Monitoring mice in Australia – July 2019

Summary

- **Mouse numbers are low in all areas** (Figure 1) – There is a low risk of damage to crops leading into spring.
- Mouse numbers will remain low. Breeding will not commence until the start of spring. It has been very dry across some regions, but good condition through lower EP, YP, Adelaide Plains, south east SA and Southern Vic.
- Growers should actively monitor mouse activity (mouse chew cards or active burrow counts). 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*.

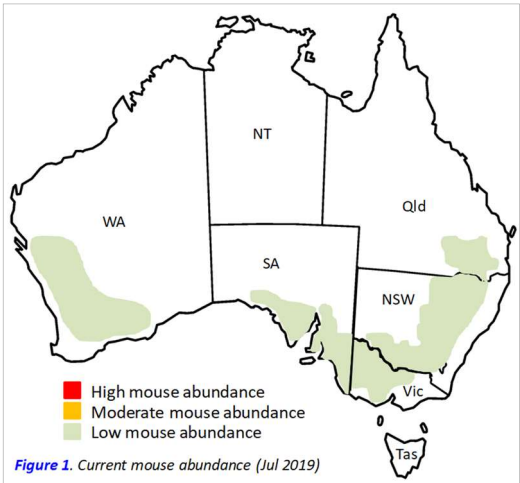

Figure 1. *Current mouse abundance (Jul 2019)*

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. See GRDC Mouse Control website for more details about control options.

1. **Control weeds and grasses** along fence lines and crop margins before seedset by spraying or slashing.
2. **Mouse-proof** houses and grain and stock feed storages.
3. **Apply bait around buildings** if necessary. Please comply with label conditions.
4. **Monitor** for signs of mouse activity.

Current situation

Mouse numbers remain low across all regions (Figure 1), largely because of the continuing dry conditions (but good conditions through lower EP, YP, Adelaide Plains, south east SA and Southern Vic). Mice will continue to decline through winter until spring when breeding starts. Growers should remain vigilant and act accordingly if damage is likely. 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).

- **Queensland: Mouse activity is very low:** Mouse numbers and activity was Very Low throughout the Darling Downs.
- **New South Wales (Northern, Central & Southern): Mouse numbers are low all regions.** There was no activity on any chew cards.
- **Western Australia: Mouse activity is low around Geraldton and Ravensthorpe areas.** Mouse activity has declined around Geraldton to low levels.
- **South Australia: Mouse numbers are low in North Adelaide Plains, Mallee, Eyre and Yorke Peninsulas** (Figure 2). Trap success at Mallala (north of Adelaide) was 1% in July (which is Very Low for this time of year). There was some activity on some sites, but Low overall.

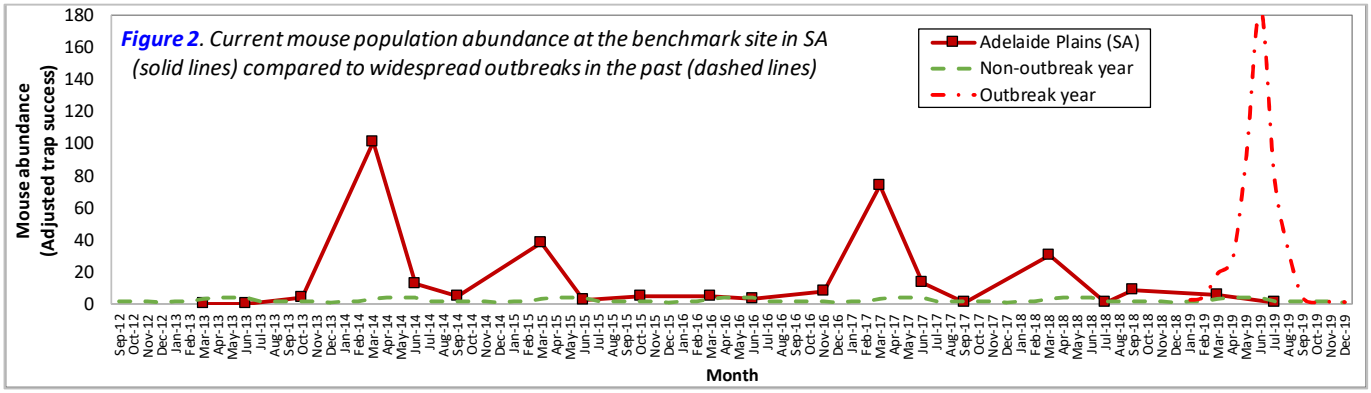

Figure 2. *Current mouse population abundance at the benchmark site in SA (solid lines) compared to widespread outbreaks in the past (dashed lines)*

- **Victoria: Mouse abundance are very low in all locations**. Mouse numbers are Very Low across Mallee and Wimmera regions (Figure 3). Trap success was 1% at Walpeup in March (Very Low). There was some activity on some sites, but Low overall.

