Cape York Peninsula

Photo: CYWAFAP

Pest Management Strategy

2004 – 2010

FINAL DRAFT

ACKNOWLEDGMENTS

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Laura-Normanby Catchment Management Group
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The Wilderness Society
West Coast Traditional Land Owners

This Strategy was endorsed by CYPPAC in Cairns on 9th March 2004.

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EXECUTIVE SUMMARY

The Cape York Peninsula Pest Management Strategy (CYPPMS) is a broad over-arching document that establishes a Cape-wide planning framework for integrated pest management by government, community, industry and individuals. The Strategy and action plans have been developed with community consultation to help achieve a coordinated and effective approach to pest management throughout Cape York Peninsula. The direction for pest management over the next six years on CYP will focus on the implementation of Local Government, Community and property pest management plans with the involvement, knowledge and support of the general community and Government agencies. Community ownership and involvement is paramount to the success of implementing the strategy and the on-ground control of pest plants and animals in the region.

The vision for pest management on Cape York Peninsula is:

All stakeholders have the commitment to and capacity for ongoing coordinated and effective pest management to support sustainable ecological integrity, economic development and social well-being

The vision will be achieved through the following strategic goals, which outline the process for overcoming pest management problems:

1. Commitment Secure a Cape-wide commitment and ownership, by all stakeholders, to on-going pest management beyond legislative requirements
2. Strategic Planning Framework And Management That the strategic directions for pest management address the needs of all stakeholders
3. Prevention And Early Intervention That the establishment and spread of pest species is prevented
4. Effective Management Systems That integrated systems are developed to manage the impact and spread of pests based on best management practices
5. Communication That effective communication and information exchange between all stakeholders is maintained
6. Resourcing That resources are acquired to implement effective pest management on CYP
7. Knowledge, Education And Training That stakeholders acquire the knowledge and skills to implement best practice for pest management
8. Integration That pest management is aligned with other relevant Regional, State & National Strategies

The Strategy will be successfully implemented when the strategic goals, objectives and actions are reflected in the outcomes of pest management initiatives from all levels on CYP.

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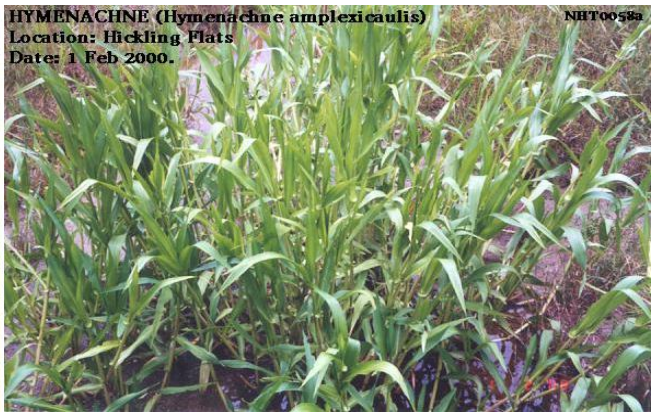
GLOSSARY OF ABBREVATIONS

AG:	Australian Government
CYP:	Cape York Peninsula
CDEP:	Community Development Employment Program
CG:	Community Groups, include: catchment groups, Landcare groups etc.
CRC:	Cooperative Research Centres
CYPLUS:	Cape York Peninsula Land Use Strategy
CYPPAC:	Cape York Peninsula Pest Advisory Committee
CYWAFAP-1:	Cape York Weeds and Feral Animals Project
CYWAFAP-2:	Cape York Weeds & Feral Animals Program
IC:	Indigenous Communities, include: Aurukun, Bamaga, Hope Vale, Injinoo, Kowanyama, Lockhart River, Mapoon, Napranum, New Mapoon, Pormpurraw, Seisia, Umagico, Wujal Wujal.
LG:	Local Governments, include: Cook Shire, Douglas Shire, Aurukun Shire, Torres Shire and Carpentaria Shire
LH:	Land holder
LM:	Land managers
NAQS:	Northern Australian Quarantine Strategy
NGO:	Non-Government Organisation
NHT:	Natural Heritage Trust
PMP:	Pest Management Plan
ROCCY:	Regional Organisation of Councils of Cape York
RTC:	Resource Target Condition
RTO:	Registered Training Organisations (e.g. TAFE, ACTA, FNQ Training)
SG:	State Government includes, but is not limited to: Environment Protection Agency (EPA) incorporating Queensland Parks and Wildlife Service (QPWS), Department of Primary Industries (DPI), Department of Natural Resources Mines and Energy (NRM&E), Main Roads Department (MRD)
SIU:	Strategy Implementation Unit (currently CYWAFAPb)



Photos: CYWAFAP

DEFINITIONS

A pest
A plant or animal that has, or has the potential to have, a detrimental effect on economic, social or conservation values. The term is relative to the situation and land manager; a pest to one person may not be a pest to another. Only weeds and vertebrate pests are considered in this Strategy, although it is recognised that there are a number of invertebrates and plant pathogens that are considered as pests on Cape York Peninsula, they are covered by other strategies and management plans.

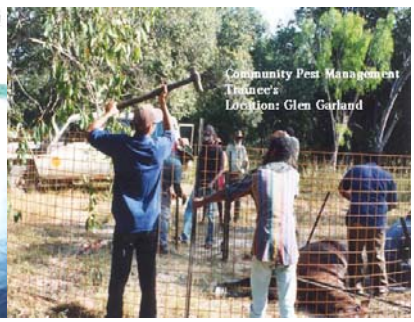
A weed
A plant whose potential for damage outweighs its potential for usefulness (NT Weeds Management Strategy). A plant, which has, or has the potential to have, a detrimental effect on economic, social or conservation values (National Weeds Strategy).

Pest Animal
An exotic animal, causing detrimental impacts on the environment, industry or community activities. A pest animal may be a declared animal (Queensland Pest Animal Strategy).

Problem Animal
An individual or local population of native animals that sometimes conflict with local or immediate human activities. Native species are generally protected under the *Nature Conservation Act 1992*. Control can only be undertaken by authorised officers or under permit (Queensland Pest Animal Strategy).

Declared Plant or Animal
A plant or animal considered a serious enough pest (could have serious economic, environmental or social impact) to warrant its control being enforced under legislation. This legislation is the *Land Protection (Pest and Stock Route Management) Act 2002*. As locusts (the only invertebrate to be declared under this Act) do not pose any great threat to Cape York Peninsula at this point in time, and have not been listed on any pest management plan in the region, they are not included in this strategy. Land managers are responsible for the control of declared animals on their land (Queensland Pest Animal Strategy).

Best Management Practice / Best Practice
Best management practice is the use by managers of management approaches which are currently the most effective and sustainable available. "Best practice" evolves as new techniques and approaches are tested and proven to be more effective. For the purposes of this strategy best management practice (or best practice for short) refers to activities undertaken by land managers that best achieve the outcomes of economically and ecologically sustainable development. (Derived from National Principles and Guidelines for Rangeland Management, 1999).



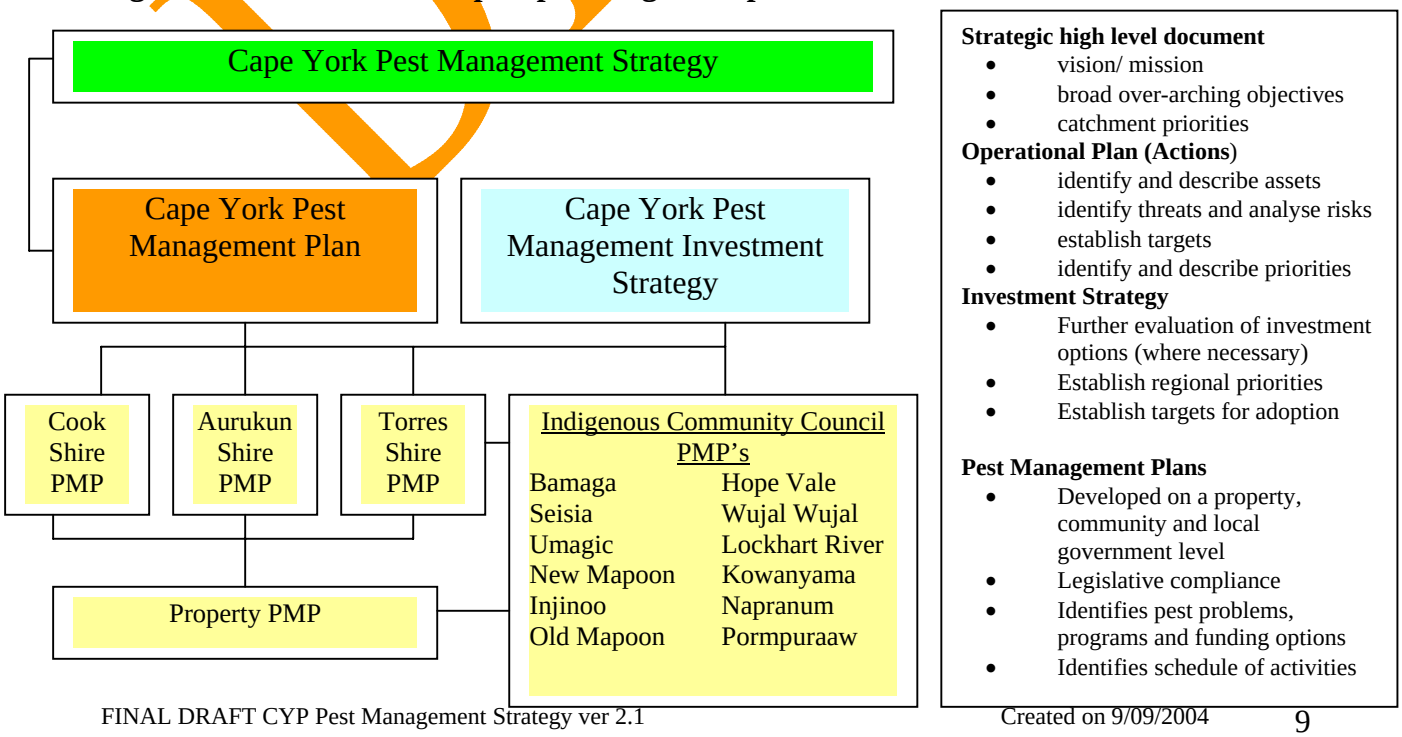
Photos:CYWAFAP

INTRODUCTION

Weeds and pest animals rate highly as ecological threats to Cape York Peninsula's (CYP) natural resource values (CYRAG, 1997, DE, 1998) and as such have attracted a large amount of funding under the Natural Heritage Trust. The Cape York Peninsula Pest Management Strategy 2004-2010 (CYPPMS) establishes a region-wide planning framework to provide clear direction to Government, community, industry and individuals for the management of weeds and vertebrate pest animals across CYP. The Strategy applies to the Cape York Peninsula (CYP) natural resource management region (Fig. 1). This strategy compliments the framework, and maintains the commitment to achieving the desired outcomes, of the Queensland Pest Animal and Queensland Weed Strategies 2002 – 2006.

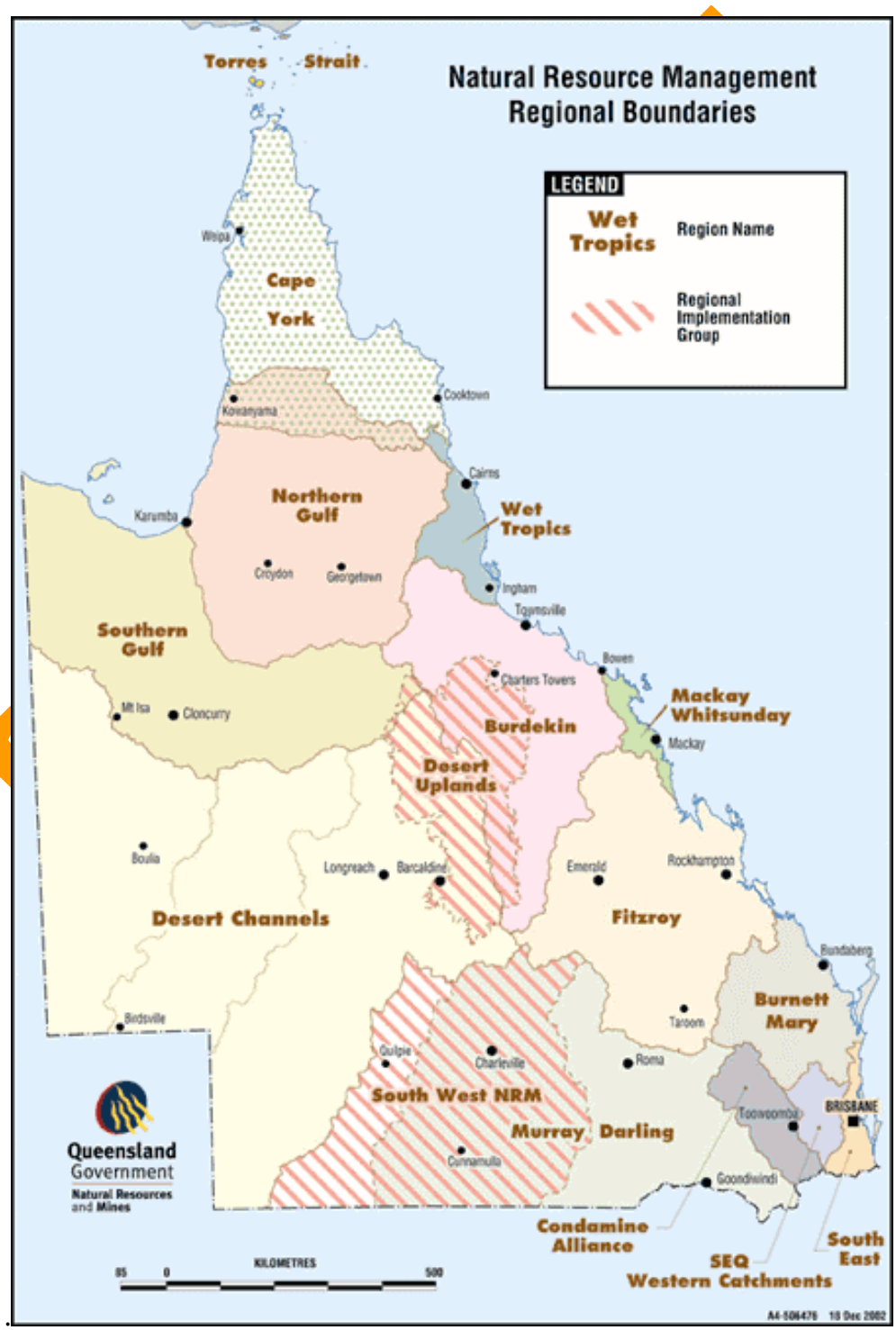
This strategy was developed in response to a request by the Minister for Environment and Heritage, The Honourable Dr David Kemp MP, for "the development of a robust and inclusive Cape-wide strategy for weeds and feral animals that can guide future investment" (letter from David Kemp received by Cook Shire Council, 5 June 2003), in particular Natural Heritage Trust (NHT) funding. However, this does not limit the strategy's scope to only NHT requirements. The requirement for a specific strategy on weeds and feral animals eventuated due to the lack of a regional natural resource management plan and a Cape-wide Pest Management Plan (PMP), which has been planned for over two years. The delay in producing the Cape York Peninsula Pest Management Plan (CYPPMP) has been caused by the community's desire for a bottom up approach which they feel will produce a better long-term outcome. This requires pest management plans to be completed for all the Local Government and Indigenous Community Councils first and then this information will be used to compile a Cape-wide PMP (Figure 1). The Cape York Peninsula Pest Advisory Committee (CYPPAC) supported this approach at its October 2001 meeting. Based on the current development of local pest management plans it is anticipated that the CYPPMP will be completed in 2004. Once this plan is approved for implementation the CYPPMS will be the overarching policy document and the CYPPMP will be the operational level document, detailing pest species priorities and identifying priority areas for control, surveying and monitoring.

