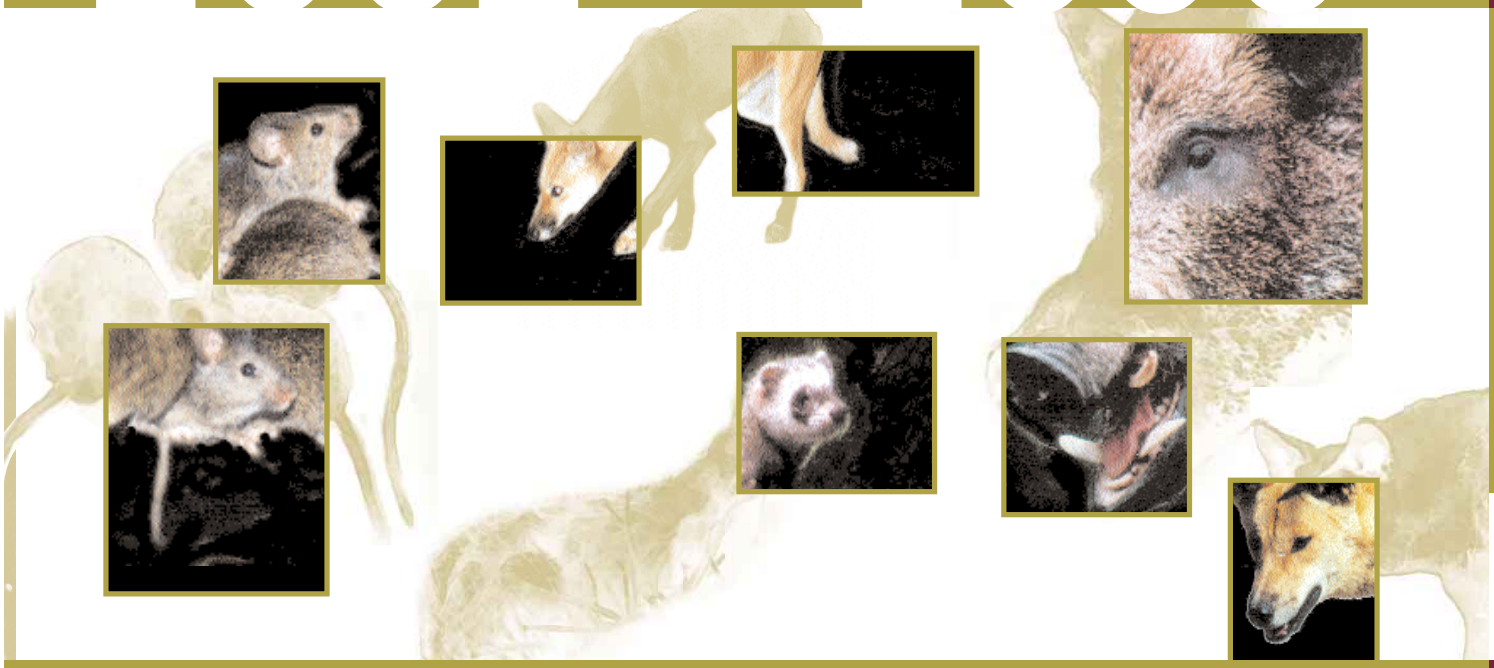
# Queensland pest animal strategy 2002 – 2006



Queensland Government

# Acknowledgments

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Queensland Farmers' Federation

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CANEGROWERS

Queensland Conservation Council

Queensland Dairyfarmers Organisation

Wildlife Preservation Society of Queensland

RSPCA

Landcare and Catchment Management Council

Indigenous Land Corporation

Rural Lands Protection Board

tertiary institutions

local government officers and elected representatives

State agency officers

many other community and industry members.

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# 2002–2006

2002-2006

# Foreword

Pest animals such as rabbits, feral pigs and wild dogs are well known for the devastation they wreak on the environment and primary industries.

Major progress has been made in terms of understanding and controlling pest animal species and the circumstances that lead to their impacts. A well-planned, coordinated effort between the many sectors of the community, industry and government will help to build on this success.

The *Queensland Pest Animal Strategy 2002-2006* provides an essential framework for the improved management of pest animals across the State. This framework needs to be supported by commitments from the Queensland Government, local government, industry, community, and individual stakeholders to work collaboratively to reduce the impacts of these pests.

I commend all those who have been involved in the development of the Strategy and hope that many others will be inspired by this common-sense approach to managing this significant environmental and community problem.

STEPHEN ROBERTSON
Minister for Natural Resources and Minister for Mines

# Summary

The *Queensland Pest Animal Strategy* establishes a State-wide planning framework to provide clear direction to Government, community, industry and individuals for the management of pest and problem animals across the State.

Complementary and consistent action plans need to be developed and implemented at the regional and local levels. This is best achieved through a common framework addressing current and potential pest problems that impact on primary industries, ecosystems, human health and the community enjoyment of our natural resources.

The Strategy distinguishes native species that are problem animals in some situations from pest animals that are exotic and/or declared species. The Strategy cannot provide a definitive list of pest and problem animals but it does cover the following species or groups of species:

- introduced mammals and reptiles which have pest impact, including species declared under the *Land Protection (Pest and Stock Route Management) Act 2002* (replaces the *Rural Lands Protection Act 1985*), for example, rabbits, feral pigs, and feral goats;
- introduced pest birds, for example, feral pigeons and Indian mynas;
- introduced amphibians, for example, cane toads;
- some native species in certain situations, for example, kangaroos, bats, native rats, native birds and locusts;
- exotic pest fishes.

In preparing this Strategy, management principles were considered for both pest and problem animals and incorporated into the desired outcomes, objectives and strategic action.

**The vision is:**

*Pest and problem animals have an acceptable level of impact on our community, the environment and production.*

**The mission is:**

*Establish and perpetuate cooperative management of the impact of Queensland's pest and problem animals.*

The vision and mission will be achieved by a regular planning process resulted in the six desired outcomes listed below. The process will raise awareness of the pest and problem animal issues so that ownership of the impacts is established. Before progressing further, there is a phase of gathering information, including monitoring and assessing impacts, so that decisions can be based on appropriate and adequate information. A strategic planning framework is then developed to manage both emerging pest and problem animals before they become major issues, and to also manage the impacts of the existing pest and problem animals. By the final stages, all of the stakeholders recognise and accept their roles and responsibilities and are committed to long-term coordinated pest and problem animal management.

The Strategy will be reviewed at the end of 4 years. Its effectiveness will be monitored and assessed by performance indicators predetermined by a management committee.

## Six Desired Outcomes

| | |
|---|---|
| **1.** | **Awareness and Education**<br>*Stakeholders are informed, knowledgeable and have ownership of pest animal management.* |
| **2.** | **Monitoring and Assessment**<br>*Reliable information is the basis for decisionmaking.* |
| **3.** | **Strategic Planning Framework and Management**<br>*Strategic directions are developed and maintained, with an acceptable level of stakeholder ownership.* |
| **4.** | **Prevention and Early Intervention**<br>*Establishment and spread of pest animals are prevented.* |
| **5.** | **Effective Management Systems**<br>*Integrated systems for successfully managing the impact of pest and problem animals are developed and widely implemented.* |
| **6.** | **Commitment, Roles and Responsibilities**<br>*All stakeholders are committed to, and undertake, coordinated management of pest animals.* |

The Strategy will be successfully implemented when the objectives and strategic actions are reflected in the outcomes of planning initiatives from all levels for natural resource and pest management.

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# Interpretation

## DEFINITIONS

### 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 is undertaken by authorised officers or under permit.

### Pest animal

An exotic animal, causing detrimental impacts on the environment, industry or community activities. A pest animal may be a declared animal.

