

HOW FAR DO MOZZIES TRAVEL?



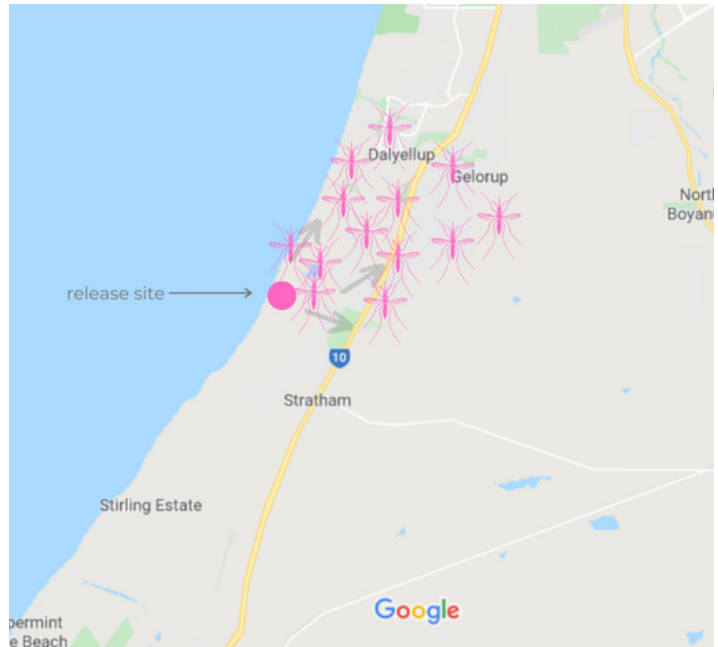
AN INSIGHT INTO THE “MOZZIE MARK AND RECAPTURE PROJECT”



AS PART OF THE PUBLIC HEALTH PROGRAM

associated with mosquito management in South West WA, the Shires of Capel, Dardanup, Harvey, Bunbury and Busselton regularly monitor and assess local mosquito populations, which then drive the aerial treatment program.

An important part of this initiative has been the “mosquito mark recapture project” to determine dispersal of mosquitoes originating from wetlands at Stratham.



“MUDDY LAKES”, STRATHAM

The coastal wetland area at Stratham is known as ‘Muddy Lakes’ and is the remnants of what originally used to be Minninup Lakes until it was severed by a drainage system known as Five Mile Brook. Now diverted, the area was drained to allow more access to land for farming purposes. In 2011 a study was conducted to determine the dispersal of mosquitoes breeding at this site.

A total of 54,000 mosquitoes were captured for marking and release. The mosquitoes were weighed and placed in a large plastic bag where the fluorescent pink dust was lightly applied. The mosquitoes were then placed on a tarpaulin under a tree to recover and disperse.





AN ESTIMATED TOTAL OF **464,600** MOSQUITOES WERE CAUGHT DURING THE MARK RECAPTURE PROJECT.

Two thirds of the mosquitoes were recaptured within 1km of the release site, a further 20% within 3km, and the majority (53%) were caught in a northerly or easterly direction from the release point.

Aedes camptorhynchus, the saltmarsh mosquito was the dominant species verifying that **82% of mosquitoes recaptured in this study breed at Muddy Lakes and disperse into residential areas of Stratham, Gelorup and Dalyellup.**

The furthest recapture was nine days after release on the opposite side of the high density urban Dalyellup development from Muddy Lakes, **6470m** from the release site, demonstrating the extent that mosquito breeding in Muddy Lakes is impacting on surrounding residential areas.



EFFECTIVE AERIAL TREATMENTS

Aerial treatments over approximately 200 hectares of the coastal wetland area have been conducted by helicopter during mosquito breeding season (generally August to November) since 2007.

Granular larvicide is electronically released from the hoppers of the helicopter directly into the water to target mosquito larvae before they emerge into adults.

This treatment may not be visible over residential areas where the adult mosquitoes are potentially harbouring, such as Gelorup or Dalyellup.

