

Buffel Grass Technical Working Group Meetings 3 – Minutes

Date: Thursday 31 August 2023 Time: 9:07am – 12:48pm
Location: Conference Room, Tom Hare Building, Alice Springs, and MS Teams

Attendance

Members

- **Tracey Guest**, Natural and Cultural Resource Manager, Uluru-Kata Tjuta National Park, Parks Australia, Department of Climate Change, Energy, the Environment and Water (DCCEEW).
- **Chris Materne**, Pastoral Production Officer, Agriculture, Fisheries and Biosecurity Division, Department of Industry, Tourism and Trade (DITT).
- **Nicole Hayes**, Station Manager, Undoolya Station.
- **A/Prof Christine Schlesinger**, Associate Professor, Environmental Science, Charles Darwin University (CDU), Alice Springs Campus.
- **Ben Kaethner**, Regional Land Management Coordinator, Central Land Council (CLC), (proxy for Nick Ashburner).
- **Louise Kean**, A/ District Manager, Top End Northern Australian Parks, DEPWS (proxy for Phil Cowan).
- **Sarah Fairhead**, Executive Director Southern Region, Department of Infrastructure, Planning and Logistics (DIPL).

Convenor

- **John Gaynor**, Regional Director Southern, DEPWS.

Executive Officer

- **Michelle Franklin**, Senior Project Officer, Weed Management Branch, DEPWS.

Speakers

- **Emma Burcher**, Weeds Planning Officer, Weed Management Branch, DEPWS.
- **Roni Opden**, Manager, Gamba Fire Mitigation Unit, DEPWS.
- **Dr Alana Mackay**, Director, Pastoral Branch, DEPWS.

Guests

- **Emily Rutherford**, Senior Policy Advisor.
- **Claire Punch**, Chief of Staff.

Apologies

- **Phil Cowan**, Director, Central Australian Parks, Parks and Wildlife Division, DEPWS.
- **Nick Ashburner**, Manager, Land Management, CLC.
- **David Albrecht**, Botanist, NT Herbarium Alice Springs, Flora and Fauna Division, DEPWS.
- **Dr Natalie Rossiter-Rachor**, Senior Lecturer, Environmental Science, CDU, Darwin Campus.

Minutes

- **Conni Warren**, On the Same Page Consulting.

Note that these are abridged minutes taken from the verbatim transcript.

General Business

- Discussion regarding minutes and outcomes from the previous meeting. Several minor changes were discussed, and the updated minutes
- Minutes – **Moved:** Chris Materne, **Seconded:** Nicole Hayes.

ACTION: Finalised minutes to be published on NTG web page.

- Discussion regarding reference in previous minutes to the property thought to 'promote growth' of buffel grass through 'bailing and distributing'. The Chair recommended members listen to the ABC radio interview where the Manager of Ooloo Farm discusses this.

ACTION: Distribute recording of Ooloo Farm Manager interview to all members.

- Introduction of new member; Sarah Fairhead, Executive Director, Southern Region, DIPL.

Guest Speaker – Emma Burcher

- Weeds Planning Officer, Emma Burcher gave a presentation on the *Weeds Management Act 2001* and the related statutory instruments and plans that are associated with it.
- Discussion included Regional Weed Management Strategies, Statutory Weed Management Plans and weed declaration classes including A, B, C and D and their requirements.
- The TWG also learned that all weed declarations regardless of class, result in the weed being subject to the general duties stipulated in the *Weeds Management Act 2001*, which apply to a person and a property owner. This means that they cannot be sold or purchased, and must not be propagated, nor brought into, stored or transported in the Territory.
- The general duties under the *Weeds Management Act 2021* also require compliance with any statutory weed management plan relevant to the weed.
- The possibility of split declarations was also explored, where a weed can be classified as A, B, C, or D in different geographic regions, as well as the possibility of restricted declarations that only cover specific areas. It was mentioned that it is possible that some parts remain undeclared.
- Gamba grass was used as an example and the “Weed Management Plan – Gamba Grass 2020-2030” was used as an example to demonstrate some of the potential clarifications, specifications, and additional requirements that can be laid out in a Statutory Weed Management Plan.

