REVIEW OF PROGRESS TOWARDS THE IMPLEMENTATION OF THE MESQUITE STRATEGIC PLAN *(2006 – 2007)*

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on behalf of the **National Prickle Bush Management Group** and its partner agencies.

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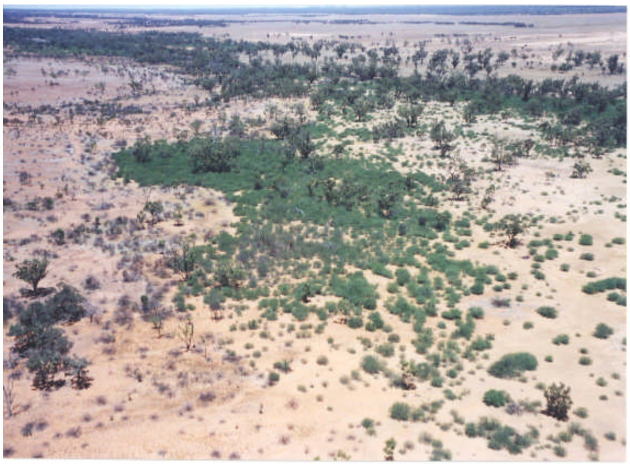


Quilpie mesquite project – Before control (1998). After integrated control (2006)

MESQUITE STRATEGIC PLAN 2006 - 2007
EXECUTIVE SUMMARY

Significant on-ground strategic control of mesquite has occurred nationally over the 2006/2007 period complimenting past efforts to address the strategic outcomes associated with the implementation of the WoNS National Strategic Plan for Mesquite. Sound leadership continues through the National Prickle Bush Management Group (NPBMG) who work with stakeholders to continue to build the capacity of the broader community to reduce the impacts of mesquite.

The NPBMG formed in 2001 and includes in its membership key representatives from northern and central Australia, who lead the implementation of the national strategy and its respective actions, with assistance from established links in South Australia and Victoria.

Over the past twelve months, the NPBMG with support from the national prickle bush coordinator has focussed on building stronger collaborative partnerships with regional natural resource management (NRM) groups to facilitate greater progress against the strategies at the regional and local levels. An ongoing challenge for the management group is to facilitate this regional approach without impacting on the existing national approach to management of the prickle bush species which has proved so successful over the past 6 years.

We continue to see good uptake in the use of the Mesquite Best Practice Manual which sets the framework for best practise management by Australia's mesquite researchers and practitioners in their fight to reduce land degradation through a planned process of attack against this invasive weed.

Progress and achievements are being made in all aspects of the strategy. The major achievements have been collated into this report with contributions provided by NPBMG members, agency staff and key community stakeholders. The funding provided through state agencies (eg Queensland Government's Blueprint for the Bush a Pest Offensive program (QPO)) and the Australian Government's Defeating the Weeds Menace (DWM) program continues to provide momentum to initiate priority projects.

Nationally, mesquite field days, workshops and best practice tours, have equipped a significant number of local government weeds officers, agency officers, landholders and others in identification, control and planning skills.

A major strategy component is the management of four core national infestations of mesquite located at Quilpie, Hughenden, McKinlay and the Pilbara region. Active control is occurring at all sites with containment programs in place supported by long-term management planning.

The control of the Quilpie and McKinlay infestations has been so successful that the threat these core infestations once posed is now dramatically reduced allowing the management focus to shift from containment goals to strategic control of regrowth following the removal of core infestations, including the detection of outlying plants.

A. Introduction

In 2006-07, there have been ongoing gains in the management of three mesquite species and hybrids in Australia (*Prosopis* species – *P.pallida, P velutina, P glandulosa* and hybrids). These species have variations in physical characteristics from tree to shrub form.

Mesquite is an introduced woody weed native to North/South America. It has been recognised as a WoNS due to its ability to invade natural landscapes, reduce agricultural production and biodiversity levels.

First introduced in the late 1800's, the distribution of this weed has been influenced by deliberate plantings in pastoral and mining areas for soil stabilisation, shade and dust abatement. National mesquite distribution includes infestations in New South Wales (NSW), Queensland (Qld), Northern Territory (NT), Western Australia (WA) and South Australia (SA) involving an area of approximately one million hectares.

The current known distribution of mesquite remains low when considering it has the potential to spread to over 70% of the Australian mainland. Areas considered strategic in the fight to reduce the further spread are targeted for active management.

Successes to date are the outcome of coordinated effort from a range of people with expertise in management and research who have developed, implemented and managed projects that have directly contributed to addressing the identified goals of the strategic plan. The vision of the strategy is that 'mesquite species and hybrids are confined and eventually eradicated from Australia', the following goals have set the framework for strategic action:

- Coordinate management
- Reduce the impact
- Prevent spread
- Eradicate

Coordinated action is now occurring in every state and territory where mesquite is present. There has been a significant increase in awareness and survey activities have directly led to the early detection and control of new infestations. Landholder control activity levels are rising and there is an increasing level of community capacity and leadership by local government (LG), community groups and regional NRM groups supported by policy and program initiatives.

