# **BESTPRAC**

# Case study series - No. 1



# Biteback - Wild dog control in SA's sheep pastoral zone

#### 1. Background

There is a good reason why wild dogs are near the top of the Invasive Animal CRC's hit list. Wild dogs, including dingoes, are estimated to cost Australian farmers \$65 million in stock losses a year.

Much more difficult to measure is the emotional impact on farmers and their families. Once a sheep is killed, the stress of waiting for the next attack is significant.

For producers living south of the Dog Fence in the sheep pastoral zone of the SA Arid Lands region, wild dogs have become an increasing problem. Under the Natural Resources Management (NRM) Act 2004 dingoes are a declared pest and landholders are required to control them.

A number of years ago widespread baiting and trapping, as well as doggers were used extensively to keep wild dog numbers in check.

Over the last 20 years these efforts have dropped off and control measures have become intermittent. In large part, this is due to changes in land use, with a number of farming properties being sold to



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conservation groups, Aboriginal groups, mining companies and tourism operators. As a result, sheep properties have become dispersed across the landscape.

These new non-livestock producing landholders haven't had the same need to eradicate wild dogs. Subsequently, dog numbers and predation have increased dramatically, with some producers reporting losses of up to 700 sheep.

In 2008 only 37% of landholders took part in baiting activities.

# 2. Owning the problem

In 2008 sheep producers in the North Flinders region struggling to control the impact of wild dogs on their properties, approached their local community based NRM group for help.

Local producer and Chair of the North Flinders NRM Group Leonard Nutt, and the other NRM group members took charge of tackling the problem.

They realised that responsibility for developing a solution and implementing it had to lie with the land managers if they were going to see long term success. However, the sheer scale of the problem meant that they would need the support of industry and government to get the program up and running.

The group investigated and identified possible sources of funding, including the South Australian Sheep Industry Fund, managed by the Department of Primary Industries and Resources South Australia (PIRSA), the South Australian Arid Lands (SAAL) NRM Board, and later Australian Wool Innovation (AWI).

As a non-incorporated entity, the group couldn't apply for funds directly, so they sought the support of SA Arid Lands NRM Board who provided guidance on the funding application process and assisted the group to develop the proposal.

#### 3. Understanding the problem

The first step in developing an effective program to address wild dog control was to understand the underlying causes of the problem and the reasons why current measures weren't working.

The following factors were identified as contributing to the problem:

- Individual land managers could not get a full picture of dog movements and predation to inform control measures.
- Individual land managers did not have the capacity to adequately address the problem.
- There were not enough land managers engaged in control measures to reduce dog numbers.
- Control measures were not co-ordinated.
- Relatively few land managers had dealt with a wild dog problem of this scale before.

# 4. Developing a solution

The group prepared and submitted a funding proposal that had at its core the following key elements:

- Responsibility for implementing the program would lie with the land managers.
- A coordinator would be needed to support the implementation phases of the program.
- Expert advice on best practice control measures would be needed to inform planning.
- Local area plans (LAPs) would be developed by land managers in areas with similar geography and land systems.

- The LAPs would be informed by land managers sharing information on dog movements, predation and current control measures used.
- Through local area planning, land managers would also decide what control measures to use in their area and plan a coordinated approach for implementing them.

#### 5. Securing industry and government support

With the support of the SAAL NRM Board, the group submitted a proposal to the SA Sheep Industry Fund for the initial three-year set-up phase of the Biteback program. In addition to this, the group was later able to secure funding and support from AWI and Biosecurity SA.

The funding was critical because it provided the capacity and staff needed to get the program up and running.

Industry support has added importance because landholders tend to get more involved when they can see their levy money (through the SA Sheep Industry Fund and AWI) is being invested to address a critical problem in their area. Non-stock running landholders pay the NRM levy and can also see their contributions at work.

### Industry and government investment in Biteback:

# South Australian Sheep Industry Fund

The Sheep Industry Fund is managed by the Primary Industries and Regions SA (PIRSA) on behalf of the Minister for Agriculture, Food and Fisheries and invests in programs that benefit the sheep industry. Producers make contributions to the Fund through a payment of \$0.35 per sheep sold in SA.

\$93,700 was invested each year for three years to cover project co-ordination, the injection service, a best practice wild dog control information sheet and a dogger.

#### **SAAL NRM Board**

The SAAL NRM Board invested money through the NRM levy to cover office space, vehicle and phone call costs as well as a percentage of the coordinator's wages.

#### Australian Wool Innovation

AWI provided \$25,000 in funding in the second year of the program so that Biteback could be rolled out in the Gawler Ranges earlier than planned.

In 2011 AWI provided additional funding of \$50,000 to supply freezers, traps, lures and baits.

# **Biosecurity SA**

Biosecurity SA in 2011 provided 20,000 manufactured baits to the program for aerial baiting south of the Dog Fence.

