Submission to the State-wide Review of NSW Pest Animal Management – Issues paper

Prepared on behalf of LNSW by Green Gully Consulting

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Many Hands, One Voice

Overview & Key Points

Pest animal management is a multi-faceted issue that requires local ownership, community participation, coordinated action and continual review and adaptation of programs. A number of key principles must be satisfied by control programs in order to achieve effective results in reducing the impacts of pest animals; these include **Broadscale** – cover as large an area as possible, look at regional, rather than individual programs, **Coordinated** – undertake organised control in the same time frame (ideally within a week), **Cooperative** – involve as many land managers as possible, both private and public lands and **Integrated** – utilise best practice control techniques (e.g. baiting, trapping, shooting) and delivery methods (e.g. different bait types, delivery methods and the use of attractants).

Landcare NSW contends that the enabler to satisfy these principles is **Community**, it is therefore imperative that the community is involved in the planning, decision making, delivery and review of pest animal control programs.

As highlighted in the issues paper there will never be sufficient resourcing. The key is to enable and empower landholders and the community so they contribute their investment to a coordinated approach rather than the individual application they would do to meet legislative requirements.

There is considerable lost opportunity if governments do not recognise the SIGNIFICANT investment already made by landholders; the key to improved pest animal management, is mobilising this investment for greater than single property outcomes.

Landcare represents the view that communities should be resourced and empowered to be involved in local actions to address sustainable agriculture and natural resource management issues. The following submission provides input on the aspects of the issues paper that concern how the community is engaged and recognised as valued and active participants in pest animal management, including opportunities to improve the management of pest animals across all land tenures for environmental, economic and social benefits.

Two case studies are provided to demonstrate how community, when given a valued and supported role enables effective broadscale, coordinated, cooperative, integrated programs, that brings landholder leverage to government efforts.

Responses to the Specific Issues

3.1 Roles and Responsibilities

Roles and responsibilities for pest animal management are not clear at the state, regional or local scales. Although broad over-arching roles and responsibilities can be identified for different aspects of pest animal management such as the development of codes of practice, standard operating procedures, legislation and policy frameworks and compliance the planning, delivery and reviewing of local and regional pest animal control programs needs to be undertaken through multiple stakeholder partnerships. Pest animal management is a shared responsibility and the solutions for pest animal issues should therefore be identified through a shared approach. There should be flexibility within the roles and responsibilities of different stakeholder organisations/agencies depending on the region/area and where the experience and expertise are available. Rather than having a one size fits all model to pest animal management across NSW, a framework should be developed to allow each region to identify and plan the best approach that will meet the needs of their community, providing all stakeholders can contribute and participate in the design, delivery and review of pest animal management programs.

As highlighted in the issues paper

"a lack of coordination and/or collaboration at the local, regional and agency levels has been noted".

Pest animal management is best delivered through a tiered approach where federal, state, regional and local priorities are identified but there is flexibility to tailor how these priorities will be contributed to at the regional, local and individual scale.

A standardised planning framework to guide multiple stakeholders through the development of a strategic approach to pest animal management at a regional and local scale, similar to how PestPlan is utilised for group planning would enable issues to be managed at the appropriate scale for efficiency and effectiveness. People learn by seeing practical examples of issues and contributing to the development and implementation of solutions. This process would also ensure community ownership of the pest animal problem and allow for the better coordination of resources and alignment of pest animal management approaches.

Landcare NSW agrees with the statement

"All parties should be working towards achieving better outcomes, as inconsistencies in approach and timing will inevitably impact the effectiveness of pest management".

This highlights the importance of all stakeholders, including community organisations such as Landcare, being involved in the identification of pest animal issues and the development of multiple stakeholder pest animal management plans, including educational activities that are tailored to meet the different needs of each community. Landcare has a strong history in supporting community networks, groups and members and facilitates the sharing of new knowledge and experiences through 'farmer to farmer' and group learning activities. Landcare networks and groups are often skilled in group facilitation, community engagement and coordination. These attributes have been identified in the issues paper and are valuable skills to contribute to the management of pest animals.

