

South Australia Buffel Grass Strategic Plan 2018 - 2023

Thank you for the opportunity to make comments on the draft South Australia Buffel Grass Strategic Plan 2018 – 2023. For pastoralists, this is an inquiry into the management of the infestation of buffel grass in South Australia.

Livestock SA was formed in 2013 to represent the interests of beef cattle, sheep and goat producers across South Australia, including the pastoral region. Currently Livestock SA has 3,500 members.

Buffel grass is an African grass that was introduced into Australia to control dust and increase livestock production in arid areas. The draft Buffel Grass Strategic Plan is focussed on buffel grass's negative impact on biodiversity, aboriginal culture and how it has no single control method. The Buffel Grass Task Force has created a biased, subjective document that has neglected the nutritional advantages for livestock, and the economic benefits to pastoralists.

The draft Plan emphasises the management of buffel grass to control the infestation in South Australia. However, the draft Plan has limited information on the controlling method, funding potentials and community involvement events. The goals mentioned in the draft Plan for 2018-2023 are identical to the goals presented in the 2012-2017 Strategic Plan, suggesting that there has only been limited success with achieving these goals in the last five years. The four goals established in the Strategic Plan are:

- Goal 1: Exclude and prevent entry of buffel grass into South Australia (all Zones)
- Goal 2: Reduce buffel grass in Zone 1
- Goal 3: Protect sites clean of buffel grass in Zone 2 or destroy in Zone 3
- Goal 4: Be committed to state management.

To assist Livestock SA to effectively represent its members, particularly pastoralists who will be affected by the draft Plan, a survey was conducted (see Appendix 2 for details on the survey and the results).

From the survey presented to pastoral growers, an average of just 10% believe they have accomplished the goals from the 2012-2017 Plan to an outstanding level. This considerably low percentage shows that Biosecurity SA has and is failing to complete the Strategic Plan's goals. More specifically, the fourth goal states they must ensure SA has the capability and commitment to manage buffel grass in all zones. Those pastoralists responding to the survey have indicated that the Biosecurity SA Buffel Task Force team have made a poor effort in achieving this goal. Figure 1 gives a visual representation that 50% of pastoralists believe that Biosecurity SA must improve their approach to attaining this goal.

From analysing the 2012-2017 Strategic Plan, it is confirmed that many elements and activities are replicated throughout both Plans. *"Action 4.2: Promote awareness of buffel grass to land managers and the community is just one example of this duplication"*. The awareness of the landowner has not increased, as in January 2019, 46% of pastoralists still only have basic to no knowledge on the impact of buffel grass.

Pastoralist's Response to Goal 4

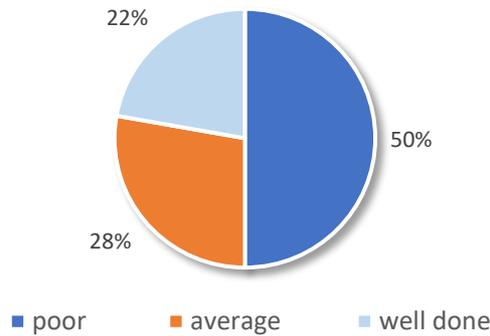


Figure 1 Pastoralists response to the Task force's ability to achieve goal 4: Be committed to manage buffel grass across SA.

Many goal achieving actions throughout the draft plan acknowledge the importance of engaging the community and land-owners to accomplish their goals to ensure the management and eradication of buffel grass across South Australia. However, the draft plan has made no suggestion to how this will be accomplished. 46% of pastoralists who are interested in the buffel grass issue, were unaware of any information sessions that may be held and 88% of pastoralists have not been surveyed in the last five years. When asked if the Buffel Grass Task Force have ever made contact with pastoral members of Livestock SA, they responded with, *who?* These statistics show just how poorly Biosecurity SA has been in engaging and educating the northern community of South Australia. This lack of association between Biosecurity SA and the pastoral land owners has created a lack of interest. This scarce interest will result in limited commitment to the management of buffel grass. When the entire community is not involved in the eradication of buffel grass, any management is just a waste of funding and resources.

