Implementing the Potato Industry's communication plan

Leigh Walters
SA Farmers Federation

Project Number: PT00001

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South Australian Farmers Federation

HAL Project Number PT00001 (July 2006)

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Purpose This work reports on implementation of the Communication Plan 2000 - 2005 for the Australian potato industry.

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Contents

Media Summary

Implementation of a national communication plan for the Australian potato industry has been vital for the potato industry, helping growers and their advisors better use important information generated from the research and development (R&D) program. The R&D program is funded through the potato levy, Australian Government and industry partners.

The guiding principle for the plan and its implementation has been that if the industry receives R&D information in a form that can be easily used, it improves the likelihood of new technologies being adopted. This also allows levy payers and their financial partners to reap the rewards of their investment in the R&D and communication.

This project has not and could not be carried out in isolation. It was only by working as an industry team that enough resources could be marshalled to tackle existing communication gaps and improve two-way communication for industry benefit.

Three key goals of the program have been Awareness, Access and Understanding.

Awareness

The program has improved awareness by producing information of interest to industry, mainly from the R&D program, and channelling it through two main outlets – the annual magazine, Potato Australia, and three quarterly newsletters, Eyes on Potatoes. Further work has also explored use of email services (proposed for inclusion into the new potato internet site) to provide information of interest as it becomes available.

Growers and their technical service providers have been the key target audiences for our information. Local technical service providers are an important source of information for growers. If they are better informed then they can provide a better service to growers. This approach also creates a multiplier effect in that technical service providers reinforce the R&D messages when growers seek information.

Access

Raising awareness of farm issues and better methods is not enough on its own – growers and the industry need easy access to information to help with decision making.

The three important channels for achieving this were:

- an effective distribution system
- access to past information through a digital library – the Potato Archives
- access to internet information through the Potato Internet Starter Pak and then through a proposed internet service.

Initially this meant developing an effective national distribution system to enable the publications, Eyes on Potatoes and Potato Australia, to reach those people who needed them.

The national distribution system was developed with the State potato grower associations or Departments of Primary Industries, as appropriate. A contact management database was also designed to assist in managing the contact information and used by many of the distributors, Technology Transfer Manager and publications Editor.

The Potato Archives was the vehicle we developed to give growers quick and easy access to past R&D information. The aim was to help people access past R&D information at the time they needed it to make decisions. In this way, the information would be better used and have a greater impact on decision making.

In effect, Potato Archives is the industry's new digital library, providing access to HAL Final Reports of research outcomes and articles and papers from Eyes on Potatoes, Potato Australia and selected conference proceedings.

The new proposed internet service will fill many of the remaining information needs through the provision of personalised services. The internet has added advantages of being open 24 hours a day, 7 days a week and being able to be updated quickly, so timely information can be provided when it is needed.

For example, the movement of Potato Hygiene Strategist (developed in this project) to the internet would provide one tool that could tackle the need to develop more practical hygiene strategies suited to a farm

Understanding

Information also needs to be understood before it can be used. The Technology Transfer Manager and the publications Editor have worked extensively with research groups to ensure information being produced for industry through publications and other media has been presented in a suitable form.

Often though, information from one R&D project only provides one part of a puzzle and managers need other information to put it into context. The TTM has worked closely with the funding committee and research groups to support development of books and field guides to consolidate existing knowledge into useful forms.

People often learn from other people. The TTM has been actively involved in supporting conferences and other group activities such as group sessions to promote awareness and understanding of the R&D program. Activities such as conferences bring people together and enable business relationships to form that can have a long term impact on business performance.

This project builds on the work of previous projects which identified a need for better communication nationally to ensure levy payers, Australian Government and industry partners would receive the full benefits of their investment into R&D.

The challenge now is to continue building on the outcomes already generated. The foundations have been laid but many challenges lie ahead with increasing globalisation of the marketplace which will create new demands for better communication.

Recommendations

From a perspective of 10 years of service to the potato industry, the issues I see need addressing and my recommendations for change are as follows:

Issue 1

The TTM is responsible for improving communication and adoption of outcomes from the R&D program but has no contractual protection to ensure outcomes are met and is often not involved in contractual discussions involving technology transfer components of the project.

