

BUILDING BIOSECURITY FOR SMALL FARMS

A SMALL FARMS NETWORK GUIDE



Building biosecurity for small farms – A Small Farms Network Guide Job No. 16195

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We would like to acknowledge the small farmers residing in Greater Sydney who were willing to be part of our case studies to showcase the alternative pathways producers may connect with one another to maximise opportunity, production and profitability.

















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Introduction

Small farmers play an important part in keeping Australia's agricultural industry free from the impacts of pests and diseases.

This guide will help you establish or join a livestock-based small farms network in your community and show you the benefits of being a part of one. It provides real life examples from other producers, the latest information on best practice biosecurity and tips on developing your farm biosecurity plan. Having

a biosecurity plan for your farm is key to effectively managing the risks of pests, diseases and weeds.

This guide was developed as part of the Livestock Producer Surveillance Champion project¹, the effectiveness of smallholder champions in promoting producer-based livestock health surveillance and networks.

While this guide has a livestock focus, the same farm-based biosecurity and smallholder networking principles apply to other farming and community gardening enterprises.

Background

Australia boasts 336 million ha of grazing land (40 percent of all Australian land) and is home to 95.4 million head of cattle and sheep. In 2016/17 agriculture contributed \$62 billion to the Australian economy, making the protection of this industry vital.

What is biosecurity?

Biosecurity means protecting the economy, environment and community from the negative impacts of pests, diseases and weeds. Practicing good biosecurity means taking action to protect your hobby farm or small landholding from the negative impacts of pests, diseases, weeds, and contaminants. Being biosecure will help:

- » Keep your animals safe from disease
- » You to grow more produce and reduce impacts of weeds and pests
- » Reduce stock losses and infrastructure damage by pest animals

» Help our primary producers gain better yields at lower costs, whilst maintaining access to interstate and international markets.

Everyday farming and gardening practices are all part of being biosecure.

This includes:

- » Good weed management
- » Pest animal control and management
- » Participating in the National Livestock Identification System, traceability and market assurance programs
- » Having the right licences, registrations and permits
- » Preventing the spread of disease and pests by checking materials and machinery when they enter and leave your property for unwanted hitchhikers
- » Educating farm visitors on the importance of biosecurity
- » Having an emergency disease action plan.

Your general biosecurity duty or obligation

There are certain actions a small landholder or hobby farmer MUST legally take to be biosecure. These are detailed in your state's biosecurity legislation, e.g. *Biosecurity Act 2015* and supporting legislation in NSW https://www.legislation.nsw.gov.au/#/view/act/2015/24/id1.

The laws cover things that are likely to have the biggest impact on our economy, environment or community. They include rules around:

- » High risk and priority pests and diseases that MUST be reported - these are known 'notifiable pests and diseases', 'prohibited matter' and 'biosecurity events'
- » Controlling the movement, keeping and release of pest animals
- » Controlling the movement, treatment and importation of plants
- » Having the right accreditation, registrations, certificates and permits.

As well as prescribing the rules for high risk biosecurity matter, state biosecurity legislation includes a biosecurity duty or obligation for small lot holders, hobby farmers and everyone who deals with biosecurity matter.

This means that all tiers of government, industry and the people of Australia need to work together to protect the economy, environment and community from the negative impacts of pests, diseases, weeds and contaminants.

You are supported in managing biosecurity by your state Department of Agriculture, for those in NSW, this is the NSW Department of Primary Industries, and Local Land Services, as well as other public and private land managers, community members and peak industry bodies.

Visit your state's General Biosecurity Duty page for more information. For those in NSW, this is: https://www.dpi.nsw.gov.au/biosecurity/managing-biosecurity/the-general-biosecurity-duty

Community approach to biosecurity – building a small farms network

The effectiveness of farm biosecurity plans is strengthened when delivered across local networks. Creation of networks for small landholders is recognised as a model which builds participation, inclusiveness and community support resulting in better land, livestock and biosecurity management.

A small farms network involving a number of communities in a region are likely to have greater landholder engagement where the:

- » Regional aspects of the local community, ie. provide local solutions to local issues
- » Interests ie. common experiences, values, lifestyle, culture and
- » Practices such as horticulture or livestock production are considered and catered for.

In addition, community and farmer networks have been shown to enable communities to better support each other and provide "services" beyond agricultural production and environmental outcomes when faced with adversity, such as natural disasters (GHD, 2013).

In 2011, Wegner-Trayner identified a number of critical success factors in developing a Small Farms Network, these include:

- » Leadership a network needs someone to provide the energy and time to take care of planning and logistics
- » Time to develop and continually evolve the network to ensure high value for ongoing engagement and commitment by community members
- » Self-governance and a sense of community ownership
- » Recognition of members' contributions sense of inclusion
- » Interactions with other communities for broader engagement and development of knowledge and skills.

Who are small landholders?

The term 'small landholder' encompasses a diverse range of land managers and can include small farmers, lifestyle, hobby and absentee landholders. Small landholders are viewed as managers of properties less than 100ha in size (40ha in coastal zones), sub commercial in nature with diverse interests, a mix of traditional and heritage livestock breeds with

lifestyle commonly quoted as a key motivator. Many small landholders demonstrate a keen desire to learn, strong stewardship and environmental values, are open to new and innovative ideas, life experiences and off-farm income which supports and drives the local economy. A key message from existing networks across Australia is:

"While small in size, combined they could result in a large area of land managed for better water, biodiversity, biosecurity and productivity outcomes."

Why create a Small Farms Network?

Across Australia small landholder networks are developed to improve engagement with this growing demographic. The networks provide support for small landholders to develop and manage their property more sustainably and adopt best practices in agriculture and land management.

Most small landholders identify themselves as a 'small farmer' and value a support network that addresses their needs. Most networks begin by coordinating workshops and field days around soil, pasture and weed management which are the dominant land management issues for small landowners. Other topics of interest include animal health and production, bee keeping, integrated pest management (IPM) and farm planning.

Small Farms Networks provide opportunities for collaboration and cooperatives where members can share equipment and pool produce for better marketing opportunities. Additional opportunities such as business development and associated marketing and skills development are also associated with involvement in Small Farms Networks.

Building a small landholder network gives its members a supportive, targeted, inclusive and stronger community, enabling landholders to socially connect with like-minded farmers. Landholders can meet neighbours, share stories and can have access to and connection with larger producers and locally relevant resources. Visits to other properties provide the opportunity for evidence-based approach to farming and peer-learning from farmers with similar interests and land management issues, including quality assurance, on-farm biosecurity planning and pest management solutions.

"The first three years of the Small Farms Network in the South Coast of NSW focussed on running regular agricultural workshops, providing opportunities for landholders to meet in a relaxed and social environment. We realised this is what landholders wanted, a social support network where they could learn, laugh and share their successes and failures. Providing a safe environment for landholders built significant community trust which leads to huge onground benefits."

South East Small Farms Network Coordinator

Developing management systems

Small landholder networks across Australia are predominantly coordinated by government through regional Natural Resource Management (NRM) and state agricultural jurisdictions. Other networks, such as the Capital Region Small Farms Network are run by a volunteer committee with a part-time paid coordinator to deliver a wide range of services to members.

A key lesson identified by new and existing networks is for staff and coordinators to develop management systems before launching a new network. The demand and support from small landholders can become overwhelming with initial interest extremely high.

Setting up simple, effective membership, communication and social media platforms is vital to ensure the successful launch of a new network. Whether it is using a spreadsheet or database for membership records, online platforms for e-newsletters, Facebook and webpages for event promotion, having these systems in place enables greater control over landholder data, promotion and evaluation of outcomes. Many of these management tools are free, easy to use and save significant time for coordinators.

Membership

Building membership can be challenging depending on location, existing industry and Landcare networks, climatic conditions and varying landholder types (e.g. absentee vs on-farm). The majority of small landholder networks begin by promoting themselves through existing groups, media articles, letterbox drops across and attending regional field days. Building relationships with local agribusiness/produce stores, breed societies, community groups (e.g. local amateur beekeepers' association), Landcare and council weeds officers greatly increases engagement effectiveness but also encourages cross promotion of workshops, funding and seasonal management tasks with regional partners.