The NPBMG and National Coordinator have increased their focus on the role of regional natural resource management groups. Significant links have been established with over 12 natural resource management groups nationally.

Project milestones are being met nationally. The Catchment Management Authorities and other stakeholders in Western NSW have formed strong partnerships for the planning and management of the mesquite problem in NSW. NT is aiming for total eradication of mesquite in the short term while WA has mapped all infestations and has developed a Strategic Plan for the Pilbara region infestation.

B. PERFORMANCE AGAINST STRATEGIC PLAN

STRATEGY 2.1 Coordinate management

Desired Outcome: Mesquite management is coordinated and maintained at a national level.

The NPBMG continues to lead the implementation of the national strategy for mesquite. This group has representation from Qld, NT, WA & NSW and has established links with SA and Victoria. National coordination and the networks provided by the NPBMG are strengthened with improved expertise at the catchment management level with seven NRM groups actively planning and undertaking mesquite management.

Weed management in most states is considered a high priority in terms of overall NRM issues and NRM bodies are well placed to play a pivotal role in the implementation of strategic plans involving government, industry and the community. For example, Desert Channels Qld has conducted aerial surveys of mesquite in their region. This has provided the distribution data needed to develop accurate maps to assist landholder groups with informed management options.

National coordination has facilitated the development of a knowledge platform enabling more targeted distribution of resources for the strategic management of mesquite. Better understanding of the strategic issues associated with the species has provided a platform for informed decision making for allocating funds for six Pest Offensive projects in Queensland, five DWM projects and six National Landcare Program (NLP) project applications. Overall direct funding allocations to national mesquite management over 06/07 is approximately $1.5M (Queensland Government Pest Offensive Program) and $350 000 (DWM) with additional state/territory in-kind assistance targeted at on-ground management.

Other mesquite management groups have been proactive at a state level including the NSW Prickle Bush Working Group who oversee strategic planning for both mesquite and parkinsonia in that state. Prevention and early detection remain high on the agenda of this proactive group along with coordinated survey, awareness raising and strategic control.

Annual reports have been compiled by the project coordinator for the Department Agriculture Fisheries and Forestry (DAFF) and Australian Weeds Committee (AWC) since 2002. These reports combined with ongoing data collection and project analysis by stakeholders including a commitment to a review process by the NPBMG provides a firm platform for the forthcoming review of the national strategy. A preliminary national strategy workshop for prickle bush management was held in September 2006. The objective of the workshop was to evaluate progress toward implementation of the national strategy, the outcomes of which are highlighted in this report.

Mesquite education and awareness continues to evolve to allow for a broad range of learning styles and target audiences. In 2006/07workshops and field days were held in Katherine in the NT. These events provided an opportunity for interaction with key stakeholders and allowed participants to pass on information regarding threats to industry from mesquite and also to receive feedback on management approaches.

The Best Practice Manual for mesquite provides a wealth of information presented in an easy to read format all available in one publication. This information combined with landholder case studies clearly demonstrates the impacts and management options for land managers to adapt to their own circumstances.

Other products promoting mesquite management continued to be distributed including identification/stop the spread posters, show displays, seed pod identification blocks, brochures, pest facts in Queensland, weed notes in NT & WA, newsletters and multiple media releases.

Northern Territory Department of Natural Resources Environment and the Arts (NTNRETA) included mesquite along with other prickle bushes in the new 'Katherine Weed ID Deck'. All prickle bushes were highlighted as high priority weeds in the region. These promotional activities have been coordinated through the development of the National Communication and Extension Plan. In principle support for the strategy has been provided by major stakeholders with a view to gaining full endorsement by all stakeholders in December 2007. Collaborative partnerships have been formed nationally to assist with increasing prevention awareness, mapping capabilities and best practice promotion.

Extension products have been refined to target specific end users and identified awareness issues. Quilpie Shire Council identified the need to produce a *P. velutina* identification card to reduce confusion between the target species and the closely associated *Acacia farnesiana*. Mesquite display banners were also developed to highlight specific catchment issues (eg: for Desert Channels Qld).

The ongoing education and awareness initiatives undertaken as part of the implementation of the strategic plan have led to a greater understanding by key stakeholders that weed management is just one component of reducing land degradation and that best practice management needs to incorporate broad NRM considerations through whole of property planning (eg including integrated control practices, understanding legislation, bore capping, domestic and feral animal management, stocking rates, vegetation assessment and management, etc).