Recommendation

HAL review how, at what stage in the project's life and the people who should be involved in communication carried out in projects from a contractual perspective with a view of developing a more effective process.

Issue 2

The internet is becoming a more important tool for industry and users need to be skilled in its use. Many growers are not skilled in using a computer or the internet.

Recommendation

Industry should work with other groups to facilitate computer and internet training, using people who have knowledge of the potato industry.

Issue 3

Growers often learn best from interaction with others. Many isolated regions receive little external input and have no levy funded research in their region. Many growers and service providers then question the value of their investment in the potato levy.

Recommendation

The industry needs to facilitate more group sessions to ensure potato communities understand the value of the R&D work, are able to capture the benefits and can input into future evolution of the R&D program.

Issue 4

The industry lacks a central distributor for publications. Being aware of, gaining access to and promoting publications is therefore difficult. This leads to intellectual property not being properly managed, resulting in the benefits of technology investments not being fully realised.

Recommendation

There needs to be a central distributor for horticultural publications. HAL is best placed to organise / oversee this through an across industry project.

Issue 5

The decline of communication and extension services in government departments and a lack in many private research groups means many researchers that need support to effectively communicate and commercialise their research do not have it.

Recommendation

That a practical how-to publication be developed on how to communicate and commercialise research outcomes.

Issue 6

The decline of technical expertise in the industry in research and extension (government and private) in the agricultural sector is a real concern. Our ability to compete relies on innovation and our ability to differentiate our product. Technical service providers play an important role in this process.

Recommendation

1. That a skills audit be undertaken of technical service providers (government and private) particularly looking at graduates who have entered the workforce in the past ten years and explore how well they are able to meet industry needs and how they are gaining the necessary skills to carry out their jobs.
2. Market Research carried out to identify the needs of industry with regards to technical services.
3. Develop a strategy to address the deficiencies.

Introduction

This project continues on from the project 'Coordinating technology transfer in the Australian potato industry - PT96009' and builds on the changes implemented.

Communication of research and development outcomes in the potato industry before project PT96009 started was poor in many instances. Some regions or industry sectors had excellent information services while others little, if any. Mailing lists used to send out information were often out of date or non existent. The service industry, from which many farmers obtain information, were largely ignored as a target audience for research and development (R&D) information. Potato Australia, which was begun to address the industry's information needs, was well regarded but only came out once a year and due to problems with distribution, did not reach many people who needed it.

Project PT96009 achieved the following outcomes:

- Many problems with mailing lists were addressed.
- The distribution system was coordinated and updated regularly.
- Eyes on Potatoes was created with the publications Editor and provided extra information to industry three times a year to complement Potato Australia.
- Researchers were supported to develop and critique the technology transfer component of projects.
- The Australian Potato Industry Council R&D Committee had an adviser who had a technology transfer perspective and wide appreciation of industry activities.
- Articles were generated for the publications which focused on key issues identified by industry.
- A direct link was established between the publications editorial group and the peak industry bodies which improved reporting of important industry issues.
- Field activities raised awareness of information services and helped address individual concerns.
- The industry had an internet package which provided links to potato sites world wide to save people time in finding potato information.
- Information product development was fostered and guided which resulted in better quality products.
- In conjunction with input from other projects (PT97025, PT98037, VG97080), a business plan was produced for a national internet service for the Australian vegetable industries and projects submitted for funding to the National Office of Information Economy and the Potato and Vegetable R&D Committees.
- A project was initiated to create a digital library for the industry to make it easier to access past HAL (HRDC) Final Reports, and Potato Australia and Eyes on Potatoes articles on CDROM and the internet (PT00027).
- A Communication Plan was developed which formed the basis for this project, 'Implementing the Potato Industry's communication plan' - PT00001.

The gains from PT96009 were considerable but only represented the starting point. Many gains would disappear if the services were not maintained or work started not completed.

Figure 1: Potato growing regions in Australia

PT00001 – drivers for a national Communication / Technology Transfer Manager

The need for a national Communication or Technology Transfer Manager for the potato industry came about due to a decline in technical information services and the need to ensure levy payers gained value from the investment they were making in R&D with the Australian Government.

