

War on WEEDS

CASE STUDY:

Turrawalla Exmoor

One of six Producer
Demonstration Sites in the BBB



Lantana



Rubbervine



Prickly acacia



Bellyache bush



Chinee apple

NQ Dry Tropics partnered with Meat and Livestock Australia to develop a Producer Demonstration Site to accelerate the adoption of cooperative, integrated weed management in the BBB catchment.

Cooperative, integrated weed management in the BBB

Project timeframe: May 2020 — February 2023

This Producer Demonstration Site aimed to showcase a cooperative and integrated approach to identify best practice management of the highest economic priority weeds in the Bowen, Broken and Bogie River catchments (BBB).

The integrated priority weed management group, centred around Collinsville and Bowen conducted weed management trials on six grazing properties.

The group implemented a suite of options, including best-practice application of biological, mechanical, and chemical controls.

Priority weeds included Lantana (*Lantana camara*), Rubbervine (*Cryptostegia grandiflora*), Prickly acacia (*Vachellia nilotica*), Belly ache bush (*Jatropha gossypifolia*), and Chinee apple (*Ziziphus mauritiana*).

The properties measured and compared relative costs of previous control and maintenance measures with the new practices; the areas of weeds treated and the comparative success rates for the new practices; and the number of new cooperative actions with neighbours and other land managers.



Rubbervine along a creek line cleared using an Auscrimper sucker puller.

A series of field events and extension activities were held throughout the three-year project to showcase results.

The events attracted participants from grazing properties, local government, NRM groups, industry and the general community.





Turrawalla grazier Mick Comerford (left) and Exmoor grazier Buster O'Loughlin.

WEED MANAGEMENT PLANNING

As neighbouring properties, Turrawalla and Exmoor sought property planning advice from the Department of Resources.

In December 2020, NQ Dry Tropics organised a workshop for seven landholders from four properties with two Department of Resources technical officers.

Clarification around clearing along fence lines, the

advantage of having a fire management plan, and issues around chemical usage were discussed.

The workshop included on ground inspection of a weed management area.

PROJECT TRIALS

Techniques and equipment trialled included:

- Splatter gun treatment of lantana and burning of the treated site.



After initial weed removal (left) and the result (right) after rain and rest.

Trials, results, knowledge gained

- Treatment of mature and regrowth lantana with a turbo mister.
- A flail mulcher head for an excavator will be trialed to control lantana in creek zones.

SPLATTER GUN

The splatter gun was trialed on dense regrowth lantana across 10ha.

- Only a 60 per cent kill was achieved, and timing and leaf coverage may have been contributing factors.
- The treated area was burnt later in the season but there was insufficient fuel to carry an effective hot fire.

TURBO MISTER

Mature lantana across 200ha of cleared country was treated with Conqueror (Triclopyr and Picloram) using a turbo mister and a 95 per cent kill rate was achieved.

The plants had full leaf coverage and were actively growing at the time of treatment.

A further 200ha was treated following the success of the treatment.

Flannel weed and other woody weeds were also killed in the treatment area.

Grasses responded well with green panic, buffel and Urochloa returning to pastures.

KEY LEARNINGS

- Always check legislative obligations to see if the planned technique is authorised.
- Always check the chemical label to ensure the product is registered for use for the desired technique.
- Only chemically treat plants when they are showing no signs of stress and have full leaf coverage.
- Chemical to be applied using a mister prior to 10am when winds are low, and temperatures are down.
- Only use the mister in areas where lantana is the dominant plant.
- If using fire as a tool, ensure there is sufficient fuel load to carry a hot fire - timing is also critical to success.
- Plan weed management activity early to ensure adequate staff or contractors can be sourced to undertake required works.



Greg Farlow from the Department of Resources (DES) with Exmoor grazier Buster O'Loughlin at the homestead and out in the paddock with Tim Green, DES, The DES representatives were able to give on-the-spot about vegetation management regulations.

LDC helps communities to tackle landscape problems

Empowering communities in the Bowen and Collinsville region to manage healthy and productive landscapes has been a cornerstone of the Landholders Driving Change (LDC) project.

A grassroots design developed by locals, for local needs, provides the overarching framework and has been supported by a community-led co-governance model.

From the outset, landholders identified weed management as a barrier and challenge to improving land condition on their properties.

In the LDC landholder baseline survey, 47 per cent of landholders identified weeds as a barrier to improving land condition. One year later in June 2019, this increased to 67 per cent.

LDC submitted an application to Meat and Livestock Australia (MLA) in November 2019 to form an integrated catchment priority weed management cluster group.

This was approved and the group started a three-year project through the LDC's BBB Grazier Support activity area.

LDC hosted nationally-accredited weed training workshops to:

- increase awareness of biosecurity and build capacity in the BBB catchment to effectively manage weeds;
- learn how to clean and inspect vehicles and machinery for plant materials;
- understand government legislation and requirements; and
- increase awareness of biosecurity threats and impacts on businesses.

Land managers, non-grazing land managers, local contractors and council representatives attended the workshops.

The Queensland Government funded the first phase of the LDC project, 2017-2021.



The vision of the Sustainable Agriculture Program is resilient landscapes and productive enterprises, agricultural producers maximising outputs while minimising environmental impacts.

The Sustainable Agriculture Program aims to support and empower producers in the use of best management practices for natural resource management within the agricultural industries of the Burdekin Dry Tropics NRM Region.



FOR MORE INFORMATION

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