- Gamba grass was also used as an example species for the formation of a statutory Weeds Advisory Committee (WAC), and the purpose, formation and makeup of a WAC was discussed.
- As discussed, the purpose of a WAC is to develop draft weed management plans, and advise the Minister on the progress of weed management. The membership of the WAC should include stakeholders who have expertise or experience relevant to the management of declared weeds or who represent groups or organisations that are concerned with the management of declared weeds or related matters.

ACTION: Copy of Emma Burcher's PowerPoint presentation to be distributed to all members.

- Discussion among group members included the pros and cons of the potential to declare specific sites (high value assets) as Class A and require eradication in those parts. Typically a site specific eradication plan would be managed under a property management plan. The general agreement was that options to protect assets voluntarily have always been available, but legislation is likely to provide stronger incentives.

Guest Speaker – Roni Opden

- Roni Opden, Manager of the Gamba Fire Mitigation Unit, gave a presentation on the history and integration of the Gamba and Fire compliance programs, using a holistic approach with legislative levers from both the *Weeds Management Act 2001* and the *Bushfire Management Act 2016* used simultaneously.
- DEPWS's Gamba Management Framework was presented, highlighting the fact that only two out of the eight actions listed were enabled by the weed declaration, illustrating that a lot of gamba grass management is done outside of its declared weed status.
- Clarification was given regarding the difference between a weed based approach targeting outliers and preventing spread, and an asset protection approach, focusing on mitigating fire risk in the core of the infestation.
- The various enforcement tools used for gamba grass management were explored and their utility in the case of buffel grass was considered by the group. This included a general top-down approach to planning, starting with a broad landscape based strategy such as the Gamba Management Framework, best practice management regimes for various regions and properties, and then targeted compliance activities under relevant legislation if/when it was required.
- It was also highlighted that since 2008 when gamba grass was first declared, the NTG has worked hard and has eradicated it in some parts of the A zone, where this is feasible. This work is not visible to the public, and most community feedback surrounds the B zone where it is visible and fuelling wild fires. The spread in these areas is continuing, but it has been successfully slowed.
- A discussion was held regarding weed declarations and listings, and their impact on funding for research. As gamba grass is identified as a threatening process there is federal funding available to assist with projects or programs to manage biodiversity, however this funding may be more in relation to ecology for threatened species.
- Additional funding has been made available following declaration of gamba for on-ground actions.

- Recommendations based on gamba/fire mitigation experience were to;
 - Start with a Strategy for areas of concern
 - Prevent spread, reduce fuel, increase biodiversity, etc
 - Weed Plans, Fire Plans, Threatened Species Action Plan
 - Consider Best Practice regime
 - Spray, slash, graze, scrape, sterilise, etc
 - Sacrifice zones
 - Enforce if/as required
 - Weeds Act: good to address introduction, spread and biology
 - Bushfires Act: good to address fuel loads, firebreaks and asset protection
 - Other legislation?
- A question was raised regarding buffel grass in the northern parts of the NT and the pros and cons of having an eradication zone in outlying areas where buffel grass is isolated.
- There was some general conversation about the impact of rainfall, temperature and humidity on habitat suitability. It was agreed that the question should be referred to the NT Weed Risk Technical Committee for consideration.

ACTION: Question regarding buffel grass habitat suitability in the north, to be referred to the NT Weed Risk Technical Committee for consideration.

Guest Speaker – Dr Alana Mackay

- Director of the Pastoral Branch, Dr Alana Mackay spoke about the *Pastoral Land Act 1992* and its place in managing the government’s large estate of pastoral properties across the NT.
- A general background on the pastoral land lease process was given, with an emphasis on the key term “economic viability of the pastoral industry” which is the basis of most of the additional duties and responsibilities built into a lease. A fundamental component of a lease is the general duties of a lessee, which include the function of improving the condition of the land.
- The group learned the Rangelands Monitoring branch delivers an annual report to the Pastoral Land Board, which gives a snapshot of how the estate is tracking and functioning. This report identifies individual stations, and details weeds that are present, how many ferals there are, and whether there are erosion issues, and goes into detail about those kinds of land degradation issues.
- Buffel grass, in a land management context, is considered a 3P grass, (palatable, perennial & productive) and therefore contributes to a positive assessment of land condition. Weed declaration would not change its 3P status but would change the way it is assessed.
- It was explained that the implications of a weed declaration of any class, depending on its location, may require reconsideration of the Rangelands Monitoring process. The *Pastoral Land Act 1992* doesn’t recognise classes, so use of a “weed” of any classification would be reported on through the monitoring process.
- The group heard that, under current policy, a weed declaration changes the way in which the condition assessment of pastoral land is considered. Depending on the recommendation, this policy may need review.
- Discussion was held regarding the implications of this aspect of the monitoring process and the question of how the presence of gamba grass on northern pastoral properties affects their monitoring and reporting.