With limited funding and lack of community involvement, committed ongoing management, what the task force is aiming towards is near to impossible. 30% of pastoralists are not interested in education events and have no control methods besides livestock, shown in figure 2, this emphasises how pastoralists are not willing to commit to the issue.

Control Methods Used by Pastoralists

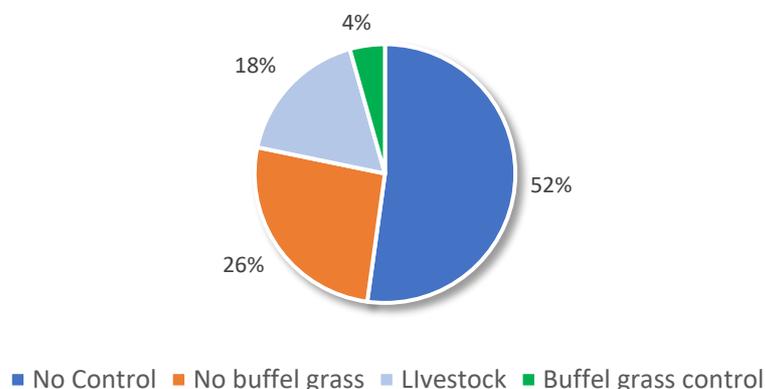


Figure 2 The control methods used by the surveyed pastoralists on their properties.

Figure 2 illustrates the control methods used by pastoralists, showing 52% have no control at all due to sparse or no infestation and 18% keep buffel grass under control with livestock. In addition to the results of the survey, it is obvious from comments received by Livestock SA that many pastoralists have strong feelings about buffel grass and its benefits to the grazing industry. It is disappointing that pastoralists have not been involved with the direction of buffel control in South Australia other than those on NRM Boards or Groups. The views of pastoralists also need to be considered to balance the arguments regarding buffel grass and how much should be spent on its control and where.

This document needs a major rewrite. The land covered by the pastoralists surveyed for this submission, is approximately 3.3 million hectares. With this amount of land, the pastoralists hold the right to the involvement in the management process of buffel grass. To assist, the membership of the State Buffel Grass Taskforce needs to be changed by having less environmentalists and more practical pastoralists or industry representatives.

Some of the points that have been made by producers to Livestock SA that need to be considered in revising the draft Strategic Plan include:

- Buffel grass has become a very important feed resource, and it is so endemic in the north, removal is out of question.
- To attack selected sections of buffel grass is a waste of resources and money. To create control, attention needs to be given to the outer perimeter,
- Although landholders are required to eliminate buffel grass, there is a low number of people who have huge areas to manage and little financial assistance to make an impact.
- The number of plants missed while spraying in areas between Port Augusta, Port Pirie and Port Neil is disappointing. Roads and rail corridors are the main vector for spreading seed, if eradication is not 100% effective, the whole exercise is futile.
- There should be a different control requirement above Port Augusta, as against south of Port Augusta, to recognise the feasibility of successful eradication.
- At the end of the day it is good stock feed. It also does not affect the quality of wool in sheep as the seed does not penetrate.

Buffel grass is a very palatable feed resource for many operators and particularly in this extremely dry time, producers are not going to eradicate a grass that is maintaining their livestock's condition and reducing soil erosion. "It's ability to reshoot before any of the native species means that it will be grazed first, often allowing native grasses to grow and set seed before being grazed by livestock. As it prefers to colonise disturbed ground it is very helpful in stabilising areas where earthworks have been carried out to prevent erosion and further degradation." Buffel grass is a drought tolerant, reliable feed source that "turns poor value land into high value grazing land and keeps core breeders alive in drought conditions." Pastoralists have stated that buffel grass is sparse on their properties due to low rainfall conditions in northern South Australia. Figure 3 gives a visual comparison of the annual rainfall average over 30 years in the townships in the northern areas of South Australia and the minimum annual rainfall required for optimal buffel grass growth.