Mesquite management in WA has been supported by an annual allocation of $40k in funding over the last five years provided by the WA Department of Agriculture and Food (DAFWA) and the Pilbara Mesquite Management Committee (PMMC) to co-fund biological control research undertaken by CSIRO. Any significant gains made through successful biological control would be considered highly strategic as the infestation in the Pilbara is identified as the largest core infestation in Australia with a strategic management goal of containment.

From 2004-2007, NHT funding of approximately $545K have been allocated to the Pilbara Mesquite Management Committee (PMMC) for strategic management of this core infestation. This support has continued into 07/08 with an additional $400K in funding provided for strategic control in the Pilbara and Gascoyne regions in WA. The PMMC was formed in 2000 to research mesquite ecology and control in the Pilbara region. A strategic plan was developed in 2006/07 based on maintaining a containment line by integrating chemical, biological, mechanical and fire control methods.

In addition, DAFWA/NLP has re-invigorated control programs at Carnarvon by developing a Memorandum of Understanding (MoU) with LG agencies and Land Conservation District Committee's (LCDC's) to address control on shire land, undertaking mapping and formalising regional control requirements.

In 2005, approximately $615K of DWM funding was made available for three years of mesquite control in Western NSW, this was in addition to $100K provided by the Lower Murray Darling Catchment Management Authority project and $100K from the Western Catchment Management Authority spent in 2006/07. All funding targeted strategic on-ground management. In late 2006, Stakeholder developed agreed guidelines to assist the concurrent delivery of projects including the need to have all sites mapped using Geographical Information System (GIS – ie arcview), mapping would encompass all identified mesquite infested areas, the DWM funds are being used to target strategic high density infestations.

The NPBMG continued to distribute and market the WoNS Mesquite Strategic Plan goals to broader stakeholder networks in conjunction with the goals associated with the other WoNS prickle bush species. Two teleconferences and the Prickle Bush National Strategy Workshop held in Townsville further identified promotional opportunities. The project coordinator travelled widely throughout the identified prickle bush distribution areas across northern Australia over 06/07 to inspect projects, meet with local stakeholders and formalise networks, provide information on best practise management and increase awareness of the goals of the national strategy.

The uptake on WoNS issues by regional NRM groups in some priority areas has varied. The following planning initiatives identify examples of planning opportunities to align with plans that all management levels:-

- In Qld, 29 Local Government Pest Management Plans include mesquite.
- Major catchments/regional weed management groups identify mesquite as high priority eg Lake Eyre Basin Catchment Group, Southern Gulf Catchments Qld.
- Katherine Regional Weed Management Strategy and Action Plan implemented.

The economics of mesquite management need to be better evaluated. A recent economic evaluation of the Queensland Governments Strategic Weed Eradication and Education Program (SWEEP) identified that every dollar invested in containment activities to prevent the spread of weeds resulted in between $1.70 and $3.10 worth of benefit. Therefore this equates to a benefit cost ratio of between 1.7:1 to 3.1:1.

Strategic mesquite control in South West Qld continued in 2006/07. Previous control costs in the core area have been up to $500/ha. These costs are well over and above the productive sustainable value of the land. The aim of controlling this isolated core mesquite information was to protect the biodiversity and productive values of the Bulloo River Catchment. The Australian and Queensland governments and Quilpie Shire Council, have invested a minimum of $5M to achieve this result however when cost/ha are extended across the immediate area protected this equates to $2-3/ha.

Other long term costs and benefits of control are being monitored at the Pilbara sites in WA and other devolved grant sites. The benefits of these projects have been identified as case studies in the Mesquite Best Practice Manual which has been distributed nationally.

Legislation identifying responsibilities for control of mesquite varies between states and territories. In Qld, the responsibility for control lies with the landholder with local government undertaking compliance as agreed in a MoU between the responsible state agency and the Local Government Association of Queensland.