The Department of Primary Industries is correctly identified as the lead agency. They develop guiding legislative frameworks including Codes of Practice and Standard Operating Procedures for pest animal management as well as undertaking research, and developing accredited industry training. Implementation of pest animal management occurs by a variety of agencies,

organisations and industry groups as well as land managers and local landholder groups. These include but are not limited to Local Land Services, Office of Environment and Heritage, Forestry Corporation of NSW, Landcare (including Rural groups, Bushcare, Friends of, Coastcare groups), Australian Wool Innovation, Meat and Livestock Australia and local voluntary pest animal control groups and associations. All of these stakeholders should be actively involved in pest animal management to ensure that programs meet the needs of the community. Having a single agency for compliance, predation reporting and the distribution of 1080 poison, Local Land Services, works well and provides clarity to land managers and other stakeholders. Other roles and responsibilities should be identified through planning activities, as mentioned above, to leverage the expertise and strengths of each partnering organisation depending on the situation and needs of each local and regional area.

Government should be actively involved in pest management planning, implementing and reviewing, rather than "intervening" at particular times. Compliance and enforcement action should be one of the last steps taken to ensure pest animal management occurs. Building rapport and relationships with land managers, increasing knowledge and skills and identifying and breaking down barriers should be utilised first, then if there is no alternative to engage an individual in pest management activities compliance and enforcement action should occur. Current compliance and enforcement arrangements are not effective as it is difficult to enforce legislation, pest animals move and a number of activities contribute to pest animal 'control'. The process of enforcement and compliance does not appear to be followed through to prosecution and there is a view held by landholders that there has been no successful 'orders' processed through the court system.

All pest animal management programs should be designed to reduce the impacts from the pest species rather than reducing numbers of the pest animal. Accountability and performance monitoring can be improved by ensuring regional, local and individual drivers have been correctly identified and including these drivers in monitoring programs. e.g. if predation of lambs is a major impact and therefore a major driver as to why landholders should become involved in coordinated fox control then lamb marking percentage should be used as a monitoring technique. Ask the question; why do we monitor? To understand the problem and assess the impact; to determine clear, measurable objectives; to develop and implement a plan of action; and to evaluate performance and modify programs. Once everyone understands the question it is easier to identify what can be measured to gain the answers. Both operational and performance monitoring should be included in pest management programs. Operational monitoring aims to improve efficiency and describes the process and extent of control, eg. number of properties treated per year, the funding allocated, number of pigs killed. Performance monitoring measures the effect of the management program on the resources to be protected. A reduction in feral pig abundance is not usually adequate as a performance indicator. Rather, a measure of the impact of feral pigs on the valued resource (environmental or agricultural) is required.e.g. number of brush turkey nests destroyed before and after feral pig control activities have occurred.

All partnering stakeholders, particularly landholder groups and land managers, should be involved in the identification of both operational and performance monitoring parameters including timing, frequency of repetition, data collected and how the data will be analysed to provide useful information back to the community.

In order to ensure monitoring is effective and reliable frequent communication is imperative. Monitoring results should be communicated with all stakeholders and they should be communicated in a useful and easy to understand manner. Land managers are the eyes and ears on the ground but unless they understand what they are contributing to on a local and regional scale, enthusiasm, information and involvement in pest animal monitoring and control will reduce. Sharing of data between groups regularly can identify patterns of pest animal activity/impacts. e.g. Wild Dog Control Associations can identify that if 'north group' have predation then shortly after 'east group' is likely to have predation. Sharing this information means that 'east group' can anticipate a predation event/series of events and have control on the ground waiting for the wild dogs, rather than deploying a control after an attack has occurred and the animals (wild dogs) have moved on.

One of Landcare's strengths is the capacity our groups and networks have to disseminate information and share knowledge throughout the community. Landcare can partner in collaborative landscape scale pest management through the collection of monitoring data, the distribution of pest animal control program results and the collation of community feedback and changing values. This would facilitate local ownership and capture grass-roots feedback from the community to inform the review and adaptation of pest management programs at the local and regional scale.

Education, training and awareness campaigns regarding the impacts of pest animals and how to maximise the effectiveness of control efforts have deteriorated due to the lack of funding and resources available in recent years. Schools education activities, group planning and information sharing activities were components of a number of externally funded programs e.g. Caring for Our Country. As resources have become more limiting, extension activities have decreased and the primary focus has been to implement on-ground control activities. Unfortunately, through association, decreased awareness raising, information exchange and training leads to decreased on-ground control as new landholders enter an area, or landholders who have been undertaking control lose enthusiasm.

