

# Determining habitat condition and wallaby population at East Point Reserve



## Abstract

In 2014 City of Darwin has been working with EcOz Environmental Services to establish a monitoring program for the vegetation at East Point Reserve. This included:

- \* Establishing permanent monitoring transects
- \* Mapping the current extent of exotic trees and weeds

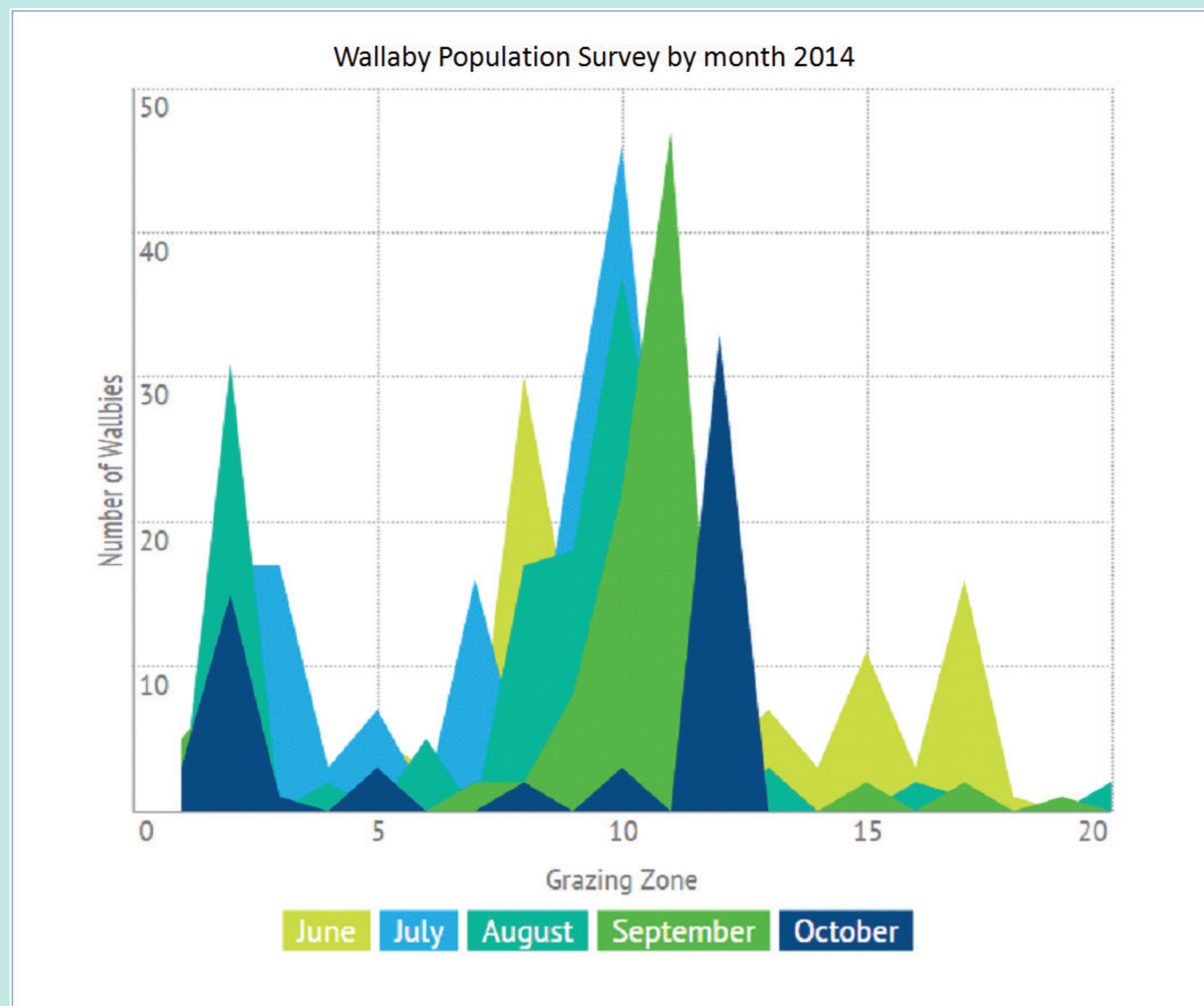
EcOz also developed a wallaby survey methodology to better understand:

- \* The stability/variability of the wallaby population (year-to-year)
- \* The preferred grassed areas for foraging
- \* The use of irrigated grass areas by wallabies.