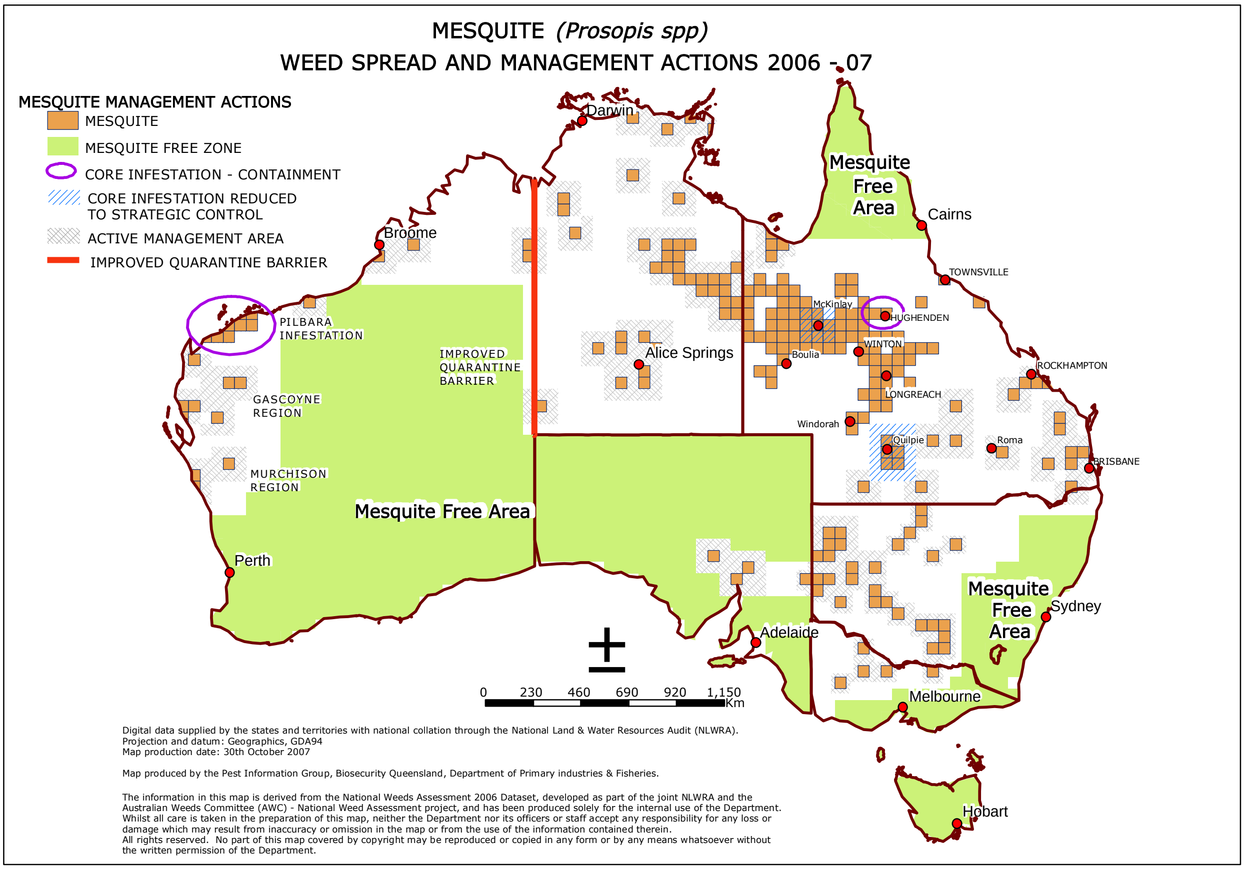
On ground mesquite management initiatives demonstrating landholder best practice have been promoted and will continue to be highlighted at promotional events and in publications. In some areas, landholder syndicates have been formed to control mesquite, this approach will continue to be encouraged in a bid to maintain existing effort

Landholder responsibilities under legislation are documented in Qld pest facts, NT Weed note and WA Weed note. In Queensland, Local Governments also incorporate declaration status in their pest management plans while NT has developed a Species Management Plan for mesquite. An increasing percentage of Local Government's in Qld employ a pest management officer whose role includes compliance activities. Legislative compliance is rarely used as a tool in Qld with a more cooperative partnership approach to weed management being the preferred option.

STRATEGY 2.2 Reduce the impact

Desired Outcome: All core infestations are contained and subject to long-term management planning with a view to eradication over time.

The NPBMG endorsed the core infestation criteria in July 2003 and substantial progress has been made in managing outlier populations in SA, NT, WA, Qld and NSW where most infestations are now under active management. Core infestations at Hughenden in Queensland and the Pilbara in WA are managed for containment while the status of the infestations at McKinlay and Quilpie remains strategic control.



Mesquite has the potential to increase in distribution and is considered to have the highest strategic value out of the three prickle bush species. The 50km² grids on the above map presents a perception of broad distribution outside the core areas. While this is the case, these areas are more localised than widespread and all outlying areas are either targeted for eradication or remain under active management.

The Quilpie mesquite situation is now a ‘mop up’ operation with only isolated plants now present. The Qld Pest Offensive project will continue to resource this work by supplying $30K annually over the next three years. The highly successful control outcomes of the Quilpie mesquite project seen over the past ten years, positions this project on track to achieve the long term goal of eradication of mesquite from South West Qld.

In the McKinlay Shire in Queensland, the core infestation area is approximately 3,000 hectares of medium density clumps of plants lacking the continuous high density stands seen in other areas. The control program in McKinlay is well resourced with $240K of available funding provided through the Qld Pest Offensive supported by $140K which is provided by the Australian Governments DWM Program – this will ensure all remaining medium density infestations are treated to a ‘mop up’ stage.