Landcare networks, through partnerships and appropriate resourcing, can actively contribute to achieving effective pest animal management. Coordination and limited resources can be leveraged through;

- The dissemination of information and monitoring data to community members through Landcare newsletters, social media and web updates.
- The planning and delivery of educational programs for adults and children in partnership with Landcare, such as school Landcare activities, Landcare field days and site visits that raise awareness of pest animal issues, including environmental, agricultural and social impacts as well as how working together in a coordinated broadscale approach can achieve greater, longer lasting results.
- Coordinating volunteer control groups to undertake regional scale pest animal control programs. Facilitating community feedback to inform future pest animal control activities and identify community priorities.
- Inclusion of Landcare and stakeholder representation on regional pest animal committees to identify issues and possible solutions.

3.2 Shared ownership

Pest animal management requires the cooperation of individuals to work together to achieve a common purpose. There are a number of opportunities to increase the effectiveness of pest animal management through supporting capacity building, information transfer and facilitating local ownership.

Every land manager will have a different set of barriers and a different set of drivers to their participation in pest animal management. By building community relationships and identifying these barriers/drivers control programs can be planned to maximise the engagement of the

community. Once different barriers have been identified tailored factual information can be provided to break them down and encourage participation. e.g. LD_{50} graphs can be utilised to break down the barrier that native animals are at risk of non-target poisoning when undertaking a coordinated fox control baiting program with 1080 meat baits.

Pest animals impact all of us, whether we are concerned about biodiversity, agricultural, biosecurity or social impacts. By involving community groups such as Landcare in the planning, implementing and reviewing of pest animal management programs, and providing adequate resourcing to facilitate this role, information to address barriers can be distributed through the Landcare networks, and community feedback can be collected and utilised to inform programs; thus effective two-way communication and genuine feed-back loops can be implemented. This process ensures local ownership of pest management programs and facilitates shared management.

Case Study one:

The Southern New England Coordinated Fox Control Program is a community program that has been operating since 1997. The program commenced after landholders identified that they could achieve longer lasting results if they undertook 1080 fox baiting together. This program grew to include 31 volunteer fox control groups that were locally coordinated by 34 volunteer group coordinators. The combined action of these volunteer groups consistently resulted in the successful engagement of over 330 properties and the distribution of over 20,000 fox baits annually during winter. The Southern New England Coordinated Fox Control Program was collaboratively supported by LHPA, NPWS and Landcare through the resourcing of a part time project officer and through coordination, dissemination of information and monitoring support. Regular awareness raising and training activities promoting recognised best practice control methods and highlighting the impacts of foxes to the broader community including school children, urban communities and cattle producers were also delivered.

This program included annual debrief dinners which allowed the results of the program to be provided to volunteer groups in a useful manner, these events also provided an opportunity for coordinators to provide feedback and actively contribute to the review of the program and provide suggestions on how improvements could be made to subsequent programs. This program demonstrates the value of community ownership, two way communication and leveraging individual investment in a manner that facilitates combined action through shared responsibility. The Southern New England Coordinated Fox Control Program is a practical example of how the actions of individuals can be leveraged to achieve local outcomes and how local contributions can be coordinated and leveraged for regional results.

Recent changes (2014 and 2015) to the program delivery model, including a reduction in the support arrangements provided to Landcare to play a coordinating and supporting role to their community, along with the removal of the formal planning and feedback loop, has seen participation, group involvement, data collection and bait distribution decrease. A Landcare initiated and funded review has shown group participation, property involvement and bait distribution has decreased by 30%, 28% and 25% respectively these past two years. This highlights the importance of maintaining shared ownership if results are to be maintained over time. Pest animal management is constantly changing as research and new technologies fill information gaps, it is therefore essential that consistent messages based on the latest best management practice information rather than hear say, personal opinion or historical practices is delivered to the community to limit confusion and complexity. e.g. it used to be promoted that free feeding foxes be undertaken before baiting with 1080 poisoned meat baits; since then research has shown us that free feeding foxes is not recommended due to their caching behaviours.

Knowledge building and skill development are critical to the successful management of pest animals. The availability of standardised resources, such as those developed through PestSmart, ensure that current best practice information is made available to the community. Landholder engagement and resulting direct action increases if clear, concise and consistent messages are delivered from multiple information deliverers. e.g. landholders are more likely to become involved in a coordinated pest animal control program if the same information is delivered by NPWS, Local Land Services, Landcare and any other information deliverer.

Landcare has a strong network base and a history of supporting community members to design and implement coordinated pest animal programs, for a variety of species, at a landscape scale. As resource availability decreases it is important that land managers work smarter not harder. It is important to understand the biology and ecology of the targeted pest animal species as well as the assets that are to be protected. There are certain times when a pest animal is more vulnerable and at this time control efforts are likely to have a greater effect. Similarly there may be times when the asset is more vulnerable and therefore control efforts should occur to protect the asset. e.g. when ewes are lambing; new born lambs are vulnerable to predation by foxes, therefore a coordinated broadscale fox control program should occur before lambing. Feral pigs are vulnerable when available protein falls below 15% therefore if a high protein food source can be made available when protein is low in the environment it is more likely that a higher trapping/baiting success will be achieved. This information can also inform the planning of proactive, reactive and spike pest animal control programs.