## How are the wallabies?

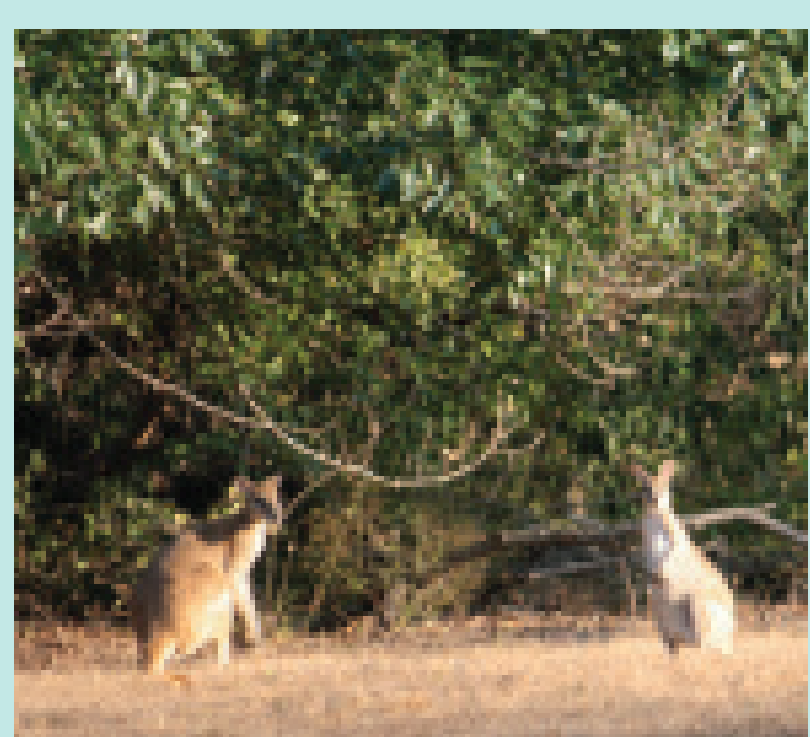
The Agile Wallabies at East Point are an isolated population highly valued by the local community. City of Darwin wants to know how they are faring.

Regular surveys have provided the data required to determine wallaby population at no less than 150 individuals. The best time to survey is one hour after dark on a new moon. Monthly surveys are ongoing until June 2015, but the last two surveys (September and October) have given very low counts (less than 100).



## What next for the wallabies?

- Use of camera monitoring to better understand grazing behaviour in warmer months.
- Determining a revegetation strategy to provide balance between grazing and shelter.
- Investigate the effects of herbicide use for weed control on wallabies.
- Investigate marking individuals for identification from a distance and possible tracking to understand movements.
- Consider closing the gates to the Reserve at dusk to allow wallabies to forage in grassed areas across the site.
- Develop a register of wallaby deaths.
- Reconsider the largely accepted theory that the decrease in wallaby numbers was due to a decrease in water points.



