

Participant questions

MLA Updates: Redefining resilience through innovation across the value chain

1. How secure is the data that MLA manages?

Data security is of the highest priority, it is crucial that we put as many protections in place as possible to reduce risk, such as:

- We have many layers of security and data protection.
- Our security as provided in the Amazon Web Services environment is a world leader.
- We carry out regular penetration tests and anti-virus software is applied across all systems
- Our environment is spread across a number of data centres in Australia and are locked within the Australia region, with no data going offshore.

2. Jenny, you obviously use the data a lot in your business, what types of datasets would you recommend for producers wanting to improve their business through data?

We collect a lot of data around reproductive performance both commercially and within the seed-stock production system.

Within the commercial business the data that we collect at scanning is focused on what the ewes are carrying and then it's allocation of feed requirements based on that information. Selection of paddocks is an important tracking device that we use to make sure that allocation of paddocks is given to the right animals. So twin bearing ewes will need higher levels of food on offer as lambing approaches.

All of that data, right up to the point of marking and weaning (percentage of lambs marked, percentage of lambs weaned), adds to that bottom line and yearly production and performance averages that we aim to improve on year on year, making changes accordingly.

The other data set that we use within the seedstock business centres around EIDs, which I am a huge fan of, and commercially that will increasingly become part of our business as well.

3. Ed, I understand Rapiscan is also assisting Australian Border authorities with biosecurity, can you talk about this?

Once our program with MLA was established, the Department for Agriculture, Water and the Environment established an ambitious program with Rapiscan Systems to develop algorithms using 3D X-ray scanners for automated detection of biosecurity risk materials. These materials include broad detection classes of Fruit, Meat, Fish, Plants, Vegetables, Seeds and Wildlife. Based on the award of both MLA and Agriculture programs, Rapiscan now has its global Centre of Excellence in Algorithms and Software Engineering in Australia.

The aim of these two related programs is to support the Australian agriculture and livestock industries by both protecting the environment from biosecurity breaches, such as introduction of swine flu, and to support efficient, high quality, livestock production and processing.

4. Is there a Biosecurity risk to our export markets from Wild Deer on Victorian Farms, seeing they may travel from property to property with no restrictions?

There are always risks associated with wild animals and their ability to move freely between properties and potentially spread disease. Producers play an important role in managing the prevalence of these animals by undertaking practices to reduce their numbers and movement where practical. To understand the specific risks associated with deer please refer to www.farmbiosecurity.com.au which has a range of farm biosecurity resources available for reference.

5. Jane, has there been any work done to determine the adoption of this data to improve on-farm decision across the country? I'd love to see all red meat producers to be like Jenny.

Our goal is to build a data culture in the red meat industry, and ideally, we'd like all producers to use data like Jenny has in her business. Currently we have over 2600 producers with LDL accounts. Health and disease data is creating more opportunities with a recent communication campaign seeing more than 400 new accounts created.

The supply chains we are working with are seeing the benefits of carcass feedback through decisions that are helping to deliver a more 'fit for purpose' product. We now have more than 17 plants providing some form of data through LDL.

MLA and ISC invest in building digital and supply chain extension capacity in red meat supply chains which are supporting producers to understand and interpret data to improve their decision making and management practises.

ISC's current approach to feedback systems is based on adoption via supply chains, but MLA programs like the Profitable Grazing Systems or Producer Demonstration Sites enable producers to build their capability in collecting and interpreting data, and how to apply this knowledge in their own businesses.

6. Jane, it's great to see that resilience is at the front of MLA's mind. Do you have any measures of where we are now in terms of resilience in order to be able to determine how the situation improves into the future? That is, where are we now and how will we know when we've "achieved" resilience?

Resilience is a key focus area for the MLA Adoption team and current metrics focus on building producer and business resilience by increasing the knowledge and skills of those participating in short-term training programs, along with producers that participate in long-term practice change programs who are willing to adopt practices that increase business performance and sustainability.

In addition to this, programs are now moving toward focusing on economic, environmental and well-being resilient metrics, and determining how to generate appropriate baselines and systems for tracking improvement.

7. Jane, how is consumer data collected, linked back to the property of origin and communicated? Can you provide an example?

We do know that some feedlots are already providing this type of feedback to producers commercially, but the level of information provided varies. For example, some feedlots use the Animal Health Data system to provide feedback to their producers as morbidity is the biggest animal health concern that feedlots have. In saying that, recent industry consultation on future feedback systems has indicated strong interest in lifetime performance tracking.

Some supply chains are interested in partnering with ISC to demonstrate that an animal's lifetime performance history can be effectively linked. Ideally, we would like to work with more feedlots in the future to enable lifetime performance history.

8. David or Ed, for the technologies that are being developed for carcass evaluation, will this eventually allow producers to be paid for the product rather than the live weight of the animal?

3D imaging and other related technologies result in accurate measurement of traits at multiple stages in the development of the animal and during processing of a carcass. Such traits include lean meat yield, inter- and intra-muscular fat and so on. The transition of this data to a potential future MSA grading scheme and so to carcass valuation will take some time to develop into a practical and reliable system. However, once developed, this should have a consequent impact on the whole supply chain including the ability to link valuation to individual carcasses based on value not just on weight.

9. Is NLIS (chip system) the basis for all data collection or are there new and more innovative animal tags in the system?

Yes, the unique National Livestock Identification System (NLIS) identifier, underpinned by low frequency RFID technology, is the foundation of our national traceability system and is used to link animal information through the supply chain. In addition, ISC and MLA are investing in research projects to identify what can be done to improve the current technology (low frequency RFID) and to investigate new and emerging technologies that can enable traceability and additional data collection.

There are no current alternative technologies approved for use as a part of the NLIS system, however a current review and updating of the Rules and Standards for NLIS devices will allow for new solutions to be assessed for the purpose of traceability.