

C/- Ms Lauren Mesiti Standing Committee on Public Administration **GPO Box A11** Perth WA 6837

By email to: lcpac@parliament.wa.gov.au

To the Hon. Liz Behjat MLC,

Inquiry into Pastoral Leases in Western Australia

The Gascoyne Catchments Group (GCG) would like to thank you for offering us the opportunity to provide a submission on the above mentioned inquiry. The GCG is a regional pastoral group with a strong belief in the future viability of the livestock industry in the Gascoyne region and the remote and regional communities of WA. Made up of members from the Upper Gascoyne, Gascoyne-Wooramel and Lyndon Land Conservation District Committees, the Group represents 42 pastoral properties within the central rangelands.

Over the past five years the GCG has been developing a self assessment and reporting tool, The Monitoring Tool©, with State and Federal funding support through Rangelands NRM WA and the State NRM Office. The main framework which we have based our Tool upon is the historic Pasture Monitoring Site (PMS) model which was created in the late 1970s by David Wilcox and the Department of Agriculture, at a time when they were well resourced and had teams of professionals including the founders of Australian rangelands science.

The Monitoring Tool® we have created has its own value based data collection, uses existing PMS on properties, counts all species in the site and incorporates benchmark data from the last 40 years, which we have found to be invaluable in making management decisions and assessing long term rangeland health.

The Gascoyne region has historically been categorised by the Department as a shrubland rangeland system. With climate change becoming a reality for the agricultural and pastoral areas, as winter and summer rainfall patterns change to reflect that of the northern areas of WA, the pasture too is changing. In line with the seasonal changes the pasture in the Gascoyne is in a transitional phase between a shrubland and a grassland, with an unprecedented increase in the proliferation of perennial grass cover in the region.

The data that we have collected and collated shows that rangeland condition has been improving since the 1980s and that environmental damage and degradation in the central rangelands has decelerated. In contrast, reports and data collected by the Department of Agriculture and Food WA

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Chairman - Sean D'Arcy

in recent times stipulate that the range condition in the Central Rangelands has been continually decreasing.

The monitoring methods that the Department are using do not take into account the climate change that is occurring and thus the change of pasture type in the Central Rangelands. Consequently all data collected by the Department is only assessing a proportion of the vegetation, the shrubs, and missing a critical part of the biodiversity in the rangeland system, perennial grass cover. This antiquated method of assessing rangeland condition needs to be brought into the 21st Century and in line with the climate change models and policies that the Department are driving.

The following data is taken from 103 reassessed PMS sites on 9 properties throughout the Carnarvon Basin in 2009. We have entered in all historical data and photos into our Monitoring Tool© database and then compared it to present day data when the sites are reassessed. Figure 1 shows the increase in plant and grass numbers spread across the 103 sites. Figure 2 shows in a pie graph form the average increase of grasses and Gascoyne Mulla Mulla over a 29 year period.

Figure 1

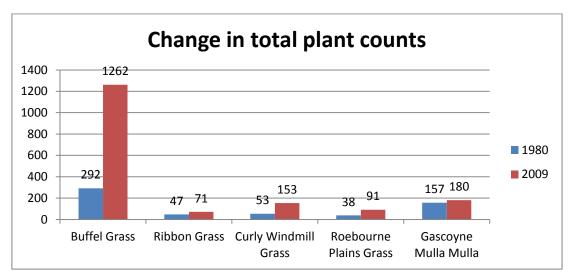
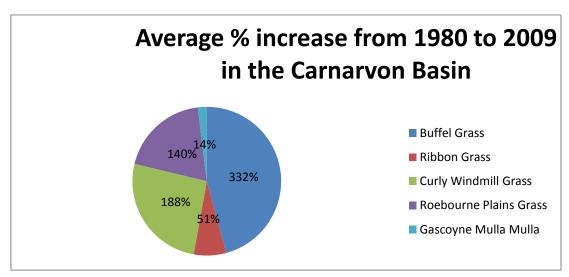


Figure 2



As can be seen by the two figures above, buffel grass is the main perennial grass that has spread within the Central Rangelands. One of the most common assertions about buffel grass is that it becomes a monoculture and decreases the growth of native vegetation and shrubs. In 2012 the GCG completed a case study for the Pastoral Lands Board to assist them in forming an opinion on buffel grass and its contribution to rangeland health.

We collected data from 43 PMS in the Gascoyne that had been reassessed between 2007 and 2009 by the GCG and compared it to historic data from the same sites. The reassessments of the sites show that where there has been a large increase in buffel grass there has also been an increase in existing native vegetation. In most cases there has been an increase in desirable and intermediate species as well as perennial grasses within the sites, with undesirables not showing much change. Further evidence to support this can be seen in the following papers and articles¹².

The anecdotal evidence and data collected reflects the pastoralists views that buffel grass promotes biodiversity and rangelands health. The Gascoyne Catchments Group collectively believes that buffel grass has reached a naturalised state whereby it can occur quite easily amongst other grasses and native shrubs without becoming a monoculture.

Anecdotal evidence will show that buffel grass often acts as a pioneer species which creates an environment conducive to the regeneration of native grasses and shrubs. Not only can they grow together but they can also increase together over time. The PMS sites show that buffel has been a primary factor in stabilising soils especially in creek lines, increasing water penetration, increasing biodiversity and generally improving rangelands health.

The GCG are of the opinion that reporting of range condition needs to include all plant and grass species. We have hard evidence that shows that the rangeland condition is improving and that environmental damage is decelerating in the Central Rangelands. By adequately monitoring all species we are able to get an overall picture of rangeland health and a true representation of the condition of the rangelands.

Regards,

Sean D'Arcy Chairman

Gascoyne Catchments Group

13th September 2013

¹ Watson I 2006, 'Monitoring in the Rangelands', paper prepared for the 2006 Australian State of the Environment Committee, Department of the Environment and Heritage, Canberra,

http://www.deh.gov.au/soe/2006/emerging/rangelands/index.html

² Watson I 2007, 'The first assessment, using a rangeland monitoring system, of change in shrub and tree populations across the arid shrublands of Western Australia.

http://www.zotero.org/groupd/rangeland journal/items/itemKey/U3TE5TP7>