# 6. Rolling out Biteback

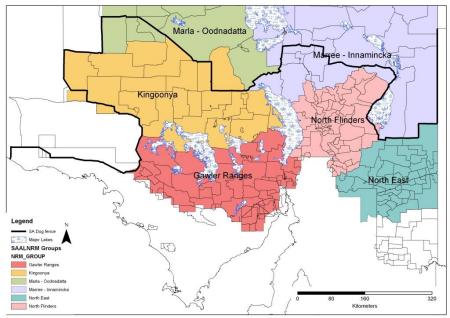
The program was rolled out across the four NRM districts south of the Dog Fence in the SA Arid Lands region, covering an area of 200,500km<sup>2</sup>. The area was divided into three regions and the program established in each region over successive years:

North Flinders and Marree: 2009/10Kingoonya and North East: 2010/11

Gawler Ranges: 2011/12

The success of the project depended on landholder involvement and the challenge was therefore to maximise landholder participation in Biteback. To make this achievable, the Board appointed a Biteback Co-ordinator, Heather Miller, who worked with each NRM group to split each district into smaller working groups. The NRM group member took responsibility for getting on the phone and speaking to landholders directly about the project. Heather also sent a supporting letter to all landholders inviting them to an initial planning workshop.

Around 50% of landholders came to the first workshops. Over the next six months, Heather met with each remaining landholder to talk to them about the project and managing the wild dog problem in their area and the region more broadly.



The four NRM districts south of the Doc Fence in South Australia

# 7. In practice

At the local area planning workshops, landholders share information and map out wild dog movements, predation and current control measures by answering the following questions:

- Where are the stock losses?
- What are the other impacts?
- Where do the wild dogs come from?
- When does the problem occur?

They then asses the problem and develop a management plan that outlines what control measures will be used, where and when. Working through the following questions helps to guide this process:

- How critical is the problem for our area?
- What actions need to be taken?
- What are the goals of the plan?
- Where are the priority areas for trapping?
- Who will do what activities?
- When will the management occur?
- What monitoring is needed?

Each group has a key contact, who is responsible for coordinating planning workshops and control measures, such as injecting and baiting, with their neighbours.

Generally local area groups meet twice a year for an injection service. If necessary, future planning and management is discussed at the same time.



Lisa Stevens, Biteback Project Officer and local producer, Daryl Fels, at a baiting session in the Flinders Ranges

#### 8. Key success factors

Ultimately the success of Biteback is underpinned by the clarity of the roles of each stakeholder group:

#### Ownership - Landholders

- The program is owned, run and driven by landholders.
- All landholders are involved, regardless of their type of landholding.
- Landholders participate in mapping, tracking and planning, commit to best practice and assist in the implementation of control measures.

# **Coordination** - Project Manager (SAAL NRM Board):

- Organising local planning workshops with assistance from the landholders.
- Developing and collating maps using information provided by landholders.
- Providing access to technical advice from project partners.

- Working with landholders to coordinate doggers on their properties.
- Reporting obligations to the funding body and other stakeholders.
- Coordination of the injecting service.

# **Support** - Government

- A crucial role of the government is upholding that ownership of the project lies with the landholders.
- The Government also has a key role to play in taking ownership of certain actions to drive change. An excellent example of this was successfully driving a policy change with state government to allow aerial baiting of wild dogs.

In addition to these roles and responsibilities, all stakeholders, both landholders and government, need to be prepared to change the way they think about wild dog management and their role in the process.

It is also important to acknowledge that current practices aren't working and to investigate and understand current best practice control measures. This includes learning from experts as well as those who have been involved in wild dog management programs in the area in the past.

#### 9. Results and measurement

Today there are almost 100 landholdings involved in the program, making up 21 working groups that cover an area of 200,500km². Generally, the groups comprise between 4 and 10 properties, depending on the size of the landholdings.

Landholders are benchmarking, mapping and tracking stock losses and dog movements at their local area planning workshops.

Direct results in the short term are difficult to measure because there are a range of external factors that impact on dog numbers and predation, such as the season and availability of other prey. This being said, landholders involved in the program have reported the following experiences on their properties:

- Leonard Nutt (Edeowie Station, North Flinders) has reported seeing a significant reduction in the number of wild dogs and stock losses.
- Producer Geoff Mengerson (Depot Springs Station, North Flinders) had only a 3% lambing rate in 2009 and over the last year has trapped twenty dogs.



Heather Miller and producer Geoff Mengerson, Depot Springs Station, North Flinders

With the support of the SAAL NRM Board, SA Farmers Federation and SA government, government policy in relation to allowing individual landholder to conduct aerial baiting on their properties was changed in mid-2011. The long term goal is to provide landholders with the tools needed to be self-sufficient in managing wild dogs. This may require some further changes within government policies and regulations.

Heather believes that at this stage in the project, success can best be measured by the number of people participating and the level of conversation. Involvement and engagement amongst the 100 people actively taking part, and the broader community, has grown significantly.

Ultimately the success of Biteback will be measured in the long term. The project aims to change how landholders think about and approach managing a natural resource management issue, and this requires time for these practices to become part of normal business and land management operations. It is anticipated that over the next 3 to 4 years landholders will be able to really measure the results of their collective efforts through reduced dog numbers and stock losses.

# 10. Adaptability of Biteback to address other NRM issues

What makes Biteback so valuable is that it provides a model for managing natural resource management issues. The approach used by landholders in South Australia's sheep pastoral zone could be adapted very effectively to deal with NRM issues in other regions.