### Declared animal

Animals proposed to be declared pests under the *Land Protection (Pest and Stock Route Management) Act 2002* (replaces the *Rural Lands Protection Act 1985*). Land managers are responsible for the control of declared animals on their land.

### Acronyms

| | |
|---|---|
| BA | Biosecurity Australia |
| CG | Community groups |
| DDMRB | Darling Downs–Moreton Rabbit Board |
| IN | Industry organisations |
| LG | Local governments |
| LH | Landholders |
| MC | Management Committee |
| QPWS | Queensland Parks and Wildlife Service |
| SG | Queensland State Government and agencies |
| EDU | Tertiary and other education facilities |

# 1.0 Introduction

## 1.1 Background

**Pest animals** can come from any animal group (mammals, birds, reptiles, amphibians, crustaceans, insects). Many of Australia's pest animals were deliberately introduced because they were thought to be useful or valuable. Others were unintentionally introduced. Now, many exotic animal species have established wild populations that have an adverse impacts on the community and environment. In Queensland, there are at least 11 exotic birds, 1 amphibian, 2 reptiles, 16 exotic fishes and 19 mammal species with naturalised populations.

Pest animals can be categorised in many different ways. It is useful to define pest animals by the objectives of management. This process groups the species as either native or exotic and identifies the level and context of the impacts it causes.

**Declared animals** are the pest animals proposed under the *Land Protection (Pest and Stock Route Management) Act 2002* (replaces the *Rural Lands Protection Act 1985*).

Declared pest animals cause, or have potential to cause, a significant and wide-ranging impact. Declared pest animals include a wide variety of exotic species, such as all mammals and reptiles not native to Queensland, with exceptions for common domestic animals. The most commonly recognised declared animals include feral pigs, dingoes and their hybrids, wild dogs, rabbits, foxes and feral goats. There are other less commonly known declared pests such as ferrets and locusts.

Declaration imposes a responsibility upon landholders to control pests and to prevent or restrict the keeping, sale or release of these pests. The Act also categorises each animal according to the degree of control required and this provides firm guidance on how to manage the pest.

**Exotic animals** such as feral cats, cane toads or mynah birds are also significant pest animals with a wide-ranging impacts. They are not declared animals because there are no acceptable control measures and control is not feasible. However State and Commonwealth agencies do direct programs at these species in the form of research, education and awareness. The responsibility for control and management is left to commercial pest operators, community groups and individual landholders.

There are also native species that are sometimes considered to be pests in some situations. While still considered to be a pest, they are referred to as **problem animals** because their impacts are usually local, often temporary, and may involve only an individual or colony of animals. In 2000, the Queensland Parks and Wildlife Service (QPWS) was requested to locally control over 75 different native species that were problem animals — including cawing crows, snakes and possums in domestic houses, and crocodiles in estuaries. The QPWS manages these problem animals by using conservation strategies for individual species and by using a range of mechanisms that focus on the individual animal or population.

While European settlers introduced and assisted the spread of exotic pest animals, their land management practices have also supported the rise of some native animal populations. Consequently, the local populations of some native animals sometimes reach unsustainable levels. Conflicts with human activities can quickly arise as a result of these population imbalances. In these instances the population imbalance is locally targeted and managed through the QPWS commercial harvesting licenses or damage mitigation permits.

The significant difference between native **problem animals** and what are generally accepted as **pest animals** (exotic) is the goal of management. Native species are managed for conservation goals whereas pest animals are managed for impact reduction, usually through some form of population control. Where the objective for control of feral pigs may be to significantly reduce the local population; for a colony of spectacled flying foxes causing problems in a public garden, the conservation goal may be to increase the distribution and population of the flying foxes but to manage the impacts by relocating

the particular roosting site. Similarly, the objective behind broad-scale, coordinated baiting of pastoral lands to control wild dog populations cannot be equated to the trapping and removal of individual saltwater crocodiles that threaten human activities in northern Queensland coastal towns. Conditions on damage mitigation permits and commercial wildlife harvesting licences restrict the numbers and types of problem animals that may be taken so that sustainable populations are regained and maintained rather than control regardless of the cost.

## Impacts

Sustainable land use is dependent on the retention of natural ecosystem functions to prevent natural resource degradation. Pest animals have potential to alter ecosystem function, reduce primary industry productivity and profitability, and seriously limit the long-term sustainability of the State's natural and agricultural landscapes. Pest and problem animals also impact on human and animal health. They can be a general nuisance to the community and most impact in more than one way.

**(a) Environmental Impacts**

Introduced pest species place considerable pressure on native biodiversity. The impacts of some are well documented while others are still unclear. In the instance of carp, the impacts have not yet been fully realised as carp are still expanding their range. Some pest animals impact on specific habitats or species, others; are more general and affect any number of species, ecological and physical processes or ecosystems. Overall, these impacts can lead to the reduction of native species and their habitats and in some cases lead to the extinction of native species. There are many examples of their impacts on biodiversity including:

- Direct predation: foxes and feral cats have been implicated in the decline or possible local extinction of at least 17 natives species listed as threatened or vulnerable. Many other species are also thought to be at risk from these predators.
- Loss of food and shelter species: rabbits, feral goats and feral pigs prevent the regeneration of, and destroy plant species that provide food and shelter to native species.
- Degradation of habitats: carp reduce the water quality; feral pigs introduce weed seeds; and rabbits assist erosion and land degradation
- Poisoning native animals: the decline of native predators such as quolls and monitors has been attributed to poisoning from cane toads;
- Spreading disease: the trade in aquarium fish may be the source of exotic diseases that have been implicated in the decline of some native frog species.
- Competition for shelter: Indian mynahs compete for the nesting sites of many birds and mammals.
- Competition for food resources: rabbits, feral goats and feral pigs compete directly with native species for food resources.

**(b) Economic Impacts**

The true cost of pest and problem animals to Queensland's economy is unknown and poorly researched, particularly in the areas of environmental and social costs. However, for agriculture, pest and problem animals reduce the viability of the industry. In 1996–97, the total value of Queensland's primary production was estimated to be $5.46 billion and accounted for 34% of Queensland's export income. Even without specific data on the impacts of all pest animal species, a reduction of agricultural production of 2% would cost more than $110 million annually. This is a conservative figure, as species such as feral pigs alone have been estimated to reduce grain production in Queensland by $12 million annually.

Some pest and problem animals have a direct impact on the livestock industries through predation of domestic livestock (dingoes, foxes and feral pigs), competition for resources (feral goats and sometimes macropods), or destruction of the natural resource through soil disturbance or alteration and removal of vegetation (rabbits and feral pigs).

Pest animals are carriers of many livestock and human diseases. If an exotic disease entered Australia, species such as feral pigs (a carrier of foot-and-mouth disease and African swine fever) and foxes (a carrier of

1.1

rabies) would be of particular concern.

Pest animals such as feral pigs, rabbits, locusts, mice and problem animals such as some macropods and native rats are also important pests of crops. They can destroy the crop, or part of the crop, and degrade the soil and water resources.

**(c) Social Impacts**

Sometimes pest and problem animals create a general nuisance and interfere with the liveability of the location, particularly in the urban and rural residential situation. These impacts are many and varied and can cost considerable sums of money. Familiar to most people are the seasonal swooping of nesting magpies, crows 'cawing', ibis raiding rubbish bins in parks and noise and droppings from flying foxes. Less obvious impacts include crocodiles arriving in estuaries and on beaches, and possums and pythons in the roofs of houses. Pest animals that create social problems include feral tomcats 'spraying' around homes and foxes predating domestic poultry and small pets. These types of impacts are increasing as urban and rural residential areas expand.

