



RAPID CREEK LANDCARE GROUP INC.

**SUBMISSION TO THE
REVIEW OF THE
WEED MANAGEMENT PLAN
FOR *ANDROPOGON GAYANUS*
(GAMBA GRASS) 2010**

**WRITTEN COLLABORATIVELY WITH
WANGAMATY LOWER DALY LAND MANAGEMENT GROUP INC.**

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WWW.RAPIDCREEK.ORG.AU



INTRODUCTION

The ever-increasing and devastating impact gamba grass has on our unique Top End environment has prompted this submission. The threat to lives, livelihoods, property and the natural environment is massive.

The cost of improving management now will be significantly less than the cost of managing increased areas of gamba grass in the future. There needs to be strategic vision and government and community will to tackle the problem now, before it gets much, much worse. **Gamba grass can be controlled, and eradicated, but this takes passion, long term commitment, skills and knowledge, resources and a willingness to work hard.**

NB. We refer to the *Weed Management Plan for Andropogon gayanus (Gamba Grass) 2010* as *The Plan* throughout this submission.

RAPID CREEK LANDCARE GROUP INC.

The Rapid Creek Landcare Group's members look after Rapid Creek through regular working bees, by promoting awareness about the creek and by advocating for better management throughout the catchment.

At one of our revegetation projects adjacent to the creek in Millner we have eradicated gamba grass through brushcutting and herbicide use. On another project at Yankee Pools there is complex land tenure and a major challenge has been getting a wide variety of landholders and managers to work towards a common goal of managing gamba grass. We hope the improved management of gamba grass continues at Yankee Pools into the future.

The Yankee Pools project included addressing a heavy infestation of gamba grass on a 5 hectare woodland section of the Darwin Clay Target Club. We sprayed the dense, mature gamba grass stands in April 2011. This appears to have favoured native grasses and discouraged other weeds establishing. The spray killed off most of the live gamba grass and allowed for a controlled burn by NT Fire and Rescue Service in May of the same year. Follow up spraying in the following 2 wet seasons have substantially reduced gamba grass on this block. **This project has demonstrated how it is possible to control severe infestations of gamba grass with a concerted effort.**

WANGAMATY LOWER DALY LAND MANAGEMENT GROUP INC.

Over the last decade Wangamaty have been successfully managing gamba grass and other weeds in the Lower Daly, they work closely with the Malak Malak Rangers and the local community to do this. This committed effort has prevented many large core infestations from establishing and spreading. Their work has seriously reduced the threat to lives and infrastructure from damaging gamba grass fires.

Work includes aerial and vehicle based surveillance and control. Identifying and treating outlier plants and stands has proven an effective method of preventing large core infestations from establishing. Roadside management has been particularly important in working to halt gamba grass's westward spread into the eradication zone. Raising awareness about the catastrophic impact of gamba grass and other grassy weeds is a key component of the group's work.

It is imperative that work carried out by Wangamaty, and other groups, continues to be resourced. The cost of resourcing such programs is far outweighed by the management costs that will be incurred if gamba grass becomes established in new areas.

ISSUES

MONITORING OF *THE PLAN*

The NT Government website states 'The Northern Territory Government will monitor the effectiveness of the Plan and work closely with stakeholders to implement and monitor the performance of the Plan' and within *The Plan* it states '...it is essential that the NT Government monitors whether the stipulated management actions are contributing towards the identified outcomes at a Territory level' and 'The Weed Management Branch will work ... to design and implement a monitoring program that allows this management plan, the management actions contained within it and the outcomes produced to be evaluated'.

We have not been able to determine if there is any publicly available information about such monitoring and subsequent results. This makes it difficult to comment on *The Plan*.