Difficulties in establishing containment protocols have been experienced at the Pilbara infestation, which has been compounded by cyclones and floods. A regional plan has been developed to address these issues. The core areas have been reviewed on an ongoing basis by both internal and external stakeholders, outcomes have been promoted in reports and media releases.

The coordinator provided technical support in a preliminary trial of remote sensing of mesquite infestations at Hughenden and subsequently in WA. A PhD student has been funded by DAFWA to develop tools for spatial analysis and remote sensing, while showcasing the impacts to the Pilbara region.

DNRETA developed the ‘Katherine Regional Weed Identification Deck’ which highlights the prickle bushes as high priority for management. Other national awareness products include WA road signs, best practice manuals, fridge magnets, and fact sheets. These products provide a suite of information that promotes prevention as key components of successful management. Accurate mapping is critical for planning and on-going management of mesquite. The NT has developed “Weed Data Collection Guidelines in line with the National Survey Mapping Guidelines.

Mesquite infestations in Qld are identified in relevant planning frameworks including catchment, regional and local government pest management and project plans designed to reduce impacts and the risk of further spread. All core infestations have had site based management plans developed and implemented based on best practice management while scattered isolated infestations like those in NT are targeted for eradication.

The Pilbara regional plan will identify containment strategies including the construction of fencing to restrict the movement of cattle and native animals. Mapping will be undertaken as part of the control operations for outlying infestations at Pilbara in 07/08 and isolated populations in the Gascoyne and Murchison area to the South of the core infestation.

Weed management has been incorporated into the Grazing Land Management Manual (Qld), Rangeland Management Workshops and Grazing Land Management Courses (NT). This undertaking continues to raise the threat to land managers posed by introduced weeds while placing emphasis on the need to incorporate weed management into daily property management.

Links exist between the Land Protection (Pest and Stock Route Management) Act 2002 and other legislation in Queensland such the Vegetation Management Act, and the Water Act. These linkages provide a structured process to limit further land degradation through responsible government policy and planning initiatives.

The Mesquite Best Practice Manual continues to be an effective promotional tool that extends information to landholders in a variety of ways. The information in the manual is provided in a simple and easy to read format which was developed by landholders and researchers. Best practice continues to evolve through ongoing landholder innovation and improvements in technology. Pilbara landholders, the regional project coordinator and CSIRO have concluded a trial project that was looking at developing integrated best practice control options in the core area (i.e. chaining, biological, fire) with a report due in 2007/08.

CSIRO in conjunction with state/territory agencies has maintained national monitoring of the biocontrol agent *Evippe* species (leaf-tying moth released in 1998) which is now established at all infestations including an isolated infestation in the East Kimberley, WA (no release was conducted at this site). This species causes extensive damage to plants including up to 100% defoliation of mesquite at the Pilbara infestation. Trials are underway to assess the impacts of the biocontrol agent when included in an integrated control program involving other control methods such as chemical and mechanical.

Mesquite research by CSIRO is being funded through the cross-regional NHT program - DAFWA, DWM, with in-kind support from QDPI&F and stakeholders in the Pilbara Mesquite Management Committee. The field component of the research program which focuses on mesquite control in the Pilbara region of Western Australia is being wound down. As part of the research, a hot fire treatment trial was undertaken over a 144 ha area in 2006. The long-term effects of the fire on the mesquite population are now being investigated. Initial indications are that fire is not going to be a practical tool for widespread use.

Evaluation of the biocontrol agent *Evippe* has shown that it continues to have a dramatic impact on foliage cover, reproduction and growth rates, and has probably been instrumental in reducing the spread of mesquite in the Pilbara and the very low seed bank densities that has been observed in recent years (approaching zero).

Several scientific papers have been published in 2006/07. These include:

- remote-sensing techniques,
- results of quantitative visual aerial survey of the entire population,
- an update of the 2001 review of mesquite taxonomy, ecology and management (basis of - 2004 Best Practice Management Manual), and
- a synthesis of biological control efforts internationally.

The aerial survey work has helped form the basis for the development of a detailed management plan for the Pilbara Region, and provides a methodology for aerial survey elsewhere. Parallel ecological research continues in Queensland, this project is still in the intensive data-collection phase.

STRATEGY 2.3 Eradicate

Desired Outcome: All isolated and scattered infestations are eradicated.

Eradication of isolated infestations is occurring at 35 sites. This action will address all known infestations in the NT and SA, most infestations in NSW and many in Qld. While ongoing commitment to follow-up remains a prerequisite, for on-going support for the projects, it is recognised that the successful outcomes associated with these projects are protecting significant areas of Australia. Increased survey efforts have been directed at strategic sites in the Gascoyne (WA), Bulloo (Qld) and Gayndah (Qld) regions.

