Katherine mosquito survey report 14 to 15 April 2015

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Centre for Disease Control
Department of Health
Northern Territory Government
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Background

Medical Entomology (ME) of the Department of Health (DoH) visited Katherine on 14th and 15th April 2015 to:

- undertake routine adult mosquito trapping to determine mosquito numbers in Katherine Town,
- inspect selected sites for mosquito breeding,
- undertake adult mosquito trapping and larval surveys to confirm the absence of exotic mosquitoes.

Adult mosquito trapping

Adult mosquitoes were collected using CO₂-baited EVS traps with gas supplied from a D-size gas cylinder at 250mL per minute. The traps were set at the routine monitoring locations:

- The Katherine sewage treatment plant
- O'Keefe House, Riverbank Drive
- Katherine Meatworks, Victoria Highway
- ‘Dairy Dam’, Florina Road

Low numbers of mosquitoes were captured in the traps. The results are shown in Table 1.

Mosquito breeding sites

Lot 3139 – Victoria Highway

The vacant Lot 3139 on the Victoria Highway, located adjacent to the Katherine Primary School on Riverbank Drive, is known to hold large volumes of water in the wet season, and to breed Culex annulirostris mosquitoes. The site has been an ongoing public Health concern due to its proximity to the school and residences. At the time of this visit the area was dry. A dense stand of para grass (Urochloa mutica) indicated where seasonal inundation occurs (Fig. 1). Further inspections will be carried out in the 2015/16 wet season, with recommendations on control and possible site rectification made to the landholder.

Katherine East drains

Several of the drains in Katherine East have previously been identified as mosquito breeding sites, especially where vegetation has become established and ‘plunge pools’ occur at the end points of the drains (Fig. 2).

The Ronan Court drain (Fig. 3) and the Acacia Drive drain were holding water at the time of inspection. The three drains running south to north under Martin Terrace were dry at the time of inspection but require vegetation removal prior to the onset of the wet season to prevent mosquito breeding.

Medical Entomology, in liaison with Environmental Health, will discuss vegetation removal and appropriate treatment of the drains with the relevant authorities.

Golf course

In the past, the lakes at the Golf course had the potential to breed mosquitoes. However, due to recent works, the lakes are now unlikely to be mosquito breeding sites, as the edges of the lakes have been either paved or cut vertically and the
shallow channel connecting the two lakes has been completely filled. They present little risk while the landscape is maintained in its current condition.

The unlined drain near the club house car park was pooling water with vegetation growth in one section. Although no mosquito larvae were found, the drain is likely to breed mosquitoes in the wet season. Rectification of the drain was discussed with relevant authorities.

Exotic vector survey

Exotic mosquito surveys were carried out at the Katherine Waste Management Facility, the cemetery, the rail freight terminal and at two private properties on First Street and in Katherine East. All sites were thoroughly searched for water-filled receptacles and Biogents Sentinel (BG) traps were deployed overnight at the private properties.

The numerous unused tyres at the Katherine Waste Management Facility (Fig. 4) and the cemetery were the most receptive sites for receptacle breeding mosquitoes. No water-filled containers were located at the rail terminal. No exotic mosquitoes were detected.
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<th>Trap type</th>
<th>Date set</th>
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<th>No. of males</th>
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Figure 1: Lot 3139, para grass in seasonally inundated area, 14 April 2015
Figure 2: Katherine drains inspected on 15 April 2015
Figure 3: Ronan Court drain pooling water 15 April 2015.

Figure 4: Tyre pile at the Katherine Waste Management Facility, 15 April 2015.