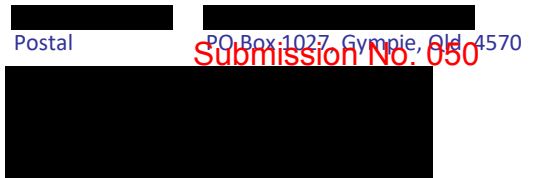




Inquiry into the impacts of invasive plants (weeds) and their control in Queensland



**Working towards a sustainable and productive catchment**

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16 January 2017

Research Director  
Agriculture and Environment Committee  
Parliament House Qld 4001

**By email in the first instance to: [aec@parliament.qld.gov.au](mailto:aec@parliament.qld.gov.au)**

To whom it may concern,

**Re: Comments on the draft Terms of Reference for the Inquiry into the impacts of invasive plants (weeds) and their control in Qld**

The Mary River Catchment Coordinating Committee (MRCCC) is an active Integrated Catchment Management organisation which has been working with the farming community to voluntarily adopt industry best practices for over 20 years. The MRCCC is overseen by a committee of representatives from 25 primary industry, government and community sectors with interests in sustainable primary industry and natural resource management.

The MRCCC maintains a strong association with local primary industry groups. Our non regulatory and cooperative approach facilitated the development and ongoing successful implementation of the Mary Catchment Strategy and the Mary River and Tributaries Rehabilitation Plan. These documents outline a 50 year strategic vision and planning framework for creating a sustainable and productive future for the catchment and were developed in active partnership with the Queensland Government, local groups and the farming community.

We appreciate the opportunity to comment on the draft Terms of Reference for the Agriculture & Environment Committee and submit the following comments for your consideration.

Yours sincerely,



**Ian Mackay**  
**Chair**  
**MRCCC**

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*The MRCCC gratefully acknowledges the support of  
The Sunshine Coast Regional Council, Noosa Council and Gympie Regional Council,  
the Australian Government Department of Environment, the Burnett Mary Regional Group, the Queensland Department  
of Main Roads, Environment and Heritage Protection and Science, Information Technology, Innovation and the Arts,  
and landholders throughout the Mary Catchment.*

**DONATIONS TO THE MARY CATCHMENT PUBLIC FUND ARE TAX DEDUCTIBLE**

**Old Government Parliamentary Inquiry into weeds and their control in Qld, December 2016**

The MRCCC is pleased to see that an inquiry into weeds and their control is underway in Queensland. Weeds and their control constitute a large proportion of the MRCCC's extension support to landholders within the catchment. Whilst there has been a number of successful control programs for a number of weeds e.g. groundsel, the prevalence of many weeds in the catchment is growing e.g. continued expansion of GRT and Cats Claw Vine in particular.

The MRCCC would like to draw to the attention of the Inquiry Committee the significant impact that environmental weeds, as well as production weeds, have on the farming community each year.

The MRCCC has vast experience working with biological control agents for Cats Claw Vine and Madeira Vine, with thousands of releases occurring annually with hundreds of landholders. These agents are working successfully to control these weeds and the State Government should be congratulated for allowing the research program to commence for these weeds. However, funding for the biological control program was cut by a previous State Government when new biological control agents were in the pipeline. These new biological control agents need to be fast tracked to complement the existing agents that are now successfully establishing themselves in the environment.

The current biological controls are one tool in the toolkit, but are not effective at controlling Cats Claw Vine singularly, so an extensive suite of vectors are required eg. bioagents that attack the vine tuber, and the geographical distribution to improve the level of effectiveness.

Ongoing and adequate funding is required to maintain the broader distribution of biological controls and breeding facilities for biological controls operated by Landcare/Catchment Groups etc once these agents have been released into the environment by Biosecurity Queensland. This funding will ensure that the biological controls increase in distribution to achieve as effective control as possible, and not rely on the effect of the initial release conducted by Biosecurity Queensland.

The MRCCC is not aware of any environmental programs administered by DEHP, so we are interested to understand what these programs are and how the MRCCC could partner with DEHP to ensure control measures are maximised.

At present, the MRCCC maintains there is no whole-of-government approach to weed control in Queensland. In the past the Australian Government worked closely with respective State Governments on "Weeds of National Significance (WoNS)" and developed joint projects and programs, in conjunction with local government. However the WoNS program was disbanded many years ago. The MRCCC recommends that the Australian Government reactivates the WoNs program to reinvigorate new technical and research programs.

Comments on case studies:

Fireweed is currently only in isolated pockets in the Mary River Catchment. It exists in small amounts on the Maleny plateau. The MRCCC is keen to ensure that this weed doesn't spread through the Mary Valley.

Giant Rats Tail grass has virtually infested the entire Mary River Catchment from the headwaters to River Heads sporadically on specific landholdings. Landholders are actively controlling GRT with some good success stories. In the paper it notes that "management strategies currently consist solely of glyphosate and flupropanate sprays" which is an incorrect statement. For very low populations of GRT grubbing and bagging individual plants is recommended, as are a suite of methods to prevent the spread of GRT seed. Healthy and competitive pastures will provide the best long-term control of GRT infestations.

A Weedy Sporobolus Grass BMP 2-page sheet (last updated 17 Aug 2016) has been prepared and has been available for past 10 years in SEQ. This sheet is updated at least annually (see attachment) and has been widely used in weed extension activities.

