

2.5. FERAL ANIMALS

Several feral animal species now make their home in the Mitchell River Watershed. These include pigs, cane toads, horses, cats and dogs. Some feral animals are declared under the *Rural Lands Protection Act 1985* therefore landholders have a responsibility to control their numbers. The impacts of feral animals vary between species and the local environment. In selected areas some feral animals have become valued resources, but in most areas feral animals are at best a nuisance and at worst a serious economic and environmental threat. Strategies for feral animal management must consider many factors if they are to be cost effective and worthwhile.

Management of feral animals needs an integrated approach, research to allow informed management decisions and consideration of environmental and economic factors. Ideally, any program will need to identify acceptable pest population levels and then work towards that goal. Complete pest eradication is seldom achievable and even less likely to be acceptable when weighing costs against benefits. It is likely that each priority species will need separate strategic plans and that an adaptive management approach will be necessary.

Feral pigs are considered by many to be the most damaging of vertebrate pest species in the catchment. Being omnivorous, they will eat almost anything. Their habits of rooting and wallowing along riverbanks and lagoons can add to water quality problems, while opening the soil to erosion and weed invasion. They are known to carry diseases that can be transmitted to humans and cattle, such as brucellosis, melioidosis, leptospirosis and Japanese encephalitis. They also have the potential to carry foreign diseases such as foot and mouth disease, which could quickly destroy our beef industry if it broke out in Australia. Their cryptic habits, high reproductive potential and preferences for thick vegetation make pig populations particularly difficult to manage.

In some areas of Australia wild pigs have become a valuable export commodity, with trade mainly going to European destinations. Consideration should be given to the economic resource potential of feral pig management. Carcasses must however be tested for nematode parasites before they can be exported. The sparganosis parasite is responsible for the rejection of a significant percentage of carcasses in northern Queensland.

Feral horses are found in many areas of the Mitchell River Watershed. Diet overlap and similar consumption levels mean that horses compete directly with cattle for pasture resources. While the Mitchell

system rangelands are extensive, quality nutrient rich pastures are not and horses need to be considered in terms of total grazing pressure. Horses can travel further and faster than cattle and so commonly have ranges and impacts extending further away from water services than do cattle. As with pigs, horses have potential to carry diseases that threaten the cattle industry. Many people are extremely sensitive to any perceived cruelty to horses and the humaneness of any of control methods must receive special attention.

Dingoes and feral dogs can be of concern to cattle production. While dietary studies indicate that kangaroos and wallabies make up the bulk of a dingo's diet, many show a tendency to harass and kill livestock. Under the open range management conditions of the grazing industry in the Mitchell Catchment, dogs can create serious losses for the industry. Reduction of dingo numbers however sometimes means an increase in wallabies who compete with cattle in grazing. Landholders therefore do not want a big reduction in dingo numbers. Feral dogs are perhaps of greater concern than true dingoes as they can breed twice yearly compared to a dingo's once. Interbreeding between feral dogs and dingoes leads to degradation of the dingoes genetic stock while boosting their reproductive capacity

Feral cats, while of little economic impact on the Mitchell's industries, are of great conservation concern. Mammals, birds, reptiles, frogs and even insects are frequently found in the stomachs of feral cats. Cats are found throughout the catchment area. Their distribution and cunning makes their numbers difficult to control. Trapping, poisoning and shooting are the most common control measures undertaken against feral cats. Public sentiment has made biological control measures politically difficult. The non-economic impact cats have — creating poor cost benefit ratios in economic terms — render feral cat control programs difficult to justify in economic terms.

Tilapia are a noxious fish under Department of Primary Industries legislation which are currently inhabiting rivers east of the Great Dividing Range. Tilapia are a potential threat to the Mitchell River waterways. If they reach the Mitchell River catchment they could displace many popular native species of fish. They breed prolifically, are mouthbrooders (the mother takes the eggs into her mouth and protects the fingerlings when they hatch) and are able to survive in polluted or saline conditions where other fish species could not. Tilapia have been sited in Tinaroo Dam and could via the channel system spread into the Mitchell River catchment, causing great environmental and

economic losses. Of greatest concern is the potential threat to our rare native fish species and barramundi fishery.

Without baseline information, feral animal control strategies are difficult to formulate. Current information on feral animal distribution is sketchy

and very poorly documented. Collecting information on most feral animal species is difficult because the Mitchell River Catchment is so large and sparsely populated by humans and so little scientific research has been done.