Correlation between Average Town Rainfall and Minimum Buffel Grass Rainfall for growth

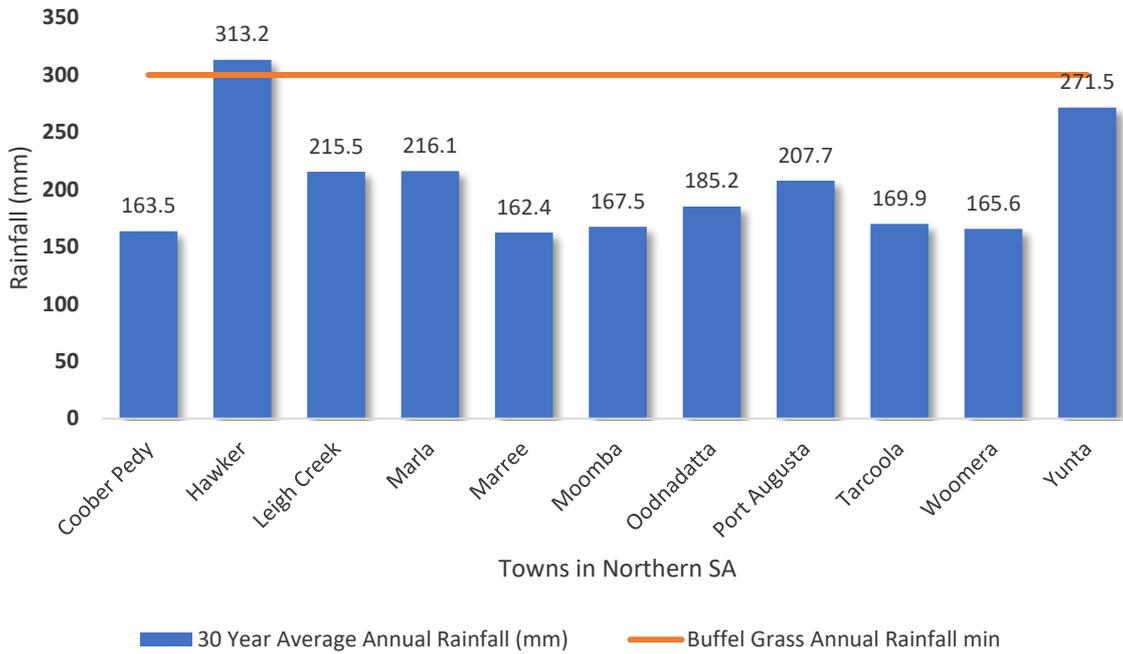


Figure 3 The 30 year average annual rainfall of the townships in the northern areas of South Australia correlated to the minimum annual rainfall required for optimal buffel grass growth.

Figure 3 identifies the significant difference in rainfalls, with Hawker being the only township exceeding enough rainfall for progressive buffel grass growth, whereas majority of towns are approximately 100mm under the minimum rainfall for buffel grass. The evidence shown from the pastoralists determine buffel grass is not a clear threat to the native ecosystem across at least 3.3 million hectares of pastoral country in northern South Australia. The resources of Biosecurity SA would be better directed to unpalatable invasive weeds such as African rue and onion weed that is covering thousands of hectares across the country. Buffel grass is not a major threat to the country if handled appropriately in all management zones. Pastoralists are able to keep it under control with their livestock, gaining economic benefits.

The members of the taskforce need to present stronger evidence, such as annual photo points and constant surveillance as well as comprehensive funding support to build a stronger case of infestation in South Australia. The Biosecurity SA should concentrate on rigorous eradication in outlier areas, roadsides and Indigenous communities. It would be important to consider how buffel grass is being introduced into the outlier areas and focus the control methods onto this demographic.

Other states acknowledge the importance of hygienic transportation by cleaning vehicles before travelling into unaffected roadsides and rail ways. The Northern Territory has implicated a four step process.

- Assess the situation
- Develop a plan
- Implement the plan
- Monitor and review

By dismantling the process into stages, it effectively communicates the goals of the task force with the community to establish efficient buffel grass management. Other states have established Buffel Grass Management guides that inflict the environmental impacts of buffel grass to their readers with direct step by step methods that encourages weed control in a strategic and cost-effective way.

