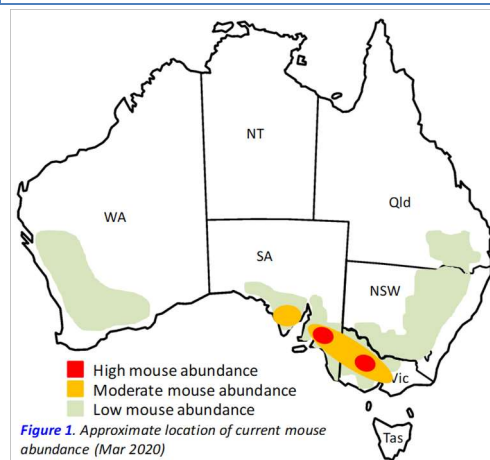


# Monitoring mice in Australia – March 2020



## Summary

- **Mouse numbers are moderate/high in a band across SE South Australia and NW Victoria (Figure 1)** – Mouse numbers are likely to cause some damage at sowing.
- **Mouse numbers are low in all other areas (Figure 1)** and are not likely to cause damage at sowing.
- Mice have continued to breed through summer/autumn. Mouse numbers will peak at sowing of winter crops in southern regions. If mouse numbers are high, they will cause economic damage.
- 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

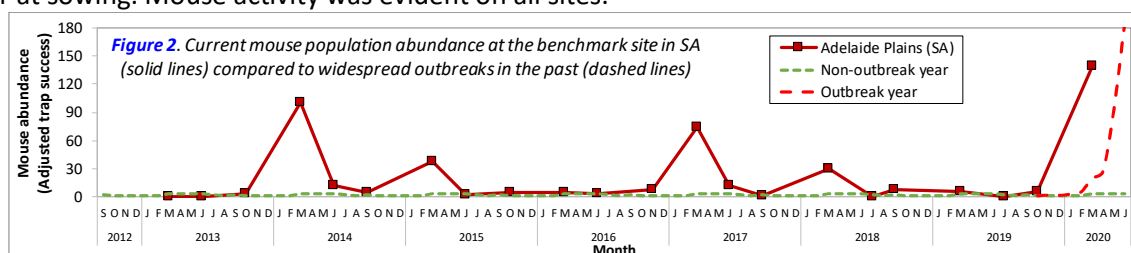
Mice could potentially cause economic damage at sowing from SE South Australia to NW Victoria. Additional areas might have increased mouse abundance because of increased grain on the ground from wind and storm damage, particularly to 2019 barley crops. See GRDC [Mouse Control](http://www.mousecontrol.org.au) website for more details about control options.

1. **Reduce alternative food sources and cover** by livestock grazing, prickle chain, small disk chain, speed tilling, rolling stubble etc if applicable for your cropping system. A light tillage will bury remaining food sources making it hard for mice to find food. Reducing cover (standing stubble) increases predation risk.
2. **Baiting with zinc phosphide** (at label rate of 1 kg/ha) if moderate to high mouse abundance is present. ZnP is reasonably effective providing there is little alternative food available for mice. Bait 4-6 weeks prior to sowing and again at sowing if warranted (if high numbers).
3. **Manage over large areas** (1,000 ha) by coordinating management with neighbours to reduce the chance of reinvasion by mice.

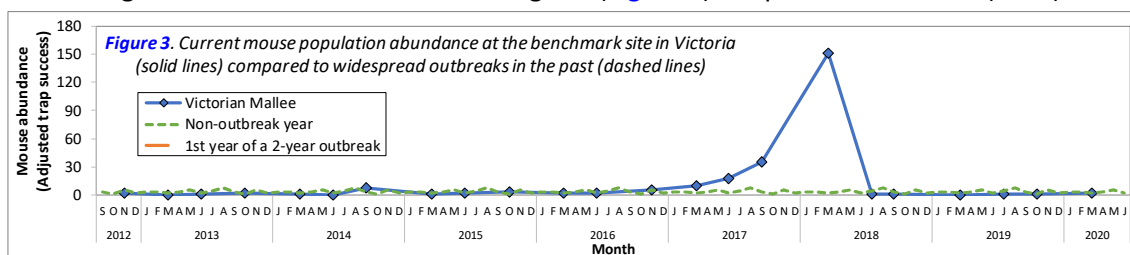
## Current situation

Mouse numbers have increased from SE South Australia through to NW Victoria but remains patchy (Figure 1). This increase was a result of good spring and summer rains plus areas affected by wind and storm damage, dropping grain onto the ground providing high quality food to sustain mouse breeding. In many regions mouse numbers remain very low (dry conditions for many months). Mice will reach a peak in late autumn 2020 coincident with sowing of winter crops in Southern regions. 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 and inform management decisions (please report on *MouseAlert* [www.mousealert.org.au](http://www.mousealert.org.au)).

