

FOR INFORMATION

NAMP Technical Committee Annual Meeting 2024

Agenda Item 5.1b

Last updated: 10 August 2024

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WESTERN AUSTRALIA ENTOMOLOGY REPORT

RECOMMENDATION

1. That the NAMP Technical Committee:

NOTE: For the financial year 2023/24 there were no identification of vector species outside the bluetongue virus transmission zone.

BACKGROUND

1. Monitoring for biting midges in WA is conducted jointly by WA Govt and NAQS.
 - WA Govt manages the collection of specimens at 15 official NAMP sites
 - NAQS manages collection at 1 WA site
2. Northern Territory Department of Industry Tourism and Trade (DITT) Berrimah Veterinary Lab sorts *Culicoides* from by catch from all samples from WA.
3. NAQS Darwin entomology lab provides species identification for all specimens from WA.
4. This report includes the 16 official NAMP entomology sites in Western Australia, inclusive of the NAQS managed site.



Image 1: NAMP entomology sites in Western Australia.

DISCUSSION

2. No vector species were found outside the BTV zone in the Western Australia. For the 23/24 FY, less individual sites reported vector species, as well as showing less diversity of vector species (Figure 1). This trend is further demonstrated by Figure 2, displaying *C. actoni* and *C. fulvus* not being present this last year, and reduced numbers of *C. wadai* and *C. brevitarsis* compared to the previous year's totals. All vector species were present in significantly higher numbers in the previous year (22/23 FY). This could be due to a decrease in trapping events. The monthly trend for significant vectors this year (Figure 3), demonstrates the decline further, interestingly *C. wadai* was found in July and August, whereas in previous years it was absent. And *C. brevitarsis* shows an absence in the months of April, June and October, reduced numbers in January, March, May, July, August and November. With a spike to similar numbers as last year in September and February.
3. Thangoo station, near the BTV transmission zone, recorded only 4 specimens of *C. brevitarsis*, which is inline with last year's totals (4 *C. brevitarsis*). Of note Liveringa recorded a single specimen of *C. brevitarsis* last year whereas this year there are not vector species present. Broome remained unchanged with no vector species being recorded the last two years (Figure 1).
4. WA has 118 budgeted trapping events, we have received and ID 72 traps for this year, sitting at 61% of total traps budgeted, a total of 34731 of midges were sorted and ID, of that only 16 specimens were significant vectors.
5. The species composition has changed slightly to last year, of note was the addition of *C. cuniculs*, *C. wadai* and *C. waringi*. This is the most southerly occurrence of cuniculus in WA (Esperance) and for Australia. It hasn't been seen in WA for 10 years. Kalumburu remains the most diverse trapping site with 18 individual species being identified, this highlights the importance of the continued efforts in the more remote regions for trapping data. Esperance comes a close second with 12 species being recorded from the site.

FINANCIAL IMPLICATIONS

6. NIL

CONSULTATION/COMMUNICATION

7. NIL

NEXT STEPS/ACTIONS

8. NIL

Attachment A: Entomology report details NT

Attachment A:

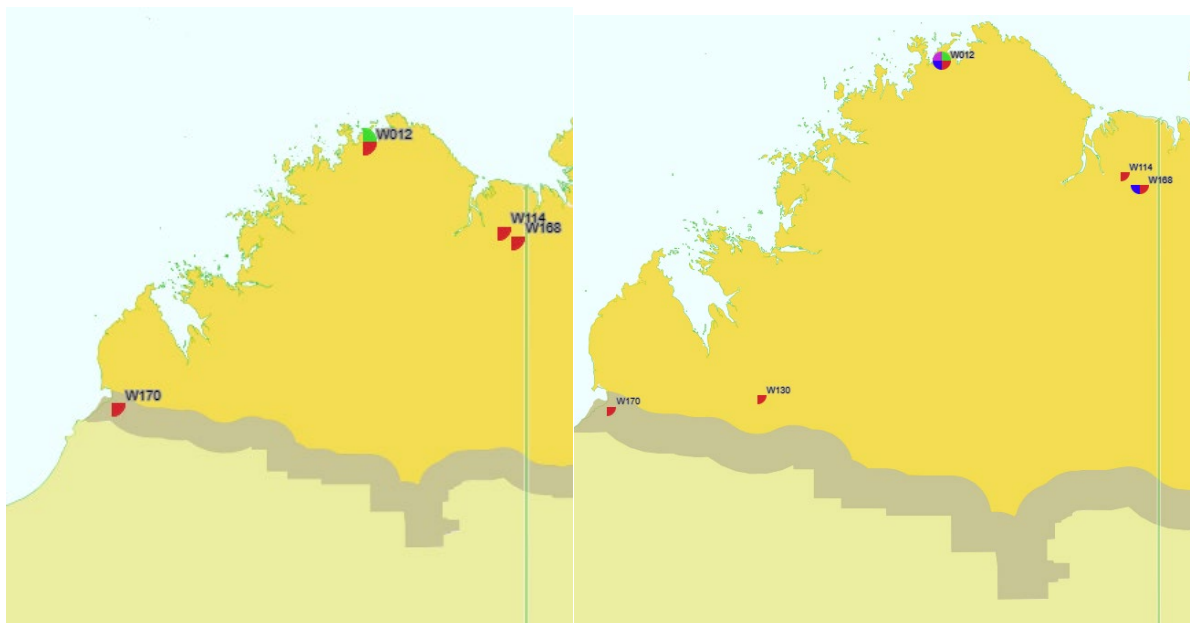


Figure 1 Significant vectors found across WA for the 23/24 FY and 22/23FY

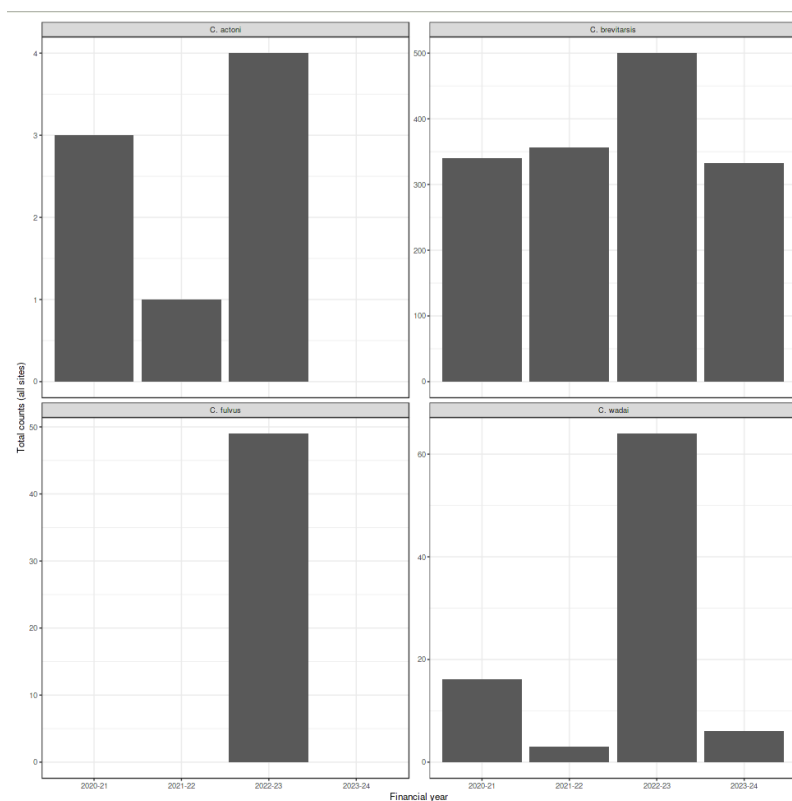


Figure 2 demonstrates totals of significant vectors present in WA from 2020-2024



C. austropalpalis	C. ornatus group #8
C. brevitaris	C. oxystoma
C. bundyensis	C. pallidothorax
C. bunrooensis	C. peregrinus
C. clavipalpis group #8	C. victoriae group #14
C. cuniculus	C. victoriae group #6
C. dycei	C. wadai
C. marksii	C. waringii
C. nattaiensis	C. williwilli
C. ornatus	C. williwilli group
C. ornatus group	C. williwilli group #3
C. ornatus group #6	C. zentae/kayi