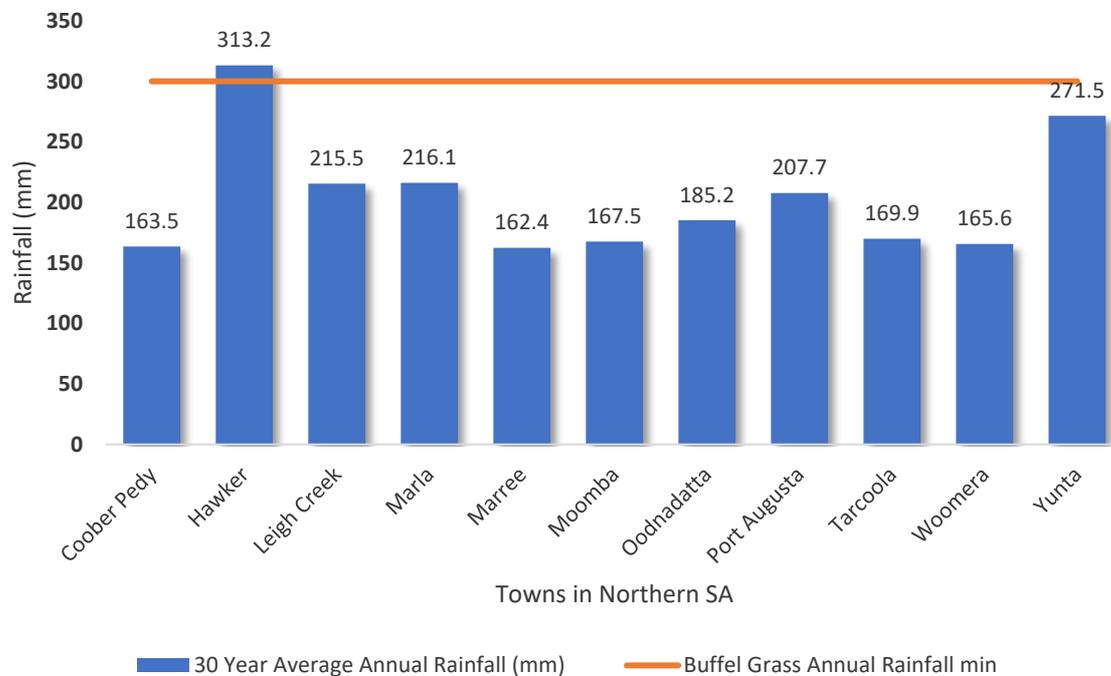
NRM board can host events that promote awareness and educate the community of council workers, truck, grader and train drivers and Indigenous members about the social and environmental impacts of buffel grass. It will be more successful to involve community members with the same motive rather than reaching out to the widespread stakeholders.

Effective buffel grass management can be achieved by focussing on the engagement of the correct audience. With comprehensive control buffel grass will not spread into areas of high value assets. This should be the main emphasis of the Buffel Grass Task Group and the 2018-2023 strategic plan.

APPENDIX 1: RAINFALL GRAPH

Data collected from Bureau of Meteorology.

This Graph gives visual representation of the 30 year average annual rainfall for northern townships in South Australia, compared to the minimum rainfall for sufficient growth of buffel grass.



APPENDIX 2: SURVEY RESPONSES

Data collected from Livestock SA members from northern South Australia.

Q1 Please indicate which zone your property is situated?

Zone 1: Far North West	8.33%
Zone 2: Far North, North East, Upper Middle East	83.33%
Zone 3: Far West, Lower Mid North, South	8.33%

Q2 Please specify how many hectares your pastoral property is?

3,321,555 ha collectively from survey applicants

Q3 Do you know about the science of buffel grass and its potential threat to the ecology of arid and semi-arid areas of South Australia?

Standard	45.83%
Basic to none	45.83%
Have extensive knowledge	8.33%

Q4 How have you gained information on buffel grass and its impact on the environment? (select all relevant)

Word of mouth - from other pastoralists and professionals	66.67%
Media - radio, newspaper, television	41.67%
Informational workshops, projects, fact sheets	37.50%
Personal research/ general knowledge	33.33%
Experiences from your property	29.17%
Other (please specify)	12.50%

Comments

- Good cattle feed & only grows along highway on this place
- First-hand knowledge, very good drought support
- My father and grandfather invented and patenting, the first air seeder "Gyral" for the express purpose of sowing buffel grass in Queensland as a pasture grass for stock in the 1950's.