In rural areas some pest and problem animals may wander onto roads and create dangerous driving conditions. They may also damage infrastructure, for example hares chewing irrigation lines and mice or rats gnawing communication cables.

Pest animals may also impact on the community's enjoyment of their surroundings. Examples include the damage caused to nature-based tourism areas by feral pigs, and altered recreational fishing opportunities caused by exotic fish species establishing in water bodies.

## 1.2 Strategy purpose

The serious threat posed by pest and problem animals will only be effectively and efficiently managed through integration of existing knowledge and resources. The purpose of a Queensland Pest Animal Strategy is to establish a State-wide planning framework, which will address the environmental, social and economic impacts of Queensland's current and potential pest and problem animals.

Reducing the negative impact of pest and problem animals across Queensland is a huge challenge due to the scale of the problem which includes gaining community acceptance, who is responsibile and the complexity of the response required. This demands a planned approach at various levels including a whole-of-State approach.

The strategy was developed during extensive consultation with stakeholders through a Project Steering Committee (with peak stakeholder membership), a stakeholder Reference Panel and a small interdepartmental working group. Workshops for key stakeholders were held at Cairns, Mackay, Nambour, Roma, Longreach and Brisbane. A consultation draft strategy was produced and the submissions received were incorporated into the Strategy where appropriate.

The extensive involvement of stakeholders has led to optimal ownership and community endorsement of the Strategy because it reflects their priorities. The process also increased stakeholder awareness and commitment to pest management. In this, the Strategy goes beyond legal requirements and provides clear direction through:

- Defined objectives and identified priorities.
- Making the best use of optimal resources.

## 1.3 Scope

For this Strategy, the term pest animal shall refer to all exotic pest animal species and include any native species covered under the *Land Protection (Pest and Stock Route Management) Act 2002* (which replaces the *Rural Lands Protection Act 1985*). Native animals, which are sometimes considered to be a pest, will be referred to as problem animals in line with the management goals of the Strategy. In some instances the Strategy will specifically refer to declared animals, problem animals or pest animals.

The scope cannot provide a definitive list of pest or problem species but each jurisdiction will define their own pests and use the Strategy to manage them. Examples of the species or groups of pest and problem animals addressed by this Strategy include:

- Introduced mammals and reptiles which have pest impact, including species declared under the *Rural Lands Protection Act 1985*, e.g. rabbits, feral pigs, feral goats, locusts.
- Introduced pest birds, for example, feral pigeons and Indian mynahs.
- Introduced amphibians, for example, cane toads.
- Some native animals in some situations, for example, kangaroos, bats, native rats, native birds, and locusts.
- Exotic pest fishes.

Pest insect species such as mosquitoes and midges are not considered in the Strategy.

Non-endemic native fish are also not included on advice from DPI and in keeping with the *Control of Exotic Pest Fishes Strategy*.

## 1.4 Challenges

Significant challenges face stakeholders in minimising the impact of pest and problem animals in Queensland including:

- Recognition and finding new and more acceptable control practices.
- Greater awareness of the problem and solutions.
- Increased knowledge of pest animal distribution, ecology and impacts.
- Greater acceptance of responsibility by all landholders.
- Greater use of regulatory provisions.
- Improving coordination and planning.
- More rapid response to new pest animal problems.
- Limited economic incentives to manage pest animals.
- Establishing a position between public and private benefits in pest animal issues — for example, dealing with the perception of an animal as a resource versus that of a pest.
- Addressing pest animal management within the broader context of natural resource and catchment management.
- Increasing stakeholder confidence that pest animal management problems will be acted upon.
- Using current resources more efficiently and effectively.
- Addressing pest problems in both rural and urban areas.
- Improving the negative perception of State government landholders.
- Addressing animal welfare concerns.
- Accepting stakeholder perceptions and priorities for pest animal management.
- Learning to live with wildlife.

## 1.5 Context

The development of this Strategy will not result in any new regulatory requirement. Instead, it aims to build on existing and emerging planning processes to increase the efficiency and synergy of capacity building. Pest management is a component of sustainable land management so this Strategy cannot be a stand-alone document. To be most effective, it should be linked to other plans and strategies that address individual pest species and pests in general, and it should be linked to natural resource management regimes at a higher level.

The Queensland Pest Animal Strategy is supported by:

- National guidelines for managing vertebrate pests, produced by the Bureau of Rural Sciences, and endorsed by the Standing Committee on Agriculture and Resource Management (SCARM).
- Strong linkages across all levels of natural resource and pest management planning, strategy development and implementation.

Table 1 provides some examples of the scale and scope of various planning initiatives, their relationships, and how they rely on each other to achieve goals of both pest and natural resource management.

**Table 1. Context of the Queensland Pest Animal Strategy 2002–2006.**
Examples of initiatives that link to the Strategy at various planning levels.

| | Scope | | |
|---|---|---|---|
| **Scale** | **Resource Management** | **Pest Management** | **Pest Species** |
| **National** | National Action Plan for Salinity and Water Quality; National Strategy Conservation of Australia's Biological Diversity; National Rangelands Guidelines | Managing Vertebrate Pests – Principles and Strategies; Model Code of Practice for the Welfare of Animals – Feral Livestock Animals Destruction or Capture, Handling and Marketing | National Pest Animal Species Threat Abatement Plans; National Management Strategy for Carp Control 2000-2005 |
| **State** | Queensland Biodiversity and Natural Resource Management Strategy (proposed) | Queensland Pest Animal Strategy; Control of Exotic Pest Fishes Strategy | Problem Crocodile Conservation Plan; Queensland Mouse Management Strategy |
| **Regional or Catchment** | Natural Resource Management Strategy for the Queensland Murray–Darling Basin; Lake Eyre Basin Strategy; Condamine Catchment Strategic Plan | Central Highlands Pest Management Plan; QPWS Park Plans | |
| **Local Government** | Local government planning schemes | Local government area pest management plans | Cooloola Shire Cat Management Plan |
| **Property** | Property management plans | Property pest management plans | |

# 1.6 Principles

The development and implementation of this Strategy are based on the management principles for pest animals below. However, the management of problem animals requires a balance between conservation priorities and species management. Effective education, planning, and in some cases research, is required to ensure conservation of the native species while implementing strategies to minimise localised impacts.

**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.

**Commitment**

Effective pest management requires a long-term commitment to pest management by the community.

**Public awareness**

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

**Prevention**

Effective pest control is achieved by:

- Preventing the spread of pests, and viable parts of pests, by human activity.
- Early detection and intervention to control pests.

*Note: conservation goals usually encourage the spread of problem animal species using a variety of strategies, including human-assisted translocation.

**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.

**Integration**

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

**Planning**

Pest management planning must be consistent at local, regional, State and national levels to ensure:

- Domestic and international obligations about pest management are met.
- Pest management resources are used to target priorities identified under domestic and international obligations.

**Improvement**

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

The primary responsibility for pest animal management rests with the land manager but sometimes the problem is far greater than the capacity of the individual and requires collective action. If necessary, enforcement measures may be used to ensure all land managers fulfil their duty of care in controlling declared animals on their land. Enforcement is the last option, and undertaken only after other avenues have failed. However, in managing problem animals the legislation is drafted to ensure everyone has a duty of care for the conservation of species and to prevent land managers from acting without authorisation. There are no enforcement measures for the control of many pest animals and the management of them must rely on other persuasive measures.