Aerial surveys including ground truthing were conducted in WA to ensure all major mesquite infestations are mapped. Mesquite in the East/West Kimberley area remains the target of eradication which to date remains on track. NT is on target to eradicate mesquite in the short term which will mark a major milestone for the Strategic Plan promoting the benefits of early intervention practices.

SA sites are also targeted for eradication while all infestations in NSW are under active management. NSW distribution includes significant infestations in the Castlereagh, Macquarie County Council area, Bourke, Brewarrina and Broken Hill LG areas and at several sites in the unincorporated area from Tibooburra to below Menindee. Isolated small infestations are found in the Urana, Leeton, Narrandera, Griffith, Lockhart and Murrumbidgee LG areas in the Riverina. The level of infestation is approximately 27,000 ha in total.

In 2006/07, NSW stakeholders from the Lower Murray Darling Catchment Management Authority (CMA) treated 100 000 plants and the Western CMA treated 16 000 plants over 13 properties. This outcome confirms that a planed collaborative approach with sound communication and reporting mechanisms in place achieves active management.

Blade plough work at Quilpie is considered a critical component of *P. velutina* best practice control and is estimated to cost $400/ha. Feedback suggests this control is expensive however, with no other options available due to labour shortages, this method has been implemented as a matter of necessity to complete this highly strategic control. Best practice is further highlighted by additional benefits towards land regeneration with improvements to soil compaction, soil surface crusting, water retention and pasture re-establishment.

While the success of the coordinated approach to WoNS management has been based on a management team approach, it is the skills and experience of the individuals that make up these management teams that ultimately ensure success. The Senior Weeds Officer at Bourke Shire Council who has had major input into mesquite management in NSW has been awarded the inaugural NSW Department of Primary Industries (DPI) Buerckner and Stephenson Weeds Officers Award for his outstanding contribution to weed management.

Having worked in weed management for more than 10 years, Don Mackenzie has been an active member of numerous committees including senior vice president of the Macquarie Valley Weeds Advisory Committee, NSW Parthenium Weed Taskforce, NSW Prickle Bush Working Group, National Athel Pine Management Committee, Shire Rural Land Pest Officers Group of Western Queensland and is accredited for assisting early detection of many weed species including mesquite and parkinsonia.

A survey of the Georgina catchment in the NT is scheduled for late 2007, regular surveys are on-going in WA and other areas of NT. These surveys are made possible through pastoral inspections of large properties requiring one-on-one property visits to advise on control techniques. Local Government officers and Land Protection Officers also inspect previous SWEEP funded sites in Qld.

Training of Local Government staff in best practice management techniques has occurred in Western Qld at Local Government workshops. National competencies training has also been offered to further education in weed management. Best practice options for eradication of small infestations are detailed in the mesquite best practice manual and agency mesquite information sheets.

Local Government officers in Qld have undertaken enforcement training in relation to compliance to legislation. For example mechanisms exist under the Queensland Land Act (1994) and *Land Protection (Pest and stock Route Management) Act 2002* to undertake compliance, however, these options are rarely enforced.

STRATEGY 2.4 Prevent spread

Desired Outcome: Mesquite species are restricted from spreading

The Australian Quarantine Inspection Service (AQIS) continues to prohibit and monitor the importation of eight mesquite species that are considered to pose a threat to Australia.

A national awareness campaign has increased landholder, Local Government and agency knowledge of the threat posed by mesquite. As a result, new infestations are being detected and controlled, weed seed spread is being addressed through a Weed Hygiene Declaration Scheme that has been developed in Qld and in WA interstate stock movement protocols are being implemented.

All mesquite species are declared nationally under State/Territory legislation. There is some variation in individual states/territory legislation, however, the overall goals remain increased prevention, early detection, awareness and control. This legislation combined with mesquite listed as a Weed of National Significance (WONS) will assist to raise awareness of the impacts of this weed and prevent importation and restrict national trade.

Mesquite has not been actively planted for many decades and today there are many alternative shade trees available which are promoted by organisations like Greening Australia.

Research has confirmed that feral pigs are vectors of spread of mesquite and that they can disperse mesquite seed over large distances. The primary outcome of this activity is that feral pigs are thickening sparse infestations, linking patches and facilitating encroachment or broadening mesquite infestations and therefore populations need to be minimised.

A range of in demand extension products continues to be distributed nationally to help raise community awareness of the issues associated with mesquite. Sound knowledge of mesquite management by all key stakeholders has enabled the development of the Mesquite Best Practice Manual which has now been distributed widely around Australia. To coordinate stakeholder's efforts a National Communication and Extension Plan is being developed which will identify gaps in extension and highlight future promotional opportunities.

A broad range of innovative products are being developed to increase awareness across targeted areas of the broader community. For example, road signs have been developed that target tourists, while resin mount seed pod identification products help improve the prickle bush identification skills of individuals involved in the grazing industry.