Understanding the biology and ecology of pest animals also allows the identification of what percentage of the population needs to be removed to have a lasting effect (e.g. remove enough individuals to counteract the rate of reinvasion and recruitment through breeding) and plan what type of control methods should be used and when to maximise population knockdown. As an example, research into the management of wild dogs has shown that the most to least effective control methods are aerial 1080 baiting > ground 1080 baiting > trapping > shooting. If this is taken into consideration when planning a program, initial control activities may include coordinated, broadscale 1080 aerial and ground baiting followed by mop up trapping and shooting to remove residual animals.

Involving landholder groups, individuals and community organisations in the design of pest management programs where considerations such as biology and ecology of pest animals are included in the planning phase, increases community understanding of pest animal management at a regional scale and supports community collaborative action, where public and private land managers work together using integrated approaches to maximise the effectiveness of multi-pest species management.

Landcare and community organisations can also be valuable partners in delivering practical handson training activities that increase the knowledge and skills of land managers to undertake more effective pest animal control activities. Landholders have limited time and money to contribute towards pest animal management, by participating in training that improves their skills in how to identify signs of pest animals, where best to put their control to maximise uptake, how to reduce non-target effects, how pest animals utilise the landscape and what they need to be monitoring in order to identify the early warning signs of pest animal impacts, their control efforts are more strategic and effective.

Awareness raising and training programs need to be delivered at local, regional and state levels. Mobilising groups, that willingly and voluntarily come together is essential to the effective implementation of broadscale, coordinated, cooperative and integrated pest animal control programs. These volunteers need access to relevant training, information, latest technologies and research outcomes to help maintain enthusiasm and commitment and ensure that best management control practices are being implemented. Regionally relevant training and awareness raising activities should be developed to involve multiple stakeholders (private and public land managers) in planning and monitoring. Regional training should be based on the principles of best management practice and provide consistent messages to land managers from a variety of sources.

Industry bodies should be engaged through state and regional planning processes. Involving all stakeholders in the development of regional pest animal management plans facilitates ownership and promotes shared responsibility. Investment from agencies, industry bodies, producer groups, external grants, Landcare and community members can be leveraged if resourcing, strengths and gaps are recognised in the establishment and review of these multiple stakeholder pest animal management plans. This collaborative multi-stakeholder approach reduces the risk of duplication and provides a forum for knowledge transfer, prioritisation of pest animal species needs and agreement on best practice approaches to landscape scale pest animal management.

Case study two:

The 'Wee Jasper and Brindabella Cooperative Wild Dog Management Plan' is an example of where the investment in multiple stakeholder partnerships to recognize pest animal issues and identify solutions together contributes to the effectiveness of the program. Landholder involvement was essential to the success of this Plan. Involving landholders and the community from the start builds relationships and ensures local ownership and plan relevance through genuine contribution and involvement. The process of developing collaborative pest management plans facilitates mutual understanding and dissipates barriers and 'finger pointing'. Strong multi-partner relationships are essential to rebuilding enthusiasm and commitment at times when activity declines and mutual respect facilitates open, honest and respectful communication to ensure pest animal management can be driven by individuals who are dedicated to a common goal. We all have a common goal, to "find a solution to the impact of pest animals in our area of management".

3.3 Priority Pest Species

The prioritisation of pest animal species should consider the views and values of the community whilst also acknowledging the feasibility of outcomes for investment. The invasion curve is essential for the prioritisation of pest animal species needs based on the feasibility of control. i.e. prevention, eradication, containment, asset protection. Additional criteria such as triple bottom line impacts and future risk also need to be considered.

The community needs to be actively involved in the identification and prioritisation of pest species at the local and regional level. This process can occur as a part of the already suggested

multiple stakeholder partnerships and pest management planning framework. Identification and prioritisation of pest species should also be linked to the identification and prioritisation of impacted assets. Additional criteria for consideration may include the capacity for leveraging of investment, such as industry group contribution, external grants, volunteer support as well as prioritisation of the asset the pest animal control will protect and the stage of the pest animal incursion in the region eg:

- If Indian Myna birds are not established in an area then it may be justifiable to invest in the removal of a small number of birds that have recently been identified, i.e. a new incursion locally (even though Indian Myna birds are well established in a number of areas within NSW); or
- Even though Wild Dogs are established throughout most of the eastern areas of NSW, investment in maintaining a containment line to limit their spread west may be a priority.