# 2.0 Strategic plan

## 2.1 Vision

*Pest and problem animals have an acceptable level of impact on our community, the environment and production.*

## 2.2 Mission

*Establish and perpetuate cooperative management of the impacts of Queensland's pest and problem animals.*

Six desired outcomes, related objectives and strategic actions have been developed to achieve the Vision and to provide the means for undertaking the Mission:

- *Stakeholders are informed, knowledgeable and have ownership of pest animal management.*
- *Reliable information is the basis for decisionmaking.*
- *Strategic directions are developed and maintained, with an acceptable level of stakeholder ownership.*
- *Establishment and spread of pest animals are prevented.*
- *Integrated systems for successfully managing the impacts of pest and problem animals are developed and widely implemented.*
- *All stakeholders are committed to, and undertake, coordinated management of pest animals.*

# 2.3 Awareness and education

**Desired Outcome:**

*Stakeholders are informed, knowledgeable and have ownership of pest animal management.*

**Background:**

For pest and problem animals to be suitably managed, there needs to be broad stakeholder awareness and knowledge of the problem, and the management issues. For pest animals in particular, ownership of the problem is important for meaningful results. Part of the solution to managing pest animals is raising public awareness of the cause and finding an appropriate response to the problems. The level of education on pest and problem animals is increasing, yet more targeted public education is needed. A higher public profile for the problems caused by pest animals is also needed. Increased industry support for pest animal management is seen as one possible approach to increase landholder awareness.

Communication becomes a key to managing the issues surrounding problem animals in particular. The provision of information about native species that have increased their numbers, or are in conflict with human activities will help assess if there is a real or perceived problem. Extension of this information enables balance between conservation outcomes and reducing the local impact.

Often people are not aware of the impact pest animals have on the natural environment or primary production. People may not also realise that they may be contributing to the problem through their own actions. The urban community is increasingly in contact with wildlife and problem animals, and awareness of the consequences of these interactions may reduce many of the current and potential impacts. Lack of awareness by the urban community of rural pest problems is seen as a drawback to increased broad-scale community acceptance of some control options. Within the urban area and urban fringes there are many pest and problem animal issues that are hindered by lack of information and community awareness.

Landholders and other stakeholders need practical and relevant guidelines specifically for pest animal management. The trend towards multi-skilling in local governments may result in the loss of staff that are skilled in pest animal management. Currently, there is insufficient training provided for local government staff on legislation, enforcement procedures and identification of pests, especially potential pests. This is seen as one of the limitations to increased effective pest animal management. In some cases, pest animal control operators or contractors may not be competent.

Social and cultural constraints have been identified as potential limiting factors in pest management. Often technical, economic and legal issues can be readily addressed, but social issues may need to be addressed separately, and in a different way. Indigenous people perceive and manage certain animals in a different way to many other members of the community; some pests may have cultural, economic or traditional use value, which needs careful consideration when managing those animals. For example, donkeys may have religious significance to people raised on Christian missions; horses have value for stock work; rabbits and feral pigs provide a source of meat; and dingoes are important in the cosmology of Aboriginal people from some areas.

## 2.3.1 Availability of information

**Objective:**

*To make relevant pest and problem animal information accessible to all stakeholders.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.3.1.1 | Establish clear points of contact for access to information. | SG |
| 2.3.1.2 | Develop, implement and regularly review an information program. | SG |
| 2.3.1.3 | Make use of all current communication technologies including print and electronic media and the Internet. | SG, LG |
| 2.3.1.4 | Develop and disseminate enhanced information packages to all sections of the community. | SG, LG |
| 2.3.1.5 | Provide regular information dissemination of pest animal research projects and results. | SG |

Note: Refer to list of acronyms p.v

## 2.3.2 Awareness

**Objective:**

*To increase community, industry and government awareness of pest and problem animals and their impact.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.3.2.1 | Develop a pest animal awareness program. | SG |
| 2.3.2.2 | Encourage public support for pest and problem animal management activities through awareness programs. | SG, LG |
| 2.3.2.3 | Improve formal and informal networks at all levels, including supporting community-focused natural resource management programs. | IN, LH, CG |
| 2.3.2.4 | Publicise the impacts of pest and problem animals on people. | SG, LG |
| 2.3.2.5 | Provide warnings where human activities create favourable conditions for pest and problem animals. | SG, LG |
| 2.3.2.6 | Develop and promote a balanced perspective on controversial pest and problem animal related issues. | SG, CG, LG |
| 2.3.2.7 | Establish linkages and methodologies to raise awareness of pest and problem animals to change management practices and to promote integrated property development. | SG, LG, CG, EDU, IN |

## 2.3.3 Education

**Objective:**

*To enhance individual knowledge of pest and problem animal management.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.3.3.1** | Develop and incorporate pest and problem animal content into school curricula, including provision of project kits. | SG |
| **2.3.3.2** | Display educational material at relevant locations. | SG, LG |
| **2.3.3.3** | Increase tertiary education capacity to meet Queensland's future needs in pest animal science and sustainable development | EDU |

## 2.3.4 Training

**Objective:**

*To ensure that individuals are highly skilled in pest and problem animal management.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.3.4.1** | Provide high quality specific training for all individuals involved in pest and problem animal management and sustainable land management. | SG |
| **2.3.4.2** | Conduct training based on national competencies to meet regional and organisational requirements. | SG, LG, EDU, IN, LH |

# 2.4 Monitoring and assessment

**Desired Outcome:**

*Reliable information is the basis for decision making.*

**Background:**

Reliable data is needed to ensure that pest and problem animals are managed in a holistic and long-term way. While there is an increasing amount of technology and information available on the distribution, abundance and impact of particular pest and some problem animals, there is scope to increase this information base and make better use of existing and new technologies.

Increasing monitoring and mapping, conducted as part of pest animal management programs, can help to determine the scope of the problem. Compatible spatial and time data-collection systems and sharing between agencies ensures consistency.

Collecting all available information on pest and problem animals, including a cost/benefit analysis of alternative management options, helps with objective decision making. Similarly, the evaluation of the potential impact of minor and potential pests provides the information needed to deal with pests before they cause significant impacts.

Research is only being conducted on the biology of some pest and problem animals. The research priorities are routinely reviewed but are dependent on sources of funding.

Quantification of environmental and social impacts of pest animals is essential for effective and efficient land and pest animal management.

Monitoring activities encompass a range of natural resources issues that enable integrated property management to be undertaken. Presently, there is limited baseline data on the physiology, biology, and ecology of some pest and problem animals, which is crucial in developing appropriate management strategies and techniques.

## 2.4.1 Monitoring and mapping

**Objective:**

*To acquire and make data available on the distribution, abundance and current management of pest and problem animals.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.4.1.1 | Develop and establish monitoring systems appropriate for all levels of pest and problem animal data collection. | SG, LG, EDU, CG, LH |
| 2.4.1.2 | Develop and promote standardised protocols for data collection, validation and dissemination. | SG |
| 2.4.1.3 | Develop and promote a collaborative program for collection of data on distribution, abundance, impacts and management status. | SG, LG |
| 2.4.1.4 | Increase the information provided to, and linkages with, the PESTINFO database and increase access to the database. | SG, LG |
| 2.4.1.5 | Develop and establish monitoring programs for all pest animal management activities. | SG, EDU, LG, LH |

## 2.4.2 Biology and impacts

**Objective:**

*To ensure that individuals are highly skilled in pest and problem animal management.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.4.2.1 | Develop better understanding of basic biology and ecology of priority pest and problem animals through targeted-research programs. | SG, EDU |
| 2.4.2.2 | Quantify the impact of priority pest and problem animals on economic activities, natural ecosystems, and human and animal health. | SG, LG, EDU, IN |
| 2.4.2.3 | Model the population of pest and problem animals and utilise in impact predictions. | SG, EDU |