## The 5 Weedy Sporobolus grass species are;

Giant rats tail grasses – *Sporobolus pyramidalis*  
and *Sporobolus natalensis*

Giant Parramatta grass – *Sporobolus fertilis*

American rats tail grass – *Sporobolus jacquemontii*

The above four (4) Weedy Sporobolus grasses are now declared Category 3 Restricted Matter (Invasive plants) under the new Queensland Biosecurity Act 2014

# Dwarf Parramatta grass (*Sporobolus africanus*) is no longer a declared plant under the new Act

## Best Management Practices

**Very low populations of GRT** eg up to 100 plants/ paddock

Grub out the stools, bag them up, tie the bags, remove from the paddock and destroy the intact bag. Hand apply flupropanate granules very precisely @ 1.5 gms/ m<sup>2</sup> to the site of each of the grubbed plants (plus a pinch of legume seed eg Wynn cassia)

**Low to Medium populations of GRT** eg up to 2000 plants/ ha

An 'effective spot-spray threshold' is about 1000 to 2000 plants/ hectare eg 1 to 2 plants/ 10 square metres (about the size of a small bedroom).

Target the single 'scout' plants in the paddock first, and then progress towards the higher population clumps of GRT grass.

Spot-spray with flupropanate eg Taskforce<sup>®</sup>/ Tussock<sup>®</sup> at 2 mls/ L of water

**Dense populations of GRT** eg more than 2000 plants/ ha

On arable land – boomspray with glyphosate, then cultivate and crop the paddock for several years; spot-spray the headlands with Taskforce<sup>®</sup>/Tussock<sup>®</sup>

On marginal arable land – fodder crop for a couple of seasons using reduced tillage techniques to minimise soil erosion; spot-spray the headlands as above

On non arable land – precision aerial (either fixed wing or helicopter) application of flupropanate granules @ 15 kg/ ha

Note: boomspraying with flupropanate is only recommended by skilled operators

## Spot-spray techniques

Spot-spraying with Taskforce<sup>®</sup>/ Tussock<sup>®</sup>: if additives such as glyphosate herbicide were to be added as a chemical marker to the spray mix, then only do so at a very low application rate eg 2 mls/ L (ie the same rate as for flupropanate)

Flupropanate herbicide is best used alone in the spray mix

'Tramlining' methods, with or without GPS support, are significantly more effective than spot-spraying paddocks 'higgledy piggledy' at random. 'Tramlining' does not require the addition of a spray marker, either a chemical or a colour dye marker

Avoid spot-spraying with flupropanate during the summer wet season. However, during the summer wet season only, spot-spraying with glyphosate herbicide @ 20 mls/ L is the only alternative herbicide treatment

## Withholding periods for grazing and slaughter

The herbicide flupropanate is a highly soluble and predominantly root uptake chemical

The grazing withholding period for spot-spraying is at least 14 days

The grazing withholding period for broadacre treatment eg boomspray or aerial applied granules, is at least 4 months

Pasture spelling for about 12 months after broadacre treatment is recommended to allow time for the non-target companion pasture grasses to fully recover from the after-effects of the flupropanate herbicide treatment. Premature grazing may damage the good grasses.

The slaughter withholding period for cattle grazing in a flupropanate treated paddock is at least 14 days (to allow time for the animals to urinate any chemical residues)

## Preventing the spread of GRT seed

Quarantine cattle for a minimum of 5 days when moving them from infested to clean paddocks or to another property (up to 30 000 seeds in the dung on day 1)

A designated 'quarantine' paddock should be by-passed in the normal rotational grazing cycle and specially reserved for grazing by contaminated cattle moving from infested to clean paddocks. Wet-season spell this 'quarantine' paddock every year to maintain optimum pasture density and surface mulch groundcover. Regularly check for the emergence of new GRT plants and remove them by hand eg grubbing & bagging, before seeding

A stockproof fence plus a 10 m wide clean buffer strip (& kept clean) has been shown to hold 99% of GRT seed spread. Tractor-mounted pressurised wick-wipers do this job well.

Clean down all machinery & vehicles with (firstly) air and water pressure cleaners to remove any attached seed or plant material before moving to clean paddocks or clean properties

## Dry Season spraying &/ or applying aerial granules

Spray flupropanate herbicide &/or apply aerial flupropanate granules in the lower rainfall winter/ spring months eg May to November, to reduce the risk of heavier falls of rain washing the highly soluble herbicide away from the root-zone before plant uptake.

## Pasture Recovery Techniques

Healthy & competitive pastures will provide the best long-term control of WSG infestations. Consider pasture improving heavily infested paddocks in the year prior to flupropanate treatment to increase overall pasture grass competition; or alternatively oversow the treated paddock in the summer post-treatment while the GRT tussocks are slowly dying.

Pastures dominated by stoloniferous grasses eg pangola, African star, kikuyu etc, will compete more strongly with GRT infestations than tussock forming grasses eg setaria

Katambora Rhodes, Bisset bluegrass and Wynn cassia are examples of recommended pasture species for oversowing at double (x2) to triple (x3) the normal seeding rates

Note: Pasture legumes are not affected by flupropanate herbicide, but also be aware that flupropanate has a plant-back delay period for sown pasture grass seedlings

## Forward Budgeting

For an effective control program, always budget in advance for the cost of follow-up herbicide treatments. For example, aerial treatments with flupropanate granules will require follow-up aerial treatment about 2 to 3 years later, to achieve effective control.