* Applicants were able to select any option, if relevant to how they received the information on buffel grass.

Q5 Have you attended any information workshops about buffel grass?

I am interested in this issue but unaware of workshops that may have been held.	45.83%
I am not interested in attending buffel grass workshops.	29.17%
I have attended workshops.	20.83%
I have known about workshops but have not attended	4.17%

Q6 Have you been surveyed by the State Buffel Grass Task Force about buffel grass infestation in the last 5 years?

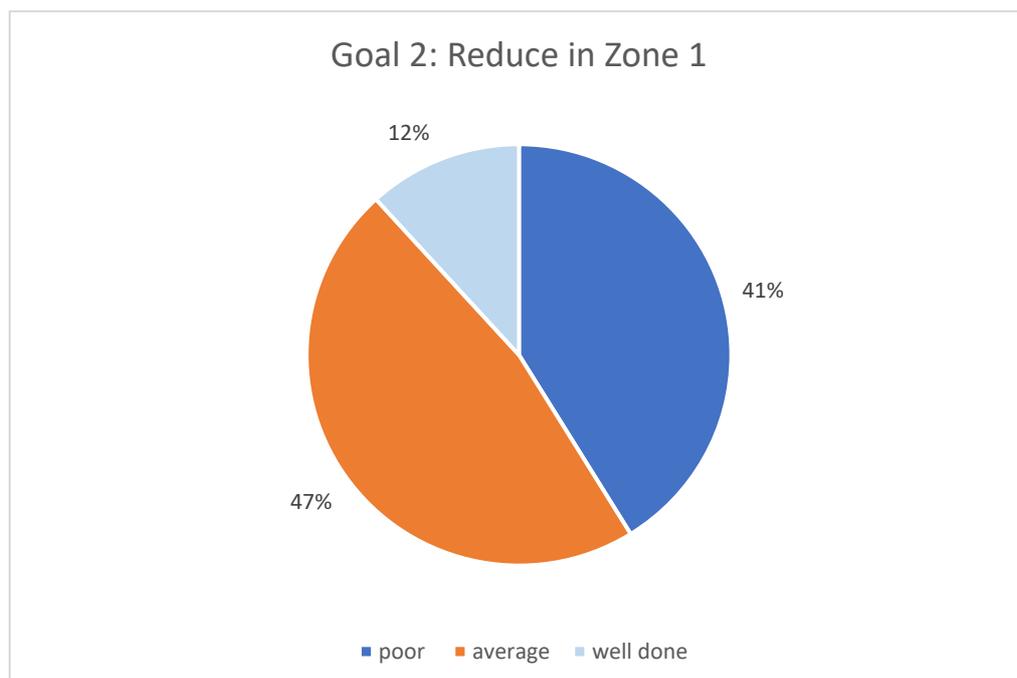
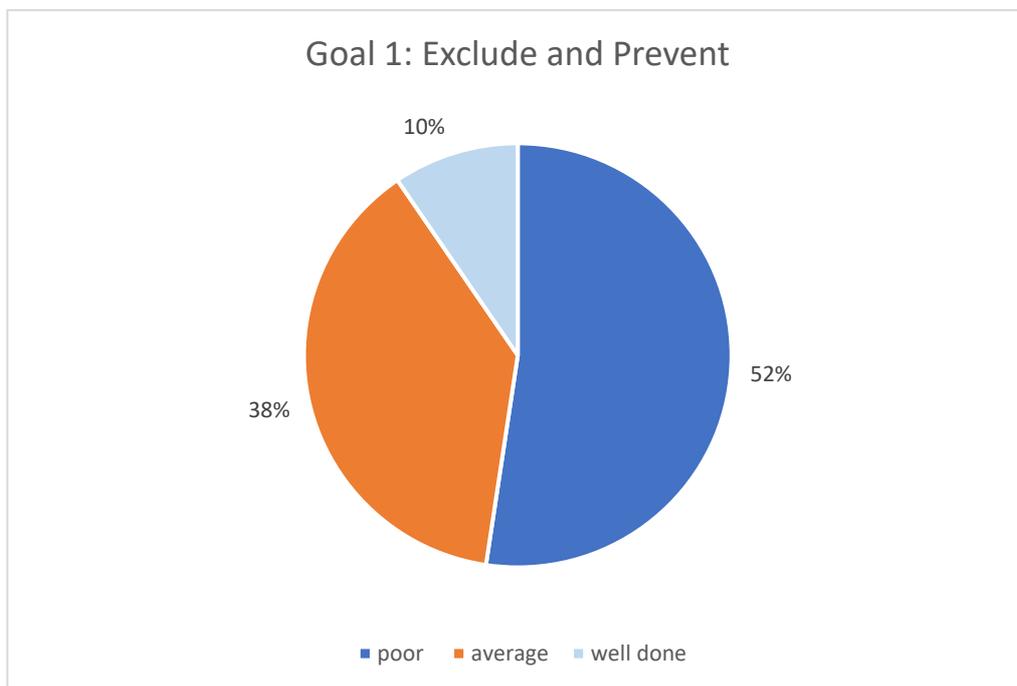
Yes	12.50%
No	87.50%