Good science alone would not ensure continuing support for the national levy scheme. Results generated from the R&D program had to be adopted if benefits of the investment were to be realised.

In the past the potato and other rural industries relied heavily on state departments of agriculture to extend new technology. With the decline of extension services and a direct investment in R&D through the levy, industry took a more active role in technology transfer.

The challenges of participating in technology transfer were immense given the potato levy program generated only about $2 million a year for its entire R&D program, while some state departments invested nearly that amount in extension alone.

This meant that if the potato industry was to conduct a technology transfer program, it had to be very focused. As Fig 1 clearly shows, the industry was spread over a very large area. As growers searched

for disease free land, especially those producing for the washed market, the industry continued to spread out, making servicing of growers needs even more difficult.

Supplying information through publications, internet and other indirect forms of communication played an important role but was not enough in many instances to achieve adoption of new technology.

And while scientists and other information providers saw new technology as something important growers should take notice of, they were often not presenting the material in a way it could easily be considered by busy growers with market deadlines or a new crop problem.

To extend new technology effectively required an understanding of how growers adopt new ideas and technologies. Any communication strategy needed to take into account the way growers learn and adopt new technology. The important points to keep in mind about the adoption process were:

1. Growers did not actively seek new technology in most instances.
2. Growers usually sought information when they had a problem to solve.
3. Information on new technologies was often provided at the end of the research project and rarely coincided with when growers needed it.
4. Growers were often interested in hearing about new technology but it did not mean they would adopt it.

Goals

The Communication Plan for the Australian potato industry had three key goals based on how growers adopt new ideas and technologies:

1. Awareness
2. Access
3. Understanding

(1) Awareness

For their businesses to function effectively, growers need to be aware of what is happening in their industry. The publications have played an important role in doing this by informing people of new developments, keeping them up to date with what was happening in the industry and getting them thinking about what they needed to consider with regards to the management. This was an important first step in a learning process.

Making growers aware of new technology though often does not lead to adoption.

(2) Access

When there is an information need to be satisfied, and new technology to potentially meet that need, then information about that technology becomes of interest. At this stage the need may be immediate - to solve a problem - or as part of a grower's research to improve the long term viability of the business.

The priority for growers wanting to solve an immediate problem is rapid access to information so potential solutions can be assessed and management decisions made. This generally means having information available in an easily accessible form and knowing who to talk to to get advice. A grower's final decision may be made after consulting one or more sources of information before getting the confidence to proceed. Action also assumes the grower has the resources to proceed and the solution is economically sound.

For growers doing personal research to determine how to improve their businesses, there is less urgency but the process is similar.

(3) Understanding

The third goal involves improving the quality of information provided to ensure growers can understand the significance of new or existing technology, whether it is relevant to them and if so, how to use the information to make management changes.

A new technology may be very good but if the potential user does not appreciate its significance, it will not be considered further or adopted.

Barriers to understanding the importance of new technology and how to adopt it are:

- Scientific and bureaucratic jargon
- Poor grammar, making it difficult for the reader to understand what is being said
- Inadequate explanation as to how the technology impacts the farm business
- Inadequate support information to enable the technology to be used or explored further
- Irrelevant information hiding the true value of what is being presented.

The adoption process

If a grower is aware of a new technology and its significance and can access further information as required, then the technology transfer process is successful. This still does not mean the new technology will be adopted. Growers may not see the new technology as important to their business, may not have the expertise to adopt it easily, may see it as valuable but are not willing to invest the resources to make the change, may not be able to afford to change or may have other priorities more important that delays its consideration. There are many valid reasons for not adopting or delaying the adoption of new technologies.

Adoption models can be complex, but the simpler process below is the basis of most and the one we used in this process:

Figure 2: The adoption process (Source: Unknown)

Each stage needs to be satisfied before proceeding to the next. For simple decisions, this may be very quick – a matter of minutes. For more complex decisions moving through all the stages may take years.

Being aware of new technology does not mean a grower will adopt it. Understanding new technology does not mean growers would adopt it. Accepting the value of the technology to their business does not mean growers will adopt it. Being committed, but not fully, also does not mean technology will be adopted. The adoption process can be stalled at any stage.