## 2.4.3 Pest animal assessment

**Objective:**

*To determine policy and priorities for managing pest and problem animals based on sound scientific knowledge.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.4.3.1** | Prioritise needs for research on pest and problem animals, including potential pests and 'new' situations for old pests. | SG, EDU |
| **2.4.3.2** | Undertake an annual review of priority pest and problem animals in Queensland to assess progress and future needs, and integrate results. | SG, LG, EDU, IN, LH |
| **2.4.3.3** | Determine 'true' costs of pest and problem animals (environmental, economic and social) as a basis for prioritisation. | SG, LG, EDU, IN, LH |
| **2.4.3.4** | Develop and promote effective systems to prioritise pest and problem animals for use at all levels. | SG, EDU, IN, LG, LH, CG |

## 2.4.4 Community attitudes

**Objective:**

*To develop an understanding of community attitudes towards pest and problem animals and their management.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.4.4.1** | Assess community and individual attitudes to pets as pest animals and native species as problem animals. | SG, EDU |
| **2.4.4.2** | Determine what makes people change their practices. | SG, LG, EDU, IN |
| **2.4.4.3** | Investigate options to promote compliance. | SG, EDU |

# 2.5 Strategic planning framework and management

**Desired Outcome:**

*Strategic directions are established and maintained, with an acceptable level of stakeholder ownership.*

As shown in table 1 (see page 5), management of pest and problem animals sits in the wider context of natural resource management. Table 1 shows how synergies and efficiencies may be achieved by linking the action of this Strategy to processes at all other levels. Natural resource management strategies are most effective if they extend to the property level, where, in day-to-day operations, the landholder integrates a range of strategies into property management plans. However, there are different management priorities across land uses that impinge upon successful pest and problem animal management. Also a perceived overlap of government roles has led to confusion among stakeholders over service provision.

Where pest animals cross all administrative and land tenure boundaries, all problem animals are managed through initiatives of the QPWS only.

Community leadership and greater industry involvement in the planning and development of strategies are recognised as a key to maximising the benefits of pest management across the community. A system of setting priorities for pest animal management is critical to ensure that resources are focused to maximise benefits of management. For a strategic approach to pest animals, communication and cooperation between landholder groups, industry, local governments and State government departments is necessary to achieve common goals and priorities. Local government area pest management plans offer a 'partnership' mechanism to achieve this level of coordination and efficiency, but further development and implementation of the plans are required.

Legislation and policy provide the 'rules' and guidelines for pest and problem animal management in Queensland. Legislation can only work successfully where there is a high level of public awareness and broad cooperation on management issues. It is important that local action plans and policies gain the voluntary support of the community rather than relying heavily on enforcement to achieve objectives.

Both the legislation and policy need to be easily understood and adopted, and implemented by the general public. These should be consistent with the needs and aspirations of the stakeholders. Traditional owners should be consulted on the potential impact of pest animals on the heritage value of significant sites, and on ways that these animals should be treated in planning processes.

## 2.5.1 Planning

**Objective:**

*To promote and implement a pest and problem animal management planning framework.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.5.1.1 | Complete development and implementation of pest management plans in all local government areas. | LG |
| 2.5.1.2 | Develop and implement conservation plans for problem animals under the *Nature Conservation Act 1992.* | SG |
| 2.5.1.3 | Develop pest animal components within property management planning. | SG, LG, LH |
| 2.5.1.4 | Produce pest animal management plans for individual species. | SG |
| 2.5.1.5 | Encourage the preparation of a national pest animal strategy. | SG |
| 2.5.1.6 | Develop and implement pest animal management plans for State-managed lands. | SG |

## 2.5.2 Holistic management

**Objective:**

*To integrate pest animal management with other property, community, industry and government planning processes.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.5.2.1 | Ensure that relevant resource management plans have a pest animal component. | SG, EDU |
| 2.5.2.2 | Make certain that two-way linkages across all planning activities are identified and maintained. | SG, LG, EDU, IN |
| 2.5.2.3 | Ensure any proposed pest management project takes into consideration relevant native title implications. | SG, EDU |

## 2.5.3 Management of the Strategy

**Objective:**

*To implement and evaluate the Queensland Pest Animal Strategy.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.5.3.1** | Develop an implementation plan for this strategy. | MC |
| **2.5.3.2** | Establish a management committee to implement this strategic plan. | SG |
| **2.5.3.3** | Establish resource support for a Strategy Coordinator position to support the Management Committee. | SG |
| **2.5.3.4** | Monitor, review and evaluate this strategy regularly by the appropriate agency or group. | MC |

## 2.5.4 Legislative support

**Objective:**

*To develop legislation in support of improved coordination and participation in pest animal management.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.5.4.1** | Provide a legislative and policy framework which enables consistent management of the State's pest animal problem. | SG |
| **2.5.4.2** | Harmonise legislation and policy with other States and Territories where it is beneficial to Queensland. | SG |
| **2.5.4.3** | Define legislatively the managerial responsibilities for pest control on State land. | SG |

## 2.6 Prevention and early intervention

**Desired Outcome:**

*Establishment and spread of pest animals are prevented.*

**Background:**

A preventative approach to pest animal management will ultimately provide savings to the community. All community members can play a role in preventing the introduction and spread of pest animals around the State.

Accurate, timely identification and location of pest animals will enable quicker responses to new occurrences and will reduce the resources needed to eradicate or control the pests. Such procedures will save time and resources, and minimise the impacts. Suitably coordinated and well-resourced contingency procedures will minimise the current impact of new pest animals and prevent future impact.

Pest animals present different levels of risk and hazard in different regions and productive systems. Both risk and hazard are essential components in helping to define priorities for pest animal prevention and management. Preventing the expansion of current pest animal distributions and populations will greatly reduce the risk of further impact by pest animals across Queensland.

In the case of problem animals, it is not appropriate to generally try to prevent their establishment and spread, indeed, the reverse is often desirable so as to recover native range that has been lost. Problem animals are managed locally as individuals, or as populations, through the use of damage mitigation permits and commercial wildlife harvest permits. Consequently this section applies specifically to pest animals.

## 2.6.1 Prevention of introduction

**Objective:**

*To prevent the introduction of new pest animals or development of new pest situations.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.6.1.1** | Cooperate with other States and Territories to develop consistent or complementary legislation, policies and strategies on the keeping and introduction of exotic and pest animals. | SG |
| **2.6.1.2** | Prevent the entry of animals with extreme pest risk potential. | SG, BA |
| **2.6.1.3** | Ensure lower risk species are securely held in zoos and wildlife parks only. | SG |
| **2.6.1.4** | Engender support from governments, government departments, industry and the community for pest animal prevention. | SG, LG, IN, CG, LH |
| **2.6.1.5** | Prioritise the pest animals in each jurisdiction. | SG, BA, LG, LH |

## 2.6.2 Early detection and eradication

**Objective:**

*To prevent the establishment of potential pest animals.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.6.2.1** | Establish and maintain a close working relationship with all agencies placed to report a newly introduced pest animal. | SG |
| **2.6.2.2** | Advocate cooperation and participation in national and State management systems for disaster declaration, quarantine and restrictions. | SG |
| **2.6.2.3** | Promote federal and State administrative procedures for trade and permit conditions for pest and potential pest animals. | SG |
| **2.6.2.4** | Continue to utilise and enforce legislative provisions for the keeping of potential pest animals. | SG |

## 2.6.3 Containment

**Objective:**

*To minimise the spread of pest animals to new areas.*

| | Strategic Action | By Whom |
|---|---|---|
| **2.6.3.1** | Continue to utilise containment and exclusion options to prevent the spread of pest animals to new areas. | SG, LG, LH |
| **2.6.3.2** | Control and reduce the population of pest animals around containment areas. | SG, LG, LH |
| **2.6.3.3** | Establish an awareness campaign to highlight the need to prevent the human-assisted spread of pest animals. | SG, LG, IN, CG |
| **2.6.3.4** | Investigate application of common law as a means of discouraging the sale and exchange of pest animals. | SG, LG, EDU, IN, CG, LH |
| **2.6.3.5** | Ensure contingency plans are a condition placed on permits to keep potential pest and problem animals. | SG |

# 2.7 Effective management systems

**Desired Outcome:**

*Integrated systems for successfully managing the impact of pest and problem animals are developed and widely implemented.*

**Background:**

Promotion of legislative compliance through best practice management reduces the need for enforcement of pest and problem animal control.

