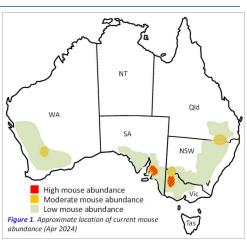
Monitoring mice in Australia – April 2024



Summary

- There is moderate-high mouse activity in parts of the north Adelaide Plains, Victorian Mallee and Wimmera, pockets of high activity on Queensland Darling Downs, and Central Eastern Wheatbelt of WA (Figure 1). Mouse activity is very patchy (moderate/high in one field, but low in the next). Growers should remain vigilant. Low numbers of mice are unlikely to cause significant crop damage.
- 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* (<u>www.mousealert.org.au</u>) so other growers can see what mouse



activity is being observed in their neighbourhood. Follow on X (formerly Twitter) using @MouseAlert.

Management Recommendations

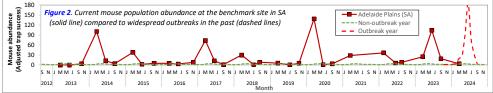
Mouse numbers are moderate to high in many areas (highly patchy). Given the excellent conditions across many areas, mice have been breeding through summer and autumn, with numbers peaking in April/May at the time of sowing winter crops. See GRDC <u>Mouse Control</u> website for more details about control options. **Be aware that only ZnP25 baits are currently available** (the Emergency Permit for ZnP50 has lapsed and is <u>not available</u>).

- 1. Actively gauge numbers by walking through paddocks.
- 2. If mice are present at sowing, bait off the back of the seeder to prevent damage to the freshly sown crop.
- 3. Baiting at sowing is most effective if no other food sources are available.
- 4. Talk to bait suppliers early to ensure timely supply. As with use of any agricultural chemical, use the product in accordance with use conditions on the label, and report any adverse or off target effects via APVMA website.

Current situation

Moderate or high mouse numbers are a concern for this time of year (seeding of winter crops), when most economic damage can occur. Mouse numbers are generally low in all areas, but there are localised areas of moderate to high activity in some regions (Adelaide Plains, Victorian Mallee and Wimmera, Queensland Darling Downs). Summer crops on the Darling Downs are susceptible to mouse damage (sorghum, corn etc) 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. Because of patchy activity between paddocks, growers are advised to monitor across multiple paddocks to monitor across multiple paddocks to gauge mouse numbers to inform management decisions. 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.

• <u>South Australia</u>: Mouse numbers are low-moderate on the Adelaide Plains and Yorke Peninsula, and generally low elsewhere. Eyre Peninsula</u>: mouse activity is low. <u>Adelaide Plains</u>: activity is highly variable: trap success from 6 sites (using trapping data from GRDC mouse ecology project in lieu of rapid assessments) ranged from 3 to 33% which is low to moderate mouse activity. 32 mice caught on trapping grids at Benchmark site at Mallala (=9% trap success), which is low (Figure 2) with low densities (20-40 mice/ha). <u>Yorke Peninsula</u>: nil on 4 sites, low on 4 sites, high on 4 sites (highly variable with up to 250 burrows per ha at one site).



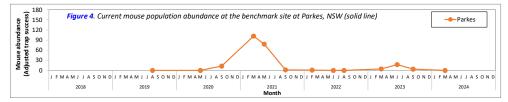
- Queensland: Darling Downs: nil activity on 8, moderate on 1 site, and high on 3 sites (150, 200 & 800 burrows/ha on the 3 sites; summer crops are susceptible to damage as they mature) across southern, central and northern Downs. <u>Goondiwindi-Moonie</u>: nil on 7 sites, low on 2 sites.
- Western Australia: Mouse activity is low-moderate in the Central Eastern Wheatbelt, and low in all other areas. We thank <u>Farmanco</u> for coordinating monitoring.

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Victoria: Mouse abundance is highly variable with moderate-high activity at some sites. Mallee: low on 3 sites, moderate on 3 sites and high on 3 sites (up to 125-250 burrows/ha). Ten mice were caught on trap grids at Benchmark site at Walpeup (<6% trap success = low, Figure 3) with low density (20-30 mice/ha). Wimmera: nil on 7 sites, low on 2 site and high on 2 sites (up to 125 burrows/ha).



New South Wales (Northern, Central & Southern): Mouse activity low. Parkes: nil activity at 7 sites, low at 1 (zero mice captured at Benchmark site at Parkes). Condobolin: nil on 7 sites. Trangie: very low activity on 2 sites. Northern Moree: unable to access sites because of heavy rain, low activity likely. Gin Gin: report forthcoming. Liverpool Plains: nil on 6 sites, and low on 4 sites. Southern (Coleambally): nil on 1 site, low on 1 site, moderate on 2 sites. Riverina: nil on 6 sites, low 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: The probability of an outbreak in autumn 2024 was forecast to be 0.33-0.42 (low-moderate). Peak abundance was esteimated to be low-moderate in autumn (around 40-60 mice/ha). Recent monitoring shows mouse activity to be highly variable (some sites with high activity).

Adelaide Plains: The probability of an outbreak in autumn 2024 was forecast to be 0.35-0.43 (low-moderate). Recent monitoring shows mouse activity to be highly variable (some sites with high activity).

Central Darling Downs: Mouse activity is highly variable, so the expected population density in March or May 2024 could range from "very low" on sites with nil activity to "moderate" or "high" on sites with high levels of activity.

Future activities

The next scheduled monitoring is set for June 2024 in all regions. Please continue to report mouse abundance on your farm (presence and absence!) using *MouseAlert* (<u>www.mousealert.org.au</u>). 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

MouseAlert Smartphone app \rightarrow



www.mousealert.org.au

This is an update on mouse abundance and activity for Mar/Apr for all regions. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, NSW and Qld during autumn 2024 (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, and NSW.
- Quantitative rapid-assessment sites (•): mouse chew cards & active mouse burrow counts (160 transects, 15 areas).
- Qualitative monitoring networks (O): from farmers and agronomists in 15 local areas.

Further information & Handy resources

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- O GRDC Mouse Control website: <u>https://grdc.com.au/resources-and-publications/resources/mouse-management</u>
- Ø MouseAlert (hosted by FeralScan): <u>https://www.feralscan.org.au/mousealert/</u>
- Dept of Ag., Fisheries & Forestry (DAFF): https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/mouse-infestation
- OSIRO rodent management: <u>https://research.csiro.au/rm/</u>