Government coordinated networks can offer free membership to join an e-newsletter mailing list, while community based groups may charge a nominal fee to gain priority access to workshop updates, funding and local discount opportunities. Linking social media platforms to digital registration forms can increase membership and provide direct contact via a centralised email database.

Communication is key

Communicating a wide range of information specific to small farms is a key focus of all small landholder networks across Australia. Free and regular e-newsletters to landholders providing links to online resources (fact sheets, property checklists, calendar of operations), cross promotion of regional workshops (agricultural, Landcare, natural resource, biosecurity), field days, funding opportunities and biosecurity updates, aim to increase the knowledge and awareness of better farm management practices.

The Capital Region and South Coast Small Farms
Networks send out regular e-newsletters to a combined
membership list of 950+ landholders across South East
NSW. Both networks achieve an average opening rate
of 49 percent which is above the industry average of
18 percent. Feedback indicates e-newsletters are the
primary source of local information for sustainable land
management issues. Using free online tools provides
coordinators with accurate feedback on the topics,
resources and events small landholders are interested
in, which informs future updates and workshop topics.

"Thank you for your emails. I may not attend many field days but I love reading about what is happening across the region and letting my neighbours know what's going on."

Capital Region Small Farms Network member

State coordinated networks provide a wealth of resources (fact sheets, biosecurity management planning guides) on regional websites, while community-based networks provide links to government fact sheets, workshop summaries, project case studies and local information. The use of social media is a great way to promote events however, reach is generally limited with older members not always active or interested in adopting the technology. Using multiple communication tools can extend reach and capture all demographics.

Tips for maintaining an active network

Train members for leadership positions - Members who take on leadership roles tend to have a greater investment in the network, will bring new ideas and perspectives to the group, and share the load of responsibility with the network coordinator. In addition, training members as leaders is a great way to build their confidence and organizational skills, which can then be applied to individual businesses and other community efforts.

- » **Include food at meetings** Combining a meeting with a meal fosters a sense of community enabling socialisation and networking to occur naturally over a shared plate.
- » Provide a balance of support, skill-building, social, and educational opportunities at events Network members will have a diverse set of needs, learning styles, and preferences. Different types of learning environments, such as on-farm, classroom, and informal settings should be considered to best serve your members with resources meeting a range of learning styles (auditory, visual, kinesthetic, and tactile).
- » Solicit feedback from the group to stay in tune with the changing interests Group activities need to reflect their changing needs. This can be determined via a simple survey and/or post event feedback to ensure the network continues to meet the group's needs.
- » **Keep it fun** A small farms network should not feel like work, providing fun, creative opportunities will help keep members engaged.

Workshops

Delivering workshops on a diverse range of agricultural, biosecurity, livestock and natural resource management issues is a great way to engage with small landholders. Soil fertility, pasture and weed management as well as property planning are key topics of interest. Small landholders are usually enthusiastic and keen to learn a wide range of skills and information. Partnering with local associations and community groups to run workshops on backyard poultry, beekeeping and fruit tree management provides an excellent opportunity to engage a wider audience while still promoting key biosecurity and land management best practices.

Most networks agree it is important for presenters to be engaging and relatable. Workshops are held on farm where possible in a relaxed, safe and social atmosphere and include a balance of theory and practical sessions while providing adequate time for landholders to network over lunch or morning tea.

Providing a range of fact sheets, management guides and other resources is useful, as well as integrating key biosecurity and land management topics into each workshop, such as:

- » Showcasing good on-farm biosecurity in-situ from the farm gate through to the production area
- » Managing the introduction of new stock, equipment and visitors
- » Management of sick stock
- » Pest and disease surveillance and reporting practices
- » Regional weed management strategies.

The topics above ensure landholders take away a number of key messages and practices to apply on their farms.

Coordinators have found Friday workshops or short two hour weekend or weeknight information sessions are preferable for busy small farmers.



Small Farmers Workshop on sheep management and handling at Belgenny Farm, NSW. Photo courtesy of Nicole Schembri, NSW DPI.



Small Farmers Network workshop of calf marking and cattle management at Braidwood, NSW. Photo courtesy of Nicole Schembri, NSW DPI.

Top 10 Key Learnings from a Small Farms Coordinator

- Identify your target audience, consider whether
 the network will target a specific group of
 producers (e.g. new producers) or a broader
 group of producers and the geographic region
 the network will encompass. Knowing what the
 network is aiming to achieve, such as building
 skills and biosecurity capability will help in
 identifying the target audience.
- 2. Being able to clearly describe the purpose of the group will help promote the new network, boost membership and provide a framework for network activities.
- 3. Take time to build your management systems membership database, e-newsletter and social media tools. Sign up to state, regional and local newsletters, search online booking systems, bookmark your state Department of Agriculture and Landcare event pages and use this to create relevant content for your e-newsletter.
- 4. Build relationships with local organisations, associations, agribusinesses and council weeds officers.
- 5. Coordinate regular and diverse workshops focussing on soil fertility, pasture, weeds, livestock management and biosecurity:
 - a. On-farm workshops are best structured to have theory in the morning, practical in the afternoon, good food in between and plenty of time for networking and peer learning.

- b. Workshops are best held on Fridays and short weekends, or as evening events of around 2 hours.
- c. Integrate key farm biosecurity management messages into all events.
- 6. Whole farm management and one-on-one farm visits build relationships, trust and maintain engagement.
- Regular communication of regional events should be a priority, in order to cross-promote a wide range of workshops, field days, funding and other opportunities to meet the diverse interests of small landholders (e.g. beekeeping to cheese making).
- 8. Regular feedback via surveys and post-activity feedback will help inform the future direction of network activities and maintain active engagement in the network.
- Seeking funding or grants from external organisations can boost network resources, reduce the cost of network activities attracting more producers to the network.
- 10. Have fun by creating a safe and open learning environment for all to share stories of success and, more importantly, failures.

References

GHD, 2013. Multiple benefits of Landcare. Final Report to Australian Landcare Council, 7 July. https://landcarensw.org.au/wp-content/uploads/2015/11/Multiple-Benefits-of-Landcare.pdf

Wenger-Trayner, 2015. Communities of practice a brief introduction. https://wenger-trayner.com/wp-content/uploads/2015/04/07-Brief-introduction-to-communities-of-practice.pdf

Small Farms Networks – Case studies

Small Landholder Information Service, WA (1999–2015)



Photo © Peter Maloney, Western Australian Agriculture Authority.

Network location

Higher rainfall areas of the South West of Western Australia.

Reason for network being initiated

In 2004 DAFWA formed the Small Landholder Information Service (SLIS) to provide information to small landholders on natural resource management, biosecurity, property planning, horticulture, animal management, soil and water conservation and economic development. In 2004, an estimated 60,000 small landholders (farming properties less than 100 ha), occupied over 650,000 ha of rural land in Western Australia.

Key extension focus

The SLIS provided a variety of technical and targeted online resources and free workshops based on landholder needs. Important natural resource management and biosecurity messages were incorporated into each event. SLIS also provided an enquiry service and developed a range of information products targeting the small landholder including:

- » Online Small Landholder Resource Hub https://www.agric.wa.gov.au/climate-land-water/ land-use/small-landholders-western-australia
- » Seasonal e-newsletter what to consider in the upcoming season, ideas for your property, seasonal calendar, events and articles
- » Field days and small landholder events allowed for direct communication and opportunity to promote the service and increase e-newsletter subscription

- » An enquiry service, which receives an average of 40 telephone and email enquiries per month
- » Small landholder community column, published in up to 17 community newsletters (at a very low cost) and potentially reaching 14,800 landholders per month.