Figure 1. Various levels of pest planning on Cape York Peninsula



The life of this Strategy is six years. This determination was based on the recommended period of 5-10 years given in the Commonwealth Guidelines for Regional Plans. As there was a general concern that this strategy would require at least a year to be put in place prior to being fully implemented it was decided an additional year beyond the minimum would be a realistic timeframe. Other timeframes identified in the new natural resource management (NRM) arrangements include 'management action targets' extending from 1-5 years, 'resource condition targets' 10-20 years and 'aspiration targets' 20-50 years.

Figure 2. Natural Resource Management Regional Boundaries showing the area known as CYP NRM Region



REGIONAL VALUES

Cape York Peninsula is an area of exceptional natural and cultural value. The area includes vast savannahs, coastal dune fields, wetlands, rainforest, heath lands and river systems that all combine to create a region of remarkable landscape and biological diversity. CYP Natural Heritage Trust Plan (1998, p2) succinctly summarises the following attributes:

Cape York Peninsula provides habitat for over 3,000 recorded plant species and over 500 species of terrestrial vertebrates. The region's species diversity includes one quarter of Australia's frogs and reptiles, half of our birds, a third of the continent's mammals and nearly two thirds of the country's known butterflies.

Culturally, the region possesses value of great and irreplaceable significance to the Indigenous and non-Indigenous people who call the Peninsula home and also to those that respect it from afar.

Economically, the region contains important agricultural, tourism, commercial and mining operations that provide employment and income for the Peninsula's 18,000 plus residents and it contributes to the broader Queensland and national economy.

Both the Commonwealth Government and the Queensland Government, in conjunction with local government, have committed to maintaining the unique natural and cultural values of the region while ensuring that those industries located on the Peninsula remain viable and productive and that opportunities exist for a sustainable economy for the future.

NATIONAL VALUE

Australia is free of many of the major pests, weeds and diseases present in other parts of the world, including South East Asia and the Asia Pacific. CYP's proximity to the South East Asian and Pacific regions places strategic importance on northern Australia. The area from Cairns to Broome and above - including the Torres Strait - is the focus for many unique and important quarantine activities, which protect all Australians.

While it is acknowledged that primary responsibility for many of these activities fall under the charter of the Australian Quarantine and Inspection Service's Northern Australia Quarantine Strategy (NAQS), the CYPPMS provides additional support to many of the NAQS principles within the region. The geographic position of CYP is recognised for its strategic value in protecting the national interest. It is within this context that the CYPPMS reinforces and imparts further protection through regional approaches to pest management.

A brief overview of the NAQS is provided at Appendix 1.

HISTORY OF PEST MANAGEMENT ON CYP

Cape York Peninsula Land Use Strategy (CYPLUS) Stage 2 Report (CYRAG, 1997) followed a three-year period of local information gathering – the CYPLUS Stage process – in which 44 reports on the natural, cultural, social and economic values of the Peninsula were prepared. Amongst these was a report titled *Animal and Weed Pests of CYP* by Jim Mitchell and Graham Hardwick. This report identified 37 species of weeds and seven species of vertebrate pest animals occurring on Cape York Peninsula Land Use area. Although descriptive, this study mapped pests only as a presence or absence at a property level. Since many properties are over 800 square kilometres, the report was not detailed enough to develop control strategies or programs. Neither did it recommend priorities for control.

Though the CYPLUS Stage 2 report provided little more direction, it did call on the then Departments of Environment and Natural Resources for the preparation of:

"*detailed management plans for all of CYP Peninsula for fire, feral animals (particularly pigs) and weeds (particularly rubber vine) and integrate these with the management plans for the various land uses affected*" (CYRAG, 1997, p93).

Clear direction on pest management priorities for Cook Shire was given by local community members through the Cook Shire Pest Management Committee, resulting in the Cook Shire Pest Management Plan developed in 1997. This plan was revised in 2002/3 and currently lists 58 weeds and 7 pest animals as being of concern in the Shire.

CYP Natural Heritage Trust Plan

CYP Natural Heritage Trust Plan was developed by the Commonwealth Government in response to key conservation recommendations of the CYPLUS Stage 2 Report and the Cape York Peninsula Heads of Agreement. "The plan fulfils the Howard Government's commitment to allocate up to $40 million to the Peninsula" (EA, 1998, p.3).

The $40 million Commonwealth funding was allocated to 10 strategies outlined in the Plan. Strategy 3 – Controlling feral animals and weeds – had an allocation of $3.95 million over four years (1997 – 2001). Strategy 3 was to establish a community-based pest and weed control program (EA, 1998). Its objective was to "control and manage weeds and pest animals in CYP in order to protect natural ecosystems and increase productivity" (EA, 1998, p. 13).

Cape York Weeds and Feral Animal Project

Under Strategy 3, a project titled *Cape York Weeds and Feral Animals Project* (CYWAFAPa) (CY98.19) was funded through the Natural Heritage Trust in 1998. The CYWAFAPa was the first of its kind in Australia. It was a result of community-based planning processes at two significant levels – the regional level, through the CYPLUS regional planning process, completed in May 1997, and the sub-regional Cook Shire Pest Management Planning process, completed in February 1998. During the life of the Project many areas were surveyed and mapped and the data stored in a geographic information system (GIS) database that is compatible with Pest Info (the pest database managed by the Queensland Department of Natural Resources, Mines and Energy).

The Project's achievements were outstanding particularly given the enormous undertaking in building team capacity, acquiring resources and overcoming guarded community attitudes before any effective on ground work could commence. The project had to be extensively built from the ground up and was committed to employing local people. This required an

intensive induction, orientation and training program and a number of short courses, including Council Workplace Health and Safety Induction; Agricultural Chemical Handling and Distribution; First Aid; 1080 Baiting; Firearm Safety; Weed Identification; and Chainsaw Operation courses, for the project staff. Staff also familiarised themselves with the Cook Shire Pest Management Plan and established contacts with various community groups and individuals around the Peninsula. The team worked tirelessly in building trust with landholders around the Peninsula who harboured wary attitudes, particularly toward Government bodies.

The project greatly enhanced local community understanding of pest issues during its initial phase whilst significantly contributing toward developing a reputable knowledge of pests in the area.

The achievements of the project are too numerous to list here and are presented in a technical report titled *Cape York Weeds and Feral Animals Project, January 1999 – August 2002: Summary of Achievements*, available from Cook Shire Council, the proponents of the project.

In August 2002 a second NHT funded project titled *Strategic pest planning, management and community capacity building in Cape York Peninsula* was commenced. This project was to provide a bridge between the Cape York Weeds and Feral Animals Project and the time when all local Governments in the region have community-based pest management plans, landholders have property pest management plans, a Cape-wide PMP is developed and responsible authorities and landholders are implementing the priorities outlined in their plans. The project group was still known to the community as the Cape York Weeds and Feral Animals Project to ensure consolidation and enhancement of the substantial progress made to date in building partnerships with the CYP community. Due to funding constraints this project was modified in July 2003 to focus on developing this Strategy and progressing the Indigenous Community pest management plans to ensure the Cape-wide pest management plan was developed in a timely manner. Other work undertaken includes assisting landholders with developing property pest management plans and delivering training modules from the Conservation and Land Management Package to Community Rangers. The project group is now known as the Cape York Weeds and Feral Animals Program (CYWAFAP-2). This slight change was implemented to allow for the working group to develop its own identity necessary for expanding its activities by taking on outside contract work. This is seen as a necessary requirement if the group is to become less reliant on NHT funding in the future and allows expertise and skills to be retained on CYP in a working unit.

CURRENT STATUS OF PESTS IN CYP

The Cape York Peninsula Land Use Strategy (CYPLUS) report *Animal and Weed Pests of CYP* by Jim Mitchell and Graham Hardwick identified 37 species of weeds and seven species of vertebrate pest animals occurring in the CYP Land Use area. While the Cape York Peninsula Land Use Strategy (CYPLUS) reports provided an invaluable central source of information it is 10 years since they were published. Since the development of the Cook Shire Pest Management Plan and the work undertaken during NHT funded projects and other research on weeds and feral animals of Cape York Peninsula the knowledge of pests and their distribution within the region has been greatly enhanced.

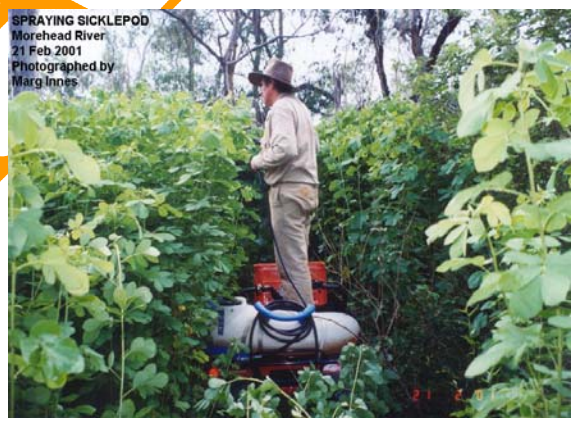
Weeds

A weed is a plant, which has, or has the potential to have, a detrimental effect on economic, social or conservation values. The Cook Shire Pest Management Plan 2003 - 2006 (CSPMP)

identifies 71 weed species as being significant, with 33 rated as being of high priority in the Shire. Until all the Local Government and Indigenous Community PMPs are completed the figures for the whole of Cape York Peninsula will not be available, but it is unlikely that the number of significant weeds will increase although priority rating may differ. To date 73 plant species have been or will be listed in pest management plans for lands on CYP (Appendix 2). Surveys conducted by the Cape York Weeds and Feral Animals Project (CYWAFAPa) across CYP between 1999 and 2002 resulted in the distribution of 31 weed species being mapped. These included 16 species declared in the State of Queensland under the *Land Protection (Pest and Stock Route Management) Act 2002* or under its predecessor the *Rural Lands Protection Act 1985*, six Weeds of National Significance (WONS), and eight weeds declared under local law within Cook Shire. Recent surveys of areas where control work was undertaken by the CYWAFAPa and land managers and continued under the new NHT funded project conducted by the CYWAFAPb, have indicated a dramatic reduction in numbers of plants for some species in certain areas, for example Pond Apple in the Cooktown area.

The weeds identified by CYWAFAPa that are relatively new to CYP and/or have only spread to a small part of their potential range include pond apple, rubber vine, parthenium, parkinsonia, hymenachne, salvinia, giant rat's tail grass, praxelis and leucaena (CYWAFAP, 2003b, p41). These should be targeted as a regional priority.

One of the most successful awareness and control programs undertaken by CYWAFAPa was that undertaken for parthenium. Preventing the spread of this weed alone from five sites on CYP has potentially paid for the Project many times over (CYWAFAP, 2003a).