Photo courtesy of: Freshwater Fisheries and Aquaculture Centre (Walkamin)

Figure 11 *Tilapia is a noxious fish species and a potential threat to the Mitchell River System. They were introduced as aquarium fish and grow up to 40cm long. The long pointed dorsal and anal fins are distinctive features*

Goal:

*To significantly decrease and manage populations
of feral animals in the Mitchell
River catchment*

Objectives:

- Improve knowledge and understanding of feral animal problems
- Monitor distributions of feral animal populations
- Develop long term feral animal management plans
- Manage feral animals using a cooperative approach
- Improve catchment health through the management of feral animal populations

Strategies:***Education***

FA1 Increase public awareness of feral animal problems.

Information and Communication

FA2 Use local knowledge to survey distributions of feral animal populations.

Improving Resource Management

FA3 Develop long term feral animal management plans.

Adopting a Cooperative Approach

FA4 Combine local and expert experience in feral animal control.

FA5 Identify and manage funding and support for feral animal management programs.

Outcomes:

Achievement of these strategies will provide the following outcomes:

- The involvement of the whole community in feral animal management.
- Implementations of long term feral animal management plans.
- Strategic measures in place to inhibit new feral animal species invading the Mitchell River Watershed.
- Continued funding for research into and management of feral animal populations.

Strategy FA1

Increase public awareness of feral animal problems.

Actions	Stakeholders	Performance Indicators	Priority	Cross Reference to
Assess and utilise existing promotional materials	DPI, EPA, Lgov, DNR		★	FA4
Conduct workshops to generate ideas for promoting awareness	Community, DPI, EPA, Lgov, DNR	l/year	★	WE1
Assist in developing information on the public's obligations with pet control	Lgov, DNR, media		★★	
Prepare information packages to distribute to schools and distance education programs	DNR, EQ, EPA		★★	
Encourage representation and presentations at relevant functions	DNR, MRWMG, Lgov		★★	

Strategy FA2

Use local knowledge to survey distributions of feral animal populations.

Actions	Stakeholders	Performance Indicators	Priority	Cross Reference to
Survey landholders to identify current distribution of feral animals in the catchment paying particular attention to riparian zones	DNR, MRWMG, Aboriginal groups	All landholders to be surveyed	★	WE1
Map known areas/habitats used by feral animals eg. animal habitat indications,	DNR, MRWMG, Aboriginal groups, landholders	Detailed map of distribution	★★★	WQ2 WE2
Identify local knowledge of food sources	DNR, MRWMG, Aboriginal groups, landholders	Detailed map of distribution	★★★	

Strategy FA3

Develop long term feral animal management plans.

Actions	Stakeholders	Performance Indicators	Priority	Cross Reference to
Support local government in registration and de-sexing of domestic cats and dogs	MRWMG, EPA, DNR, Lgov,		★★	
Support new trials of different management methods for feral animals - considering non-target species.	DNR, Lgov, MRWMG		★★	
Provide input and assistance to implementation of local government pest management	Lgov, DNR, MRWMG		★★	WE5
Investigate the cost/benefit analyses of control programs	DNR, MRWMG, CSIRO		★★	
Prioritise areas to develop local management programs	MRWMG, DNR, Lgov,	Formation of a priority list	★	FA1
Support a Code of Conduct for feral animal hunters	Land managers, RSPCA, DPI, QDH		★★	
Identify livestock management options to reduce feral animal impacts.	Community, DNR, MRWMG, DPI		★	GM3

Strategy FA4

Combine local and expert experience in feral animal management.

Actions	Stakeholders	Performance Indicators	Priority	Cross Reference to
Be involved in a regional conference on feral animal management in the Mitchell River Watershed as a method of sharing local and expert experience	DNR, DPI, Landholders, Lgov, EPA, FNQPAC	1 per 2 years	★★★	FA5 FA3 FA1
Conduct workshops on feral animal management.	DNR, DPI, Landholders, Lgov, EPA	1per year	★	WE3 LD5
Develop mechanisms to gain feedback from landholders on feral animal control	DNR, DPI, Landholders, MRWMG	eg. Mailback cards	★	WE6

Priorities Achieved By:

★ 1 - 2 years

★★ 2 - 3 years

★★★ 3 - 5 years

Strategy FA5

Identify and manage funding and support for feral animal management programs.

Actions	Stakeholders	Performance Indicators	Priority	Cross Reference to
Promote the importance of cooperative control programs	DNR, MRWWMG, Landholders	Groups of landholders involved in programs	★	FA3
Identify funding for maintaining current extension material	DNR, MRWWMG, Lgov		★★	FA1
Identify funding for control of Priority feral animals Potential feral animals	DNR, MRWWMG, Lgov	Ongoing funding	★★	LD4
Prioritise feral animals in respect to their impact on the MRW.	DNR, MRWWMG, Lgov	A priority list	★	
Encourage research to determine the prevalence of disease in feral animals.	DNR, JCU, QDH, UQ		★★	

Priorities Achieved By:

★ 1 - 2 years

★★ 2 - 3 years

★★★ 3 - 5 years