Key learnings

- » Developed relationships and partnerships and collaborating with agribusiness, local Landcare groups, local government and other small landholder services resulting in better promotion and extension opportunities eg: workshop, webinar and field day collaboration
- » Weekend and weeknight workshops were preferred due to off-farm work commitments
- » The importance of developing and sharing information tools in partnership with other organisations (e.g apps for small landholders)
- » Potential to support small landholder/business cooperatives (e.g. market products/ work as a group to acquire services and products at a cheaper rate buying in bulk)
- » Social media and online platforms for information sharing was increasingly important
- » Local ownership focus on developing the local networks and organisations already providing services to small landholders
- » It took four to five years to develop market place recognition amongst all stakeholders.



Mobile smallholder information trailer used by SLIS WA officers.

Small Farms Network, South Coast, NSW (2004 - ongoing)

Network location

South Coast NSW (Shoalhaven and Illawarra regions) and across the southern highlands of NSW.

Motivation

To engage the large number of new small landholders moving from Sydney and assist them to manage their land more sustainably and productively while building a supportive community to share resources and ideas. A strong focus on agricultural production and coordinating diverse workshops (backyard beekeeping, poultry, pasture management).

Funding

The Small Farms Coordinator position is primarily funded through the National Landcare Program and partly through Catchment Action NSW for the delivery of onground projects as well as via Envirofund, Environmental Trust, Sustainable Agricultural/NLP grants.

Membership

Free for all landholders regardless of property size or industry. Members receive a fortnightly e-newsletter promoting local and regional events. There are currently 720 members, most on small properties up to 40ha. with no farming background, but are keen to have livestock and improve their property.

Extension focus

The network was supported by NSW DPI Extension Officers who provided significant time and resources to run on-farm workshops focussed on soil, pasture and livestock management. These events were fundamental in landholder engagement and formed the basis of a number of improved land management programs during 2004-2010. The network also:

- » Coordinated a wide variety of small farms/lifestyle workshops eg: beekeeping, cheese making, biodiversity forums, meat chickens, home preserve making, increasing engagement of a wider audience
- » The development/creation of industry associations allowed the network to develop community capacity and establish a peer-learning model to improve long term management practices
- » Established the Berry Small Farms Field Day attracting 6,000 people.

Key learnings

One of the key benefits is the opportunity for landholders to connect, build relationships, share resources and support each other. Other learnings include:

- » Regular communication through regional and local newsletters, social media, websites (Eventbrite / Local land Services for workshops) and Landcare groups maximises reach
- » On farm workshops are important; creating a relaxed, social environment for landholders to share ideas and management issues.

- » One-on-one farm visits build trust and create onground change with minimal investment
- » Offering a range of services from weed and pasture ID, soil testing, funding and general advice save landholders time and creates opportunities to create property-specific change
- » Word of mouth continues to be the primary engagement tool. Neighbours, council weeds officers, Local Land Services staff and contractors telling landholders about the network and funding available for project work.



South East Local Lands Services Small Farms Network at a local small farms field day event. Image courtesy of Andrew Britton, Local Land Services.



Sheep handling workshop Image courtesy of Andrew Britton, Local Land Services.



Bee keeping workshop Image courtesy of Andrew Britton, Local Land Services.

Small Farm Living, NRM North, Tasmania (2012 - ongoing)

Network location

Northern Tasmania – the region covers 25,200 km². The Small Farm Living program's regular engagement extends to landholders in Cradle Coast NRM and NRM South regions and some landholders on mainland Australia.

Motivation

In 2012, NRM North commissioned a report to determine the best way to engage with local smallholders. Report findings highlighted many small landholders felt intimidated engaging in extension activities as they weren't commercial farmers, had other jobs and couldn't attend when events were held.

Funding

The Small Farm Living program was established in July 2012 through funding provided by the Australian Government's Biodiversity Fund and the National Landcare Program.

Membership

The program is designed to support and assist owners and managers of small, non-commercial lifestyle holdings (<100ha) to develop and manage their property sustainably. A monthly e-newsletter is distributed to keep members up-to-date with the program, upcoming events and feature resources that are often available online https://www.nrmnorth.org.au/small-farm-living-resource-centre.

Key extension focus

The Small Farm Living program began by coordinating workshops focussed on soil and pastures extension. After the first two years, a program review found there was greater demand for knowledge and skill development than for financial assistance with onground works. The program evolved to offer

- » Property planning tailored to smallholders
- » Local workshops and field days
- » A web-based resource centre
- » Support for eligible environmental works on properties.

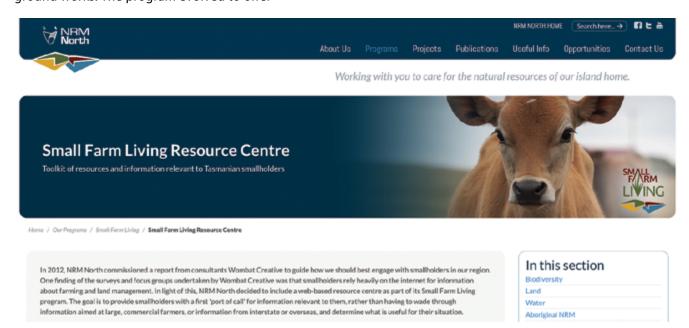
Other major activities delivered through the Small Farm Living program have included:

- » Hobby farm pasture renovation trials
- » The biannual Small Farm Living Field Day
- » Small Farm Property Management Planning (PMP) workshops
- » Farm fencing demonstrations activities
- » Balancing soil nutrients/soil health

Key learnings

From the program review report in 2012

- » Smallholders relied heavily on the internet for information about farming and land management resulting in misinformation. Web-based resource centre was developed as a first 'port of call' for relevant information.
- » Smallholder Property Management Planning (PMP) has been successful and well-subscribed and small grants for on-ground works are often attached to PMPs.
- » NRM North/Small Farm Living has strong networks with other local organisations enabling crosspromotion of events between local organisations.
- » A majority of small landholders have off-farm jobs, timing of events and pitch of information being delivered is important.
- » The need for knowledge and tools were stronger drivers for participation than financial assistance for environmental works.
- » Workshops and one-on-one advice (very popular) to support behaviour /on-ground change have achieved more cost-effective practice change.



Small Farms Network Capital Region Inc. NSW (2015 - ongoing)

Network location

Based in Bungendore NSW, the network services the needs of people managing small rural holdings in the NSW Southern Tablelands with people travelling up to 100km to attend events.

Motivation

The Small Farms Network Capital Region (SFNCR) was a community initiative started by small farmers in 2015 to fill an information and education gap related to managing small rural holdings. The objective of the SFNCR is to deliver improved agricultural productivity and land management for the long term especially on small rural properties in the Capital region.

Funding

The network has maintained administration of a number of grants, including a Sustainable Agriculture Grant from the Australian Government, Department of Agriculture; the NSW Local Land Services Community and Industry Landscapes Fund; Environment Small Grants and volunteer in kind contributions.

Membership

The SFNCR is an incorporated association with paid membership \$20 per annum. The cost includes early notification of workshops, advertising in the newsletter and access to the members-only Facebook page and members-only events. Participants attending workshops pay a small fee of around \$25 per person, which helps cover catering and other minor administration costs. The network currently has 81 members and a committee of six volunteers who run the community association and employ, guide and support a project officer. (See map opposite for smallholder distribution in the Capital Region).

Key extension focus

Priorities and themes for the network's education events are based on participant feedback collected at earlier events. There is emphasis on the hands-on building of practical skills and matching the content to the needs and realities of small farmers.

- » Communication is maintained via a monthly newsletter, Facebook page, a members' Facebook Group, advertisements and press releases
- » A summary for each education event is posted on the website along with links to useful resources. These summaries are accessed by people across Australia with around 25,470 website visitors in the second half of 2018
- » Email communication to members (including the newsletter) has proven successful in engaging with the small farms' audience. Facebook has been less effective but by publishing information in multiple formats, the network has been able to engage a wide audience
- » Marketing of events has been via Eventbrite, with further notices placed on the website, e newsletters, facebook and local papers
- » The committee attends local shows and field days to engage local producers.

Key learnings

The SFNCR community engagement model has worked with committee members managing projects as volunteers and through collaboration with several government agencies such as the NSW Department of Primary Industries, Local Land Services in NSW and the ACT Regional Landcare Facilitator.