Sicklepod

Photos: CYWAFAP

Vertebrate Pest Animals

Pest animals (by definition in this Strategy) are exotic vertebrate animals, causing detrimental impacts on the environment, industry or community activities and may be declared under legislation. Pest animals on CYP are mainly the result of deliberate or accidental release of domesticated animals, which have become feral. The main vertebrate pest species identified during the CYPLUS study were feral pigs, feral cattle, feral horses, feral dogs, feral cats, cane toads, and feral fish (especially tilapia) (CYPLUS Stage 2 Report (1997), 92-93). The animals considered major vertebrate pests today are not very different however the terminology has changed (mainly to fall in line with legislation). Feral horses are also referred to as brumbies, while dingoes and wild dogs have replaced feral dogs. Rusa deer and antelope are more recent additions to the list of vertebrate pests. Under current legislation feral pigs, dingoes, wild dogs, Rusa deer, Indian Blackbuck antelope, rabbits and feral cats are declared species. In certain areas domestic horses and domestic dogs have been identified as

having detrimental impact as demonstrated by Indigenous Community pest management plans.

The distribution of pest animals is difficult to estimate given the vastness of CYP and lack of formal surveys. In May 2003 the Cape York Weeds and Feral Animals Program (CYWAFAPb) conducted an aerial survey over CYP to calculate approximate numbers and distribution of feral pigs and horses. Another survey is scheduled for 2004 for the purpose of including seasonal variation.

Recent Environmental Protection Agency (EPA) preliminary reports indicate feral pigs are having a significant impact by predating upon turtle nests on the west coast of CYP with numerous other impacts unknown including the endemic turtle populations of the Jardine Swamps (pers comm. Ian Bell 2003).

Problem animals are an individual or local population of native animals that sometimes conflict with local or immediate human activities. Native species are generally protected under the *Nature Conservation Act 1992*. Control can only be undertaken by authorised officers or under permit obtained from the Environmental Protection Agency. Where native animals are having a detrimental impact land managers are encouraged to investigate options to reduce the impact without undertaking removal activities. These can include exclusion fencing, planting sacrificial crops, scare mechanisms, redistribution of watering points etc.

Concerns & Conflicts

During the development of this Strategy several conflicts arose relating to vertebrate pests, which have implications for the management of these animals on CYP. The concerns and conflicts identified include:

- Protection of dingoes in National Parks even though they are listed as a declared species in the Land Protection (Pest and Stock Route Management) Regulations and are not listed as protected wildlife in the Nature Conservation Regulations.
- Indigenous peoples view of feral pigs as a valuable food source.
- The dingo being a totem for several indigenous groups on CYP.
- Radically different views between conservation groups and pastoralists regarding the status and control methods of dingoes and wild dogs.

Stomach contents of a Dingo

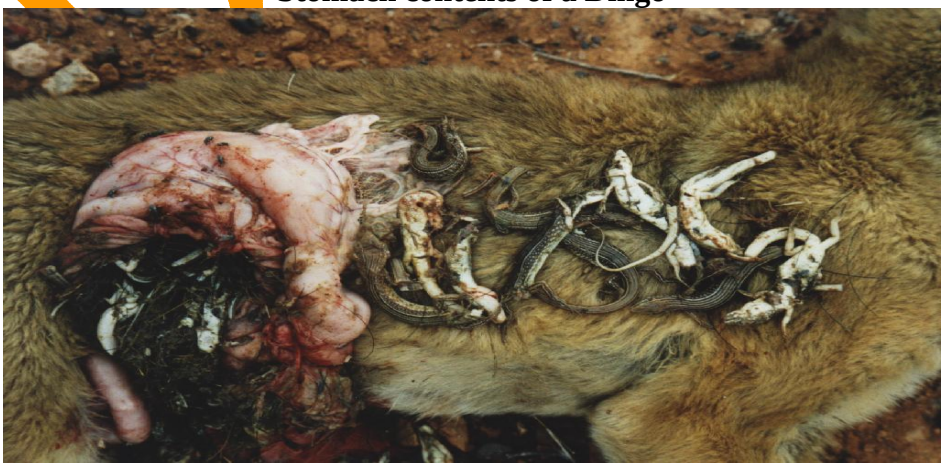


Photo: NRM&E

GOVERNING POLICY

National

The National Weeds Strategy (NWS) was launched in June 1997, by three Ministerial Councils; Agriculture and Resource Management Council of Australia and New Zealand, Australian and New Zealand Environment and Conservation Council and Forestry Ministers.

The NWS takes a strategic approach to weed management problems of national significance, addressing environmental and agricultural weeds equally. The strategy describes the nature of the problem and discusses why existing weed management measures are not adequate by listing the roles and responsibilities of government, community, landowners and land users. (*http://www.weeds.org.au/nws.htm*).

State

The *Land Protection (Pest and Stock Route Management) Act 2002* and the Land Protection (Pest and Stock Route Management) Regulation 2003 provide legislative measures to manage pests and address the impacts they have on the environment.
This Act and its regulation commenced on July 1, 2003. There are three classes of declared pests, which cover both plants and animals. Class 3 requires pests to be controlled on environmentally significant areas or on land adjacent to them. The declaration of Class 3 pests does not come into force until November 1, 2003.

Under this legislation economic, environmental and social impacts of pests are recognised. Environmental weeds, weed seed and spread of animal pests, as well as Local government and State land pest management, including planning requirements, are included. A declared pest cannot be offered for sale, traded, or given away without a permit. Persons are required to take reasonable steps to not spread the pest by their activities. Pest management planning activities for land and fresh water bodies in Queensland are to take note of all declared pests.

There are three Queensland declaration categories, common to both plants and animals. Categories and species included under them are listed in Schedules of the Regulations. The categories of State declaration are shown in Table 1.

Table 1: Declaration categories of the Land Protection (Pest and Stock Route Management) Act 2003

CATEGORY	DESCRIPTIONS	EXAMPLES
Class 1	Not generally established in Queensland and has potential to cause an adverse economic, environmental or social impact	Giant Sensitive Tree See note below for animals
Class 2	Established in Queensland and can cause significant adverse economic, environmental or social impact (including in another State)	Sicklepod Hymenachne Dingo Feral pig
Class 3	Established in Queensland and has or could have adverse economic, environmental or social impact (including in another State)	Lantana Singapore daisy

Pests of National or State significance recorded on CYP

The species identified in Table 2 have not been given a regional priority as yet as this is in keeping with the stakeholder's request for a 'bottom up' approach and will not occur until all

local Government pest management plans have been completed. A complete list of all major pests is provided at Appendix 3.

Table 2: Pests of National or State significance recorded on CYP

Significance	Common Name	Scientific Name	Declaration Category *Land Protection (Pest and Stock Route Management) Act 2002*
Weeds of National Significance (WONS)	Hymenachne	*Hymenachne amplexicaulis*	Class 2
	Parkinsonia *	*Parkinsonia aculeate*	2
	Pond Apple *	*Annona glabra*	2
	Rubber vine	*Crytostegia grandiflora*	2
	Salvinia *	*Salvinia molesta*	2
	Lantana	*Lantana camara*	3
Declared plants of Queensland	Madras Thorn	*Pithecellobium dulce*	1
	Thunbergia	*Thunbergia laurifolia*	1
	Bellyache Bush	*Jatropha gossypiifolia*	2
	Chinee Apple	*Ziziphus mauritiana*	2
	Giant Rat's Tail Grass	*Sporobolus pyramidalis* and *S. natalensis*	2
	Giant Sensitive Plant	*Mimosa invisa*	2
	Hymenachne	*Hymenachne amplexicaulis*	2
	Mother-of-millions	*Bryophyllum spp.*	2
	Parkinsonia	*Parkinsonia aculeate*	2
	Parthenium	*Parthenium hysterophorus*	2
	Pond Apple	*Annona glabra*	2
	Prickly Pear	*Opuntia* spp.	2
	Rubber Vine	*Cryptostegia grandiflora*	2
	Salvinia	*Salvinia molesta*	2
	Sicklepod	*Senna obtusifolia*	2
		Senna tora	2
	Thunbergia	*Thunbergia grandiflora*	2
	Water Hyacinth	*Eichhornia crassipes*	2
	African Tulip Tree	*Spathodea campanulata*	3
	Camphor Laurel	*Cinnamomum camphora*	3
	Cat's Claw Vine	*Macfadyena unguis-cati*	3
	Lantana	*Lantana spp.*	3
	Singapore Daisy	*Sphagneticola trilobata*	3
Declared animals of Queensland	Feral cats	*Felis catus*	2
	Wild dog	*Canis familiaris*	2
	Dingoes	*Canis familiaris dingo*	2
	Feral pigs	*Sus scrofa*	2

* See Figure 3 a- e for distribution maps.

Pig predation on turtle nests on west coast of Cape York Peninsula

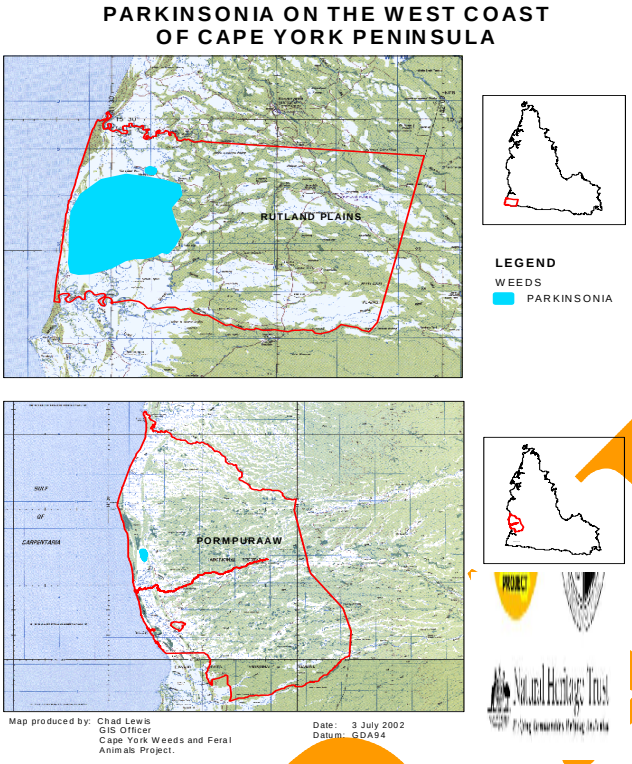
Photos: CYWAFAP

Photo: Ian Bell (QPWS)

Photo: CYWAFAP

Figure 3. Shows mapped locations of some Weeds of National Significance occurring on CYP

(a) Parkinsonia on the west coast



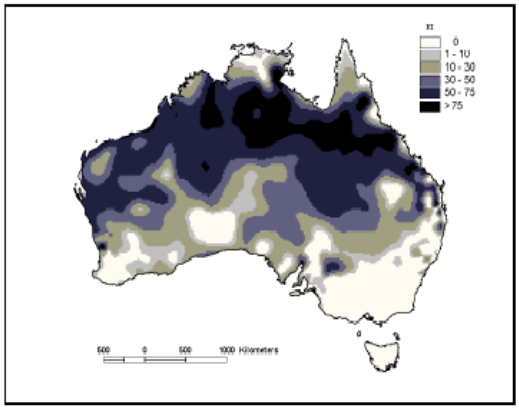
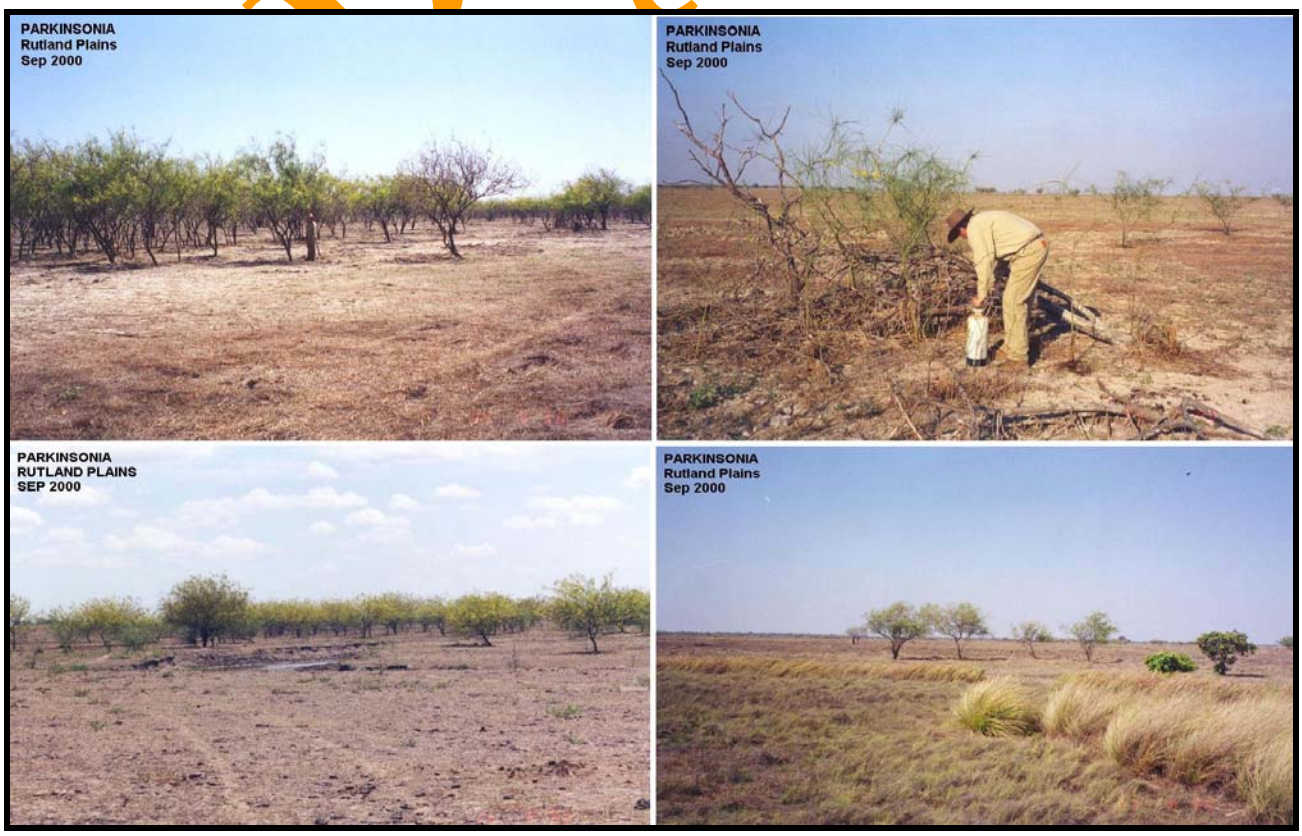