All stakeholders should continue to advocate and adopt best practice management for all management activities for pest and problem animal. The principle of best practice management applies equally to all activities. Management practices should be regularly reassessed and updated, based on the best information available, to enable the most effective and efficient application of the control options. Information on best practice needs to be available to pest animal managers at all levels to ensure a consistent approach, and to maximise effectiveness while minimising risks to land managers and natural resources.

Traditionally, pest animal management has been based on the assumption that it is important to reduce pest populations. While this is true in some cases and is linked to impact, the critical element in pest animal management is minimisation of the impact of those pests whether they number 2 or 200. In other cases, a species does not become a pest until its numbers and impact reach an unacceptable threshold and population manipulation becomes necessary; this is particularly so with those native species which develop problem populations.

Currently some pest animal issues are not being adequately addressed. This is most obvious in, or near, urban and rural residential areas. Issues associated with control techniques, animal welfare and human risk are complex and exacerbated by a large number of differing opinions and attitudes. It is further complicated by community sentiment when the animal is a problem species. Also, pest animals currently not declared which cause impact on the environment, such as feral cats and pest birds, are not controlled in any coordinated or strategic way.

In the past, incentives have been used to a varying degree for pest animal management, with mixed results. Incentives should not be discounted, but their type and use need careful consideration.

Pest animal management legislation is backed by suitable enforcement measures; however enforcement should be the last option, used when other approaches have failed. Compliance and enforcement are generally not an issue for problem animals because control activities can only be undertaken by authorised officers unless permitted through commercial harvesting licences or damage mitigation permits.

## 2.7.1 Development of management practices

**Objective:**

*To develop new, or improve where necessary, existing pest and problem animal management practices.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.7.1.1 | Investigate additional, improved and alternative methods of control. | SG, EDU |
| 2.7.1.2 | Establish collaborative arrangements between State, national and international research providers. | SG |
| 2.7.1.3 | Utilise adaptive management programs as a means of obtaining management information. | SG, LG, EDU, IN, LH |
| 2.7.1.4 | Improve integrated management programs. | SG, LG, EDU, IN, LH |

## 2.7.2 Adoption of management practices

**Objective:**

*To promote and adopt best practice pest and problem animal management.*

| | Strategic Actions | By Whom |
|---|---|---|
| 2.7.2.1 | Develop, maintain and distribute documentation on best practice. | SG, LG, IN, EDU, CG, LH |
| 2.7.2.2 | Prepare a support system for pest animal management decisions to assist with identifying opportunities for effective and efficient control by landholders. | SG |
| 2.7.2.3 | Integrate pest and problem animal management into good land use and property management practices. | SG, LG, EDU, IN, LH |
| 2.7.2.4 | Apply adaptive management and action learning through land manager and government partnerships. | SG, LG, EDU, IN, LH |
| 2.7.2.5 | Develop benchmarks for the adoption of best practice. | SG, CG, EDU, IN, LH |

## 2.7.3 Population management

**Objective:**

*To reduce imbalances in pest and problem animal populations.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.7.3.1 | Implement land management practices that minimise imbalances in pest and problem animal populations. | SG, LG, EDU, IN, LH |
| 2.7.3.2 | Maintain and improve the current system for controlling imbalances in problem animal populations. | SG |
| 2.7.3.3 | Manage the current commercial harvesting of pest animals and evaluate the program's effectiveness in pest control and population reduction. | SG |
| 2.7.3.4 | Implement strategic habitat manipulation consistent with sustainable land management practices (including the built environment), and conservation plans to restrict pest and problem animal population growth. | SG, CG, LH |
| 2.7.3.5 | Predict major population fluctuations and identify opportunities for strategic preventative control programs. | SG, LG, EDU, IN, LH |
| 2.7.3.6 | Reduce pest animal populations inside exclusion barriers. | SG, LG, LH |

## 2.7.4 Impacts of management practices

**Objective:**

*To minimise impacts by pest and problem animals.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.7.4.1 | Apply best practice management to all pest management programs. | SG, LG, LH |
| 2.7.4.2 | Discourage actions that contribute to, or maintain, pest and problem animal impact in and around urban areas. | SG, LG, CG, LH |
| 2.7.4.3 | Implement strategic control practices in built-up areas. | SG, LG, LH |
| 2.7.4.4 | Establish and maintain a preparedness capability for pest animals implicated in exotic disease incursions. | SG |
| 2.7.4.5 | Implement effective community-based control programs where appropriate. | SG, LG, LH |
| 2.7.4.6 | Maximise coordination of land managers in the implementation of control programs where appropriate. | SG, LG, LH |

## 2.7.5 Management incentives

**Objective:**

*To use incentives to enhance pest animal management.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.7.5.1 | Assess effectiveness of incentives. | SG, LG, EDU, IN, CG |
| 2.7.5.2 | Identify and promote existing incentives and develop an incentive awareness package. | SG, LG, EDU, IN, CG |
| 2.7.5.3 | Evaluate possible new incentives. | SG, LG, EDU, IN, CG |

## 2.7.6 Compliance

**Objective:**

*To ensure compliance with the legislation is the minimum management outcome.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.7.6.1 | Promote communication networks to promote education, incentives and persuasion, warnings, revocation or suspension of rights and penalties as alternatives to enforcement. | SG, LG, EDU, IN, CG, LH |
| 2.7.6.2 | Ensure key stakeholder support for enforcement. | SG, LG, EDU, IN, CG, LH |
| 2.7.6.3 | Develop an enforcement strategy and procedures. | SG, LG |
| 2.7.6.4 | Identify and allocate resources necessary to enable enforcement. | SG, LG |
| 2.7.6.5 | Train authorised officers to enforce legislative provisions for pest animal management. | SG, LG |
| 2.7.6.6 | Establish a support network for enforcement officers. | SG, LG |
| 2.7.6.7 | Conduct a regular review of enforcement activities. | SG, LG |

# 2.8 Commitment, roles and responsibilities

**Desired Outcome:**

*All stakeholders are committed to, and undertake, coordinated management of pest animals.*

**Background:**

Pest management provides a range of tools that contribute to sustainable land management. Common law duty of care requires each person to take all reasonable and practical steps to avoid causing foreseeable harm to another person's use or enjoyment of land. State legislation extends this responsibility to the environment in general and to maintain the productive capacity of natural resources on land under their control.

Clearly defined and accepted roles and responsibilities in pest animal management are crucial to obtaining long-term management benefits. Currently there is a degree of confusion within the community about the exact responsibility of landholders, local government and State government for pest management. Clarification of these responsibilities is needed for long-term benefits from management. When planning and implementing management programs for pest animals, stakeholders should recognise each other's capacity to deliver pest management outcomes.

The broad scope and nature of pest animal problems demand a long-term commitment by all stakeholders to find solutions to pest management problems. It should be recognised that effort is required and that effective pest management is not a costless, quick or easy process.

State lands are often perceived to be sources and sinks for pests. State government agencies have a responsibility to manage pests on land and water bodies under their control. Landholders, local governments and community groups often call for greater resources to be allocated to pest management on State lands. Without adequate resources to manage pests on State land, the action undertaken by other landholders is often compromised. There is also a feeling of inconsistency in approach as other landholders are required under law to manage pests on their lands, whereas the State government does not have the same enforceable obligation.