The Plan is well written and clearly identifies all the issues and actions required, however the main concern is whether it is being effectively implemented. In the future there needs to be more transparency about how the government is implementing *The Plan*. **The review of *The Plan* needs to establish if an effective monitoring regime has been set up, and also needs to examine the results of all monitoring to determine if actions and outcomes are being achieved.**

ERADICATION ZONE

The Plan states there is 'the urgent need to eradicate outlying populations (A/C zone)' and 'Land managers and land users in this zone are required to actively identify and eradicate gamba grass infestations and prevent new infestations.' **Stopping gamba establishing in the eradication zone is of utmost priority.**

Have the management actions in Appendix A been implemented? In particular have the following targets from Appendix E, identified to be completed by Year 3, been completed?

- Identify infestations of gamba grass in the A/C zone (all land users).
- Develop a gamba grass mapping and monitoring program for infestations in the A/C zone (NTG).
- Programs developed and implemented to eradicate infestations of gamba grass on all NT Government controlled lands in the A/C zone (NTG).
- Results of eradication activities are obtained from land holders (NTG).

There has been discussion about the possibility of expanding the management zone and decreasing the eradication zone area. This must not occur as it is possible to eradicate gamba grass within the eradication zone. Top priority must be given to ensuring *The Plan* is implemented in the current eradication zone.

MANAGEMENT ZONE

The Plan states 'the need for control and, over time, a reduction of gamba grass in areas of highest infestation (B/C zone)' and 'The aim is therefore to contain existing infestations, while eradicating any smaller and/or new infestations.' and 'Land managers and land users in this zone are required to control the growth and prevent the spread of gamba grass.'

Have the following targets from Appendix E, identified to be completed by Year 3, been completed?

- Results of management activities are obtained from land holders (NTG).
- Spread of gamba grass into new areas is prevented (all land users).

We have no way of knowing if the first target is being achieved and our personal experience of driving through the management zone indicates that the second is definitely not being achieved. **Preventing spread into new areas is crucial, this requires ongoing vigilance in surveying for new outbreaks of gamba grass in areas that have previously not been infested.**

Apart from not meeting the aims within the management zone, having extensive areas of mature, seeding gamba grass poses a high risk of seed material being transported into the eradication zone through natural wind and water processes, fire, and in material such as fill, mulch and other products and on animals and machinery.

Government land

There are plenty of examples of land under NT Government control and Australian Government control that have extensive stands of mature, seeding gamba grass at the moment. This is the case both in the urban and rural areas. These areas must be at the very least immediately contained through slashing/burning/grazing to prevent seed spread in future years, with a view to gradually eradicating gamba grass and reinstating native vegetation in the long term. There is also scope for much better coordination between government departments when managing gamba grass.

There is no excuse for government departments not complying with *The Plan*. It is extremely difficult to encourage private landholders to follow *The Plan* when the government is not doing so.

Small landholdings

Have the management actions in Appendix B1 been met? When watching local news and current affairs programs invariably any footage of the rural area includes mission grass (also a declared weed), and frequently gamba grass, this demonstrates how ubiquitous both these grasses are. We are aware of some amazing stories where small landholders have worked very hard to implement *The Plan* on their land. However just driving through the management zone indicates that there are many who are not managing gamba grass effectively. It is incredibly disheartening for landholders who do the right thing to have fields of gamba grass threatening them from neighbouring properties.

The Plan states that 'It is acknowledged that the range of capabilities for managing weeds vary between land managers and that in the first instance, some will need time to build knowledge and capacity to adjust to new requirements.' This is particularly true for small landholders. **Support for small landholders needs to be continued and expanded (see 'Communication and support'). Communities should be encouraged and supported to work together towards a common goal of managing gamba grass.**

Large landholdings

The Plan states large landholdings must 'identify and implement a control program to manage gamba grass infestations'. **Have the management actions in Appendix B2 been met?**

We do not condone the use of gamba grass for grazing in any new areas and gamba grass should not be promoted as a pasture grass. However we believe more could be done to encourage landholders to use best practice grazing regimes to control large, dense, existing stands of gamba grass where other methods are not feasible in the short term (with support from the Department of Primary Industry and Fisheries). A long term plan should always be for eradication, not the ongoing use of gamba grass for commercial purposes.

