

# Information sheet

## Eradicating the core ... is it worth it?



### Increasing production; enhancing biodiversity

Prickly Acacia is a significant direct and indirect cost to property budgets. A DCQ Weed Plan offers cost-effective strategies and tools to minimise this budget drain.

The DCQ Weed Plan is a framework for success: treating core infestations; putting a buffer around the treatment area; working sequentially to clean the paddock; and keeping it clean. Strategic fencing and stock weed hygiene are relatively cheap but critical tools for achieving success.

DCQ mapping identifies, and attributes stem densities to, each of the area classifications:

- core - more than 1000 stems per hectare;
- buffer - between 50 and 650 stems per hectare; and
- paddock - between 0.1 and 650 stems per hectare.

Because of the ease of access, hand application of residual chemicals is generally recommended in the paddock and buffer areas, with hand and aerial control techniques used on the core areas, with some use of machinery in selected sites.

Core areas, often associated with watercourses, are the last bastion of Prickly Acacia, mainly due to cost and workplace health and safety issues. While some work with machinery has been done, it is very difficult to stop the resultant widespread erosion, and it is generally not used.

The DCQ Weed Plan is underpinned by two new regulatory instruments – the Area Management Plan and the AVPMA Permit – both of which can only be used under a DCQ Weed Plan. They require that only mature native vegetation needs to be protected and, under strict rules, residual chemicals can be used to ensure control of not only the parent weed plant but germinating seedlings. This means basal bark spraying is no longer the only technique that can be used. However, it does mean careful mapping to ensure the treatment is correct for the area and that reporting is possible.

The example map below shows how DCQ lays out, before work commences, the obligations and project costings for themselves and the landholder. It shows the core and buffer zones DCQ is responsible for under the project, the areas the landholder is responsible for, and the sequence for each activity.

DCQ uses the Stocktake program to assess and classify land condition. Heavily infested core areas of Prickly Acacia are Land Condition D, and can have a pasture biomass of less than 100 kilograms per hectare. Surrounding buffer areas vary from C to B, while paddocks are generally a mixture of A and B, with pasture biomass of greater than 2000 kilograms per hectare. The Queensland Government suggests that improving land condition from D to A/B can lift carrying capacity by a factor of 10. This potential extra carrying capacity has the wider community benefit of also improving biodiversity and water quality.



Residual chemicals are generally the preferred option due to the continuing control of seedlings for up to three years. Under the DCQ Weed Plan, they can be used most places, except within 30 metres of a mature native tree. The core (Land Condition D) areas are

treated with 15 kilograms per hectare, but once densities drop below 1000 stems per hectare the application rate drops to 15 grams per tree. This confines the blanket application to the smallest possible area and reduces chemical application by up to 40%.

While costs vary for each property, under the DCQ program it is generally \$60 to \$240 per hectare, with landholder costs of \$1 to \$12.50 per hectare. Costs continue to fall as systems are refined: average treatment costs for the program have fallen from \$197 per hectare to \$87 per hectare, while landholder costs (chemical only) have remained steady. At Auteuil, the program treated area was 605 hectares in year 1, with the landholder treating an additional 4000 ha of scattered infestations.

If full recovery is achieved after year 5 it is estimated the property's carrying capacity will increase by two decks of cattle. This, coupled with significantly reduced annual chemical, mustering and general operating costs represents a considerable profitability increase.

Important note: The blanket application of residual chemicals across a paddock is not recommended due to the extreme cost. DCQ is working in partnership with other groups to refine promising techniques to control emergent seedlings in these areas; however, none are yet approved. There are also cases where, due to the cost and lack of public benefit, DCQ will not fund eradication support; however, it may support containment activities.