It is also important to accept that many barriers to adoption of new technologies exist and technology transfer can address some of these but not all.

The aim of the industry's communication program

We needed to be clear about what the Communication Program could realistically achieve. The Program did not have the scope or budget to be an extension program encouraging adoption of new technology. Rather, the available resources dictated it as a technology transfer program providing the opportunity for people to adopt new technologies.

Technology transfer can have a major impact on Awareness and Understanding but less on Acceptance, Commitment and Adoption. These later phases of the adoption process require a greater interaction with the local growing community (as is usual in an extension service), something not possible for the TTM.

Role of technical service providers

With the focus of the Communication Program on technology transfer, an important part of the task was to leverage all available resources to help growers move through the last three stages of the adoption process.

This was achieved by tapping the potential of technical service providers who were often local or regional people with local knowledge and trusted by the grower as a source of information. They were people the grower could interact with and work through issues involving technology adoption. They may have been local merchandisers or traders providing value added services, consultants, fertiliser agronomists, chemical company technical staff, processor field staff, government extension officers or researchers.

It was in the commercial interests of non-government technical service providers to be well informed so they could provide high value services. They were therefore information hungry.

Technical service providers also provided important reinforcement of messages from the R&D program and supported growers in satisfying their information needs. They also added local and technical knowledge, something that could be extremely valuable in the adoption process.

Using a network of technical service providers can be a bit like having team of sales representatives. In this case, given they were not employed through the Communication Program, the network proved a cost effective way of increasing the impact of the program.

One negative of using technical service providers though was they were using the knowledge to further their own interests. When dealing with growers, they would not always disclose the source of the information as levy-funded. Growers therefore could have been using technology they had funded without realising it.

From a marketing and branding perspective this was counterproductive to building a positive image for the program, but from a technology transfer perspective it was not so important.

Although the R&D program needed to be recognised as being valuable to growers to ensure ongoing support, the main aim was effective use of the technology so growers could benefit from the investment.

Success was based on teamwork

As expected, introduction of the new information service meant some adjustment as other groups changed what they did to avoid duplication and take advantage of the benefits of the new system.

The success of PT96009 was very much based on working as a team with other government, commercial and industry groups. These links needed to be strengthened in the PT00001 project as only collectively could the goals of providing effective technology transfer be achieved. Even working as a team, the challenges were great.

As well as building on the networks that were so important to our industry's development, project PT00001 also started to leverage new technologies such as CDROM and the internet to build a new form of support service.

It continued the work initiated in PT96009 and improved the services already put into place as well as addressing other deficiencies identified by industry.

Strategy

The Communication Plan, which formed the basis for this project, was created to guide development of the national communication effort in the Australian potato industry. A major focus was to address communication deficiencies impacting on adoption of technology from the national research and development program.

The plan was developed through extensive discussions carried out as part of the project PT96009.

This plan was also one of four proposed operational plans under the industry's strategic plan.

Due to the lack of industry support, the Fresh Potato Marketing Plan was not adopted in the life of this project. The Seed Potato Research and Development Plan also underwent many changes as a result of the review of the Breeding Program.