- If buffel grass were to be declared a weed, monitoring would need to be adjusted. Where it is currently considered a positive fodder crop, it would then need to be identified as a declared weed used to manage land.
- The TWG also learned that the Pastoral Land Board can be called upon at any time by the Minister for an emerging matter, area of consideration or where they might need to hold a public hearing. This enables them to advise the Environment Minister of any potential risks or any information that might need to be provided in that context for the pastoral estate.
- The idea was also raised by a member of the TWG that the current method of monitoring where buffel grass is considered a pasture grass and increases the condition score of a property, is actually a contradiction given our current understanding of its impacts. Further discussion in this area is needed, particularly regarding what constitutes “use”.

General Discussion

Alternative species for land stabilisation and pasture improvement

- There was discussion regarding alternative species including native options that can be used for land stabilisation and pasture improvement. Comparisons were explored between alternatives, and buffel grass, noting that the pasture improving species all require some weedy characteristics to make them fit for that purpose.
- Concern was raised that some pastoral landholders may look to other species which also have weedy characteristics and there is a need to regulate or be aware of this.
- Alternative native grass seed sources are in low supply and are comparatively more expensive than commercially available seed of introduced grass species. This leads to low take up of native species.
- Substitute grasses are most often introduced species, such as Sabi Grass. It has similar qualities to buffel grass, such as weediness, ease of establishment, nutritional value and quick growth, attributes that are ideal for soil stabilisation, drought resistance and reliable fodder.
- For the purposes of soil rehabilitation, in areas where there is existing surrounding buffel grass, seeding is not necessarily required due to a generally abundant seed bank.
- The conflict between biodiversity and buffel grass control was highlighted, when grazing is used as a management tool. Current good grazing land management standards promote diversity in perennial grass species which includes buffel grass. Grazing regimes that reduce buffel grass are generally overly intensive.
- Examples of where good grazing management neighboured ungrazed national parks were re-visited and it was agreed that the TWG should explore this difference further. A field trip was proposed on the South Road, through Old Man Plains Station, then the conservation reserve at Owen Springs, and through Simpsons Gap.

ACTION: Field trip for the TWG to be arranged for around the time of the October meeting, visiting selected pastoral and native park properties to look at grazing as a management tool on pastoral land and look at land management issues in other tenures.

