



Sheep CRC Practical Wisdom Notes

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Delivering innovation to industry: training and skills development

By Lu Hogan, Sheep CRC

Key points

- Sheep CRC has delivered innovation by building skills in advisors and service providers, developing high quality information and decision tools for the major profit drivers, and supporting the delivery of training to sheep producers.
- The Graduate Certificate in Agriculture (Agricultural Consulting) has built business, communication and technical skills in 270 advisors.
- 4,884 producers and service providers have participated in CRC training programs.
- 223 industry service providers have received training and skills development.
- As public sector advisory services decline, private advisors and service providers are increasingly important to industry.

Introduction

While investment in agricultural research and development leads to productivity growth in the sector, slow industry uptake can result in a 35-year lag¹ between development of an innovation and improved industry performance. Returns from investment in research and development vary between 15 and 40%; higher returns result when the program includes an investment in extension and farmer education¹.

Benefit cost analysis of recent sheep industry extension projects, such as Evergraze, Lifetime Ewe Management and AWI Extension Networks, has demonstrated returns ranging from \$1.40 to \$13.10 per dollar invested³.

Traditionally, state departments of primary industry have provided sheep industry extension and training activities at no charge. In the last decade, in the face of declining budgets, there have been significant reductions in public sector investment in productivity-based extension services that are considered to be largely private good. A 2013 audit found an 18% decline in sheepmeat extension and 48% in wool industry extension since 2009³. Public sector organisations are repositioning themselves to undertake industry development activities, provide support for private sector advisors and, in some cases, to operate on a fee-for-service basis.

In 2007, the Sheep CRC undertook market research that anticipated these trends and the need for higher level producer skills to maintain profitable businesses in an environment of increasing business and technical complexity. Over its life, the CRC has invested to develop the skills and capacity of advisors and service providers, built a legacy of information and resources and supported delivery of training programs to sheep producers².

What training and skills did Sheep CRC deliver?

Graduate Certificate in Agriculture (Agricultural Consulting)

The University of New England (UNE) Graduate Certificate in Agriculture (Agricultural Consulting) was developed following market research that identified the need for a formal course providing advisors with strategic, whole-of-business skills and an understanding of communication and facilitation techniques for working with clients. The course is delivered in a flexible, online format to accommodate advisors working in industry in a range of locations. The target to train 160 sheep industry advisors has been exceeded. Enrolments in the core consulting subjects totalled 270 to Semester 1 2014, with 204 completions to date. UNE student feedback indicates an 8.5/10 satisfaction rating for the core units. The course continues to be available through UNE.

Professional development for young and emerging advisors

The Professional Development project provided additional support to young and emerging advisors in the sheep industry and students enrolled in the Graduate Certificate. The project engaged 49 advisors; 22 from the private sector. The project provided:

- practical skills in public speaking, communication, negotiation, facilitation, working with farmers and rural communities
- knowledge of how to establish and run your own business
- business benchmarking and analysis skills
- opportunities to network with others in the industry and to meet experienced agricultural consultants

Seven participants started their own businesses as sheep industry advisors during the project.

Resources, decision tools and training products

Sheep producers have access to the latest information on parasite management through the ParaBoss suite of websites—FlyBoss, LiceBoss and WormBoss. Embedded within these websites are practical electronic tools to assist development of integrated pest management plans and guide preventative and acute treatments for worms, lice and flies. These websites are consistently used by industry as demonstrated by the January 2014 usage figures in Table 1.

Table 1. Website usage for May 2014.

Site	Users	Sessions	Pageviews
WormBoss	6150	7244	15952
FlyBoss	1116	1360	3078
LiceBoss	655	779	2926

These websites and associated training resources will be maintained by UNE in the ParaBoss project funded by MLA and AWI.

CRC has invested heavily in the development of training products and networks of advisors competent to deliver the programs. Table 2 details the training products that are available in a range of formats to suit producer workshops, tertiary teaching and competency-based training via registered training organisations. Universities, registered training organisations, advisors and CRC participants have access to these training packages on a non-exclusive basis to support their client and student services.

Table 2. Training products and activity.