Figure 2. *Potential distribution of Parkinsonia in Australia. (Data is splined from a CLIMEX climate prediction. EI = Ecoclimatic Index: EI<30 potential for permanent population low, EI>50 potential very high).*

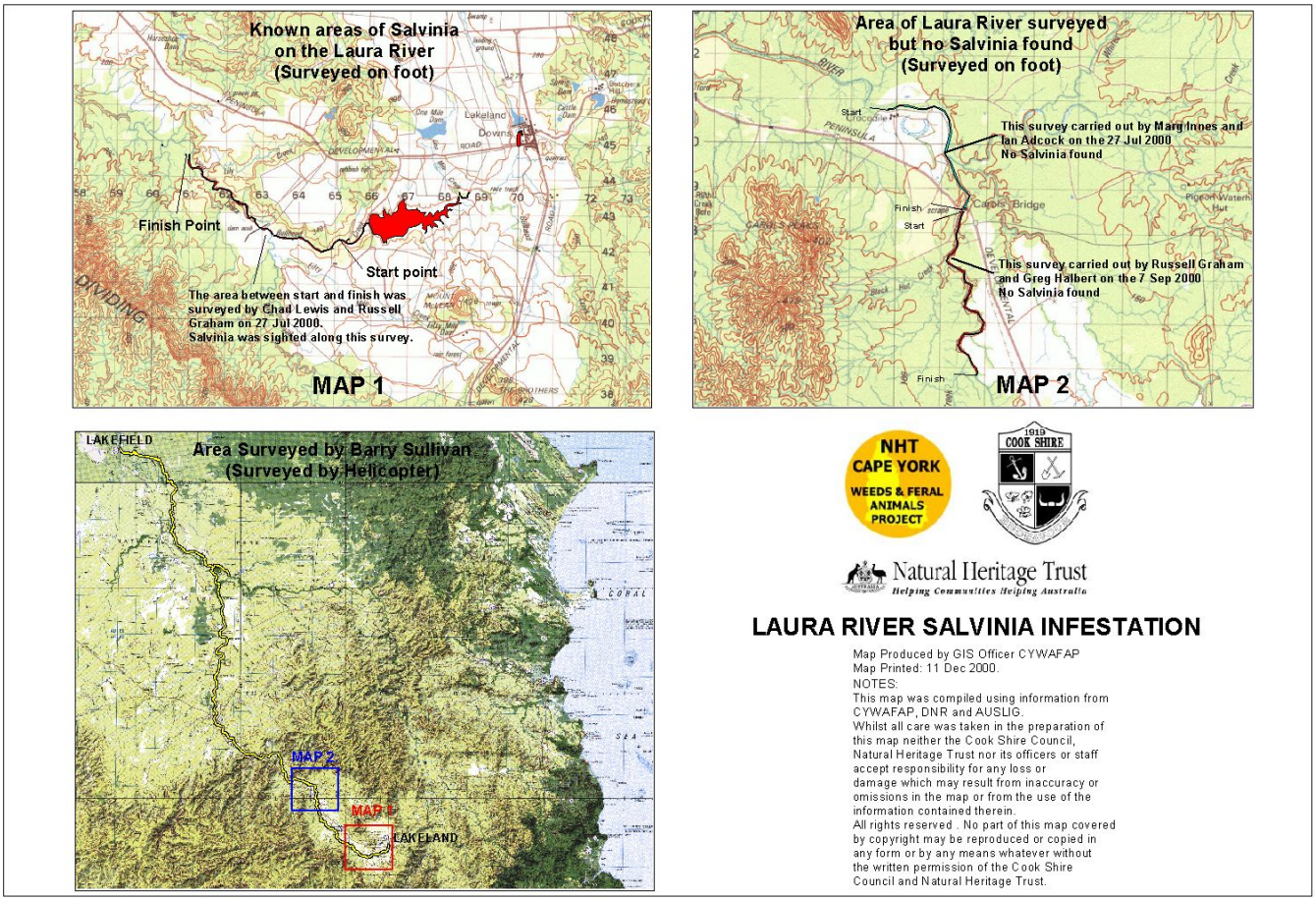
(Source: Agriculture & Resource Management Council of Australia & New Zealand, Australian & New Zealand Environment & Conservation Council and Forestry Ministers, (2000)(a).

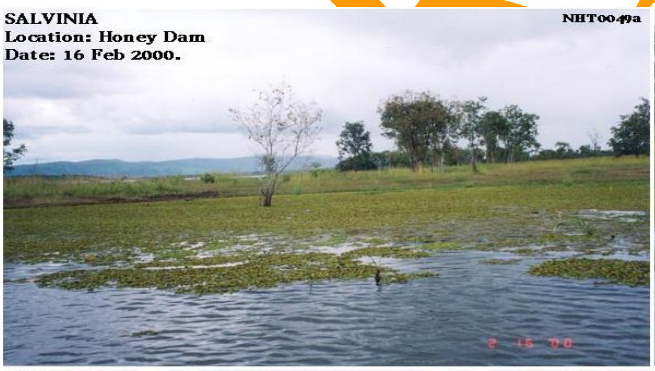
As Parkinsonia is able to adapt to an extremely wide range of soil types, there is little doubt that it will continue to spread through watercourses and adjoining areas throughout the sub-humid and semiarid environments of Queensland. The most vulnerable areas would appear to be the Gulf Region, Channel Country and downstream into the Lake Eyre catchment. *(Source NRM&E)*

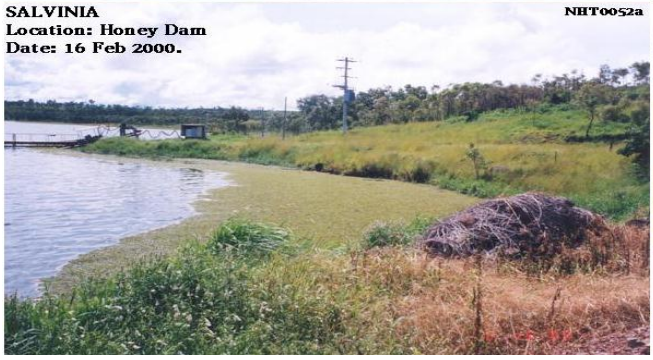


Photos: CYWAFAP

(b) Salvinia along the Laura River

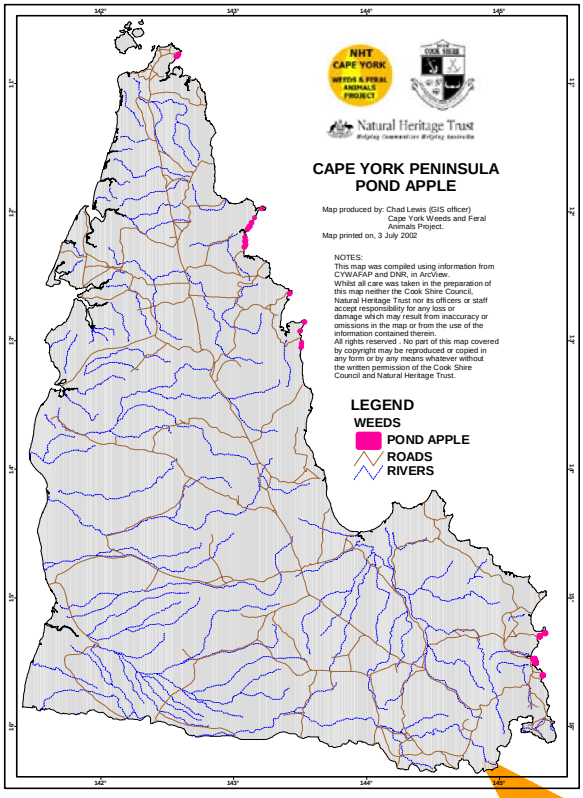




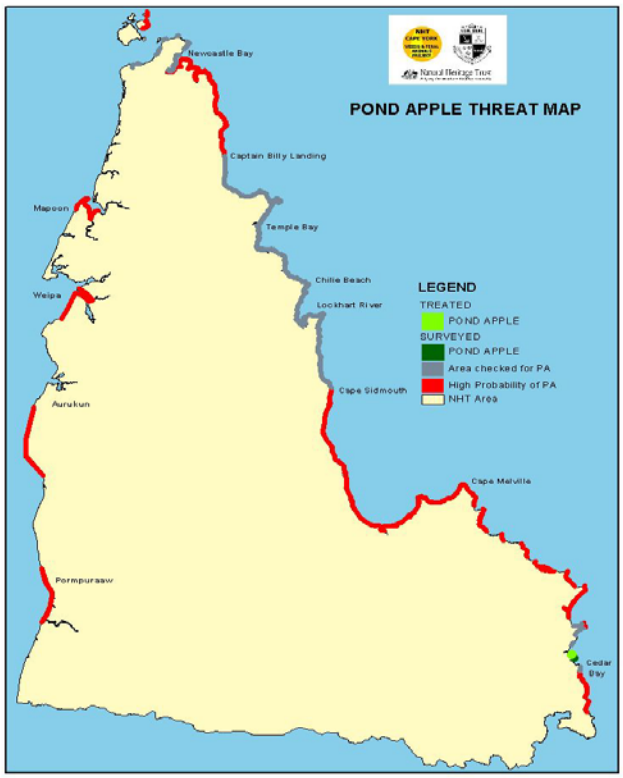


Photos: CYWAFAP

(c) Mapped pond apple on CYP

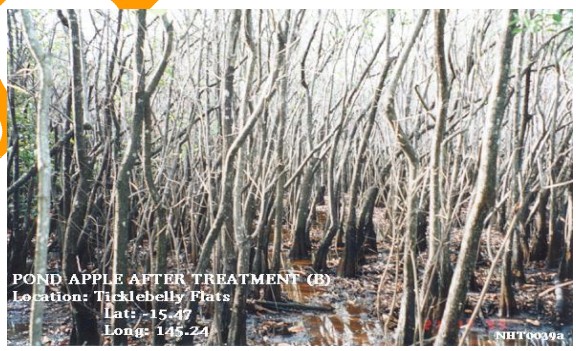


(d) Potential spread of pond apple on CYP



Treatment of Pond Apple at Ticklebelly Flats

Above: before treatment 2000



Right: Regular monitoring and follow-up work is keeping the infestation under control

Photos: CYWAFAP

Research

Whilst numerous research projects have been undertaken in relation to weeds and pest animals in northern Australia, it is identified that a research inventory of completed work relevant to CYP pest management is required.

BACKGROUND TO STRATEGY DEVELOPMENT

This strategy was developed through extensive consultation with stakeholders, initially through Cape York Peninsula Pest Advisory Committee (CYPPAC) meetings and primary stakeholders and later with the wider community. The process was initiated at a Strategic Directions workshop held in Coen as part of the June 2003 CYPPAC meeting. Here items to be included in a strategic directions paper were identified. These were: arrangements for CYPPAC, secretariat, who will administer funds, what business needs to be done on weeds & feral animals on CYP: on-ground management, training, research and development, regional strategy, coordination; investment, responsibility and commitment: State, local, Commonwealth, landholders, industry; relationships and liaison: neighbouring regions and communication plan. At this workshop planning began for a Strategic Directions Workshop that involved all major stakeholders. To facilitate the workshop a working group was established at the conclusion of the Coen meeting. The Strategy Working Group were tasked with preparing background material to be sent to workshop attendees, organising a workshop and pre-workshop meeting where guest speakers provided an update of pest management, the requirements of the strategic direction paper and put the strategy into context.

Strategic Directions Workshop

In August 2003 a workshop was held in Cairns with representative stakeholders from scientific, Indigenous, pastoral, local government, State government agencies, conservation groups, Australian government, mining (listed at Appendix 4) to determine the future directions of pest management on CYP. The workshop provided an opportunity to bring together a wide cross-section of perceptions, ideas, options and concerns.

The impetus for this workshop was to build upon the work that had been done and to establish new directions for the future. These future directions would be steered by the progressive ideology of stakeholders and to align with the Australian Government's requirement of regional plans to support funding applications for NHT Stage 2.

The workshop focus was to determine a vision, goals and objectives that would form the basis for the development of a regional pest management strategy for CYP. This is the strategy that evolved from that workshop and will become an integral component of the Regional Natural Resource Management Plan for Cape York Peninsula when it is developed.

Figure 4 shows the process followed for the development of this strategy.

By involving stakeholders in the development of the strategy stakeholder priorities are better reflected; stakeholder awareness, ownership and commitment is increased and the likelihood of community acceptance and implementation is increased.