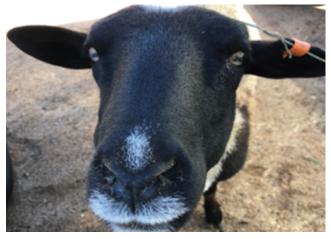
- » Network members are less likely to engage in formal courses because they have little need for formal qualifications related to farming. At workshops, powerpoint presentations are kept to a minimum and always have a hands-on component
- » The greatest challenge has been sourcing funding to maintain current level of activity.

The project has led to the following outcomes

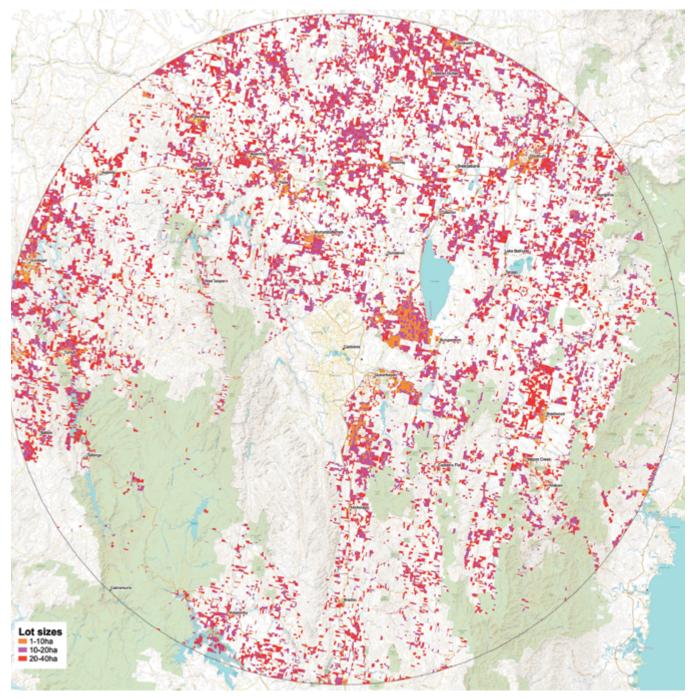
- » Greater knowledge about evidence-based land management and animal husbandry practices and strategies for smallholders
- » An increased sense of community and inclusivity through regular opportunities to connect with other smallholders at workshops and events
- » Increased awareness of private land conservation, natural resource management and retention of native vegetation on farms
- » Raised awareness in the small farms community about key natural resource management messages, weeds and biosecurity.



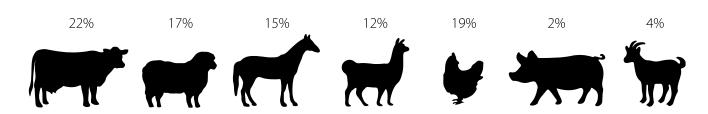
Small Farms Network Capital Region Sheep Health and Farm Biosecurity Workshop participants learning from farm owners and veterinarian. Photo courtesy of Nicole Schembri, NSW DPI.



Black-face Dorper from the above property. Photo courtesy of Nicole Schembri, NSW DPI.



Small rural lots in the capital region. Image courtesy of Small Farms Capital Region.



Livestock kept by members, 2016–18. Image courtesy of Small Farms Capital Region.

Emergency Animal Disease Watch Hotline

The most serious diseases, such as foot and mouth disease, mad cow disease, swine fevers and rabies are termed emergency animal diseases and have major consequences for the whole economy as well as individual farms. In the event of an Emergency Animal Disease incursion, farms with good biosecurity practices are expected to have reduced financial and livestock losses compared to those farms with poor practices.

Australia has a hotline dedicated to dealing with emergency animal diseases and triage with the relevant state and regional authorities. Vets help farmers to develop biosecurity plans, undertake disease monitoring and emergency response activities for animal diseases.

EMERGENCY ANIMAL DISEASE WATCH HOTLINE 1800 675 888

The EAD Hotline in action

A landholder in Somersby, NSW experienced a sudden loss of 25-30% of their sheep and concerned, they immediately reported the event to the Emergency Animal Disease Watch Hotline. The hotline took details about the situation and recorded contact details for the landholder.

A representative from NSW DPI called the landholder back to get more veterinary details about the case and determine its level of urgency. The case was deemed suspicious, so a District Veterinarian from Greater Sydney Local Land Services was notified. The vet collected information about the disease activity and medical history of the animals. He attended the property to perform a post-mortem and collect faecal samples, blood and tissue for further testing. The samples revealed the cause of death as barber's pole worm *Haemonchus contortus*.

The landholder was advised to switch to a different drenching product and immediately drench the remaining animals. After two weeks, more faecal samples were tested and the results were negative for worms. The farmer was also equipped with parasite management knowledge regarding paddock rotation and timing of drenches. He also advised that minerals would aid recovery.



Conducting faecal egg counts. Image courtesy of NSW DPI



Barber's pole worm. Image courtesy of Professor Nick Sangster, University of Sydney

Small Landholder Case studies

Grace Springs Farm, Central Coast NSW

Tony and Virginia Mall established Grace Springs Farm when they moved to Kulnura in 2012. They produce grass fed and finished beef, pastured eggs, vegetables, garlic, honey and Muscovy duck meat and eggs. Regular farm tours and beekeeping workshops are also hosted at the property. All of this happens on a 10 ha property making this a productive small farm.

The Malls believe that healthy soils support healthy pastures that help produce healthy animals - nutrient dense produce to sustain a healthy population. They are part of the growing regenerative agriculture movement, farming without the use of chemicals, and working to improve the health of the soil and pastures they manage.

The cattle and poultry at Grace Springs Farm are raised ethically and managed with respect and kindness. "We keep a close eye on our cattle, regularly checking their condition and addressing any issues quickly. Having quiet, easy to manage cows gives us more time to work on other aspects of the farm," Virginia says.

Virginia has observed that by practising holistic management and looking after their soils and pasture means that their animals are in good health and appear to be less susceptible to disease. She has also found information on natural farming a useful resource to maintain good animal health.

The whole farm is considered as part of their holistic grazing plan. Virginia says that "during dry times, the family use electric tape fencing to graze the pasture available along laneways and within the house paddock." These areas are naturally fertilised and improved thanks to their duck and chicken enterprises and this also allows other paddocks additional days to recover before moving the animals back onto them.

During the drought in 2018 the grass was much shorter than usual however the paddocks still had groundcover, which is their main priority.

"Once rain did come in early spring, the response from the pastures was incredible. The pastures were actively growing with the warmer weather and we began to move cattle onto new grass every day to allow each area time to rest and recover," she says.

Virginia attended holistic grazing management training and found the course invaluable when applied on farm. "We move all of our animals regularly. The aim is for the animals to graze within the fenced area, drop dung and urine & trample any weeds they don't eat. This practice mimics natural grazing animals in herds, and allows a longer rest period for the pasture to recover before that paddock is grazed again".

Dung beetle populations thrive in the grazing paddocks, and play an integral role in processing animal manure to improve the soil health. Dung beetles also reduce the available manure for fly larvae and gastrointestinal parasites, removing the need for drenching cattle and reducing the time spent undertaking these activities.

The family are now adapting their farm management to manage biosecurity risks associated and the changing climate.

Virginia uses social media to share stories of success as well as the struggles that come with managing a farm. "I try to give people an authentic insight into the realities of running a farm and hopefully help them understand the benefits of regenerative agriculture," she says.

"We also open our farm up to local school students so the agriculture students can get some hands-on experience."

Social media is used by the growing community of regenerative farmers to regularly connect with each other. Virginia's enthusiasm for regenerative farming, producing nutrient dense chemical free food and simply loving what she does is contagious.



Cattle grazing on diverse pasture (photo courtesy of Grace Springs Farm).



Tony and Viginia Mall and family (photo courtesy of Joy and Sparrow Photography).

