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The Australian Rangeland Society

Mining partnerships - we can dig it!

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Abstract

The Pilbara Mesquite Management Committee (PMMC) was one of the first community groups in the WA rangelands to focus on partnering with local land managers in developing local solutions to one of the biggest threatening processes on coastal leases at the time – the invasion and domination of weeds.

In a rapidly changing environment, the PMMC has thrived in a region known for its boom and bust cycles. Our transition into developing formal partnerships with resource companies and NRM groups has strengthened our committee and enhanced our activities. Annual operations are predominately funded through external agreements with organisations such as Rangelands NRM and fee-for-service work for resource companies. The on-ground programs we manage are currently leveraging \$1.1 million annually, investment that is directed into the on-ground management of weeds and development of innovative tools to help map, monitor and evaluate our projects.

We have a reputation of being committed to our projects, consistently working hard to make sure every investment is achieving the best outcomes for our pastoral industry, our environment and the primary production that relies on a weed-free landscape.

Our continuing success lies in playing to our strengths, never letting opportunities to be involved pass us by, and ensuring that no matter what we do, we can show you the threats at play and the positive benefits of actively, strategically and methodically working through to protect what we all rely on for our business activities – our natural resources.

Introduction

In the Pilbara, everything is BIG.

An ancient red earth, estimated at 3.4 billion years old. A landscape that covers over 507,000 km².

It's the powerhouse of Australia.

Over 500 million tonnes of the nation's largest export commodity, iron ore, leaves our ports annually. We have the single largest open-cut iron ore mine in the world.

70% of Australia's Natural Gas is produced here. 85% of Australia's crude oil and condensate comes from our region.

\$31.9 billion in gross regional product is generated in the Pilbara.

With these big numbers, big companies, big profits and big resources, how is our small, pastoral focused group making some big waves within the Pilbara resources sector?

The process of change

Established in 2000, the Pilbara Mesquite Management Committee (PMMC) was one of the first community groups in the rangelands to focus on partnering with pastoral land managers in

developing local solutions to one of the biggest threatening processes on coastal pastoral leases at the time – the invasion and domination of weeds. Our efforts were driven by the exploding population of mesquite in the west Pilbara, and a lack of knowledge about how the unique hybrid genotype was best controlled.

Our timing was impeccable.

Pastoralists were in the process of transitioning their stations from over 100 years of sheep production to cattle grazing. They were facing enormous challenges, including how new production systems were going to influence the spread of weeds, and how reductions in staff were going to impact on their ability to undertake control programs.

This coincided with the best run of continuous above-average rainfall seasons in the West Pilbara since the introduction of mesquite onto Mardie Station in 1930 (Figure 1). This triggered not only great seasons for the pastoral industry, but also a huge opportunity for the regeneration and spreading of weed populations.

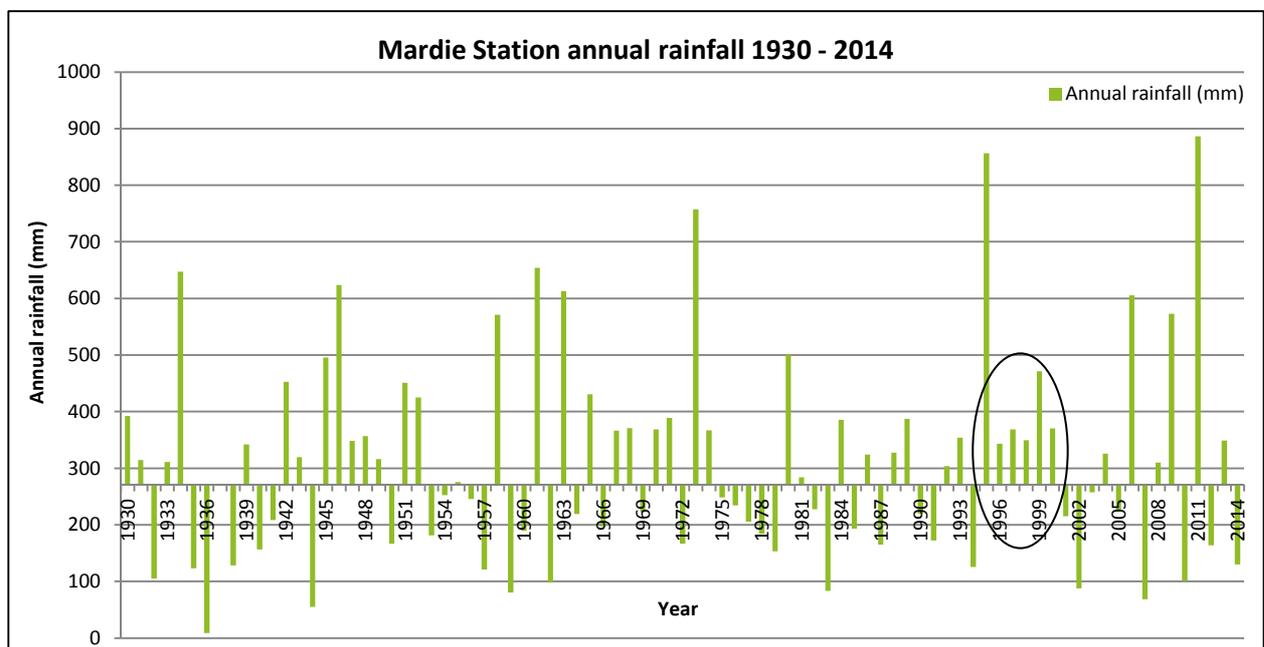


Figure 1: Above and below average annual rainfall (271 mm) at Mardie Station from 1930 to 2014, highlighting the series of above-average seasons experienced between 1995 and 2000.