Development of Strategic Goals and Objectives

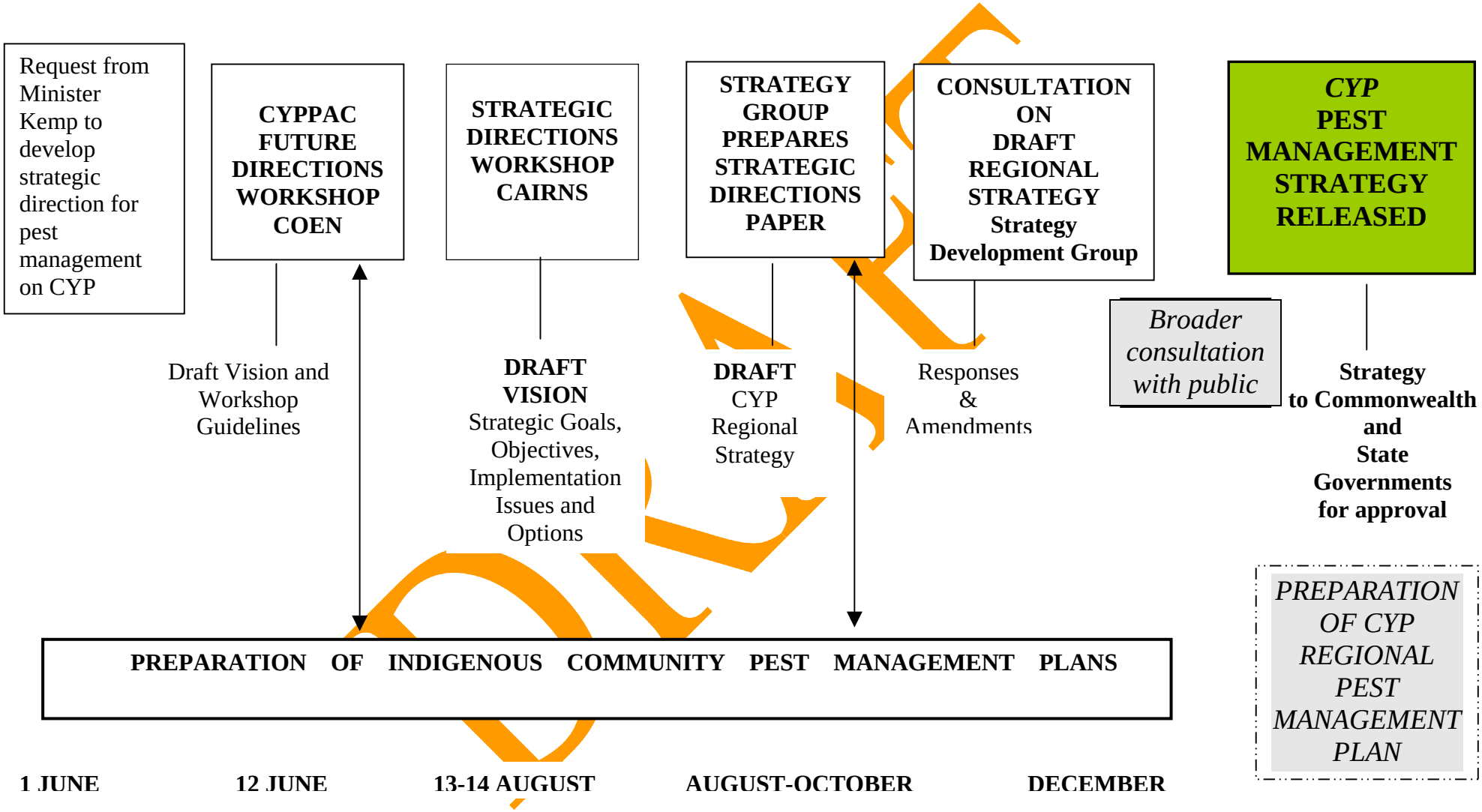
The strategic goals were developed out of group sessions followed by a plenary session held at the Workshop. The Workshop attendees were divided into four groups balanced with a range of stakeholder representatives. Group members each identified their top goals for pest management on CYP and the group then discussed them and compiled a short-list of the most important goals. The groups were not required to prioritise or rank the goals. Group leaders then presented the groups' contribution at the plenary session. The Summary of Group Contributions is available in the Strategic Directions Workshop - Summary of Workshop Outcomes (Northage & Associates Pty. Ltd., 2003). The eight strategic goals included in this strategy were derived from these group reports.

At the conclusion of the Strategic Directions Workshop, a Strategy Development Group (consisting of the Strategy Working Group plus additional stakeholder membership) was established to progress the writing of the strategy. Initially a draft was created of the vision, goals and actions developed at the workshop and circulated to the Strategy Development Group. Once comments were incorporated Draft 1 was released to Workshop attendees and key Government personnel. The completed draft was released for public comment on 15th December 2003. Comments received were incorporated by the Strategy Development Group to produce this final draft Cape York Peninsula Pest Strategy 2004 – 2010, which if approved by the CYPPAC membership at its meeting in March 2003 will be sent to the State and Federal Governments for acceptance as the document to guide pest management investment on CYP until such time as a regional natural resource plan is approved.

Strategy Development Workshop - August 2003

Photos: Bruce Rampton (CYP NHT)

Figure 4. TOWARDS A REGIONAL STRATEGY FOR PEST MANAGEMENT ON CYP: FLOW CHART



Strategy structure and review process

This strategy aims to provide a planning framework for weeds and vertebrate pest animals on CYP. It is written as a policy document to direct investment to priority areas and not as a prescriptive plan identifying specific control measures to be undertaken. This information will be provided in the CYP Pest Management Plan when it is developed. However it does provide clear direction to all stakeholders in addressing the problems and requirements of pest management by providing clear goals and identified actions. Apart from assisting to obtain funding this strategy enables the community to monitor achievements against expectations over a given timeframe. The effectiveness of the Strategy will be monitored and assessed against performance indicators predetermined by CYPPAC in the annual work plan. The Strategy Working Group will monitor the performance with an annual review undertaken by a panel of key pest management specialists. Recommendations from the review panel are to be incorporated into the Strategy by the Strategy Working Group. A thorough review of the Strategy will occur at the end of six years by a representative group of all stakeholders in preparation for developing the next strategic document. The annual review process will commence once this document is implemented following endorsement from the Queensland and Australian Governments.

THE CONTEXT

Strategy purpose

There is a lot of variation in the natural and cultural environment of CYP and an integrated approach is required to accommodate this variation. This is best achieved by involving all stakeholders in the development of any regional strategy. Local pest management plans may be based on a Shire or an area of interest, but each of these areas will have their own specific reasons and specific priorities for particular issues. A regional strategy for pest management needs to account for the variation while also imposing a broader strategic direction.

Review Process

This strategy will be reviewed annually in order to maintain the documents relevance in response to unforseen future changes.

Scope

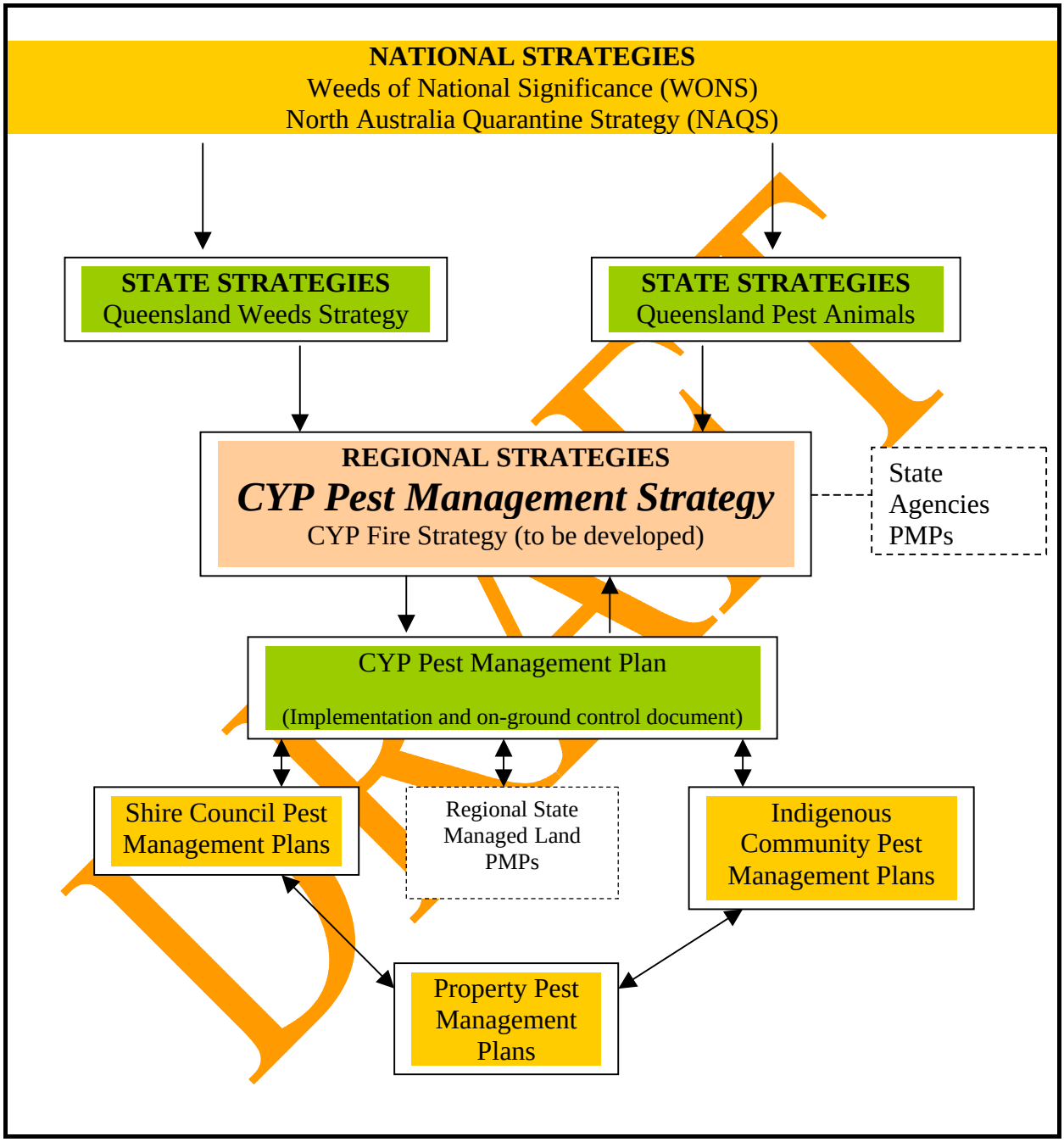
This Strategy is aimed at weeds and vertebrate pests that have significant economic, environment or social impact on the community of CYP.

For this Strategy the following plants and vertebrate animals are included:

- Introduced (exotic) invasive weeds, including weeds of grazing land, aquatic weeds, environmental weeds, and weeds declared under the *Land Protection (Pest and Stock Route Management) Act 2002*
- Native woody and aquatic species that have become weedy in the situations in which they exist and native plants that have been introduced to areas outside their native range and have become weedy in the new environment
- Weeds of crops and sown pasture
- All exotic vertebrate animal species listed as declared under the *Land Protection (Pest and Stock Route Management) Act 2002*
- Other exotic animals that cause detrimental impacts on the environment, economy or society of the region
- Native animals that are sometimes considered to be a pest (referred to as problem animals) in line with the management goals of the Strategy

The relationship between this strategy and other pest management documents is shown in Figure 5.

Figure 5. How the Strategy fits into the pest planning process on CYP



The relationship between this strategy and natural resource management plans and research institutions are shown in Table 3.

Table 3: The context of the Cape York Pest Management Strategy 2004 – 2010 showing links with other natural resource management plans and research institutions.

	SCOPE			
SCALE	**Resource Management**	**Research**	**Pest Management**	**Pest Species**
National	• National Strategy for the Conservation of Australia's Biodiversity • National Guidelines and Principles for Rangeland Management; • Northern Australia Quarantine Strategy (NAQS)	• Tropical Savannas CRC • Pest Animal CRC • Weed Management CRC • CSIRO	• Model Code of Practice for the Welfare of Animals – Feral Livestock Animals Destruction or Capture, Handling and Marketing • National Weeds Strategy • Managing Vertebrate Pests – Principles and Strategies	• National Pest Species Threat Abatement Plans • Strategies for Weeds of National Significance (WONS)
State	• Queensland Biodiversity and Natural Resource Management Strategy (proposed)	• Charters Towers Research Station	• Control of Exotic Pest Fishes Strategy • State Agency Pest Management Plans Queensland Weeds Strategy • Queensland Pest Animals Strategy	• Problem Crocodile Conservation Plan • Queensland Parthenium Strategy • Pest Status Review Series – Land Protection • Queensland Strategy for wild dogs
Regional/ Catchment	• Regional Vegetation Management Plans • CYP Natural Heritage Trust Plan • Northern Australian Quarantine Strategy • Catchment Management Plans: Annan-Endeavour (in progress), Laura-Normanby (in progress), Weipa / Albatross Bay (approved and endorsed by Government), Bloomfield-Yalangi (in draft).		CYP PEST MANAGEMENT STRATEGY • CYP Pest Management Plan (in progress)	▪ CYP Feral Pig Management Plan (proposed).
Local Government	• Local Government Planning Schemes		• Aurukun Shire Pest Management Plan (in progress) • Cook Shire Council Pest Management Plan • Torres Shire Pest Management Plan (in progress)	• Codes of Practice for Leucaena, Vetiver Grass & Neem Trees (CSC) • Hymenachne Management Plan for Cook Shire (proposed)
Indigenous Communities	• Natural Resource Management Plans		• Pest Management Plans for Deed of Grant in Trust Areas: Hope Vale (Council approved); Wujal Wujal (Council approved); Lockhart River (in draft); Pormpuraaw (in progress); Kowanyama (in progress); Bamaga (public consultation); Mapoon (in progress); Napranum (in progress); New Mapoon (in progress); Seisia (public consulation).	
Property	• Property Management Plans		• Property Pest Management Plans – 20 completed to end of 2003.	