Camden Valley Veal and A Smart Farmer, Cawdor NSW

Luke and Jess Micallef brought their 12 ha property in Cawdor eight years ago. The couple studied agricultural science together at Sydney University and worked on farms before starting their own business. Starting with a blank canvas; no fencing, no farm infrastructure and no house, it was the opportunity to run a farm close to the city and their family that attracted them to the region. They now run a dairy herd of 70 of which 20 are currently being milked.

Initially the couple developed 'A Smart Farmer", a mobile dairy education business. "We offer a unique, educational and syllabus aligned experience for students to learn about the dairy industry and the nutritional benefits of drinking milk," says Luke.

"We saw an opportunity to diversify our operation and add value. We started to sell our veal direct to niche markets in the city to achieve a premium price. Later, we began to stop milking the dairy cows and allowing them to graze for a further nine months to gain fat. This then allows the butcher to hang the meat and creates a valuable dry-aged product that is both tender and flavoursome".

"It is important the butchers we work with share our values. We are passionate about using the whole animal and reducing waste. Testimonials from chefs and butchers have helped us to establish a market for our produce in some areas of Sydney," says Luke.

Jess says they learnt a lot from online research, trial and error and talking to other farmers. "At one time we had a bad case of pneumonia within the herd that we resolved by switching to bucket feeding," she says.

The Micallefs have a good relationship with their local vet and have learnt to take biosecurity disease prevention and management seriously. The couple follow a 7-in-1 vaccination schedule and address any health issues without delay. No calves younger than 14 days are purchased. The future plan is to require all calves brought into the operation to be tested for bovine viral diarrhoea virus (BVDV) to prevent weakening the herd's immunity.

"We hosted a biosecurity awareness event at the farm in 2017. The idea was to improve farm and animal health practices at the schools we work with, primarily to protect the health of our cattle when they visit," says Jess.

The couple have recently engaged an agronomist for advice on pasture management, and undertaken baseline soil and water testing in preparation for using recycled water for irrigating some of their pastures.

"Accessing a reliable water source is part of our strategy to maintain production levels during dry times. It has taken significant investment and five years of planning to use recycled water to irrigate our pastures," says Luke. "This will allow us to return to strip grazing, generally moving the herd twice a day and following a 20-day rotation plan."

The couple undertake fox baiting each year as part of a coordinated community program led by Local Land Services. This helps to reduce the impact of vertebrate pests and the potential spread of weeds and diseases.

The couple enjoy the process of producing their own quality food for the Sydney market, and themselves.

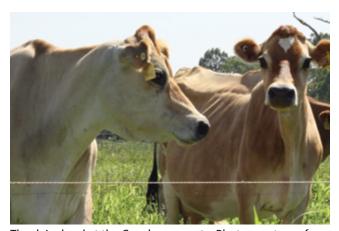
"We love to barbeque veal ribs with our own special marinade, there's nothing quite like enjoying a meal with your family on the farm it was created," says Jess of the family's favourite way to enjoy their produce.



Camden Valley Veal produce. Photo courtesy of Camden Valley Veal and A Smart Farmer.



The dairy herd at the Cawdor property. Photo courtesy of Camden Valley Veal and A Smart Farmer.



The dairy herd at the Cawdor property. Photo courtesy of Camden Valley Veal and A Smart Farmer.

Lancashire Downs, Hawkesbury NSW

For the last six years Linda and Mark have owned and operated a boutique beef cattle and horse property in the Hawkesbury. Motivated by a change of lifestyle they now manage 10 hectares of land along with 16 Lowline cattle and three horses.

Lowline are a versatile breed, have compact frames and are generally easy to manage. They are ideally suited to smaller farms.

All animals on the property are rotationally grazed meaning paddocks have rest periods between grazing. Rotational periods vary based on a variety of factors including seasonal conditions. Cross grazing is used to assist in managing internal parasites.

During recent drought conditions they chose to maintain their herd size. "It's been a challenge given the limited availability of quality feed and the ridiculously high prices, resulting in significantly higher costs," Linda says.

Linda and Mark sell their ethically and sustainably raised beef through direct sales via a network of 'conscious consumers' they have developed locally and in Sydney.

"We process a steer about every 10 weeks. Customers receive the beef vacuum-sealed and unfrozen, and are able to come to the farm to pick up their order or have it delivered," Linda says.

"As part of our marketing strategy we are able to share with our customers the whole paddock to plate story, of when the animal was born, how it has been raised and what it has been fed."

In 2017 Linda and Mark received a grant that allowed them to fence a 250 metre section of a creek that travels through their property. Bush regeneration techniques were used to control weeds including privet, moth vine and crofton weed.

Linda has a Bachelor of Agricultural Economics degree and continues to learn through a combination of experience, advice, reading and courses.

"The NSW Local Land Services have helped us by offering various workshops on soil management, livestock health and pests, sustainable horse property management and drought management," Linda says "It not only gives us access to the expert knowledge and advice, but also the opportunity to network with other farmers."

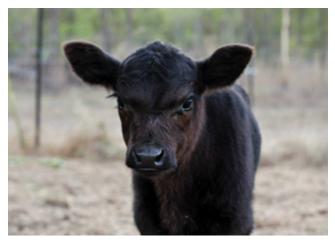
"Running a farm is challenging, especially during drought. Seeking out knowledge gives you the confidence to make informed decisions about your livestock, farm business, and protecting the natural resources on your farm such as pastures and soils," she says.

An annual vaccination program is followed to protect their cattle against clostridial diseases (pulpy kidney, tetanus, black disease, malignant oedema and blackleg) and the horses receive an annual 2-in-1 tetanus and strangles vaccination booster.

All animals are checked twice a day.

An important part of their farm management is carrying out regular faecal egg counts (FECs). FECs assist in: identifying the extent and type of internal parasites animals have; and determining the most effective treatment. Dung samples are collected and sent for analysis. Linda has used equine veterinary clinics and the state veterinary laboratory at NSW DPIs Elizabeth Macarthur Agricultural Institute at Menangle (https://www.dpi.nsw.gov.au/about-us/science-and-research/centres/emai) to conduct the FECs. Conducting regular FECs can be useful in monitoring worm control programs, selecting the most appropriate anthelmintic (wormer/drench), reducing the risk of resistance, and ultimately, improving the health and well-being of livestock.





Lowline cattle are raised on Linda and Marks' Hawkesbury property.

Elmsleigh Farm, The Oaks NSW

Lisa and Brad Martin bought their 80 ha property, Elmsleigh Farm, at The Oaks about five years ago. They run Black Angus beef on this farm and also agist on a further 40 ha nearby.

The Martins refer to themselves as ecosystem farmers and actively manage their animals to regenerate the landscape and monitor the recovery of the pastures.

The couple know starting a beef cattle business requires a diverse skill set, and the right infrastructure. "Farming is hard work, and over the years I have learnt to observe and monitor the natural systems. It takes time to learn and build your confidence, so don't be in a hurry to make large scale investments," Lisa says.

Over the years, through trial and error, reading, asking questions and attending training courses the Martins have developed the practical skill set and knowledge required to run a successful operation. Having grown up in the city, Lisa had to learn the required animal health and husbandry skills on the job.

The couple are currently considering agri-tourism to diversity their business and share the farm experience with others. "You have to work to your strengths," Lisa says. "By knowing your values and your context you can determine the best fit enterprises to add to the business and create complimentary income streams".

In 2018 the Martins trialled direct to the public beef sales and were able to sell 95 percent of their product through friends and their networks. The decision to process and market their 'seasonal' beef was motivated by the challenges associated with drought. While the beef is the product, it is their regenerative and ethical farm practices that they use to tell their story to customers.

Farm biosecurity is an integral part of Lisa and Brad's regenerative farm operations.

Lisa and Brad follow a vaccination schedule and have been taught how to correctly administer vaccines and keep records for all animals.

"Our business model is flexible but in general we breed and grow within our herd," says Lisa. "When we do have new stock brought on to the property, they spend time separate from the main herd to reduce the risk of introducing new weeds and diseases". This quarantine period also allows new stock to be vaccinated before mixing.