Q7 How would you describe the infestation of buffel grass on your property?

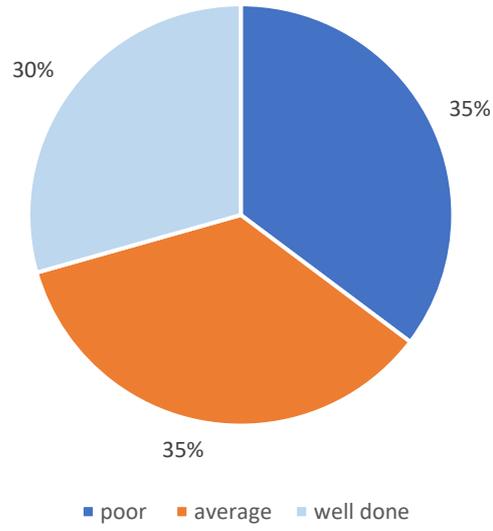
Steadily spreading	0.00%
Taking over	0.00%
No infestation	79.17%
Unsure	20.83%

Q8 Biosecurity SA (PIRSA) had set 4 goals for their 2012-2017 strategic plan. Please indicate on a scale of 1 - 3 (1-poor, 3-well done), how successful have they been in achieving these goals.

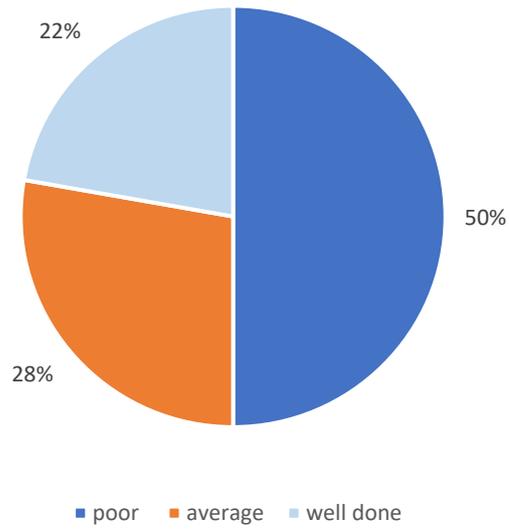
Goal	Poor	Average	Well done
Goal 1: Exclude and prevent entry of buffel grass into South Australia.	52.38%	38.1%	9.52%
Goal 2: Reduce buffel grass in zone 1.	41.18%	47.06%	11.76%
Goal 3: Protect sites clean of buffel grass in zone 2.	35.29%	35.29%	29.41%
Goal 4: Be committed to state management.	50%	27.78%	22.22%



Goal 3: Protect Zone 2



Goal 4: State Management



Q9 How is buffel grass controlled on your property?