ROLES AND RESPONSIBILITIES

Legislation

The *Land Protection (Pest and Stock Route Management) Act 2002* (the Act) and the Land Protection (Pest and Stock Route Management) Regulation 2003 commenced on 1 July, 2003. The Act provides the primary legislative base for the management of particular pests on land and the management of the stock route network throughout Queensland. The legislation introduces a pest management planning framework for Queensland that involves State strategies, local government area plans and state-wide plans for state-controlled land. A key principle the Act advocates is that pest management plans at local, regional, state and national levels are consistent with each other. This ensures integration between natural resource planning activities and arrangements at a regional level. *Integrating planning requirements of the Land Protection (Pest and Stock Route Management) Act 2002 into regional natural resource management plans and arrangements*, a module of the Guidelines for Developing a NRM Plan in Queensland, provides direction for regional bodies and regional agency planners, on practical approaches for improving integration between their planning activities. This document is available on the Regional Natural Resource Management web page (www.regionalnrm.qld.gov.au/planning/guideance/integration.html).

Local Government Pest Management Plans are a requirement under the Act and the subsequent development of subregional and regional plans provides an opportunity for consistency, cooperation and coordination across local areas. The respective legislative roles and responsibilities are shown in Table 4.

Table 4: Roles and Responsibilities under the *Land Protection* (*Pest and Stock Route Management*) *Act 2002*.

Area	Responsible for:
Department of Natural Resources, Mines & Energy	1. Identifying area to which Councils should direct their efforts; 2. providing technical and management information and staff training to Council personnel; 3. controlling pests on Un-allocated State Land (USL); and 4. ensuring that declared pest plants and animals are controlled on land under the control of other Government Departments.
Shire Councils & Land Trusts	1. Ensuring that declared plants and declared animals are controlled within their area (Section 64(a)) and on lands under its control (Section 76); 2. preventing the introduction and spread of declared plants and animals within their area (Section 64(b)); and 3. enforcing relevant provisions of the *Land Protection (Pest and Stock Route Management) Act 2002* (Section 64c and Section 81/83).
Landholders	1. Controlling declared plants and declared animals on their own land.

To assist with the administration of the *Land Protection (Pest and Stock Route Management) Act 2002* a Memorandum of Understanding has been drawn up between the Queensland Department of Natural Resources and Mines and the Local Government Association of Queensland Incorporated. This document clearly lays out the responsibilities of the respective parties.

While the above legislation is recognised as law, community feedback reflects a desire for a genuine Cape-wide commitment beyond legislative frameworks and that statutory provisions be utilised as a resource rather than as a stick. Stakeholders seek realistic assessments of available

resources and extenuating issues (e.g. land inaccessible due to flooding) in determining recognition of compliance. The vast areas, remoteness, difficulty of access and limited resources are all recognised factors that contribute to the challenges faced by landholders in addressing pest management issues.

There are several other Commonwealth and State laws that may need to be taken into account when developing pest management plans. Some of these may include:

Area	Responsible for:
Commonwealth	*Environmental Protection and Biological Diversity Conservation Act 1999.*
State	*Nature Conservation Act 1992*

56 FROGS FROM ONE PIG STOMACH

Photos: CYWAFAP

THE VISION

The long-term vision for pest management on CYP has evolved over several years with input from a wide range of stakeholders via CYPPAC. The vision for pest management on CYP stated below along with an explanation of the development of the statement.

All stakeholders have the commitment to and capacity for ongoing coordinated and effective pest management to support sustainable ecological integrity, economic development and social well-being

Development of the Vision

Leading up to the Strategic Directions Workshop several statements regarding pest management on CYP had been considered. These included Desired Outcome 2.2 from CYPLUS Stage 2: Strategy 2 – "No loss of species or ecosystems and a reduction in threatening processes with priority being given to those affecting threatened species and critical habitat"; the objective of Strategy 3, Controlling Feral Animals and Weeds, from CYP Natural Heritage Trust Plan; and the overall goal of the NHT Cape York Weeds and Feral Animals Project (CY98.19) "to involve all stakeholders in on-going, coordinated and effective pest management for long-term and sustainable ecological and economic growth in the region." Taking all these into account a draft vision for a Cape-wide pest management strategy was developed at the CYPPAC Future Directions Workshop held in Coen in June 2003 as "All stakeholders have the capacity for on-going coordinated and effective pest management to support sustainable ecological integrity, economic development and social well-being".

The final version of the vision was developed at the workshop held to develop this strategy. In developing the vision the group were mindful of the need to involve all stakeholders and ensuring that they have the tools necessary to implement pest management. Differing needs, cultures and values of stakeholder groups were also recognised, as was the need to achieve sustainable ecological and economic and development.

The components of this vision then formed the basis for the strategic goals of this strategy.

Community Pest Management Planning Workshops

Photos: CYWAFAP

THE PRINCIPLES OF PEST MANAGEMENT

The *Land Protection (Pest and Stock Route Management) Act 2002* states that the principles of pest management for land are as follows:

Integration
Pest management is an integral part of managing natural resources and agricultural systems.

Public Awareness
Public awareness and knowledge of pests must be raised to increase the capacity and willingness of individuals to manage pests.

Commitment
Effective pest control requires a long-term commitment to pest management by the community, industry groups and government entities.

Consultation and partnership
Consultation and partnership arrangements between local communities, industry groups, State government agencies and local governments must be established to achieve a collaborative approach to pest management.

Planning
Pest management planning must be consistent at local, regional, State and national levels to ensure resources target priorities for pest management identified at each level.

Prevention
Effective pest management is achieved by:

a) preventing the spread of pests, and viable parts of pests, especially by human activity; and
b) early detection and intervention to control pests.

Best Practice
Pest management must be based on ecologically and socially responsible pest management practices that protect the environment and the productive capacity of natural resources.

Improvement
Research about pests, and regular monitoring and evaluation of pest control activities, is necessary to improve pest management practices

Estuarine crocodile nest destroyed by pigs

Photo: NRM&E

STRATEGIC GOALS

Eight strategic goals and related objectives (with strategic actions) have been developed to achieve the vision and guiding principles. In March 2004, a second strategy development workshop was held in Cairns with the following goals being listed according to priority.

1. **COMMITMENT**

   Secure a Cape-wide commitment and ownership, by all stakeholders, to on-going pest management beyond legislative requirements.

2. **STRATEGIC PLANNING FRAMEWORK AND MANAGEMENT**

   That the strategic directions for pest management address the needs of all stakeholders.

3. **PREVENTION and EARLY INTERVENTION**

   That the establishment and spread of pest species is prevented.

4. **EFFECTIVE MANAGEMENT SYSTEMS**

   That integrated systems are developed to manage the impact and spread of pests based on best management practices.

5. **COMMUNICATION**

   That effective communication and information exchange between all stakeholders is maintained.

6. **RESOURCING**

   That resources are acquired to implement pest management on CYP.

7. **KNOWLEDGE, EDUCATION and TRAINING**

   That stakeholders acquire the knowledge and skills to implement best practice for pest management.

8. **INTEGRATION**

   That pest management is aligned with other relevant regional, State & National Strategies.

THE STRATEGIC PLAN

GOAL 1: COMMITMENT

Secure a Cape-wide commitment and ownership, by all stakeholders, to on-going pest management beyond legislative requirements

Background

Stakeholder commitment is an essential part of successful implementation of any plan. Coordination at all levels including State, regional, catchment and local government is necessary to maximise cooperation and use of resources for effective pest management. To find solutions to pest management problems a long-term commitment by all stakeholders is necessary given the broad scope and nature of pest issues. Land managers need to recognise that effective pest management is not a costless, quick or easy process and often requires a long-term approach. State managed land is often perceived to harbour pests with little resources made available for control. The current legislation requires all landowners to control declared pests on their lands.
The community of CYP has already demonstrated a significant commitment toward pest management with the formation of CYPPAC. This community-based committee includes representation of all landholders in CYP and meets on a regular basis to provide strategic direction to the NHT funded Weeds and Feral Animals Program. It also makes other recommendations relating to pest management issues on CYP. This group has been instrumental in the development of this Strategy.

The following tables have been prioritised at stakeholder workshop. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

1.1 To achieve long-term stakeholder commitment to address pest management issues

Strategic Action	By Whom	Priority
Encourage greater commitment from Government bodies to long term pest management (local, state, national)	**CYPPAC**, SIU, LM, SG	**High**
Promote the positive outcomes of long-term approaches to pest management and planning.	**CYPPAC**, SIU, LG, SG	**High**
Promote the advantages of property pest management plans and provide assistance for their development and implementation.	**SIU**, CYPPAC, CG SG, AG, LG	**High**
Promote the advantages of pest management plans for Indigenous Communities and provide assistance for their development and implementation.	**SIU**, CYPPAC, SG, AG	**High**
Encourage all land managers including Government to support a 'good neighbour' approach to pest management.	**CYPPAC, LM, LG, SG, AG**	**High/ Med**

1.2 To promote compliance with pest management legislation across all tenures

Strategic Action	By Whom	Priority
Ensure land managers achieve a maximum level of compliance with the means available to them.	**LG**, SG	**High**

1.3 To provide incentives for land managers to undertake control work on declared pests

Strategic Action	By Whom	Priority
Investigate and promote other forms of incentive to encourage management of pests	**SUI**, SG	**High**
Ensure incentives continue to be available for on-ground pest control where available.	**LG, SG, AG, SIU**	**High/ Med**

GOAL 2: STRATEGIC PLANNING FRAMEWORK AND MANAGEMENT

That the strategic directions for pest management address the needs of all stakeholders

Background

Community direction and feedback are essential to ensure pest management planning responds to the needs of all stakeholders within the region. To date the only formal mechanism for this to occur on CYP is through CYPPAC, a forum for all landholders on CYP. Representatives from the Deed of Grant in Trust (DOGIT) Communities, the Shires, landholders/pastoralists and relevant Government agencies meet three to four times each year. At present the terms of reference for this committee are centred on providing direction for CYP Weeds and Feral Animals Program and exclude non-landholder stakeholders. However discussions have already taken place to revise these terms of reference to enable CYPPAC to broaden its membership base and enable membership for all stakeholders. It was also recommended during the Strategy Development Workshop that the role of CYPPAC needed to evolve from an advisory service to one capable of decision-making.

This Strategy has been developed from stakeholder input through facilitation of workshops, dissemination of drafts and provision of feedback mechanisms to ensure the Strategy contains what the people want. This is the first step in ensuring ownership and must be maintained during the implementation phase.

The following tables have been prioritised at stakeholder workshops. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

2.1 To promote and implement a pest management planning framework

Strategic Action	By Whom	Priority
Complete development of and implementation of pest management plans for all Local Government and Indigenous Community areas on CYP and have plans approved by the Minister (as per the Act).	**LG & IC,** SIU, SG, CYPPAC	**High**
Ensure all pest management plans for Local Government and Indigenous Community areas receive Ministerial approval (as per the Act)	**LG,** SUI, SG	**High**
Develop a pest management plan for CYP based on Local Government and Indigenous Community pest management plans.	**SIU**, SG, LG, IC, CYPPAC	**High**
Seek formal approval for the CYP Pest Management Strategy to be recognised as a regional pest strategy by the Joint Steering Committee (State and Australian Government).	**CYPPAC**, SIU	**High**
Ensure reviews of pest management plans are undertaken as per legislative and policy requirements.	**LH**, **LG, IC**, SIU	**High**
Support the development and implementation of plans for State managed lands.	**SG,** CYPPAC, LG, LM	**High**
Develop and record pest specific management strategies for Rank weeds and feral animals.	**SIU, CYPPAC, SG**	**High/ Med**

2.2 To progress and refine the representative body for regional pest management

Strategic Action	By Whom	Priority
Ensure that an inclusive decision making process is in place that recognises and encompasses all stakeholders.	**CYPPAC**, LG	**High**
Ensure an effective and equitable decision making process is in place that is respectful of all stakeholder values.	**CYPPAC**, LG	**High**

2.3 To collaborate with all relevant stakeholder groups when developing management plans for specific species or localities

Strategic Action	By Whom	Priority
Ensure AQIS, NRM&E, DPI, EPA/QPWS are consulted when developing regional management plans or strategies.	**CYPPAC**, SIU, LG, SG, AG	**High**
Ensure relevant Catchment Groups and other community based groups are consulted during the development of any pest/location specific management plan.	**CYPPAC**, SIU, LG, SG, AG	**High**
Ensure all relevant Indigenous Communities and Traditional Owners who have a special interest in the species and/or area are consulted during the development of any pest/ location specific management plan.	**CYPPAC**, SIU, LG, SG, AG	**High**

Ensure all stakeholders with a commercial interest in the species and/ or area are consulted during the development of any pest/ location specific management plan.	**CYPPAC**, SIU, LG, SG, AG	**High**
Ensure all stakeholders with a conservation or research interest in the area are consulted during the development of any location specific pest management plans.	**CYPPAC**, SIU, LG, SG, AG	**High**

GOAL 3: PREVENTION AND EARLY INTERVENTION

That the establishment and spread of pest species is prevented

Background

A preventative approach to weed and pest management will ultimately provide savings to the community and Government in the long-term. All community members can play a role in preventing the spread of weeds and pest animals around CYP.