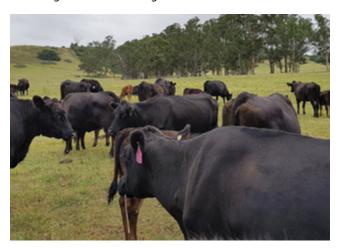
The couple also carry out regular checks of their herd. They observe how they are walking, body condition, herd behaviour and temperament. When stock is on agistment away from the property, the couple still look after the herd with daily visits to check the stock, water and fences.

The Martins have installed a biosecurity sign on the front gate to manage biosecurity risks as well as reducing the likelihood of the public entering without notice and causing a farm accident.

There are three endangered ecological communities on the property. The couple have received grant funding from Greater Sydney Local Land Services to conserve these communities using bush regeneration techniques. They also established the Spring Creek Landcare group, to manage the African olive and other weed infestations on the property and hope to welcome adventure land carers from the city in the future.



Black angus beef at Elmsleigh Farm.



Black angus beef at Elmsleigh Farm.



A calf at Elmsleigh Farm.

Paddock to Plate, Hawkesbury NSW

Alastair and his family operate a beef, poultry and lamb business on leased land in Western Sydney. The farm produces grass fed and finished beef and lamb and pastured eggs that are sold through the local farmers markets. A meat chicken enterprise and 'farm chores' tours will be trialled in 2019. Shearing demonstrations are also a source of income for this diversified farm business.

Eating quality and animal health are important. The family implements the principles of holistic grazing management. They farm with minimal use of chemicals, and aim to improve the health of the soil and pastures they manage.

Alistair grew up working with family members on farms in Victoria, although more recently inspired by a more holistic approach. Two family members have completed holistic grazing management and are implementing the practices learnt on properties at Yarramundi and Richmond.

At Yarramundi the enterprise is using grazing management to regenerate a compacted horse paddock that was primarily African lovegrass. The combination of animal disturbance and manure makes the grass more palatable and gives more favourable plants a chance to recover to create a diverse pasture. Alistair's advice is to use the resources that you have available. He has successfully regenerated bare areas in the paddock by covering them with wool shorn from the meat lambs. The wool protects the soil surface, captures sediment and helps to retain moisture which allows plants to regenerate and establish groundcover.

Alistair is currently trialling mixed pasture species grazing where sheep (black faced Suffolk) and a few goats graze an area for one day, followed by cattle for one day then three days rest before the chickens come in. Sheep are selective, cows will eat more and then chickens spread manure and eat the fly larvae preventing disease and allowing more even recovery of the pasture.

At the Richmond property Alistair has an additional 20 ha leased where he runs 100 Angus cattle and 14 calves. During the recent drought conditions, the farm received assistance through the local community to purchase the irrigation pipe required to commence holistic grazing management at this site.

Alistair ensures all the properties he leases have good on farm biosecurity. This starts with boundary fences as this prevents people entering the land and dumping unwanted stock and rubbish which can be an issue. Paddocks are broken down into smaller grazing units using 'low-tech low-cost fencing' comprising of one strand electric fence with recycled star pickets. Standard sizes and measurements help to streamline the daily fence and water movements.

The family moves the stock on to new pasture each afternoon so the stock are able to eat fresh pasture. Plant sugars accumulate late in the day and the increased dry matter makes the grass more nutritious.

Alistair takes almost daily photos (with something recognisable such as a tree or fence) and notes to record the pastures and stock movements. He can

track the pastures recovery this way. Whilst he is yet to implement a full written grazing management plan, his advice is that changing your management takes time- time to observe, to notice and to learn. Implement new practices, take small steps and improve your management through gradual change.

Holistic grazing teaches you simple strategies to manage during drought and make farm management decisions with confidence. Alistair says "it's like a hay shed in your paddock; you're assessing how much feed you have and then giving cows access to a certain amount each day so you can plan".

Daily stock movements have the added benefit of enabling regular checks of the condition and behaviour of the cattle. This ensures that any issues or concerns can be addressed quickly. Inspecting cowpats is also a daily habit that is an indicator of animal health. "If it sits up but is slightly sunken in the middle this indicates good health".

Alistair has attended livestock health workshops and participates in the National Arbovirus Monitoring Program. The surveillance and monitoring program, managed by NSW Department of Primary Industries, involves monitoring the distribution of bluetongue virus (BTV) and its insect vector, the biting midge. This program aims to minimise the impact of BTV disease in Australia's cattle industry and protect valuable export markets.



Pastured eggs are sold through local farmers' markets.



Black-faced Suffolks are used to manage pastures.

Biosecurity for small farms

How does your farm stack up?

There are many factors to consider when putting together a biosecurity plan, but it doesn't have to be hard! Use this as a guide to reflect on your current biosecurity practices and remember to tailor your plan to your situation; every property is different.

At the farm gate - movement of people, vehicles, equipment on and off your property

Be clear about what is expected of visitors (including regular farm visitors) with regards to your quarantine and biosecurity procedures. Consider the use of signs at property entry points, a station for visitors to sign in/out, a document for new visitors detailing allowed and prohibited conduct, etc.

People

People can unintentionally and unknowingly carry diseases, pests and weeds. This includes anyone visiting your property such as vets, transporters, workers, contractors as well as guests and anyone living on the property.

By limiting the number of property access entry points, directing all visitors to a designated parking area, and requesting they sign a visitor register, you can limit the risk of visitors carrying new pests and diseases onto your property. A basic farm visitor register can be accessed via https://www.farmbiosecurity.com.au/wp-content/uploads/2019/02/Visitor-Register1.pdf

The use of signs (on-farm, the main entry gate and fence line) should be used to inform visitors of your biosecurity status and what you require from them. Signage should be clear, visible and well maintained with simple messaging e.g. 'Do not enter the farm without prior approval'. Biosecurity gate signs (900mm x 600mm) can be downloaded from https://www.farmbiosecurity.com.au

Limit visitor contact with livestock, crops or plant materials as much as possible and eliminate any unnecessary contact altogether, particularly if the visitor is unwell or has had contact with other livestock, crops or plant materials in the past 24-48 hours. This is a key pathway for disease transfer between properties.



Biosecurity farm gate sign directing visitors to call the farm owner or manager before entering a biosecure area. Courtesy of https://www.farmbiosecurity.com.au.

Vehicles

Cars, trucks, tractors, bikes and other vehicles pose a significant biosecurity risk. Consider how easily pathogens, weeds and pests can be accumulated and transported from property to property. For this reason, good biosecurity management must include minimising or excluding vehicle access to your property where possible.

If elimination of vehicle access is not possible, tyres should be checked and if necessary decontaminated.

Indicate established paths for vehicles (avoid grazing areas where possible) so tyre tracks are limited to the same areas and can be treated accordingly.

Do the same when visiting other properties and this will in turn protect your property.

Equipment

Decontamination of equipment, especially those involved in animal production needs to occur routinely. Even in the absence of disease, many pathogens can remain dormant and unnoticed on equipment. Care must be taken when using chemical disinfectants to avoid safety risks.

Manage inputs (stock, water, feed, bedding)

Good biosecurity is important to maintain healthy animals and prevent the spread and impact of disease. This can be done by:

- » Keeping up-to-date with routine vaccinations and drenches
- » Protecting your most vulnerable animals such as newborns by ensuring enough colostrum is received from their mother within the first few hours of life, shelter is provided and stress is minimised
- » Inspecting animals, pasture and water sources daily to ensure that any problems can be observed and dealt with promptly
 - Access to clean, quality feed is essential for keeping healthy livestock
- » Feed may be purchased hard feed, roughage or pasture - whatever it is, do not compromise on freshness and quality
- » Note that it is illegal to feed swill. This means it is illegal to feed, supply or allow pigs access to meat or meat products or anything that has been contact meat (including containers that may have stored meat products).
- » A variety of grazing animals can be rotated on paddocks to allow sufficient fertilisation, rest and growth for pasture
- » Animal waste presents a challenge but also an opportunity, as many grazing animals produce manure suitable as fertiliser. The benefits extend

beyond the maintenance of grass to parasite control and nutrition for livestock

- » Apart from manure, any animal carcasses should be disposed of appropriately and in a timely fashion as they can harbour disease
 - When the cause of death is unknown but not suspicious, an autopsy is recommended, but most importantly, the carcasse should be removed from the presence of other animals
 - When the cause of death is unknown and suspicious, call the Emergency Animal Disease Hotline on (1800 675 888) immediately for further instructions.