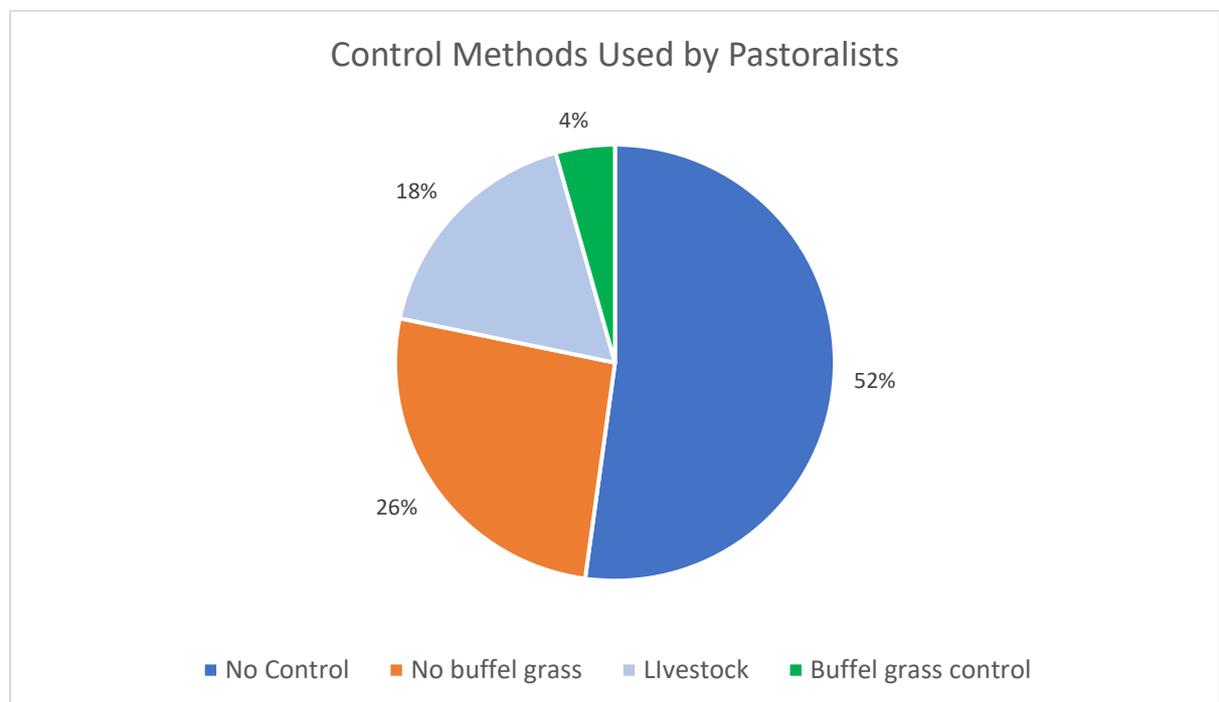
No control Not interested in controlling buffel grass	39.13%
No buffel grass on property	26.09%
Livestock	17.39%
No control Buffel grass is too scattered	8.70%
Herbicide	4.35%
No control Unaware of how to control buffel grass	4.35%
Burning	0.00%

Comments

- Don't have Buffel grass
- no control - no buffel grass
- Have no Buffel grass

Simplified for the submission into 4 categories; No control, no buffel grass, livestock and buffel grass control.

No control	52.17%
No buffel grass	26.06%
Livestock	17.39%
Buffel Grass Control	4.35%



Q10 Does buffel grass have a positive or negative impact on your pastoral property?

Neutral	52.17%
Positive	39.13%
Negative	8.70%

Comments

- Drought tolerant reliable feed source which could potentially turn poor value grazing land into high value grazing land
- Keeps core breeders alive in drought conditions
- It stops erosion and rabbits do not eat it. It is a hardy plant.
- Quite responsive and cattle will eat it
- It stops erosion and rabbits do not eat it. It is a hardy plant.
- it does not take over the area is to consistently dry. Adds feed value for livestock. Not enough rainfall to grow and spread here. Spend the money in the farming areas to keep weeds out of crop and hay production.
- Only small amounts growing but provides hungry stock with something to eat in all condition's and hold the soil together

Q11 Would you be committed to managing buffel grass the same way other invasive weeds are controlled, such as African rue?

Agree	31.82%
Disagree	68.18%

Comments

- Buffel is an extremely good feed source other invasive weeds are not
- African rue is an invasive weed and stock do not eat it. Livestock do eat buffel grass.
- There are far more worst weeds than buffel grass, such as Potato weed, Bathurst Burr, Horehound & Pimelia/Rice Flower weed. We look upon this as good cattle feed when the seasons are favourable.
- In the farming areas yes but in pastoral country no.
- Get rid of noxious weeds but leave the buffel grass.