Accurate, timely identification and location of weeds and pest animals will enable quicker responses to new occurrences and will reduce the resources needed to eradicate or control such incursions. Procedures need to be established for all the community to be involved in monitoring. Such procedures will save time and resources and minimise the impacts. It is essential that contingency procedures be put in place and resourced to minimise the impact of new species (NR&M 2002b).

Weeds and pest animals present different levels of risk and hazards in different areas and productive systems. Both impact and cost are essential components in helping to define priorities for weed and pest animal prevention and management. Preventing the expansion of current weed and pest animal distributions and populations will greatly reduce the risk of further impact upon CYP values.

This goal does not apply to problem (native) animals, as it is generally not appropriate to limit their establishment and spread. Problem animals can be managed locally as individuals, or as populations, through the use of damage mitigation permits and commercial wildlife harvest permits. Consequently, this section does not apply to problem animals.

One tool increasing in popularity to reduce weed seed spread is the establishment of wash-down facilities. Eight sites around CYP have already been assessed as to their suitability for the establishment of a wash-down station/facility. This project needs to be followed through with the establishment of such facilities on CYP.

AQIS and Queensland DPI play an important role on CYP in preventing and early detection of foreign plant and animal material and diseases entering Australia. However, preventing the spread of pests already established in Queensland needs to be a priority for all land managers.

The following tables have been prioritised at stakeholder workshops. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

3.1 To promote identification and importance of early detection to the broader community

Strategic Action	By Whom	Priority
Promote community networking to assist in early detection of pest species new to the area.	**AG**, LG, CYPPAC	**High**
Increase public awareness of the potential impact of introducing new weed species from areas outside of CYP.	**SG**, AG, LG, IC, SIU	**High**

3.2 To promote hygiene methods to prevent the spread of pests

Strategic Action	By Whom	Priority
Establish wash-down stations/facilities on CYP	**AG**, SG, LG	**High**
Ensure Government departments, earth work companies, Local Government, the community and tourists, exercise a duty of care for limiting weed seed spread, when travelling throughout CYP.	**CYPPAC**, LG, SG, IC	**High**

3.3 To develop and implement standard methods to monitor the distribution and status of existing established pests

Strategic Action	By Whom	Priority
Develop a simple 'user friendly' monitoring system for weeds and pest animals.	**Research organisation**, SG, SIU	**High**
Encourage all pest managers to conduct monitoring.	**SIU,** SG, LG, LM, LH	**High**
Encourage open access and sharing of data.	**CYPPAC**	**High**

GOAL 4: EFFECTIVE MANAGEMENT SYSTEMS

That integrated systems are developed to manage the impact and spread of pests based on best management practices

Background

Weeds and pest animal invasions occur for a variety of reasons. As a consequence, it is unlikely that effective and sustainable management can be achieved by any one means. The use of an integrated suite of management tools, which may be used in a variety of situations for a range of issues, is increasingly being recognised as the preferred management option (NR&M 2002b).

All stakeholders should continue to advocate and adopt best management practices for all activities relating to pest issues. The principle of best management practice applies equally to all

activities. Management practices should be regularly reassessed and updated, based on the best scientific and technical information available at the time, to enable the most effective and efficient application of control options. Information on best practices needs to be accessible to all pest managers at all levels to ensure a consistent approach, and to maximise effectiveness while minimising risks to land managers and natural resources (NR&M 2002a).

The following tables have been prioritised at stakeholder workshops. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

4.1 To identify and target priority areas for control of pest species

Strategic Action	By Whom	Priority
Classify CYP into areas of rated actual and potential threat from weeds and feral animals based on conservation, cultural, and agricultural values, utilising available information	**SG**, CRC, SIU, CYPPAC	**High**
Encourage community involvement in managing pests in environmentally sensitive areas	**CG**, LG, SUI, SG	**High**

4.2 To promote new or improved pest management practices

Strategic Action	By Whom	Priority
Ensure new management practices are promoted to relevant land managers	**SG**, LG, SIU, CYPPAC	**High**
Inform the scientific community of potentially new biological control agents found locally	**SIU**, LM	**High**

4.3 To promote and adopt best practice for pest management

Strategic Action	By Whom	Priority
Ensure best management practices are promoted during educational programs	**SIU,** SG, LG, IC	**High**
Ensure information on best management practices for key species is readily available	**SG**, SIU, LG	**High**

GOAL 5: COMMUNICATION

That effective communication and information exchange between all stakeholders is maintained

Background
Effective communication, while being difficult to achieve on CYP, is essential for ensuring that up to date best practice and other management information is circulated to all land managers.

A Communication Plan (available from the CYWAFAPb or CYPPAC) was developed by staff of the CYWAFAPa and CYPPAC during 2001 and has the following aims:

- To ensure the CYWAFAP operates in a transparent manner;
- To ensure that all current and future stakeholders have an understanding of the objectives, programs and activities of the CYWAFAP and are informed of the Project's progress;
- To ensure that all interested stakeholders have the opportunity to participate in decision-making in the CYWAFAP;
- To improve communication between the Project and CYPPAC members, and support CYPPAC and its sub-committees in accessing appropriate and timely information to assist in its decision-making and Project implementation roles;
- To create an understanding amongst CYPPAC members of their advocacy role;
- To facilitate stakeholder access to the information held on the Project's Geographic Information System;
- To maximize community support for and involvement in the CYWAFAP;
- To build on stakeholder understanding of the accountability requirements of the CYWAFAP; and
- To encourage long-term maintenance of initiatives of the CYWAFAP.

Many of the specific strategies for communication with stakeholders have been implemented – regular reports to CYPPAC from the Project, newsletter, press releases, and, particularly, staff and CYPPAC members' ongoing communication with individual stakeholders and groups. This work has continued on during the second NHT project. It is clear that CYPPAC has a pivotal role to play in communications for pest management on CYP Peninsula.

While communication and awareness has improved greatly since the inception of the first Weeds and Feral Animals Project there is still a long way to go. All four of the working groups participating in CYP Pest Management Strategic Directions Workshop highlighted communication as a key element in development of the Strategy. In light of significant inroads into its implementation, the recent changes in NHT funding and the formation of a natural resource management board in the near future, it is timely that the current communications plan be reviewed. There are several impediments to effective communication on CYP especially at land manager level. These include but are not limited to remoteness, limited area specific media, language differences and limited on the ground expert personnel. Communication with Traditional Owner land managers of outstations has been identified as an area requiring special consideration.

The following tables have been prioritised at stakeholder workshops. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

5.1 To increase communication of pest issues between the landholders, government, industry, tourists and the broader community

Strategic Action	By Whom	Priority
Develop and maintain a CYP Pest Management web site	**SIU**	**High**
Develop pest information programme for tourism operators and the broader community	**SUI,** CYPPAC	**High/ Med**
Revise the current Communications Plan	**SIU**, CYPPAC	**Low**

5.2 To improve the exchange of ideas between stakeholders

Strategic Action	By Whom	Priority
Create forums for discussions and exchange of ideas	**CYPPAC**, LG, SG	**High**
Share and disseminate new developments in pest management amongst all stakeholders	**CYPPAC**, SUI, LG, SG, AG, IC	**High/ Med**
Nurture partnerships with adjacent NRM regional bodies e.g. Torres Strait, Northern Gulf, Wet Tropics	**CYPPAC**, SIU, ROCCY	**Med**
Establish and encourage working relationships with peak industry bodies (networking and using existing peak industry body newsletters etc) • Fisheries • Cattle • Agriculture • Mining • Tourism	**CYPPAC**, SIU. LG, LM	**Med**

5.3 Raise profile of pest management on CYP

Strategic Action	By Whom	Priority
Develop and disseminate information for tourists travelling through CYP	**SG**, LG, IC, CG	**High/ Med**
Present displays at public events	**SIU**, LG, CG	**Med**

GOAL 6: RESOURCING

That resources are acquired to implement pest management on CYP

Background

CYP is in a unique situation where input for pest management now could prevent major economic, environmental and social losses in the future. A minor investment in the next few years could save millions of dollars in remediation work (as we are seeing in other parts of Australia). To this end resources are required for all landholders (State Government Agencies, Local Government, Indigenous Communities, leaseholders and private land owners) to undertake pest management on CYP Peninsula to ensure the ecological and economic integrity is maintained for the future.

No Government, Council or landholder has sufficient resources to eradicate all pests. It is insufficient to just require Local Governments, Indigenous Communities and landholders to have pest management plans if effective management of pest problems is the desired outcome. Resources must be allocated for implementation of these plans. These resources can come from a variety of sources including Government grants, Incentive schemes, loan equipment, industry, sponsorship and landholder contributions.

At present there are 17 portable pig traps available for loan to landholders, however they are located in Cooktown and so the distribution area is restricted to the lower part of CYP. There are also five spray units purchased from NHT project funds available for loan by landholders/land managers. These are currently located at Musgrave, Coen, Pormpuraaw, Umagico and Cooktown.

An important part of pest management work on CYP is the undertaking of strategic on-the-ground control work and capacity building for the community. In many areas pest management is a new concept. The awareness developed during the Cape York Weeds and Feral Animals Project needs to be built upon to develop good pest management practices if sustainable management is to become a reality. This requires provision of training and mentoring as well as supplying technical advice on best management practices. This work needs to be funded on a committed long-term basis if the Government's aim of having all landholders on CYP undertaking their own pest management is to be a reality.

Implementation of this Strategy and pest management in general should be through a partnership approach that involves all major stakeholders. Stakeholder's capacity to deliver pest management outcomes should be taken into account when developing and implementing management programs (NR&M, 2002b). Stakeholders should also recognise that effective pest management is not a costless, quick or easy process and that long-term commitment and effort is required.

The following tables have been prioritised at stakeholder workshops. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

6.1 To retain existing capacities to manage weed and feral animals on CYP

Strategic Action	By Whom	Priority
Retain and utilise the local knowledge and expertise developed during the life of both NHT funded weed and feral animals projects	**SIU**, CYPPAC, LG, LM, IC	**High**
Ensure people with special skills in pest management on CYP are available and utilised	**SIU**, CYPPAC, LG, SG, RTO	**High**
Support Indigenous Communities seeking funding for full time pest management officers	**CYPPAC**	**High**
Ensure coordination between the SIU, Land and Sea Centres, Local Government Pest Management Officers and landholders	**CYPPAC**, SIU	**High**
Maintain education and training levels across all land managers	**CYPPAC**, SIU, RTO, LG, IC	**High**
Encourage and support pest management teams from Indigenous Communities wishing to undertake contract work on other lands	**CYPPAC**, SIU	**Med**

6.2 To source funding for the administration, planning and implementation of pest management activities.

Strategic Action	By Whom	Priority
Establish a working group to identify and capture funding.	**CYPPAC**	**High**
Develop an Investment Strategy, which prioritise issues and determines resources needed.	**CYPPAC**, SIU	**High**
Identify opportunities for sharing resources.	**LG**, IC, CYPPAC, SG, AG	**High**

6.3 To establish a workable and sustainable management structure

Strategic Action	By Whom	Priority
Ensure that CYPPAC remains the voice of the community on pest management in the structure of any NRM Board.	**CYPPAC**, SG	**High**
Ensure that CYPPAC is structured to operate within the funding available.	**CYPPAC**, SIU/Secretariat	**High**

6.4 To identify existing human resources and promote their role and responsibility in managing pests on CYP

Strategic Action	By Whom	Priority
Identify, promote and utilise local knowledge and expertise where applicable.	**CYPPAC**, SIU, LG, IC, CG, LH	**High**
Identify and promote specialists and organisations that can provide knowledge and assistance with pest management on CYP	**CYPPAC**, SIU, SG	**High**

6.5 To identify existing infrastructure for pest management and prioritise the acquisition and spatial distribution of additional equipment/ resources

Strategic Action	By Whom	Priority
Assess the location and suitability of current equipment available for loan by land managers	**SIU**, CYPPAC,	**Med**
Identify equipment needed and prioritise its acquisition	**CYPPAC**, SIU, LM, LG, IC	**Med**

6.6 To gain adequate information about the distribution of pest plants and animals on CYP

Strategic Action	By Whom	Priority
(1)Maintain and expand the CYP database of pest plant and animal distribution and abundance to incorporate monitoring data and (2) predictive modelling. (3) Link the GIS to the photo library	**SIU**	**High**
Establish a system for consistent reporting for pest plants, which standardises sites/locations and incorporates assessment of control work and monitoring of distributions	**SIU**, CYPPAC, SG	**High**

GOAL 7: KNOWLEDGE, EDUCATION AND TRAINING

That stakeholders acquire the knowledge and skills to implement best practice for pest management

Background

Pest management on CYP requires all those involved to have appropriate knowledge and skills. However, this knowledge and skill level needs to be practical and relevant to the situation at hand. The variation in stakeholder values and education level must be considered when developing any education/training program.

General weed and pest animal awareness was greatly enhanced on CYP during the life of the Cape York Weeds and Feral Animals Project. While it is recognised that not all stakeholders were supportive of the control measures undertaken, there are few who would admit that the knowledge of pest species, issues and impacts was not enhanced. This awareness raising has continued under the second project *Strategic pest planning, management and community capacity building in CYP* where individuals and Indigenous Communities have been exposed to the pest management planning process. A weed identification pocket book specific to CYP was produced with NHT funds and assistance from the Department of Natural Resources and Mines in 2001. This booklet has been disseminated across all stakeholders and many visitors and has been a huge asset in the education process.

Members of CYPPAC have identified training as a major issue for a number of years, especially in the Indigenous Communities. While it is desirable for training to be delivered from national

competency based training packages stakeholder needs are varied and programs need to be specifically targeted at the people requiring the training.

