high, 4 moderate, 3 low. In the Central West, mouse activity highly variable (moderate to high chew card activity from 3/8 sites; low elsewhere). We thank Central West Farming Systems and NSW DPI for mouse monitoring.
- **Queensland: Mouse abundance and activity was moderate to high on the benchmark and rapid assessment sites across the Darling Downs and Goondiwindi.** Mice were causing damage to summer crops (sorghum, mungbeans, cotton) and are likely to be a problem at sowing of winter crops. Ongoing vigilance is important.



## The ‘Mouse Forecast’

**Northwest Victoria:** Peak abundance at Walpeup was predicted to be **low-moderate** in autumn (up to 60 mice/ha), with trapping confirming densities are 30-100 mice/ha. Mouse abundance in other regions of NW Victoria could be higher and could cause damage at sowing.

**Central Darling Downs:** The density index for the mouse population was moderate in December, and the model predicts ‘**high**’ numbers of mice in May 2021 with ‘**moderate**’ levels of damage to summer crops.

## Future activities

The next scheduled monitoring is set for June 2021 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 >1,200 records). A simplified **MouseAlert** has just been released. We welcome any information at any time. You can also follow progress on **Twitter** (@MouseAlert). Download the **MouseAlert** App from [iTunes app store](https://itunes.apple.com) or [Google play](https://play.google.com) (click on hyperlink to download).

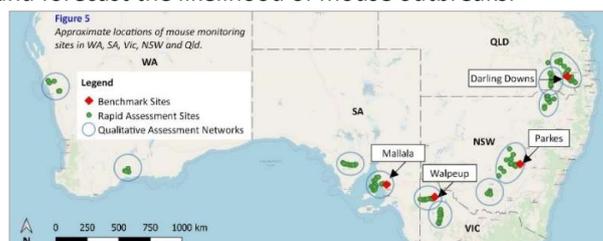
**MouseAlert Smartphone app** → [www.mousealert.org.au](http://www.mousealert.org.au)



## Background

This is an update on mouse abundance and activity for March for all regions. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, and NSW during spring 2020 (October) and Qld and northern NSW in Dec/Jan (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.

- **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-control>

② MouseAlert (hosted by FeralScan): <https://www.feralscan.org.au/mousealert/>