

**ENVIRONMENT, COMMUNICATIONS, INFORMATION TECHNOLOGY AND
THE ARTS REFERENCE COMMITTEE**

**SUBMISSION: ENVIRONMENT PROTECTION AND BIODIVERSITY
CONSERVATION AMENDMENT (INVASIVE SPECIES) BILL 2002**

STRATHBOGIE SHIRE COUNCIL

1.0 INTRODUCTION

Pest plants and animals are a major issue throughout Australia. If there were no weeds, incomes of Australian agricultural producers and benefits to food consumers would rise by an estimated \$4 billion dollars per year, a study this year by Weeds CRC revealed. The study also revealed that the costs associated with lost production and weed control are equivalent to 14% of the value of agricultural products.

2.0 DISCUSSION

The Shire of Strathbogic:

Located in North Eastern Victoria, the Strathbogic Shire encompasses 3304 square kilometers of hills and plains regions. A number of farming enterprises are present within the shire, including cropping, beef, sheep and viticulture, with a large number of notable horse racing studs.

The Nature and Extent of the Threat that Blackberry, Foxes and Feral Cats pose to the Australian Environment and Economy:

Blackberry (*Rubus fruticosus* agg.);

References such as Landcare Notes and National Heritage Trust's Weedeck provide detailed botanical descriptions and other useful information on Blackberry. The notes which follow refer to those features of the weed that are relevant to local control methods.

Due to its dispersal by seed and vegetative reproduction by root suckers and daughter plants from stems, Blackberry is a very difficult plant to eradicate or control because of its extensive root system and its ability to regrow from roots or root fragments. Any control method such as slashing, grazing or burning which damages the stems will not kill the plant and regrowth will soon occur.

Similarly, spraying with chemicals will only kill the plant if the spray penetrates and kills the entire root system. When large bushes are sprayed some of the daughter plants will not absorb sufficient spray. Also plants with leaf damage caused by grasshoppers or leaf rust are affected in the same way, that is, insufficient spray will be absorbed to kill the roots. Pouring on spray beyond run – off does not increase absorption, only wastes spray.

Some months after spraying even large bushes may appear dead, but often, sometimes years later, regrowth occurs from surviving roots.

Blackberry infestations within the Shire of Strathbogie are a serious threat to the biodiversity of the region. Of the 14 Landcare groups within this shire, 11 have identified this weed as being a threat, and are targeting the species for eradication. The main regions where Blackberry is found is within the Strathbogie Ranges, however some Landcare groups in the plains region, have identified Blackberry as a threat, and are striving for its complete eradication. As surveyed (through the Rural Land Rebate Program in 2004), a total of 326 properties or 11% have identified Blackberry as growing on their properties (of 2925 surveyed).

European Fox (*Vulpes vulpes*);

The European Fox first spread to the Euroa region in 1893, and rapidly established a viable population. According to Landcare notes for foxes, produced by the Department of Sustainability and Environment in 2003, Foxes have adapted to a wide variety of habitats from the arctic to sub – tropical conditions. Foxes reach sexual maturity by the age of 10 months with an average litter size of 4 – 10 pups. Their home range area varies from > 30 ha (Urban areas) up to 550 ha (Alpine regions), where they can travel anything under 10 km per day. Their main food source is Rabbits (36.1% of their diet), however this is further supplemented by Sheep (20%), Mice (14%), Possums (5%), Insects (5%) and Birds (1%). They carry diseases such as distemper, hepatitis and mange, and are known to transmit several species of Tapeworm and Roundworm. Foxes are known to kill livestock, particularly young lambs, where research (according to the Department of Sustainability and Environment) found that up to 30% of all new lamb deaths are caused by foxes. They also threaten extinction to native wildlife. Australian wildlife did not co – evolve with the fox, therefore making our native wildlife more vulnerable to predation. The main control methods employed include 1080 baiting, shooting, fumigating and fencing.

No comprehensive study on population size within the Strathbogie shire has been completed. However, studies completed in the Bendigo region suggests that for every fox that is sighted, there will be another 4 undetected, depending on topography, hunting pressure and terrain. Research completed by the Department of Sustainability and Environment and Department of Primary Industries have found that throughout most of Victoria, fox population densities range between 2 – 4 per square kilometer. For the Strathbogie shire, this would equate to an average of 6608 – 13216 foxes being present within the shire. However over the last 4 months, according to landholders in the Strathbogie Shire, many properties have suffered severe losses of lambs through fox predation. Therefore it could be concluded that the fox population at the present time, is actually increasing.

Feral Cat (*Felis catus*);

In general, feral Cats are domestic Cats that have survived and reproduced in the wild without human contact. They are generally tabby in colour (some are black also) and can range in weight from 2.4 – 4.4kg (females) up to 3.4 – 6.4kg (males). Their main food source is the European wild Rabbit, however they do prey on mice, small native mammals, reptiles, birds and invertebrates. It is believed that the feral cat has had a significant role in some extinctions, particularly in isolated areas (ie. Island habitats). One example was on Macquarie Island, where they caused the extinction of the ground nesting parakeet. Their reproduction is similar to that of the domestic cat, where the female can have at least two litters per year, with litter size varying from 2 to 7 kittens. Home range sizes can be up to 10 square kilometers for roaming males, and substantially less for females. Feral cats are usually most active at night, mainly during sunrise and sunset, whilst during the day they will rest in sheltered areas like rabbit burrows, hollow logs or dense thickets of scrub. The main measure of control for them is either shooting or trapping.