Training Product	Workshops delivered	Total number of participants
Flystrike Management	64	1,080
Worm Control	10	180
Precision Sheep Management and use of electronic ID	10	190
RamSelect	73	1,389
Managing Scanned Ewes	88	1,726
Bred Well Fed Well (pilot phase)	5	152
Implementing Genomics	3	102
Genetics Service Provider Training (with Sheep Genetics)	3	65
Total	256	4,884

In total the Sheep CRC has delivered 256 workshops to 4,884 participants over 7 years. Producers attending Managing Scanned Ewe workshops owned or managed an estimated 2.2 million sheep. Producers attending RamSelect workshops owned or managed 2.4 million ewes.

Train the trainer

The CRC has been particularly successful in building a network of advisors with the skills to deliver CRC training products to industry. The development of CRC training materials, training and ongoing support to the deliverers has had a range of benefits for industry, including:

- a consistent package of materials and messages, supported by the websites;
- increased skills and experience for advisors, particularly those new to the sector;
- a collegiate and supportive network of professionals;
- the opportunity to build client networks.

Throughout the life of the CRC, 223 service providers and advisors have received specific training to deliver CRC training products and information to industry.

Formal feedback from service providers rated the Sheep CRC highly (8.9/10) as a trusted source of information and indicated it had made a substantial contribution to their professional development (7.5/10). The 29 survey respondents had client lists totalling 2,992 producers.

An estimated 73% of these clients had improved their sheep enterprise management as a consequence of information and training provided by the CRC. The substantial leverage and accelerated adoption rates that can be achieved through service provider networks is confirmed by these figures.

Supporting delivery

The Sheep CRC has actively supported delivery of the workshops detailed in Table 2 to industry. In total, 256 workshops have been delivered to 4,884 participants over the life of the CRC. Toward the end of the CRC, training delivery is being moved to registered training organisations and private providers with user pays and user part-pays arrangements. This is consistent with the declining availability of public sector extension officers and the likelihood that producers will need to pay for training and advice in the future. In general, the Sheep CRC found producers willing to pay \$50 to attend a one-day workshop. The Worm Control workshop priced at \$200 for the day was considered too expensive outside the New England area (where barber's pole worm causes significant losses and stock deaths in certain years). Consequently, uptake of the workshop program was minimal outside the New England.

Given the high returns to research and development when the adoption lag is shortened, industry needs to consider the appropriate balance between encouraging user pays and achieving adoption and required rates of return on research and development. A level of industry support and producer contribution for group training is likely to be required for the medium term, while industry adjusts and learns to value the training it receives at its full cost.

How will industry access these resources in the future?

Training products developed by the CRC have been transferred to universities, registered training organisations, participant organisations and private advisors and service providers. These organisations will continue to use the materials in their training and service delivery, as will the extended CRC.

Information and decision tools will remain available to industry through the various websites, and Livestock Library.

The Red Meat Co-investment Committee and Meat and Livestock Australia are considering future investment in extension activities under a project entitled 'A National Blueprint for Future Sheep and Beef Extension'.



Figure 1. Genetics Service Providers Training.



Figure 2. Bred Well Fed Well workshop WA.



Figure 3. Managing Scanned Ewes Workshop NSW.

Take home messages

- Three core strategies: professional development for advisors and service providers; content development; and supported delivery; have been the basis for successful delivery of innovation to the sheep industry.
- Service providers have valued the CRC's contribution to their professional development and the resources developed.
- The CRC has effectively delivered training and skills to 5,107 producers and service providers in 7 years.
- The Graduate Certificate in Agriculture (Agricultural Consulting) has built skills in 270 students.
- CRC materials and information will continue to be available on the web and through universities, registered training organisations, state departments, service providers and advisors.

References

1. Australian Farm Institute Research Report (March 2007) Productivity Growth in Australian Agriculture: Trends, Sources, Performance.
2. CRC II Sheep Industry Education and Training Programme Business Plan (Feb 2008).
3. Red Meat Co-investment Committee and Australian Wool Innovation (Nov 2013) Discussion Paper: Blueprint for Future Extension in the Livestock Industries.