Landcare (including Rural groups, Bushcare, Friends of and Coastcare groups) can leverage, through resourcing; awareness raising opportunities regarding the prevention of new incursions, emerging species or future risks, by disseminating information throughout their strong communication networks. Landcare is a well-established community organisation consisting of volunteers and experienced land managers, working voluntarily in groups. These community groups can contribute to the prevention of new or emerging species through Citizen Science programs and effective communication channels.

3.4 Landscape Approach

The strategic and coordinated planning for pest management across tenures can be improved through the formation of multiple stakeholder partnerships and planning frameworks. As highlighted by the 'Brindabella and Wee Jasper Wild Dog Plan' if pest management planning is broken down to the fact that all land managers are trying to find a solution to the impact of pest animals in their area of management, regardless of individual drivers, collaborative action to maximise pest control efficiencies can occur.

If the ecology and biology of the target pest species as well as the impacts identified by all stakeholders are considered in the planning and review processes, strategic control can be planned and implemented. For example an area may be impacted by feral pigs (pasture destruction – landholder driver) and wild dogs (predation of rock wallabies – NPWS driver); understanding the biology and ecology of the pest species as well as the impacts allows shared responsibility and decision making to occur. As feral pigs require considerably more 1080 than wild dogs to effectively poison them, an across tenure control program may occur to poison feral pigs in winter when available protein is low in the environment and then complete a wild dog 1080 baiting program after reducing the feral pig population before the major rock wallaby breeding event. This results in a win-win outcome for both agricultural and environmental drivers and removing feral pigs from the landscape first means that more 1080 wild dog baits are available to wild dogs and other predators.

All pest animals have a territory and/or a home range, research has shown that the size of these territories and home ranges depends on the landscape, environment and resource availability. If indicative territory/home range sizes for an area can be considered during the planning of local and regional pest animal control programs then the required scale of a program for effectiveness can be determined.

As with all decisions, the details of a pest animal management program including whether activities should be coordinated by species or locality, and the scale at which a program should occur, should be identified by stakeholder representatives through a collaborative approach.

However, the four principles (broadscale, coordinated, cooperative, integrated) should also inform these decisions.

A number of actions and principles contribute to the success of shared, landscape scale pest management. These include; local ownership, communication, acknowledgement of contributions, cooperation, planning, monitoring, reviewing and sharing results, seeking feedback and the building of genuine partnerships.

There may be opportunities for pest animal and pest plant control to be integrated at the local level, there are a number of links between pest plants being habitat for pest animals and pest animals aiding in weed dispersal. However, there are distinct differences in the management of pest animals compared to pest plants. The difficulty in integrating management of pest animals and pest plants is that you lose specialist skills and technical experience. This is an important consideration that will be informed, in part, by the differing needs of each community.

3.5 Emerging Issues

A number of emerging issues including the identification of risks and opportunities, increasing the awareness of animal welfare requirements when undertaking pest management, and managing the risk of new pest incursions, can be highlighted to the broader community through the dissemination of clear, concise and relevant information. Landcare networks and landholder groups can contribute to increasing community understanding of emerging issues and increasing the knowledge and skills of community members to actively identify and manage emerging issues.

Landholder groups, where supported, provide a great mechanism for acting on emerging and emergency biosecurity issues. Where groups do not exist pest management is a constant battle that does not result in lasting outcomes.

3.6 Adequate Resourcing

Current resourcing and funding arrangements are not sufficient, as identified in the issues paper a number of activities currently occur in duplication and resources and skills could be utilised more effectively in a collaborative method than facilitates shared responsibility.

The resourcing to support the efforts of volunteer pest animal control groups is often overlooked or inadequate. The private investment in pest animal management made by individual landholders and pest animal control groups is often underestimated – and without this private investment effective pest animal management cannot occur. The key to unlocking this resource is to enable and empower landholders and community groups to contribute their local private investment to a regional outcome that also leverages and brings public good outcomes.

Public investment should resource such support as coordination/facilitation of group efforts and increased involvement, access to latest research information, training in best practice control techniques, providing monitoring data in a useful and relevant manner or facilitating the sharing of experiences between pest animal control groups.