There is no excuse for large, commercial operations to have done nothing about managing gamba grass, prosecutions need to occur to ensure all landholders have an incentive to comply with *The Plan*.

CORRIDORS

Management of gamba grass in corridors is a key part of *The Plan*. It is absolutely crucial to ensure corridors are managed to prevent the spread of gamba into new areas and into the eradication zone.

Transport & service corridors

The Plan states 'Landholders and managers of service corridors and publicly used transport corridors ... must: ... design and implement ... an eradication program for gamba grass infestations within the A/C zone ... a control and containment program for gamba grass infestations within the B/C zone ... implement a seed spread prevention program ... '.

Have the management actions in Appendix C been met? In particular have the following targets from Appendix E, identified to be completed by Year 3, been completed?

- Programs are developed to manage spread within and from transport and service corridors, including:
 - NTG roads (NTG).
 - Railway line (AustralAsia Railway Corporation)
 - Gas pipeline (Utility Managers)



We see plenty of examples of mature, seeding gamba grass in transport corridors. In some cases, where past work seemed to be making progress, things appear to have now got worse.

Prosecutions need to occur where managers of corridors are not complying with *The Plan*.

NT Government roadside reserves have been managed for gamba grass through a contract program started well before *The Plan* was written, or gamba grass was declared. We understand that systematic photopoint monitoring of roadside gamba grass was carried out annually. NTG weeds and roads staff and contractors would inspect monitoring points to ensure work was achieving program goals. **Is this monitoring program still being implemented?** If so it should give information about the distribution and spread of gamba grass and progress made. **After all this time there should not be dense, mature, seeding gamba grass in NTG roadside reserves. However our personal experience shows that this is not the case.**

Riparian corridors

Riparian corridors house important habitats that can be very sensitive to fire and therefore are at great threat from gamba grass. Water courses can also transport gamba grass seed long distances into new areas. **A high priority must be placed on keeping riparian corridors clean of gamba grass. *The Plan* needs to include management of gamba grass in riparian corridors.**

COMMUNICATION & SUPPORT

These comments relate specifically to sections 8.3 and 9 of *The Plan* which we see as crucial.

8.3 COMMUNICATION

It is absolutely imperative to have community and industry based extension officers who can offer practical, hands-on training in identification of gamba grass and in using control techniques and to motivate and encourage landholders. **Resources need to be made available so extension can go further than just providing herbicide and/or equipment to landholders.**

When we (Rapid Creek Landcare Group) utilised the Gamba Assistance Program for the Yankee Pools project we had to submit a weed management plan, we also carried out mapping of the gamba grass. There has been no formal follow up to determine if we achieved anything (we believe we have).

Monitoring of extension programs needs to be more than a measure of those who participated (outputs). There needs to be monitoring about behavioural change and on-ground results (outcomes).

Identifying and destroying outlier stands of gamba grass in 'clean' areas within both the management zone and the eradication zone is crucial. Locals, travellers, campers and fishers can play a crucial role in preventing infestations establishing. Landholders need to be encouraged to regularly survey their whole properties for new infestations, even if gamba grass has not previously been found. **Public education needs to be increased to encourage everyone to be on the lookout for gamba grass.**

9. SUPPORT & INFORMATION FOR LAND MANAGERS

Extension work needs to be backed up with quality material that covers all aspects of gamba grass management in as simple a way as possible. This material then needs to reach its target audience effectively (through extension officers, at shows, in local shops, through all forms of media, with rates notices etc.)