Local government is crucial to the success of pest management, however, some local government area pest management plans do not give pest animal management a high priority. Local governments need to meet their responsibilities and adequately resource pest animal management.

For problem animals, the landholders and the community are not usually involved in operational activities unless in the context of supporting QPWS officers. Accordingly, coordinated programs as they apply to pest animals are not appropriate for problem animals.

## 2.8.1 Long-term commitment

**Objective:**

*To achieve long-term, shared, stakeholder commitment to address pest animal issues.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.8.1.1 | Promote the positive outcomes of long-term pest management planning. | SG, LG, EDU, IN, CG, LH |
| 2.8.1.2 | Encourage all land managers, including Government, to use a 'good neighbour' approach to pest animal management. | SG, LG, IN, CG, LH |
| 2.8.1.3 | Build ownership and capacity for pest animal management through long-term partnerships between community, industry and all levels of government. | SG, LG, EDU, IN, CG, LH |

## 2.8.2 Roles and responsibilities

**Objective:**

*To have the roles and responsibilities of pest animal management accepted by landholders, community, industry and Government.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.8.2.1 | Document roles and responsibilities for pest animal management. | SG, LG, UNI, IN, CG, LH |
| 2.8.2.2 | Establish a promotion campaign to outline roles and responsibilities of all stakeholders. | SG, LG, IN, CG, LH |
| 2.8.2.3 | Use existing community networks to establish and inform stakeholders on roles and responsibilities. | SG, LG, EDU, IN, CG, LH |

## 2.8.3 Sustained control campaigns

**Objective:**

*To develop and implement long-term control campaigns.*

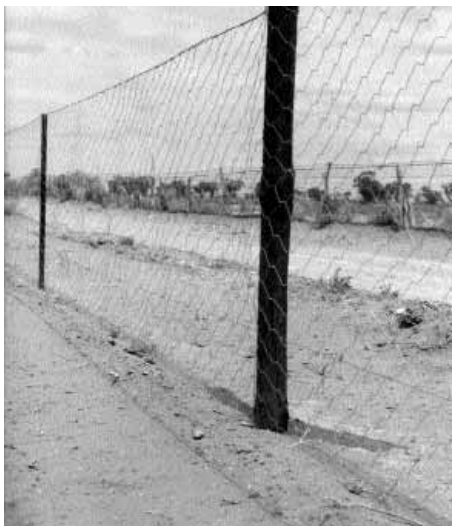
| | Strategic Action | By Whom |
|---|---|---|
| 2.8.3.1 | Ensure the coordination and promotion of the Strategy are assigned by the Management Committee. | SG |
| 2.8.3.2 | Establish and coordinate a State-wide, community-based control program for pest animals. | SG |
| 2.8.3.3 | Maintain a commitment to coordinated control programs so acceptable pest population levels are attained. | SG, LG, EDU, IN, CG, LH |

# 2.8.4 Resourcing

**Objective:**

*To secure and manage resources necessary to effectively implement pest and problem animal management in Queensland.*

| | Strategic Action | By Whom |
|---|---|---|
| 2.8.4.1 | Establish mechanisms to attract, direct and acknowledge the efforts of community volunteers. | SG, LG, IN, CG, LH |
| 2.8.4.2 | Identify common objectives and opportunities for sharing resources. | SG, LG, EDU, IN, CG, LH |
| 2.8.4.3 | Support the development of long-term community and industry-resourced pest management projects by 'seeding' with existing government support. | SG, LG |
| 2.8.4.4 | Identify and capitalise on opportunities for obtaining resources from sponsors, government programs and industry. | SG, LG, EDU, IN, CG, LH |
| 2.8.4.5 | Establish mechanisms for ensuring that beneficiaries of these strategic actions contribute to their delivery. | SG, LG, EDU, IN, CG, LH |
| 2.8.4.6 | Within the context of agency priorities, allocate resources for pest and problem animal management. | SG, LG |
| 2.8.4.7 | Establish pest animal management as a long-term investment by land managers in the economic and ecological viability of their properties. | SG, LG, EDU, IN, LH |



# 3.0 Opportunities and constraints

**Opportunities**

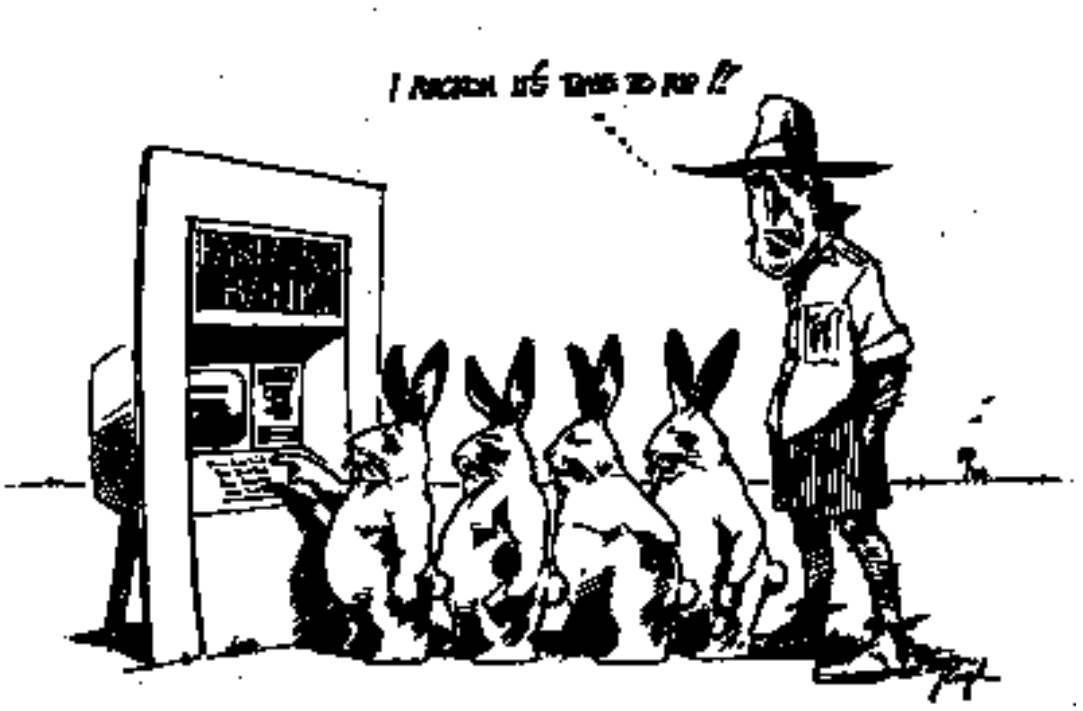
Implementation of this strategy will provide a basis on which:

- A common vision can be articulated.
- Performance of pest and problem animal management can be judged.
- Support of community leaders can be gained.
- Resources for pest and problem animal management can be negotiated.
- A higher profile for pest and problem animal management in the community can be gained.
- All contributions can be acknowledged.
- Queensland can be recognised as a world leader in pest and problem animal management.
- Informed decision making for sustainable, holistic management is undertaken.
- An integrated approach to natural resource management can be deployed.

**Constraints**

Obstacles to implementing this Strategy may be:

- Competing community priorities.
- Community ability to further invest in natural resource management.
- Changing demographics and economics.
- Severe long-term climatic fluctuations.
- Varying economic viability of rural land uses.
- Lack of awareness, skills and resources at the local level.
- Opposition to the use of some control techniques.



# 4.0 Stakeholder responsibilities

Government and stakeholder responsibilities for implementing the strategic actions outlined in the *Queensland Pest Animal Strategy* are outlined below.