In 2006-07, NPBPMG members and other key stakeholders developed and distributed articles and newsletters, undertook radio interviews and delivered presentations on the impacts of mesquite. eg mesquite – A weed menace to Southern Gulf – Southern Gulf Catchments newsletter was distributed to 4000 community members in the Southern Gulf region. A display at the Cloncurry Mining Expo improved networks with mining stakeholders and has allowed information exchange between mine site environmental officers and NRM officers.

Regulation has improved quarantine protocols between NT & WA reducing the risk of mesquite spread by livestock and machinery. State and territory legislation forms a policy basis for limiting the spread of declared weeds. Qld currently has a weed spread prevention policy in place. This policy aims to reduce the spread of declared weeds by promoting protocols and procedures for improved hygiene practices such as clean down. The policy has been adopted by many Queensland state agencies and industry has also adapted the policy for use in their own industry.

Nationally stakeholders continue to conduct mesquite distribution surveys with ongoing support from the Australian and State/Territory Governments. Local and regional planning processes utilise survey data to map, identify spread risk and priority areas for strategic control.

Climate modelling is used to determine climate characteristics in the native range of mesquite and this information can be used to better inform of potential distribution modelling in Australia (eg CLIMEX – CSIRO simulation modelling system).

Strategic fencing in the Pilbara region has been erected to restrict cattle and emu movement. This is identified as a best practice management technique for landholders incorporating property hygiene principles into property planning and paddock design to help maintain clean areas through improved livestock/feral animal management strategies.

The collation of ongoing mesquite surveys by Qld Local Government Weed Officers, weed reporting processes in NSW, prickle bush identification workshop in NT, WA integrated research and Desert Channels Qld web based weed spotter capabilities provides a sound national awareness base for the early detection of mesquite.

The capacity for early detection and eradication of new infestations varies between State and Territories. With increased funding support this national capacity level is improving with increasing human resources, education, and training across stakeholders and industry.

C. Conclusion

From 2001, the presence of a national coordinator and associated management experts has empowered Local Government officers/landholders across the country to build confidences in weed management.

The national coordinator has provided the critical link to develop local into regional/catchment management groups. This report identifies many examples of stakeholders that are demonstrating commitment to limiting the impacts of prickle bushes, however many initially have lacked the knowledge and resources. The progress on the Mesquite Strategic Plan has provided the mechanism to build the capacity of many communities to implement effective management programs.

National priorities for prickle bush WoNS management have been determined and many of these have been addressed with support from the Australian Government's Defeating the Weeds Menace program, The Queensland Government's Blueprint for the Bush – Pest Offensive and regional NLP funding programs. Queensland Pest Offensive funding for prickle bush management (e.g. strategic control, wash down facilities, weed awareness) during 2006/2007 is approximately $3 million with additional contributions of approximately $4.5 million provided by stakeholders including proponents. Australian and state government funding provides an incentive for stakeholders to contribute to effective on ground control, including predicted increased community ownership of prickly acacia management over the next two years.

The level of knowledge and understanding of the mesquite issue by stakeholders is high. This is demonstrated by their on-going commitment to map, plan and implement on ground control. The skills of a few individuals are now expanding to groups of stakeholders supported by government, NRM groups, industry and the community.

Considerations and challenges into the future

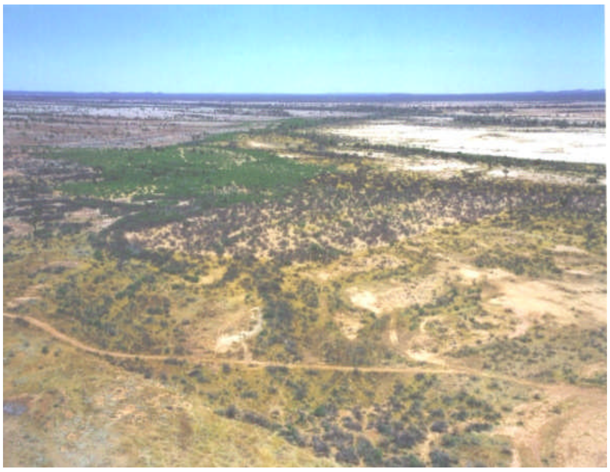
- Success of prevention aspects of the national strategy have yet to be determined. Opportunities for implementation of coordinated prevention program between states now exist with development of the National Weed Seed Prevention Strategy.
- Awareness levels regarding prickle bush impacts, skills, attitudes and aspirations remain varied. This can be improved by the adoption of the Prickle Bush National Communication and Extension Plan.
- National strategy review – maintaining momentum. The greatest threat to ongoing coordinated action against the three WoNS prickle bushes species would be the loss of national coordination, the loss of the experience and knowledge contained in the national management group and the availability of strategic funding. Funding cycles should reflect the long term nature of prickle bush management.
- Build on the level of community capacity and improve mapping/weed data recording at all levels
- Further increase the profile of prickle bushes to attract more dollars for long-term control
- Promote public benefit of public investment
- Research of economic benefit data for WoNS – i.e. cost, incentives to eradicate.
- Maintain the ability for innovative research and 'Left-field' ideas including opportunities to utilise mesquite as a resource while maintaining environmental and productive capacity of the land.

