Mosquitoes do breed in rain-water tanks

Rainwater tanks can provide excellent habitats for mosquito breeding. Mosquitoes are annoying insect pests which have the potential to carry diseases such as Ross River Virus. Between 2003 and 2004, there were 31 confirmed cases of Ross River Virus contracted within the City of Swan, all of which were associated with rural properties.

Mosquito life cycle
The mosquito lifecycle has four main stages being, egg, larvae, pupae and adult. Mosquitoes usually lay their eggs on the waters surface, on damp ground and vegetation and in containers such as pot plant saucers, birdbaths and rainwater tanks.

Larvae (commonly called wrigglers) hatch from the eggs and become pupae (commonly called tumblers). Adult mosquitoes then emerge from the pupae. All mosquitoes require standing water to complete their life cycle and therefore rain-water tanks are an ideal habitat for breeding mosquitoes.

Adult mosquitoes can gain entry into a poorly constructed or maintained rain-water tank through any gap, opening or pipe.

Preventing mosquito breeding
Mosquitoes and other nuisance insects need to be excluded from rainwater tanks. Unless in use, all access points, excluding the inlet and any overflows, should be kept shut with close fitting lids that will prevent mosquito access. Inlets and overflows should be covered with closely fitting removable insect-proof screens.

Mosquito control
By far the preferred approach for managing mosquitoes and other insects is to keep them out of tanks.

Detection of mosquito larvae (wrigglers) in rainwater tanks can indicate the presence of a gap through which the female mosquito can enter and lay eggs. The gap could occur:
- in mesh used to protect inlets and overflows
- around inspection and access points
- between the roof and main body of the tank
- in the tank itself due to corrosion or physical damage.

If mosquitoes or other insects are found in rainwater tanks, the point of entry should be located and sealed. As well as preventing further access, this will prevent escape of emerging adults.

Gutters should be inspected to ensure they do not contain ponded water and cleaned if necessary.

There is no ideal treatment to kill mosquito larvae present in rainwater. The two commonly recognised treatments involve adding chemicals (medicinal or liquid paraffin or kerosene) to tanks, however it is important to note that these will need to be added to the rainwater tank on a regular basis.

A checklist has been provided on the back page to assist you in assessing whether your rainwater tank is or has the potential to breed mosquitoes.
Could My Rain Water Tank Breed Mosquitoes?

Checklist

Qu.1  Is there a seal between the roof and main body of the tank?  

Qu.2  Is there a mesh cover on the inlet pipe?  

Qu.3  Is there a mesh cover on the overflow pipe?  

Qu.4  Is the man-hole lid adequately sealed?  

Qu.5  Is the tank free from holes which may have been caused by corrosion or physical damage?  

If you answered NO to any of the above questions, then your rain water tank has the potential to breed mosquitoes. If you have any queries regarding mosquito management please call City of Swan Health Services on 9267 9153.