**State Government**

The Queensland Government develops and implements pest and problem animal management policy through legislation, research, and extension and education programs. It provides assistance to landholders and undertakes an overall coordination role in the State response to pest and problem animals. The Government consults widely with key stakeholders and the general community on these issues. Specific State Government agency responsibilities are described below.

**Department of Natural Resources and Mines (NR&M)**

Ensuring that the social, economic and environmental impact of declared pest animals is kept to a minimum throughout the State by:

- Developing legislation and policy for the management of declared pest animal species.
- Ensuring that declared pest animal control is undertaken on lands directly managed by NR&M.
- Continuing to research efficient, effective and appropriate control techniques.
- Providing extension and education services to both rural and urban communities on the impact of declared pest animals.
- Undertaking strategic control with the integrated use of biological control agents and other control methods.
- Monitoring declared pest animal populations and the effectiveness of control programs.
- Coordinating the development and implementation of the Queensland Pest Animal Strategy and individual declared pest animal strategies.
- Maintaining human resource capacity to undertake declared pest animal control.
- Lliaising with community and industry groups, local governments and other State agencies to coordinate control activities for local declared pest animals.
- Facilitating and coordinating integrated control of declared pest animals in areas of high economic and environmental impact outside the Darling Downs–Moreton Rabbit Board (DDMRB) fence.
- Acting as lead agency for declared pest animal control during exotic disease incidents within Queensland.
- Ensuring that local governments undertake their responsibilities under the *Land Protection (Pest and Stock Route Management) Act 2001*.
- Operating the wild dog barrier fence.
- Ensuring the introduction and keeping of all non-Indigenous mammals and reptiles with high pest potential is restricted by the Queensland Animal Categorisation Committee.

**Environmental Protection Agency (EPA)**

- Ensuring the conservation of biodiversity.
- Monitoring and regulating any environmental impact of pest animal management.
- Ensuring the introduction and keeping of all non-Indigenous mammals and reptiles with high pest potential are restricted through membership of the Queensland Animal Categorisation Committee.

**Queensland Parks and Wildlife Service (QPWS)**

- Utilising provisions in the *Nature Conservation Act 1992* to facilitate the management of native animal species that become a problem through increased numbers or, are in conflict with human activities.
- Ensuring that pest animal control is undertaken on lands directly managed by the QPWS.
- Providing input into policy for declared pest and problem native animals.

**Department of Primary Industries (DPI)**

- Facilitating the management of exotic pest fish.
- Ensuring that pest animal control is undertaken on lands directly managed by DPI.
- Ensuring the introduction and keeping of all non-Indigenous mammals and reptiles with high pest potential are restricted through membership of the

Queensland Animal Categorisation Committee.
- Coordinating the overall response to exotic disease incidents in Queensland.
- Administering animal welfare legislation which includes ensuring that the control of pest animals is humane, and monitoring the use of animals for scientific purposes.

**Department of Health**
- Maintaining public health and safety in relation to issues of obtaining, possession, sale, and use of poisons used in pest animal control—Health (Drugs and poisons) Regulation 1996.
- Managing vermin—Health Regulation 1996.

**All other State Government departments**
- Ensuring that pest animal control is undertaken on all government lands.
- Implementing various legislative provisions that directly or indirectly relate to pest animal management.
- Incorporating pest management into the Department Corporate Plan.

**Lands Protection Council (formerly Rural Lands Protection Board)**
- Making recommendations to the Minister for Natural Resources and Minister for Mines on strategic matters for declared pest animals.
- Providing advice to the Minister for Natural Resources and Minister for Mines based on reports from the management committee developed under this Strategy.

**Darling Downs–Moreton Rabbit Board (DDMRB)**

Ensuring that land in the district is kept free of rabbits through:
- Building rabbit fences and maintaining their rabbit-proof condition.
- Eradicating rabbits in the district.
- Implementing and reviewing the DDMRB Strategic Plan.

**Local governments**
- Administering and enforcing the provisions of the *Rural Lands Protection Act 1985.*
- Ensuring that all relevant stakeholders are involved in the development of the pest management plan for the local area.
- Ensuring that pest management plans for the local government area provide for the strategic control of declared pest animals.
- Liaising with NR&M, community groups, other local governments and, where appropriate, the DDMRB, to undertake strategic control of declared pest animals.
- Ensuring that strategic control of declared pest animals is undertaken on all lands under the local government's control, including stock routes, road sides and town commons.
- Ensuring that all private landholders engage in strategic control activities for declared pests, as needed.
- Contributing financially through the precept system for declared pest animal control and research services.

**Department of Agriculture Fisheries and Forestry Australia (AFFA)**
- Operating the quarantine and inspection services which include North Australian Quarantine Service NAQS and Australian Quarantine Inspection Service (AQIS).
- Protecting animal and plant health by conducting risk analyses of potential import by using Biosecurity Australia.

**CSIRO**
- Undertaking and promoting applied research into natural resource issues including pest and problem animal management.

**Vertebrate Pest Committee**
- Providing national policy advice on management and control of all vertebrate pest species (excluding fish).

**Animal Welfare Committee**
- Developing animal welfare codes of practice for the control of feral animals.

**Community Groups**
- Promoting awareness of pest and problem animals among their members.
- Becoming increasingly involved in the planning, monitoring and

# 4.0

evaluation of pest management activities, and in some cases, resourcing and implementing programs.

**Industry organisations**

- Promoting and facilitating activities that contribute to pest and problem animal management.

**Tertiary and other education facilities**

- Undertaking and promoting research on pest and problem species.
- Training and educating groups and individuals in pest management science and technology.

**Private landholders and land managers**

- Being responsible by not introducing, keeping or encouraging pest animals on their land.
- Using best practice methods for pest and problem animal management.
- Undertaking management activities in keeping with all relevant legislation, policy, guidelines and codes of practice.

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# 5.0 Management arrangements

**Purpose:**

*To coordinate and monitor the implementation of the Queensland Weeds Strategy and the Queensland Pest Animal Strategy.*

A combined Queensland Weeds Strategy and Pest Animal Strategy Management Committee will be formed to guide and coordinate the implementation of the Strategy. The Department of Natural Resources and Mines will play a key coordination role in the formation of this committee. Representatives from key stakeholder and interest groups involved in weed management and problem animal management will be invited to nominate for membership. Each member will bring highly developed skills and appropriate expertise to issues such as animal welfare, agricultural production, conservation, indigenous participation or other relevant issues. Additional technical expertise in environmental, economic and social research will be available through relevant Government departments.

**Terms of reference**

- Develop an implementation plan for the strategy identifying the status of pest species and their impact; targets to be achieved, action to achieve the targets, time frames, investment resources needed, roles and responsibilities of stakeholders; performance measures; monitoring and evaluation processes and reporting mechanisms.
- Identify industry specific actions to be referred to relevant industry bodies.
- Coordinate, promote, monitor and report on the implementation of the action within the Strategy.
- Establish and ensure on-going consultation with key stakeholders.
- Establish linkages with other natural resource planning, implementation, capacity building, information dissemination, extension and research activities.
- Evaluate the effectiveness of implementation in reducing weed and problem animal impacts in Queensland.
- Review strategic actions after four years. At the earliest possible stage it is crucial that the committee establish the time frames, benchmarks, interim performance indicators and criteria to enable the evaluation and review process to take place.
- Report annually through the Landcare and Catchment Management Committee, Rural Lands Protection Board, Local Government Association of Queensland, Australian Weeds Committee, Vertebrate Pests Committee and through future State of Environment and State of Region reporting processes.
- Ensure that opportunities are utilised and constraints addressed.

Resources to support a Strategy coordinator position have been highlighted in section 2.5.3 and the Department of Natural Resources and Mines will provide secretariat support to the committee within existing budget constraints.