The following tables have been prioritised at stakeholder workshops. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

7.1 To enhance individual knowledge in pest management

Strategic Action	By Whom	Priority
Provide feedback on appropriateness of training packages and materials	**IC**, LH, SUI, RTO	**High/ Med**
Ensure that appropriate educational material is readily available and up to date	**SG**, LG, IC, CYPPAC, SIU	**High/ Med**
Provide mechanisms for the spatial distribution of knowledge throughout CYP	**SIU**, CYPPAC, SG, LG	**High/ Med**

7.2 To ensure individuals have the appropriate skills in pest management and control techniques

Strategic Action	By Whom	Priority
Provide high quality client specific training for stakeholders involved in pest management and sustainable land management	**SIU**, RTO, SG	**High/ Med**

GOAL 8: INTEGRATION

That pest management is aligned with other relevant regional, State & National strategies

Background

To maintain consistency when developing any pest management strategy other relevant documents and plans need to be consulted. There are a number of National and State level strategies that relate to pest plant and pest animal management that are relevant to CYP. To ensure pest management on CYP is identified as a priority natural resource management issue, integration with other natural resource management plans is essential (NR&M 2002b).

Currently there is no regional natural resource management strategy/plan for CYP, however this strategy will be integrated into this document when one is developed. In addition, as other CYP regional strategies (e.g. Fire) are developed, relevant sections also need to be incorporated into the pest planning process. This will ensure future investment in pest management is targeted at priority issues recognised at all levels of governance.

Whilst there are many natural resource based programs operating within the region, no framework currently exists to provide a central reference for the collation and storage of any natural resource management information specific to CYP. It is anticipated that the development of an NRM board will fulfil this role. However, in the absence of such a system, the potential for duplication by agencies and ineffective deployment and utilisation of resources remains high.

Relationships need to be established between those groups undertaking control work and the scientific community. This will enable research outcomes to be specifically targeted to control needs and enhance the development of best management practices. A combined effort will also enable more effective monitoring programs to be established.

The following tables have been prioritised at stakeholder workshops. The objectives appear in order from highest to lowest priority. The priority of the actions within each objective is listed in the priority column. In the following action tables under each objective the lead group responsible for ensuring the action is progressed is shown in bold. Other groups included are given in order of diminishing responsibility; however all should be involved in the action listed.

Objectives:

8.1 To integrate this strategy with state and federal pest management strategies and with local and regional natural resource management plans

Strategic Action	By Whom	Priority
Ensure that compliance with State and Federal pest management strategies is encompassed in the development of this strategy	**SIU,** LG, SG, AG	**High**
When developing regional pest management plans local Government and Indigenous community pest management must be incorporated	**CYPPAC**, SIU, SG,AG	**High**
Regional plans for other natural resource management sectors should be consulted when developing pest management plans	**SIU**, IC, LG, CG	**High/ Med**

8.2 To establish relationships between the scientific community and operational groups

Strategic Action	By Whom	Priority
Identify key contacts within the scientific and research community for weeds and feral animals and invite them to conduct presentations and workshops	**CYPPAC**, SIU	**High/ Med**

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Personal Communications

Ian Bell (2003) Scientist Queensland Parks and Wildlife Service

APPENDIX 1

Overview of Northern Australia Quarantine Strategy (NAQS):

OVERVIEW

Mission

The NAQS mission is to protect Australia's animal, plant and human health and the environment from quarantine threats arising from Australia's unique northern border by:

- identifying and evaluating risks;
- offshore and onshore monitoring;
- surveying for pests and diseases of quarantine concern;
- increasing public awareness of threats;
- inspecting and clearing goods and vessels; and
- collaborating with Australia's near northern neighbours.

Quarantine risks posed by Australia's northern coastline

The northern coastline creates quarantine risks for Australia. Issues of concern include:

- proximity to other countries with pest and disease profiles and agricultural health status different from Australia's;
- treaty arrangements with Papua New Guinea that allow the free movement of traditional inhabitants into and out of the Torres Strait Protected Zone;
- unauthorised entry into northern Australia by foreign nationals and fishing vessels;
- low population density;
- difficult terrain, with populations of cattle and feral animals and very extensive land use systems;
- attractiveness of the area to international yachting tourism; and
- continued movement of people, animals and goods eastwards within Indonesia, and the establishment of significant cattle populations on eastern Indonesian islands.

APPENDIX 2

List of CYPPAC Representatives as at June 2003

First Name	Last Name	Representing
Jeffrey	Aniba	Seisia Island Council
Mervyn	Bond	New Mapoon Community
Lawry	Booth	Mapoon Community
John	Clarkson	Environmental Protection Agency
Paul	Clemesha	Hope Vale Land & Sea Centre
Chris	Clifford	Lockhart River Land and Sea Management Centre
Daniel	Collins	Injinoo Land & Sea Centre
Nick	Curnow	Bamaga Island Council
Colin	Innes	Cook Shire Council
Anzac	Frank	Kowanyama Community Council
Victor	Gibson	Hope Vale Community Council
Marty	Glancy	Pormpuraaw Land & Sea Centre
Paul	Graham	Main Roads Department
Val	Halbert	Northern Region Landholders
Paul	Horrocks	Natural Resources and Mines
Colin	Hughes	Western Region Landholders
Peter	James	Natural Resources and Mines
Vacant		Kowanyama Land & Sea Centre
Mark	Peacock	Queensland Parks & Wildlife Service
Murray	Penter	Nanum Wungthim Land & Sea Management Centre
Mark	Pitt	Cook Shire Council
Neville	Pootchemunka	Aurukun Shire Council
John	Pritchard	Lockhart River Community
Bruce	Rampton	CYNHT Support Unit
Bill	Raymond	Western Region Landholders
Ann	Raymond	Western Region Landholders
George	Ropevarn	Injinoo Aboriginal Community Council
Helen	Rutherford	Cook Shire Council Alternate & Interim Chair
Peter	Sciberas	Wujal Wujal Community Council
Paddy	Shepherd	Northern Region Landholder
Pedro	Stephen	Torres Shire Council
Lachlan	Sutherland	Aurukun Land & Sea Centre
Charles	Woosup	Umagico Aboriginal Council

APPENDIX 3

MAJOR PESTS OF CYP
(Those causing significant economic, environmental or social impact)

Pest Animals of CYP Peninsula

Antelope – Indian Blackbuck	*Antilope cervicapra*
Brumbies (Feral horses) Wandering domestic horses	*Equus caballus*
Feral cattle	*Bos spp.*
Feral / wandering cats	*Felis catus*
Feral pigs	*Sus scrofa*
Rabbits	*Oryctolagus cuniculus*
Rusa Deer	*Cervus timorensis*
Dingoes	*Canis familiaris dingo*
Wild dogs Uncontrolled/mangy domestic dogs	*Canis familiaris*

Problem Animals of CYP Peninsula

Black and white cockatoos	*Calyptorhynchus banksii, Cacatua galerita*
Wallabies	Various species

Weeds of Cape York Peninsula

African Tulip Tree	*Spathodea campanulata*
Bauhinia	*Bauhinia monandra*
Bellyache Bush	*Jatropha gossypiifolia*
Calopo	*Calopogonium mucunoides*
Calotrope	*Calotropis procera*
Caltrop	*Tribulus terrestris*
Camphor Laurel	*Cinnamomum camphora*
Candle Bush / Six O'clock	*Senna alata*
Cassod tree	*Senna siamea*
Castor Oil Plant	*Ricinus communis*
Cat's Claw Creeper	*Macfadyena unguis-cati*
Chinee Apple	*Ziziphus mauritiana*
Chinese Burr	*Triumfetta rhomboidea*
Native cobbler's peg	*Bidens pilosa* or *Glossocardia bidens*
Coffee Senna	*Senna occidentalis*
Common Sensitive Plant	*Mimosa pudica*
Devil's Fig	*Solanum torvum*
Elephant Creeper	*Argyreia nervosa*
Flannel flower	*Actinotus helianthi*
Gamba Grass	*Andropogon gayanus*
Giant Rat's Tail Grass	*Sporobolus pyramidalis* and *S. natalensis*
Giant Sensitive Plant	*Mimosa invisa*
	Gmelina philippensis
Goat's head Burr	*Acanthospermum hispidum*
Grader Grass	*Themeda quadrivalvis*
Phassa	*Grewia asiatica*
Hymenachne	*Hymenachne amplexicaulis*

Hyptis Hyptis pectinata	*Hyptis suaveolens* *Hyptis pectinata*
Japanese Sunflower	*Tithonia diversifolia*
Joy Weed	*Alternanthera* sp.
Khaki weed	*Alternanthera pungens*
Knobweed	*Hyptis capitata*
Lantana	*Lantana* spp.
Leucaena	*Leucaena leucocephala*
Lion's Tail	*Leonotis nepetifolia*
Madras Thorn	*Pithecellobium dulce*
Milkweed	*Euphorbia spp*
Mintweed	*Salvia reflexa*
Mossman River Grass	*Cenchrus echinatus*
Mother-in-Law's Tongue	*Sansevieria trifasciata*
Mother-of-millions	*Bryophyllum* spp.
Navua sedge	*Cyperus aromaticus*
Neem Tree	*Azadirachta indica*
Noogoora Burr	*Xanthium occidentale*
Parkinsonia	*Parkinsonia aculeata*
Parthenium	*Parthenium hysterophorus*
Pink Flowered Chinese Burr / Urena Burr	*Urena lobata*
Pond Apple	*Annona glabra*
Praxelis	*Praxelis clematidea*
Prickly Pear	*Opuntia* spp.
Red Convolulus	*Ipomoea hederifolia*
Rubber Vine	*Cryptostegia grandiflora*
Salvinia	*Salvinia molesta*
Sesbania Pea	*Sesbania* spp.
Sicklepod	*Senna obtusifolia* *Senna tora*
Paddy's Lucerne, Sida Retusa Spiny Head Sida Flannel Weed	*Sida rhombifolia* *Sida acuta* *Sida cordifolia*
Singapore Daisy	*Sphagneticola trilobata*
Snakeweed	*Stachytarpheta cayennensis* *S. jamaicensis* *S. mutabilis*
Starburr	*Acanthospermum hispidum*
Stinking passionflower	*Passiflora foetida*
Common Thornapple	*Datura stramonium*
Thunbergia	*Thunbergia grandiflora* *Thunbergia laurifolia*
Trefoil Rattlepod	*Crotalaria medicaginea*
Vetiver Grass (Excluding *Monto)*	*Chrysopogon zizanioides*
Water Hyacinth	*Eichhornia crassipes*
Wild gooseberry	*Physalis minima*
Yellow Oleander (cooktree)	*Cascabela thevetia*

Note: The plants and animals listed above have been derived from past survey work and may change in the future.

APPENDIX 4

LIST OF ATTENDEES AT THE STRATEGIC DIRECTIONS WORKSHOP

Pref	First Name	Last Name	Organization Name
Mr	Harry	Abrahams	Environment Australia
Mr	Ian	Adcock	Laura-Normanby Catchment Group
Mr	Jeffery	Aniba	Seisia Island Council
Ms	Fiona	Barron	Department of Natural Resources and Mines
Dr	Shane	Campbell	Tropical Weeds Research Centre
Mr	Paul	Clemesha	Hope Vale Aboriginal Council
Mr	Andrew	Congoo	Department of Natural Resources and Mines
Mr	George	Conrad	Ranger, Pormpuraaw
Ms	Gabrielle	Crowley	Queensland Parks & Wildlife Service
Ms	Ann	Creek	Coen Land and Culture Centre
Mr	Luke	Croton	Department of Natural Resources and Mines
Mr	Neale	Dahl	Comalco Aluminium Limited
Cr	Terry	Dukes	Cook Shire Council
Mr	Peter	Elliot	Department of Primary Industries
Mr	Marty	Glancy	Pormpuraaw Land & Sea Centre
Ms	Sue	Gould	Albatross Bay Catchment Group
Mr	Paul	Graham	Department of Main Roads
Mrs	Val	Halbert	Northern Pastoral Representative – CYPPAC
Ms	Francis	Hayter	QLD Mining Council
Mr	Eddie	Holroyd	West Coast CYP Traditional Land Owners
Mr	Paul	Horrocks	Department of Natural Resources & Mines
Ms	Louise	Hucks	Australian Quarantine Inspection Service
Mrs	Nikki	Hungerford	Cairns and Far North Environment Centre
Mr	Peter	James	Natural Resources & Mines
Mr	Jamie	Molyneaux	CYP Weeds & Feral Animals Program
Mr	Brian	Namai	Kawalagal Aboriginal Corporation
Mr	Vol	Norris	Kowanyama Land and Sea Management Office
Ms	Kerryn	O'Connor	The Wilderness Society
Mr	Simon	Orr	Indigenous Land Corporation
Mr	Mark	Peacock	Environmental Protection Agency
Mr	Murray	Penter	Nanum Wungthim Land and Sea Management Centre
Mr	Bruce	Rampton	CYNHT Regional Co-ordinator
Ms	Wendi	Rowlands	Wujal Wujal Aboriginal Council
Cr	Helen	Rutherford	Annan-Endeavour Catchment Group
Ms	Mary	Shepherd	Landholder/CYPPAC
Mr	Lachlan	Sutherland	Aurukun Land and Sea Management Centre
Mr	Norm	Tayley	Wujul Wujul
Mr	Peter	Thompson	CYP Peninsular Development Association
Ms	Margaret	Upite	Bloomfield-Yalanji Catchment Group
Mrs	Cathy	Waldron	CYP Weeds & Feral Animals Program
Mr	Mervyn	Wales	Nanum Wungthim Land and Sea Management Centre