Two products should be developed and clearly linked to on the main gamba page (www.nt.gov.au/gamba) of the NT Government *Weeds* website (www.nt.gov.au/weeds):

- **One written product** (produced as pdf for website and as a printed brochure)
The current written material is informative, however there is some repetition between the products (*Gamba Grass Management Guide*, *Gamba Grass Photo Identification Table*, *Gamba Grass Weed Note*). Whilst recognising that it shouldn't be simplified so much that important aspects of a complex problem are ignored, there is scope for consolidation of these resources. Keep it simple and reference other resources as needed. In general the main issues are covered in the existing material but there could be more on encouraging regrowth of native vegetation (strategically carrying out burning, slashing and spraying after native grasses have seeded etc.) as described in 6.3.5 of the *The Plan*.
- **One video product**
The current video on the main gamba page only covers some aspects of only one method of control (foliar spraying), and it is filmed in windy conditions, not exactly showing best practice. This is the first thing you come across and for many people they may only watch the video, they may not read any of the written material. All the key points about threat, identification, strategic management and control methods need to be covered in an introductory video which should be professional and entertaining.

All other products (including those listed at 9. in *The Plan*) should be deleted or, if still relevant, referenced on a separate, more detailed page. 'Gamba grass resources' still exists as a page on the NTG website (<http://www.lrm.nt.gov.au/weeds2/find/gamba/resources#>) but is not linked from any live page. It could be reviewed and linked from the main gamba page for people wanting more detailed background information. It would be worth referencing Key Threatening Process and Weeds of National Significance products to emphasise the national declarations.

Weeds of Northern Australia: a field guide by Nicholas Smith was published by the Environment Centre NT in 2011, it provides a valuable weed identification resource, it should be referenced. It may be worth looking at how the 'Gamba grass resources' page relates to the 'General Resources' list on the 'Forms and Publications' section of the main weeds website. There are also some good resources found under 'Indigenous Land Managers' under 'Weed Mapping Data' that would be good on the 'General Resources' list. In general simplify these lists and use links better.

SECTIONS OF THE PLAN

Here we list specific points relating to sections of *The Plan*, these are in addition to comments listed under 'Issues' and 'Communication and support'.

1.1, 6.1 & 7.

It needs to be mentioned that gamba grass seed can be spread in mulch and topsoil.

1.1

Gamba Grass in the NT: A Summary of Current Knowledge is no longer found at www.nt.gov.au/gamba, although a search brings you to a 'Gamba grass resources' page which has this document listed (see 9. for a discussion about this page).

3.

Mention of national declarations including as a Key Threatening Process under the *Environment Protection and Biodiversity Conservation Act 1999* and Weeds of National Significance listing is needed.

3.1

NT Weed Risk Assessment Report: Andropogon gayanus (Gamba Grass) is no longer at www.nt.gov.au/weeds but it is on the 'Gamba grass resources' page (see 9. for a discussion about this page).

5.3.3

More emphasis could be made on the effectiveness of grazing as a control and containment measure for heavy gamba infestations, provided very careful management is undertaken to prevent seeding.

6.1.2

The links to the *Introductory Weed Management Manual* and *Guidelines for Weed Data Collection in the Northern Territory* do not work any more (see 9. for a discussion about better referencing).

6.2.1

Reference should be made to glyphosate products in addition to 360g/L (eg. 450g/L glyphosate, 540g/L glyphosate and 570g/L glyphosate). In particular reference to the new permit for aerial spraying using the stronger products could be made. A brief discussion on the increased risks of creating herbicide resistant gamba grass through herbicide misuse could also be included.

6.2.2

It would be useful to discuss spraying after native grasses have set seed but before gamba grass seeds, particularly when spraying large areas. It should also be mentioned to avoid spraying in windy conditions.

6.2.3

A discussion on methods of application - backpacks, quads, vehicles through to aircraft - could be included. A discussion about aerial spraying needs to emphasise the need for careful planning, timing and the need to enforce on-ground monitoring and follow up - there is the risk of just making the problem worse if not done properly.

6.3.3

The web link for soil erosion does not work, something more generic should be used.

REFERENCES

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