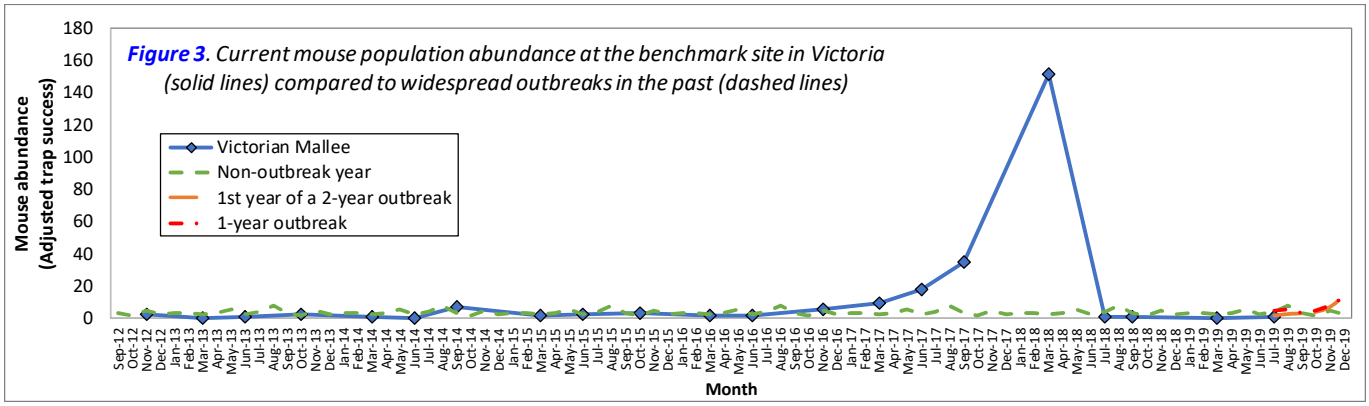

***Figure 3**. Current mouse population abundance at the benchmark site in Victoria (solid lines) compared to widespread outbreaks in the past (dashed lines)*

The 'Mouse Forecast'

The Forecast Models will be run again in September/October after the spring monitoring to estimate the likelihood of an outbreak in autumn 2020. The models require in-crop rainfall (Apr-Oct) and spring mouse abundance.

Future activities

The next scheduled monitoring is set for Septemebr 2019 for all sites. Please continue to report mouse abundance on your farm (presence and absence!) using ***MouseAlert*** (*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 or Google play (click on hyperlink to download).

MouseAlert Smartphone app
www.mousealert.org.au

Background

This is an update on mouse abundance and activity for July 2019 for all regions. Mouse populations were monitored in typical grains farming systems in WA, SA, Vic, NSW and Qld during winter 2019 (July). The monitoring provides data on the size (abundance) of mouse populations, their breeding status and overall activity. This information is used in models that have been developed progressively over the last 20-30 years to predict mouse outbreaks. Monitoring was conducted on a range of sites (Figure 4):

- **Benchmark sites**: live trapping data collected for use in models in Adelaide Plains (SA), Walpeup (Vic) & Darling Downs (Qld).
- **Quantitative rapid-assessment sites**: mouse chew cards & active mouse burrows assessments (110 transects, 11 areas).
- **Qualitative monitoring networks**: from farmers and agronomists in 11 local areas.

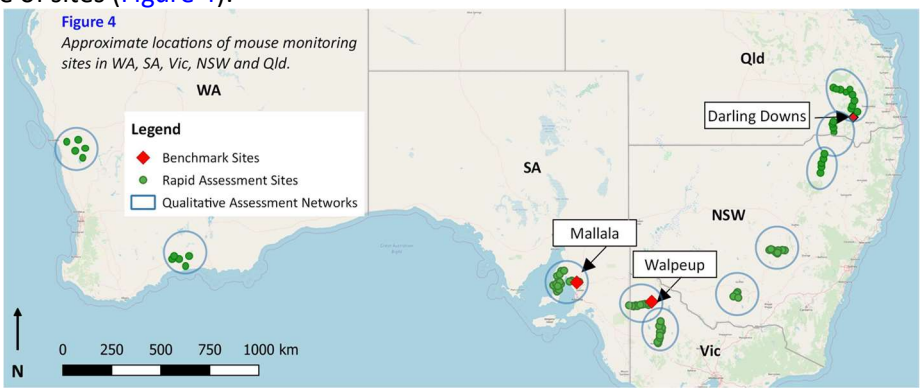

Figure 4
Approximate locations of mouse monitoring sites in WA, SA, Vic, NSW and Qld.

This is part of a study funded by the GRDC to monitor mouse populations and forecast the likelihood of mouse outbreaks. This project has been funded by GRDC until Dec 2021.

Further information

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Handy resources

❶ GRDC Mouse Control website: https://grdc.com.au/resources-and-publications/resources/mouse-control
❷ MouseAlert (hosted by FeralScan): https://www.feralscan.org.au/mousealert/ ❸ Twitter: *@MouseAlert*