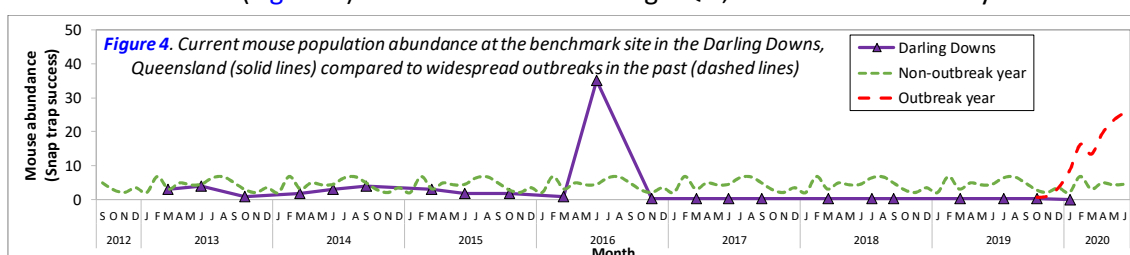
- **South Australia:** Mouse numbers are moderate to high in North Adelaide Plains, and moderate in Mallee, Eyre and Yorke Peninsulas (Figure 2). Trap success at Mallala (north of Adelaide) was 140% in March with densities of 200-600 mice/ha in some areas (which is very high for this time of year). Mouse damage is likely to occur at sowing. Mouse activity was evident on all sites.



- **Victoria: Mouse abundance is moderate or high (but patchy).** Mouse activity is highly variable with some areas moderate to high across Mallee and Wimmera regions (Figure 3). Trap success was low (0.7%) at Walpeup.



- **Western Australia: Mouse activity is low around Geraldton and Ravensthorpe areas.** There are a few mice around, but low overall.
- **New South Wales (Northern, Central & Southern): Mouse numbers are low all regions.** Two mice were trapped at the Benchmark site near Parkes, but very low mouse activity elsewhere. We thank Central West Farming Systems and NSW DPI for mouse monitoring.
- **Queensland: Mouse activity is very low:** Mouse numbers and activity was Very Low throughout the Darling Downs and Goondiwindi (Figure 4). Extensive rainfall through Qld, but nil mouse activity.



## The 'Mouse Forecast'

**Northwest Victoria: There was a low likelihood of an outbreak for autumn 2020.** Peak abundance in autumn 2020 (sowing time) was predicted to be low (<30 mice/ha). The model will be run again in September 2020.

**Central Darling Downs (Qld): The density index for the mouse populations is currently very low (<1%), and likely to remain very low in March and low in May 2020.** No crop damage is expected.

## Future activities

The next scheduled monitoring is set for September 2020 for all sites. 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. 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/au/app/mousealert/id1441111111) or [Google play](https://play.google.com/store/apps/details?id=org.mousealert) (click on hyperlink to download).

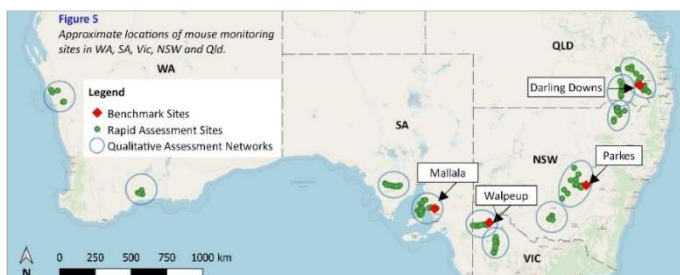


**MouseAlert Smartphone app**  
[www.mousealert.org.au](http://www.mousealert.org.au)

## Background

This is an update on mouse abundance and activity for March 2020 for all regions. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, NSW and Qld during autumn 2020 (March) (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/> ③ Twitter: @MouseAlert

Monitoring of mouse populations across Australia – March 2020