Manage outputs

Before the sale or slaughter of livestock, the animal's health should be assessed. It is essential this occurs before the animal leaves the property. All animals and/or their products should be checked for signs of disease, pests or weeds, including non-meat products as well (e.g. wool, milk and honey for example).

Manage production practices

The best way to prevent the spread of infectious diseases is to minimise contact between animals and herds that do not normally have contact.

Dedicate an area of your farm to quarantine. This may allow you to monitor animal health before integration with existing animals. Additionally, it can be used as an area to treat sick livestock.

Reliable fencing securing your animals is vital, and in some cases, it may be beneficial to offset fencing from your property boundary such as when your neighbour has the same type of livestock and the animals can contact each other over a single boundary fence.

Animals grazing through travelling stock reserves present a challenge to biosecurity due to the lack of boundaries, so overall health is important to support the immune system to protect against disease during this time.

Grazing stock need to be registered with the National Livestock Identification System and appropriate documentation must be completed when stock are to be sold or transported to a new location. More information can be found at https://www.nlis.com.au.

Train, plan, record

For owners

Create a biosecurity plan for the management and use of your property. You can find resources to assist you via the following links:

- » https://www.farmbiosecurity.com.au/wp-content/ uploads/2019/02/On-Farm-Biosecurity-Plan-Template.pdf
- » https://www.farmbiosecurity.com.au/wp-content/ uploads/2019/04/Farm-Biosecurity-Action-Planner.pdf

» https://www.farmbiosecurity.com.au/wp-content/ uploads/2019/02/National-Farm-Biosecurity-Manual-Grazing-Livestock.pdf

Implement new practices as outlined in your plan. This might mean establishing a calendar for routine biosecurity practices (e.g. decontamination of equipment, vaccination schedule and drench schedule) or find resources to print out for (e.g. sign on sheets or animal health assessment sheets).

Follow through! Set reporting dates, review against your initial plans and adapt as necessary.

Produce records of monitoring information, incidents and other relevant information. Store records safely for future reference.

Train staff

Appropriate training is necessary to give staff an understanding of biosecurity. Additionally, they will require training on how to implement their biosecurity knowledge according to your property's specific plan. They will likely be involved with supervising and communicating with visitors, so they need to know how to approach visitor biosecurity as well.

Manage environmental issues

Manage weeds

Weeds need to be tackled for a number of reasons. They may be poisonous to livestock, of poor nutritional quality and/or degrade the soil and environmental structures. Contact your regional NRM organisation for more information about weed control in your area. http://www.nrm.gov.au/regional/regional-nrm-organisations



Serrated tussock picture right side under managing weeds. Photo courtesy Jo-Powells, South-East Local Land Services.

Manage animal pests:

Animal pests are a direct threat to farmers because they damage crops and/or are predators of livestock. They are also known to spread diseases, parasites and environmental weeds. The laws surrounding pest animal control vary between the states, so contact your state biosecurity department for more information. You can also visit FeralScan to map pest animal activity in your area https://www.feralscan.org.au or PestSmart Connect for the latest management tips, tools and research findings https://www.pestsmart.org.au.

The National Landcare Program is the lead for natural resource management in Australia. Visit their website at: www.nrm.gov.au/national-landcare-program

Manage the elements:

The most common method for disease-causing organisms to spread via the elements is through the air so consider the quality of ventilation systems for indoor areas.

Water sources, including the farm dam can provide a breeding ground for insects and parasites, and additionally can carry diseases.

Soils can be parasite-laden, especially if using animal manure to fertilise or if un-drenched animals have grazed the area. Events of soil disturbance have the potential to cause illness if a disease-causing organism is present.

Pollution of any of the elements mentioned (such as air pollution, run off, littered pasture, etc.) poses a threat to the health of animals and control measures will be necessary where possible.



Water sources, including the farm dam can provide a breeding ground for insects and parasites and can carry diseases. Photo \odot iStockphoto.

Networks and key contacts

Australian Government contacts

Department of Agriculture

Phone: 1800 900 090

Website: http://www.agriculture.gov.au/biosecurity

Animal Health Australia

Emergency Animal Disease Watch Hotline: 1800 675 888

Phone: (02) 6232 5522

Email: aha@aha.animalhealthaustralia.com.au Website: https://animalhealthaustralia.com.au

Plant Health Australia

Exotic Plant Pest Hotline: 1800 084 881

Phone: (02) 6215 7700 Email: info@phau.com.au

Website: http://www.planthealthaustralia.com.au

Farm Biosecurity

Providing practical information to help you protect your farm from biosecurity risks

farm from biosecurity risks.

Farmbiosecurity is part of the Farm Biosecurity Program; a joint initiative of Animal Health Australia (AHA) and Plant Health Australia (PHA) managed on behalf of members.

benan of members.

Website: http://www.farmbiosecurity.com.au

Non-government organisations

RSPCA

Phone: (02) 9770 7555
Email: mail@rspcansw.org.au
Website: https://www.rspca.org.au

Landcare Australia

Phone: (02) 9412 1040

Website: https://landcareaustralia.org.au

Meat and Livestock Australia

Phone: (02) 9463 9333 Email: **info@mla.com.au**

Website: https://www.mla.com.au

AusVeg

Phone: (03) 9882 0277 Email: info@ausveg.com.au Website: https://ausveg.com.au

Horticulture Innovation Australia

Phone: (02) 8295 2300

Email: communications@horticulture.com.au Website: https://www.horticulture.com.au

Other national organisations

Australian Veterinary Association

Phone: (02) 9431 5000

Website: https://www.vetvoice.com.au

State Government contacts

NSW Department of Primary Industries - Biosecurity

Phone: 1800 680 244

Email: quarantine@dpi.nsw.gov.au

Website: https://www.dpi.nsw.gov.au/biosecurity

NSW Local Land Services

Phone: 1300 795 299

Website: https://www.lls.nsw.gov.au

Queensland Department of Agriculture and Fisheries

Phone: 13 25 23

Email: info@daf.qld.gov.au

Website: https://www.daf.qld.gov.au/business-

priorities/biosecurity

Primary Industries and Regions South Australia - Biosecurity Division

Phone: (08) 8226 0995

Website: http://www.pir.sa.gov.au/biosecurity

Northern Territory Department of Primary Industries and Resources

Phone: (08) 8999 2006 or (08) 8999 5511 Biosecurity Hotline: 1800 084 881 Email: info.dpir@nt.gov.au Website: https://dpir.nt.gov.au

Australian Capital Territory Environment, Planning and Sustainable Development Directorate

Phone: 13 22 81 or (02) 6207 1923

Website: https://www.environment.act.gov.au/parks-conservation/plants-and-animals/Biosecurity

Agriculture Victoria - Biosecurity

Phone: 13 61 86

Website: http://agriculture.vic.gov.au/agriculture/

biosecurity

Department of Agriculture and Food, Western Australia

Phone: 1800 084 881

Email: info@agric.wa.gov.au

Website: https://www.agric.wa.gov.au/biosecurity-

quarantine

Department of Primary Industries, Parks, Water and Environment - Biosecurity Tasmania

Phone: 1300 368 550 or (03) 6165 3777

Email: Biosecurity.Tasmania@dpipwe.tas.gov.au Website: https://dpipwe.tas.gov.au/biosecurity-tasmania