Evippe leaf tying moth

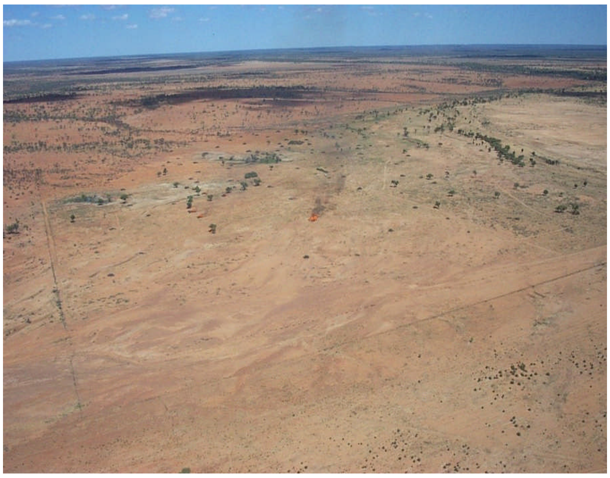
WA – biocontrol awareness

National Strategy Workshop – September 2006

Quilpie Qld integrated control 1998



After - 2004



D. Budget
Coordination figures - split between prickly acacia, parkinsonia, mesquite
* Additional funds were granted for National Strategy Workshop

	200607	Planned budget		Actual Expenditure	
	Employees & Positions Held	**Recipient's Contributions** (without GST)	**Funds paid by the Commonwealth** (without GST)	**Recipient's Contributions Expended** (without GST)	**Commonwealth Funds Expended** (without GST)
	Co-ordinator salary and on-costs		88 950		91 778
	Management, admin support, research officers	59 500		60 000	
	Travel Coordinator		16 500		13 972
	Management Group travel & meeting expenses	82 500	11 000	82 000	*3054
	NRM groups, state /territory community support inputs	43 200		43 000	
A	**Total Employment Costs**	**185 200**	**116 450**	**185 000**	**108 804**
	Operating Cost Items	**Recipient's Contributions** (without GST)	**Funds be paid by the Commonwealth** (without GST)	**Recipient's Contributions Expended** (without GST)	**Commonwealth Funds Expended** (without GST)
	Vehicle rental		11 000		8512
	General operating costs		7 000		4738
B	**Total Operating costs**		**18 000**		**13 250**
C	**Total Cost (without GST) (A+B)**	**185 200**	**134 450**	**185 000**	**122 054**
D	**GST (10%)**	**18 520**	**13 445**	**18 500**	**12 205**
E	**Total Cost (including GST)**	**203 720**	**147 895**	**203 500**	**134 259**

Budget continues: (2006-07)

National Strategy Workshop – September 2006

	Employees & Positions Held	Proponent Funds (without GST)	Australian Government Funds Sought	Recipient's Contribution Expended without GST	Commonwealth Funds Expended (without GST)
	National strategy development workshop – NPBMG 12 participants x 5 days (agency & community reps Qld, NT, WA and NSW	$21,000		19 250	
	National workshop participation – additional key stakeholders 12 x 5 days	$21,000		21 000	
	National mapping – contributions to process by Qld, NT, WA, NSW, SA and Vic (includes data collection, surveys, data transfer)	$14,000			
	National map compilation and production QNR&M Project Manager PO4 @ 0.05 FTE		$4,450		
	Evaluation planning & process development 12 participants x 1 day	$4,200			
A	**Total Employment Costs**	**$60,200**	**$4,450**	**$40 250**	
	Operating Cost Items	**Proponent Funds** (without GST)	**Australian Government Funds Sought**	**Recipient's Contribution Expended without GST**	**Commonwealth Funds Expended (without GST)**
	Workshop facilitator & evaluation technical support		$7,000	7 000	
	National strategy revision workshop travel expenses		$30,000		29 878
	Audit/financial arrangements	$500			2 323
B	**Total Operating costs**	**$500**	**$37,500**	**$7 000**	**$32 201**
D	**Total Cost (without GST) (A+B+C)**	**$60,700**	**$41,950**	**$47 250**	**$32 201**
E	**GST (10%)**	**$6,070**	**$4,295**	**$4 725**	**$3 220**
F	**Total Cost (including GST)**	**$66,770**	**$46,145**	**$51 975**	**$35 421**

APPENDIX 1

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