There are a number of pest animal management specialists (practitioners) throughout the public and private sectors. The development of a 'practitioners' resource pool that can be utilised when necessary would be a valuable resource. As new technologies become available it is easy to lose sight of basic foundational principles. Pest animal management is a complex issue that requires the effective use of a broad suite of integrated methods, there is no silver bullet to effective pest animal control. As highlighted in the issues paper:

"Building trust and maintaining relationships with landholders requires more than technical expertise and knowledge. Relationships are built over time and this requires continuity of staff and stability of organisations".

Agencies and departments regularly undergo restructures and staff turnover can be frequent; due to these changes local and historical knowledge can be lost. Landcare is a grass-roots community organisation that predominantly consists of volunteers and long standing community members. Landcare has a strong history and has been a voice for the community and changing community needs for over 25 years. Continuity and the building of trust and maintaining relationships is a founding principle of Landcare.

There are considerable social impacts from pest animals; Landcare has established partnerships with other community organisations and land manager groups, and the social benefits of Landcare networks have long been recognised for contributing to community resilience. Through genuine, resourced partnerships the relationships and connections established by Landcare can be leveraged to engage more land managers in effective pest animal management and increase knowledge and skills of the broader community regarding the need for shared responsibility and the need to work together through coordinated action.

There are cost-sharing arrangement opportunities between agencies, industry groups, organisations and private landholders. Cost sharing arrangements should be based on the needs of individual regions and communities. Any cost sharing arrangements should explicitly define how funding/revenue are to be used and how the success of the program will be defined and measured. e.g. if the current rate base is expanded, the use of that additional funding should be explicitly defined. How the funding will be spent needs to be identified in partnership with the community – ie 'mop up wild dog trapping after coordinated and broadscale aerial 1080 baiting has occurred', or '1080 poisoning of rabbits in high conservation value Endangered Ecological Communities'.

Decisions regarding the use of additional funding/resourcing from industry players, stakeholders or landholders should be based on recognised best practice and needs identified by the community, and there should be transparency in the decisions made.

3.7 Knowledge Building

Standardised training activities should be mandatory for advisers and facilitators. Currently Certificate IV in Vertebrate Pest Management is recognised and delivered to agency staff when they first start in a biosecurity role. Due to advances in technology, frequent research outcomes and legislative changes, staff in an advisory/coordination/facilitation role working in pest management programs need to keep up to date with the latest information and should undertake additional training regularly. A communications email network should be established and include all pest management professionals, DPI should regularly disseminate research information and changes to recognised best practice. This would ensure consistent messages that are up to date with current best practice are provided to land managers from numerous organisations regardless of whether they are from NPWS, LLS, Landcare or the private sector.

Knowledge building is not only restricted to improving the knowledge and skills of pest animal advisors and facilitators. Knowledge building amongst the community, to increase their understanding, and hence ongoing involvement occurs in several ways – from access to useful information, peer learning opportunities and technical training that increases understanding of pest animal impacts, the importance of integrated control methods and learning from program

results; to co-learning by being part of the planning and implementation of the program. The following are examples of learnings and knowledge building by being involved in a hands on capacity within a group program:

- Pest animal management is not easy and there is no silver bullet. Stakeholders and
 organisations need to continually work together to utilise integrated control methods in a
 broadscale, coordinated and cooperative manner. Using one approach or one tool will
 select animals. e.g. not all animals will take 1080 bait (bait shy) and not all animals can be
 trapped (trap shy) or shot; but by increasing landholder understanding for the need to
 use all methods of control, more individuals from a population will be removed and the
 control efforts will have better, longer lasting results.
- In order of pest animal management to be successful it is essential that landholders and community organisations are involved from the start of any program. A genuine partnership between all stakeholders (private and public land managers) builds relationships and breaks down barriers. Identifying pest animal impacts as a multistakeholder group builds empathy between stakeholders and demonstrates commonalities, and builds knowledge. Once pest animal issues have been identified stakeholders can work together to identify solutions, using their combined knowledge base.

The development of a guiding multi-stakeholder pest animal management plan **with** the community that is tailored to the needs of the region builds community resilience and organisational capacity whilst also fostering shared responsibility. Effective two way communication and the resourcing of groups to leverage individual investment through broadscale, coordinated, cooperative and integrated programs is the key to effective long lasting pest animal management.

The development of a collaborative pest management plan that is reviewed and adapted frequently based on monitoring and community feedback will leverage skills and resources and increase ALL stakeholders' knowledge and capacity to be prepared and responsive to the ever changing nature and demands of pest animal management.