Interaction between fire and buffel grass

- The negative impacts of buffel grass were discussed including the loss of biodiversity, and it was noted and agreed that the impact of fire is probably the most significant negative impact of buffel grass, while it was also noted that biodiversity loss is significant where buffel grass becomes dominant even without fire, and this has been clearly documented. Fire significantly compounds this.
- Buffel grass's tendency to grow more extensively at the base of shrubs and trees leads to loss of these shrub and tree species over time by increasing fuel loads and increasing fire impact on these shrubs and trees and resulting reduction in both biodiversity and habitat/shade for native animals and for cattle.
- It was also discussed that local extinctions are not the only indicator that should be considered, but reductions in abundance of various more abundant species and habitats, for example loss of large trees, are highly impactful on the overall ecology of an area.
- The TWG agreed that fire is a natural part of the system and it would occur even without buffel grass, however its presence in a system leads to more frequent fires because it builds up sooner after a rain event and greatly increases fuel loads in most habitats. This impact is also likely to be exacerbated by climate change which is leading to more sporadic, heavier rain events.
- The positive feedback loop between fire and buffel grass was again highlighted, noting that the biggest risk to biodiversity is through fire. The need for the development of improved fire risk mitigation techniques was discussed with alternatives to constant burning including grazing, mechanical removal and technology assisted, targeted and broad scale herbicide techniques requiring further investigation.
- The impact of buffel grass fires on the carbon burning program was explored, noting that credits can be gained based on the number of young/small trees in an area. This is being impacted by the frequent fires and their impact on shrub and small tree density.
- The impact of gamba grass presence on the carbon methodology in the north was discussed, and the TWG agreed that this is an area that warrants further exploration in terms of buffel grass.
- Post fire/slashing herbicide treatment was discussed, highlighting the ongoing tree-collaring work conducted by DEPWS with assistance from Correctional Services. Learnings from this work and experience in management at Uluru were discussed and applied to broad scale situations including roadsides.
- The time to recover post fire/slashing was highlighted as an opportunity for non-targeted treatment of buffel grass before other species become susceptible to herbicide. Further research required on the most opportune time to spray post fire.
- The group discussed the positive and negative aspects of burning as a management technique, and identified that buffel grass spread into fire scars is a key issue.
- Broad scale firebreak discussion included the concept of large sacrificial fire break areas with reduced ecological value, and methods available to achieve them, such as graders, bulldozers, chemicals, and including fenceless grazing.
- It was identified that there is more work needed to be done to look at the frequency of fire, how much is burned in relation to tenure and vegetation and early fires versus late hot fires.
- The impact of buffel grass on young / small trees and shrubs and any subsequent arid lands carbon sequestration methodology requires further exploration.

ACTION: Progress with invitation to Ben Kaethner to attend October 5 meeting.

- Further research required on the nature and purpose of land tenure and the purpose of fire as a tool to either promote germination and growth or manage risk.

Drone AI mapping of buffel grass

- A general update of the progress of the Uluru buffel grass drone mapping project was given by Tracey Guest, followed by discussion about its use in mapping treatments, and also for aerial spraying by drone.
- The general agreement within the TWG was that this area still needs more discussion and the invitation to Rene Bartolo from DCCEEW will provide more insight.

ACTION: Progress with invitation to Rene Bartolo to attend October 5 meeting.

General Discussion

Discussion was held around the general leanings of TWG members:

- The impact of slashing and seed distribution on transport verges was discussed with agreement that the place of herbicide treatment as an alternative to constant slashing also needs further exploration.
- Further research is also required on the use of herbicide preferentially post slashing or fire. It was noted that fire or slashing without follow up treatment is ineffective and can promote buffel grass.
- The holistic approach of using multiple legislative options has merit requiring clarity around the purpose and priorities for management across different areas. It was generally agreed that this needs to be explored in order to determine the best legislative levers that can be applied, depending on the various locations and situations where buffel grass is causing negative impacts.
- It was highlighted the need for an overarching strategy or framework which will identify goals and intentions before legislative options are selected.
- The Buffel Grass Weed Risk Assessment Technical Report and Review were tabled as a guiding document for a potential strategy.
- The use of the Weed Risk Assessment system as a guide for management highlighted the need for better mapping in order to identify different management zones according to risk and feasibility of control.
- The implications were discussed of weeds and seeds being transported during mining and civil works operations when borrow pits are used to source gravel and soil to transport to other sites. It's possible to apply for and be issued a permit to transport weeds, and the person will need to outline how the fill will be transported and used, in order to prevent weed spread occurring.

Logistics

- Field trip – around 5 October 2023 on date to be determined.
- Next meeting – Meeting 4 – 5 October 2023.
- Final meeting – Meeting 5 – 16 November 2023.

Meeting closed

- The meeting concluded at 12:48pm

Action List

Item	Due
1. Finalised minutes to be published on NTG web page.	ASAP
2. Distribute recording of Ooloo Farm Manager interview to all members.	ASAP
3. Copy of Emma Burcher's PowerPoint presentation to be distributed to all members.	October 2023
4. Question regarding buffel grass habitat suitability in the north, to be referred to the NT Weed Risk Technical Committee for consideration.	Next meeting
5. Field trip for the TWG to be arranged for around the time of the October meeting, visiting selected pastoral and native park properties to explore grazing as a management tool.	Next meeting
6. 6. Progress with invitation to Ben Kaethner to attend October 5 meeting.	Next meeting
7. Progress with invitation to Rene Bartolo to attend October 5 meeting.	Next meeting