Q12 In your opinion, whose responsibility is it to manage the infestation of buffel grass in South Australia?

Everybody	57.14%
Pastoralists	19.05%
SA Arid Land NRM Board	14.29%
State government	9.52%

Comments

- No one I think it is a waste of time. We've got onion weed which has decimated thousands of square miles of country in SA and we're worried about a plant which is palatable and useful. Go figure.
- No one, because there is no infestation. AW NRM seem to have the biggest issue with it, let them do it.
- This includes the traditional owners of areas such as APY. Money should be coming out of their pockets as well, not just tax payers supporting NRM and govt to do it for them.
- If everybody is involved it is a team effort
- We, the landholder didn't introduce the weeds here, most have come in on equipment such as graders, trucks & other forms of transport vehicles.

Q13 Any further comments

- Have a look at Queensland and North Territory. They are way ahead.
- Buffel grass is a good feed source for livestock and should be managed accordingly.
- This is not an issue in our area.
- African rue must be managed immediately as high priority.
- Need to see more personnel out on properties to check these types of weeds out.
- Get rid of noxious weeds but leave the buffel grass. We don't get enough rain to maintain it in our dry conditions anyway.

APPENDIX 3: EMAIL RESPONSES

Reponses collected from members of Livestock SA

- I acknowledge Buffel grass is invasive and creates problems with fires etc. but at the end of the day it is good stock feed and doesn't affect the quality of wool in sheep as the seed doesn't penetrate.
- Its advantages to producers and because of low rainfall it is not a threat to the entire rangelands system.
- Buffel grass is not a clear a present threat to our industry in fact good argument could be made to the contrary.

- My opinion is; given that Buffel is endemic in the area above Port Augusta, and the importance as a feed source to graziers, there is no point in trying to eradicate it there.
 - Further, there is no interest in Queensland where seed can still be purchased! Nor NSW, or the NT, or WA.
 - To me, it is a complete waste of resources and that could be better directed in more practical ways.
 - Buffel is one of the most useful species introduced to this country, and has, and will, provided feed to stock where there was none before.
 - I think Buffel is so endemic in the north that removal is out of the question. Indeed, it has become very important as a feed resource for many operators.
 - The way to tackle control, is to get the process right where the outer boundaries are, then move inwards from there. To attack select sections surrounded by Buffel infestations is a waste of resources and money. It is akin to fighting a fire: not much is achieved by putting out burning trees in the middle while the outer perimeter goes largely unchecked!
 - With the declaration of Buffel, landholders are required to eliminate it "in so much as practical". It's another impost on a low number of people, who have huge areas to manage, and little cash assistance to do anything meaningful.
 - With roadsides and the rail corridors being the main vector for spreading the seeds, it is important to get that process right as a control method. I have seen the amount growing between Port Augusta/Pirie, and Port Augusta/Port Neil, and the number of plants missed when spraying is disappointing. If that process is not 100% effective, the whole exercise is futile!
 - I think there should be a different control requirement above Port Augusta, as against south of Port Augusta, to recognise the feasibility of successful eradication.
 - Buffel grass is rife in the APY lands whereas on pastoral country it is limited to isolated patches - usually around waterpoints where there is disturbed ground.
 - On the APY lands it exists everywhere - even in areas where there are no grazing animals (due to lack of drinking water). Large swathes of buffel can be observed as far out as the WA border.
 - Who? They have never contacted us or made any attempt to seek our input or opinion.
-
- Buffel grass plays an important role in grasslands management in Far North SA. It's ability to reshoot before any of the native species means that it will be grazed first, often allowing native grasses to grow & set seed before being grazed by cattle. As it prefers to colonise disturbed ground it is very helpful in stabilising areas where earthworks have been carried out to prevent erosion and further degradation. Properly managed it provides a useful feed source for native and grazing animals when other grasses have not grown or are too small - especially after fire.
 - The information contained in these fact sheets would indicate that buffel is not well suited to this environment and will pose very little threat to the environment if managed appropriately.
 - Our experience has been that cattle do not spread buffel grass seed via their dung as they completely digest the seed. Other grazing animals such as horses and donkeys are the main culprits for seed dispersal.