## History of East Point Reserve

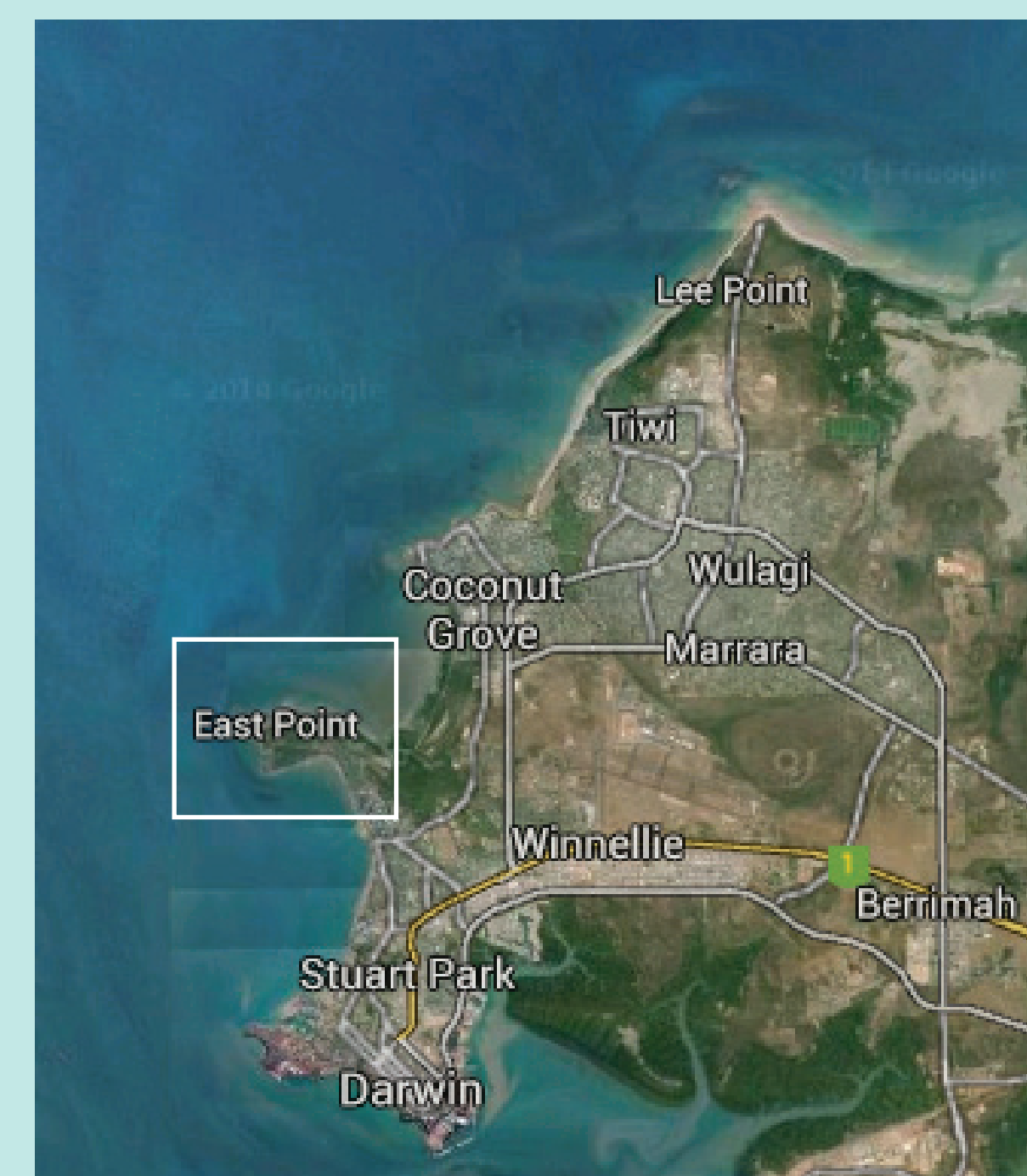
The vegetation at East Point was first modified by the Australian military from 1932. By 1943 almost half the monsoon rainforest was cleared and burnt annually, transferring these areas into grassy woodland.

The remaining forest was significantly cleared for a golf course between 1955 and 1963. While the golf course closed in 1974, Cyclone Tracy delivered a final blow that same year, causing severe damage to the forest. Since then patches of East Point have been revegetated.<sup>1</sup>

City of Darwin took over management of East Point Reserve in 1984 and commenced a revegetation program in 1985. Water points and weed control have supported revegetation efforts and in 2014 Council developed the "East Point Reserve Biodiversity Management Plan" to ensure revegetation is enhancing the biodiversity of this unique pocket of dry monsoon rainforest.

The Reserve's easy access and high profile location opens the area to great opportunities for education and community awareness of the natural environment.

<sup>1</sup>Franklin, D.C., Matthews, R., Lawes, M.J. (2010). History of the East Point monsoon forest. Northern Territory Naturalist. 22: 2-16.



## What's at East Point?\*



\* Native species known to occur at East Point Reserve. East Point Reserve Biodiversity Assessment. Prepared by EcOz, for City of Darwin. (2013)

## How is the habitat?

The remnant and revegetated monsoon rainforest at East Point is dominated by native species, and appear to be healthy and self-sustaining.

Revegetation communities differ from the remnant vegetation in some aspects; this is to be expected due to the long time frames involved in the development of ecological communities. However, both areas provide important habitat for native fauna.

## What next for the habitat?

- Control exotic plant species as a priority, initially focusing on the recently declared weed species Neem.
- Further revegetation of rainforest edges.
- Ongoing monitoring of revegetation.
- Limited active management of the revegetation sites (aside from weed control).
- A community tree planting day in December 2014.