The Agriculture Protection Board was, at the time, responsible for the managing the impact of Declared Plants and Animals on agriculture and related resources. An amalgamating with the Department of Agriculture occurred in the late 1990's, which resulted in the consolidation of resources and officers, and the retirement of all on-ground operator positions. This caused a dramatic and immediate reduction in the number of local staff available to work with pastoralists on managing invasive species threats effectively.

Finally, the Pilbara resources industry was gearing up for an unprecedented explosion in construction and mineral extraction, with a rapid expansion of the number of mines, rails and ports along with increasing the capacity to process more liquefied natural gas. Their footprint was growing rapidly, the landscape was becoming more fractured by transport pathways and the threatening invasive species that would impact on these developments was not fully appreciated.

In the rapidly changing environment, with the immense pressures being put on our people, our landscape and our ability to provide local services, the PMMC has managed not only to survive, but thrive in a region known for its boom and bust cycles. Rangelands NRM recognised the importance of

our group in natural resource management in the Pilbara, investing in and remaining our most staunch supporters since 2007.

Creating partnerships

Our progression into developing formal partnerships with resource companies was spearheaded simply by conversations with local Environmental Officers from the (then) State Department of Environment and Conservation (DEC). Concerns received from pastoral land managers regarding in the influx of exploration and mining in weed-infested areas with little regard for sound biosecurity practices were raised and discussed.

After a firsthand visit by DEC staff to the single largest mesquite infestation in Australia at Mardie Station in 2008, a long-term cash contribution to the management of mesquite was written into the Conservation Estate Management Plan and offset package for Citic Pacific Mining's (CPM) Sino Iron Project. The 10 year, \$3 million investment is allowing us to develop the most strategic, long-term control programs and investigate innovative ways to detect and make use of mesquite as an energy resource.

This relationship and the highly successful program that followed has allowed us to approach and build strong ties with neighbouring Rio Tinto, BHP Billiton and privately owned pastoral stations. We bridged fence lines with parallel, complimentary weed management programs and created a West Pilbara alliance against the prickly bushes. Overall, six pastoral lease holders and two additional mining companies have come on board, combining resources to battle 245,000 ha of mesquite and 185 km of parkinsonia over 1.15 million hectares of prime coastal grazing systems.

In 2012, the PMMC geographically broadened the cross-tenure partnership model. We created a new cell of land managers working together to battle parkinsonia in the East Pilbara by bringing together Fortescue Metals Group (FMG), Roy Hill Iron Ore (RHIO), the Department of Parks and Wildlife (DPaW), Pilbara Corridors and Roy Hill Station. Participants have developed a 5 year strategic management plan for parkinsonia, and are implementing the on-ground and monitoring components. Contributions of over \$230,000 have been committed for resourcing this program in 2015.

Outcomes of on-ground works

In our 4 years partnership with CPM, 854 days of control have been undertaken across 20,403 ha of Mardie Station. Over 435,700 mesquite and 73,000 parkinsonia plants have been killed using herbicides, and a further 700 ha of dense mesquite has been mechanically treated. All programs are recorded using GPS technology, enabling us to map, over time, a reduction in the distribution and density of the weed.

Our weed control efforts in the remainder of the West Pilbara are starting to produce positive results in line with that recorded at Mardie Station. Records for the three years of on-ground control conducted between 2012 and 2014 detail that the alliance has implemented and additional 1,200 operator days of control work across 68,000 ha of the Pilbara, killing 420,379 mesquite plants and 113,071 parkinsonia plants. Additional mechanical control has removed 6,000 hectares of moderate to dense mesquite & parkinsonia.

Resourcing of our program in the East Pilbara is building annually, with additional programs being funded through mining offsets. Over the past three years, 144 operator days of control have been undertaken across 1,126 hectares of land, controlling 48,732 parkinsonia plants. In 2015, funding is expected to secure 220 operator days of control work, with on-ground control expected to occur across 90% of the 2,700 ha infestation. This funding is secured for the next 5 years, allowing us to plan long-term for the eradication of all known adult parkinsonia in the Upper Fortescue, and a biennial follow-up program to chase seed bank germination.

In packaging our methods of approaching, undertaking and recording the progress and success of on-ground control, we are anticipating to leverage investment of \$1.11 million into weed management programs in the Pilbara during 2015.

Our future

Continuing to ensure that the PMMC operates as a functional, relevant and successful community group in the Pilbara is one of the paramount challenges that face us into the future.

We have a reputation of being committed to our projects, consistently working hard to make sure every investment is achieving the best outcomes for our pastoral industry, our environment and the primary production that relies on a weed-free landscape. The future is going to be challenging, as most of our programs are at the mercy of the economics of the resources sector.

We need to remain flexible, working our programs to fit the mould of where funding is available. The future won't be about how many hectares are covered or how many weeds are controlled, but more about how we are protecting and restoring the landscapes in which nationally listed threatened species, such as the Northern Quoll and Greater Bilby, live and breed.

We never miss the chance to be involved - whether it's meeting people, providing updates at meetings, presenting ideas to companies, speaking at conferences or talking with the media. It is from simple conversations that the best partnerships are built and the grandest projects can result. Make people and companies aware of what you are doing, boast about the excellent work everyone else is doing and make them desperate to invest in your programs.

Our continuing successes will lie in playing to our strengths, never letting opportunities to be involved pass us by, and ensuring that no matter what we do, we can show you the threats at play and the positive benefits of actively, strategically and methodically working through to protect what we all rely on for our business activities – our natural resources.