No comprehensive study on feral cat populations has been completed in the Strathbogie shire. However, according to the Compliance department at the council, a total of 11 feral cats were captured and destroyed humanely from September 2003 to September 2004. This is not a good indication as to the population size and density in the shire, as very little time is used to remove feral cats, as they are not perceived as a major threat to livestock.

The Estimated Cost of different Responses to the Environmental Issue Associated with the Invasive Species, including Early Eradication, Containment, Damage Mitigation and Inaction:

Blackberry (*Rubus fruticosus* agg.);

One Landcare group within the shire (Creightons Creek) estimated the cost of annual Blackberry spraying within that area to be \$600 per year (chemicals and labor). This estimation was based on labor costs of \$20 per hour for landowners, however if contract sprayers are employed the cost is at least \$40 per hour. If the only way that infested area could be treated is through aerial spraying, then the rates per 4 hectares (10 acres), completed by Helicopter, is \$420 per load. This figure does not include the cost of the chemical and if there are less than 5 loads, additional costs are incurred (ferrying the Helicopter to the site).

Preferably a combination of control measures needs to be used to have the maximum impact on this pest. However many landholders only spray bushes, mainly due to the fact that the weed grows in gullies that are inaccessible to large machinery. This measure alone does not completely eliminate Blackberry. If an effective biological control measure was released, the combination of this and spraying may eventually eradicate Blackberry.

The Adequacy and Effectiveness of the current Commonwealth, State and Territory Statutory and Administrative arrangements for the Regulation and Control of Invasive Species:

Of the Landcare groups within the Shire of Strathbogie that responded, all commented that facets of pest plant and animal control in all levels of Government need to be revised. Particular emphasis was placed on State Government, where Landcare members expressed their disapproval at the lack of enforcement in regards to pest plant and animal infestations within the shire. They believe that enforcements and prosecutions are virtually non existent, which is having an impact on the overall levels of control.

They believe that the Strathbogie Shire's Rural Land Rebate Program has been effective in making people aware of the pest plant and animal issues within the Shire. They also believe that it has given many landholders the incentive to work towards the local Landcare groups goals for eventual eradication of pests. However, they believe that the benefits of this scheme are limited by non – application for the rural Land Rebate by some landholders (> 20% for the shire) and an auditing rate of < 10%.

The Effectiveness of Commonwealth – funded measures to Control Invasive Species:

Due to the reduction in primary industry and environment services offered by successive State and Federal Government departments, Landcare has received dramatic reductions in funding in the last 2 years. This in turn means that more local communities have to rely on small volunteer groups, resulting in these groups accumulating more work, and increasingly volunteers are exhibiting volunteer 'burnout'.

The National Heritage Trust has provided funds to help in the control and spread of Paterson's Curse and funds from the state government through second generation landcare have subsidized chemicals for the spraying of Blackberry as a harbor for Rabbits, however no NHT funds have been available for the specific control of Blackberry.

Whether the Environment Protection and Biodiversity Conservation Amendment (Invasive Species) Bill 2002 could assist in Improving the current Statutory and Administrative Arrangement for the Regulation, Control and Management of Invasive Species:

As recommended by the Burnt Creek Landcare Group, the European Rabbit should be added to the list of pests and Paterson's Curse to the list of weeds that the bill outlines, because they have a devastating impact on the environment.

Many of the Landcare groups believe that more funding needs to be made available to them, to assist in the control and eradication of pest plants and animals of the region. They also believe that a subsidy for accredited farm chemicals used on specific pest plant

and animals, should be provided at a discounted rate to the landholders. Another suggestion made for the control of the cat population is that Veterinarians should be subsidized 90% of the cost of cat sterilization, in turn encouraging the community to act responsibly for their pets. This could be applied to dogs also.

In terms of Foxes, continue to promote the use of 1080 poisoned fresh liver baits, which is recognized as one of the best control methods currently employed. It has been found that Foxes are less likely to cache fresh liver baits, therefore reducing the impact on non – targeted species and reducing the baits residual effect in the environment.

The most effective measure to control pest plants and animals, is to increase public awareness through education. The overall effectiveness of the Land Management Program could be significantly improved if Government increased resources available for public education, rather than having just one officer to educate the entire shire. Officers would then have the ability to work in consultation with Department of Primary Industries and Department of Sustainability and Environment. Additional funding would also assist in the promotion of the Land Management Program as an effective way to manage and control pest plants and animals.

3.0 CONCLUSION

The Strathbogie Shire is affected by a number of different pest plant and animal species. However, due to the lack of resources within government departments throughout Australia, many of the pests that we are currently attempting to deal with, are continually spreading. This is why more financial incentives and expert knowledge on these problems, needs to become available to landholders. If we continue the way that we are, there will be expanses of land that will become infested with weeds, and further extinction of native animals.

Landholders are some of the most experienced people in managing environmental problems. Governments need to utilize and assist this commodity, otherwise the land will become non productive and the economy will fail.

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This submission was authorised by Mayor Robin Steers and Councillors of the Strathbogie Shire Council.

A handwritten signature in black ink that reads "Melissa Eddy". The signature is written in a cursive style with a long, sweeping underline.

Melissa Eddy
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Strathbogie Shire Council