



Weed Management Strategy, Coochiemudlo Island

Redlands City Council

May, 2017

The Goals

- Goals of the Weed Management Strategy
 - To develop an Integrated Weed Management strategy for the island to ensure a sustainable and healthy island for all
 - Develop a strategy that takes into account the goals of residents, Traditional Owners, groups (e.g. coastcare, bushcare, progress association etc.) and Council
- Goals of the Day
 - Share information i.e. finding's so far; control information etc.
 - Receive information
 - Work together

The Issues

- More than 48 weeds are impacting the health, sustainability and future resilience of the island. Weeds negatively impact:
 - The ability of native vegetation to germinate, grow and reproduce
 - Structure impacted i.e. currently trees, shrubs and groundcovers being pulled down, suffocated, killed and out-competed
 - Currently large areas of the island with no native mid story or ground layer i.e. no future generations germinating or growing
 - A depletion of the native seedbanks occurs further impacting the future resilience of native vegetation
 - Habitat and available food sources for local and migratory fauna
 - Diversity, further simplifying / limiting food sources (flowers / fruits / roots etc.) and opportunities for local and migratory fauna
 - Complexity – a simplification of vegetation structure including all layers (i.e. ground, mid, canopy) and the roots, further increases the risk of recovery from disturbance (e.g. storms) and increases the risk of erosion
 - Cultural and significant places e.g. middens, scar trees, caves etc.
 - Experiences (aesthetics) and future visitation / economic opportunities for the island

Ground asparagus

Asparagus aethiopicus



- Grows in a range of conditions (e.g. sun and shade)
- Outcompetes native vegetation and completely alters the forest floor (leaf litter, ability of animals to forage, move through site etc.)
- Prevents the germination and growth of native species
- Changes soil health, dynamics etc.
- Is controllable via crowning and on a large scale requires spraying over a number of years

Cat's claw creeper

Dolichandra unguis-cati



- Prevents the germination and growth of native vegetation
- Collapses vegetation (and entire systems) including mature trees
- Contains seed and underground tubers (the latter can be massive requiring many years of control)
- Requires a number of techniques for control (depending on the size) all requiring herbicide

Painted spurge

Euphorbia cyathophora



- Serious coastal weed growing on fore and hind dunes in open areas and amongst native vegetation limiting the opportunities for native plants to grow



Mickey mouse bush

Ochna serrulata



- A highly invasive weed that is difficult to control
- Impacts the lower layers of many forest types preventing native plant growth and germination
- Seed dispersed mainly via birds (also gravity)
- Extensive and modified taproot which makes control challenging
- Requires herbicide and specialised technique to properly control

Mother of millions

Bryophyllum delagoense



- Significant weed in coastal districts and in western districts on a range of soils
- Easily grows from seed, segments, garden dumping and dispersal via water, gravity etc.
- Can be controlled organically over many years of regular follow up
- Larger areas can be controlled using herbicide while controlling other weeds

Garden Escapes



Garden escapes

cont'



Weed Control Techniques



- Cut, scrape and paint (including variations to treat *Ochna*)
- Cut and paint
- Scrape and paint
- Stem injection
- Spot spray
- Over spray
- Splatter gun
- Hand pulling
- Crowning
- Roll and hang
- Combinations depending on the weed species, level of maturity, habit, suite of weeds, habitat, project goals (i.e. restoration) etc.
- MAINTENANCE

Assisted Regeneration lantana control



Photos: City of Gold Coast

- # Lantana control

Using 6 weed control techniques
cutting of tracks; cut, scrape and paint, cut and spray regrowth;
hand pull; over-spray; spot spray

(photos; City of Gold Coast)



August 2008



September 2008

Lantana control cont'

(photos City of Gold Coast)



July 2009



June 2010

Lantana control cont'

(photos: City of Gold Coast)



Controlling similar weeds in a similar situation

Melaleuca wetland impacted by *Passiflora* spp., lantana; exotic grasses, annuals

(photos City of Gold Coast)



March, 2008

Coombabah Wetlands

(same photo series)

(photos City of Gold Coast)



November, 2008



June, 2010

Coombabah Wetlands



June, 2011



June, 2012

Coombabah Wetlands

Photo point 2



March, 2008



November, 2008

Coombabah Wetlands

Photo point 2

(photos City of Gold Coast)



June, 2010



June 2012

Burleigh Heads

Similar weeds – extensive ground asparagus, Ochna, umbrella tree, lantana, garden escapes amongst native vegetation

(photos City of Gold Coast)



Comparing the areas weed infested on the left, recovery on the right



Timing

- Strategic plan – within the next few months
- Parts of the island treated organically i.e. in areas that have been managed and are at a particular stage
- Some areas to get to maintenance stage within 2 years
- Some areas to a level of maintenance in 2-5 years
- Other areas (e.g. cat's claw zone) may take up to 10 years to get to a level of minimal maintenance
- Goal is to be able to manage island weeds (if properly and regularly maintained) organically in approx. 10 years (perhaps except for cat's claw zone).

What can you do to help?

- Assist with education of fellow residents and visitors the island
- Manage garden dumping
- Replace known environmental weeds in gardens with local or non-invasive plants
- You tell me???