Networks

Farmer Exchange

Email: airlie@farmtable.com.au

Website: https://ag.farmtable.com.au/exchange-

information

Agrifutures startup.business

Email: liz@startup.business

Website: https://www.agrifutures.com.au/people-

leadership/agrifutures-startup-business

Future Farmers Network

Phone: 0428 139 679

Email: admin@futurefarmers.com.au Website: https://www.futurefarmers.com.au

Young Agribusiness Rural Network

Email: administration@awia.org.au Website: https://awia.org.au/contact-2

Young Dairy Network Australia

Website: https://www.dairyaustralia.com.au/dairynsw/farm/dairy-nsw-farm/young-dairy-

network-nsw

Food and Agribusiness Network

Email: info@foodagribusiness.org.au
Website: https://foodagribusiness.org.au

AgFuse

Email: info@agfuse.com
Website: https://agfuse.com

FarmStyle

Phone: 0439 082 820

Website: https://farmstyle.com.au

Rural Business Collective

Phone: 0409 620 302

Email: hello@ruralbusinesscollective.com.au

Website: https://www.ruralbusinesscollective.com.au

New South Wales

Young Farmer Business Program

Phone: 0419 110 714

Email: young.farmer@dpi.nsw.gov.au

Website: https://farmtable.com.au/young-farmers-

business-program

NSW Farmers Association

Phone: (02) 9478 1000

Website: https://www.nswfarmers.org.au/nswfa

Small Farms Network Capital Region

Email: alex@smallfarmscapital.org
Website: https://smallfarmscapital.org

South East Small Farms Network

Email: andrew.britton@lls.nsw.gov.au Website: http://www.smallfarms.net.au

Queensland

AgForce Queensland

Phone: (07) 3236 3100

Email: agforce@agforceqld.org.au Website: https://www.agforceqld.org.au

Queensland Farmers Federation

Phone: (07) 3837 4720 Email: qfarmers@qff.org.au

Website: https://www.qff.org.au/projects/rural-jobs-skills-alliance/queensland-agricultural-workforce-

network-qawn

Victoria

Young Farmer Network

Phone: (03) 5215 6041

Email: youngfarmer.coordinator@ecodev.vic.gov.au

BetterBeef Network

Email: darren.hickey@ecodev.vic.gov.au

Website: http://agriculture.vic.gov.au/agriculture/livestock/beef-and-sheep-networks/betterbeef-network

Victorian Farmers Federation

Phone: 1300 882 833

Email: members@vff.org.au
Website: https://www.vff.org.au

Stock Sense

Phone: 1300 020 163

Email: stocksense@vff.org.au

Website: https://www.vff.org.au/stocksense

Best Wool/Best Lamb

Email: cathy.mulligan@ecodev.vic.gov.au

Website: http://agriculture.vic.gov.au/agriculture/livestock/beef-and-sheep-networks/bestwool-bestlamb

Western Australia

West Australian Regenerative Farmers Network (RFN)

Phone: 0427 472 005

Email: justin.wolfgang@perthnrm.com Website: https://regenwa.com.au

AqConnectWA

Phone: (08) 9486 2100

Email: agconnectwa@gmail.com

Website: https://wafarmers.org.au/agconnectwa

Grower Group Alliance

Phone: (08) 6180 5759 Website: http://gga.org.au

Wheatbelt Business Network

Phone: (08) 9880 8035

Email: admin@wheatbeltbusinessnetwork.com.au Website: https://www.wheatbeltbusinessnetwork.com.au

Western Australian No-Tillage Farmers Association

Phone: (08) 9383 7630 Email: admin@wantfa.com.au

Website: https://www.wantfa.com.au

Pastoralists and Graziers Association of Western Australia

Phone: (08) 9212 6900

Website: http://www.pgaofwa.org.au

South Australia

SheepConnect SA

Phone: 0437 659 353

Email: ian.mcfarland@sa.gov.au

Website: https://www.sheepconnectsa.com.au

The Grassland Society of Southern Australia Incorporated

Phone: 1300 137 550

Email: office@grasslands.org.au
Website: https://www.grasslands.org.au

AgBureau

Phone: (08) 8249 7581

Email: agbureau@ruralbusinesssupport.org.au Website: http://www.agbureau.com.au

Agricultural Societies Council of South Australia

Phone: (08) 8210 5230

Email: info@sacountryshows.com

Website: http://www.sacountryshows.com

SA Next Generation

Phone: 0421 328 590

Email: sanextgeneration@gmail.com Website: https://www.sanextgen.com

Rural Business Support

Phone: 1800 836 211

Email: admin@ruralbusinesssupport.org.au Website: http://www.ruralbusinesssupport.org.au

Mackillop Farm Management Group

Phone: 0433 499 630

Email: ceo@mackillopgroup.com.au

Website: http://www.mackillopgroup.com.au

Women in Agriculture and Business of SA Inc.

Email: WABinSA@gmail.com

Website: https://www.wabsa.com.au

Tasmania

Department of Primary Industries, Parks, Water and Environment

Phone: 1300 368 550

Email: Biosecurity.Tasmania@dpipwe.tas.gov.au

Website: dpipwe.tas.gov.au/biosecurity

NRM North - Small Farm Living

Phone: (03) 6333 7777 Email: sfl@nrmnorth.org.au

Website: https://www.nrmnorth.org.au/smallfarmliving

NRM South

Phone: (03) 6221 6111

Email: admin@nrmsouth.org.au Website: https://www.nrmsouth.org.au

Farm Biosecurity Planning: https://www.nrmsouth.org.au/wp-content/uploads/2017/06/farm-biosecurity-

final-3.pdf

DairyTas

Phone: (03) 6432 2233

Email: j.price@dairytas.net.au

Website: https://www.dairyaustralia.com.au/dairytas

Tasmanian Women in Agriculture

Phone: 0448 336 458

Email: taswomeninag@outlook.com
Website: https://www.taswomeninag.org

Tasmanian Farmers and Graziers Association

Phone: (03) 6332 1800 or 1800 154 111 Email: reception@tfga.com.au Website: https://www.tfga.com.au

Tasmanian Agricultural Productivity Group

Email: terry.brient@gmail.com Website: http://tapg.net

Northern Territory

Rural Business Support

Phone: 1800 836 211

Email: admin@ruralbusinesssupport.org.au
Website: http://www.ruralbusinesssupport.org.au

Northern Territory Cattlemen's Association and FutureNTCA

Phone: (08) 8981 5976

Email: office.darwin@ntca.org.au Website: https://www.ntca.org.au

Other industry contacts

Merck Veterinary Manual

Website: https://www.merckvetmanual.com

Fair Food Forum

https://fairfoodforum.org.au

Australian Alpaca Association

Phone: 02 6151 2073 Email: info@alpaca.asn.au Website: alpaca.asn.au

Australian Dairy Farmers

Phone: 03 8621 4200

Email: reception@australiandairyfarmers.com.au Website: http://www.australiandairyfarmers.com.au

Australian Pork Limited

Phone: 02 6270 8800 or 1800 789 099 Email: apl@australianpork.com.au Website: http://australianpork.com.au

Cattle Council of Australia

Phone: 1300 653 038

Email: cca@cattlecouncil.com.au

Website: http://www.cattlecouncil.com.au

Wool Producers Australia

Email: info@woolproducers.com.au Website: https://woolproducers.com.au

Goat Industry Council of Australia

Email: goatind.industrycouncil@gmail.com

Website: http://www.gica.com.au

Sheep Producers Australia

Phone: 02 6269 5610

Email: admin@sheepproducers.com.au Website: https://sheepproducers.com.au

Australian Eggs

Phone: 02 9409 6999

Email: contacts@australianeggs.org.au
Website: https://www.australianeggs.org.au

Australian Chicken Meat Federation

Phone: 02 9929 4077

Email: acmf@chicken.org.au

Website: https://www.chicken.org.au



BE A BIOSECURITY CHAMPION

AND PROTECT YOUR FARM, COMMUNITY AND PRIMARY INDUSTRIES...

Small farms network producers support each other to improve on-farm biosecurity practices, plant and livestock health and production.



These small farmers work with NSW DPI and Local Land Services to prevent the introduction and spread of pests, diseases and weeds on their property.

They are champions and ask for help when they see something unusual. "Just call and have a chat..."

EXOTIC PLANT PEST HOTLINE 1800 084 881 EMERGENCY ANIMAL DISEASE WATCH HOTLINE 1800 675 888