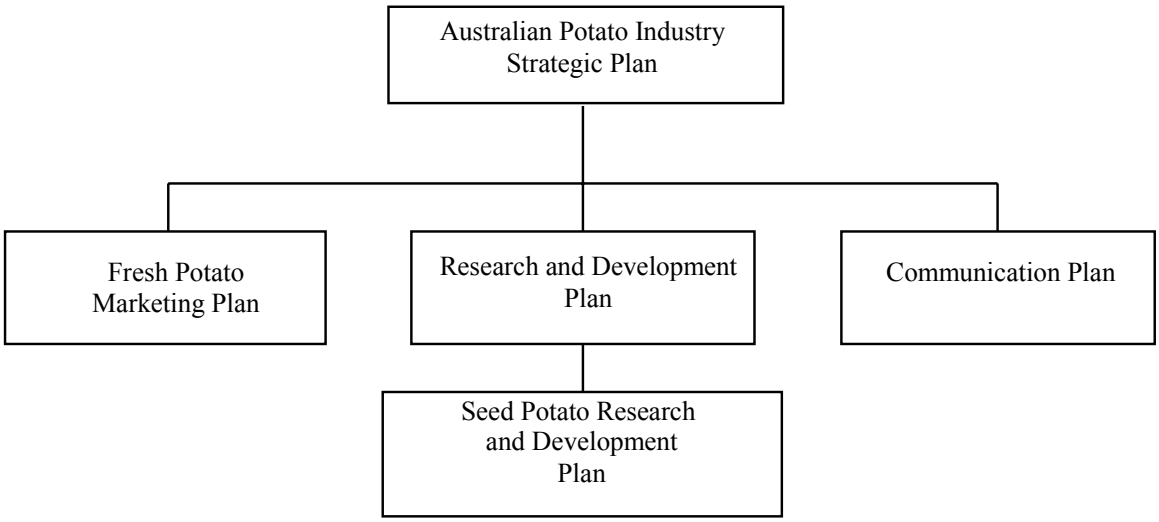


Figure 3 – Proposed national industry plans

In the course of developing the Communication Plan, a number of important issues became apparent.

- Farmers were distributed throughout Australia and operated in a wide range of soil types and climatic conditions which complicated the process of doing research and providing services.
- The search for areas low in disease would result in new areas continuing to open up for the foreseeable future, further adding to the research and information access problem.
- The declining emphasis by government on traditional extension services and the greater extension role of private enterprise produced new challenges for researchers in the way they communicated and extended their work.
- The increasing focus on maximising the benefits of research nationally made it more difficult for researchers to communicate at a group level with growers.
- Government services were in many instances state bound and therefore state focused, which created ongoing difficulties in developing national approaches.
- The service industry (ie. technical service providers) was an important part of the industry network. For the purpose of the project, the service industry was defined as people who provided technical advice to growers, in particular - consultants, private agronomists, field officers, seed agronomists, fertiliser agronomists, government extension officers, researchers

and chemical agronomists. These people needed to be kept informed of industry developments if they were to provide a high quality service for their customers and participate effectively in developing the industry.

The following strategic framework for the project was borne out of these observations and the many lessons learnt through project PT96009.

Mission

Better satisfy customer requirements by addressing information needs of farmers and the service industry so that they can more effectively face the challenges of a dynamic marketplace and changing community expectations.

Vision

Customers
Customers are able to obtain what they need and they feel the industry is responding to market needs.

Farmers
Farmers feel they have a good understanding of what is going on in the industry, the R&D work is valued and they can obtain the information they require to make management decisions.

Service providers
Service providers are seen as an important source of technical and industry information for farmers and other sectors of the industry and as such an integral part of the industry network.

Goals

- Raise awareness of industry issues
- Improve access to industry information
- Improve understanding of industry information
- Facilitate implementation of Communication Plan.

Method

The Communication Plan provided the framework for all activities. Activities and outcomes were reported at each Potato Industry Advisory Committee (Potato R&D Committee) meeting. In the first two years, the Communication Plan was reviewed annually.

The philosophy behind all activities was that the more industry participants knew about what was happening in their industry, the better they would deal with changes, especially if they gained this understanding over time. If participants in an industry were well informed, they were also likely to communicate more effectively amongst themselves.

Goal - Raise awareness of industry issues

1 - Produce Potato Australia once a year as the industry's principle technical journal.

- Introduce reporting on all currently funded levy projects.
- Improve readability of articles.
- Improve the publication based on feedback from the Horticulture Australia project – 'Evaluation of potato publications1999 Market Research' - PT98042

Potato Australia was started in 1990. It underwent many changes, which improved the publication to the credit of the Editors. Market Research in 1999 (PT98042) clearly demonstrated widespread support for the publication. No major changes to Potato Australia were planned.

2 - Produce the Eyes on Potatoes newsletter three times a year for industry news and application of technology.

- Improve the publication based on feedback from Horticulture Australia project PT98042 - 'Evaluation of potato publications1999 Market Research'

Eyes on Potatoes was started in June 1997 to address the need for a more regular publication and to broaden the type of issues presented. The newsletter focused on application of technology, services, outcomes from peak industry body meetings and general industry news, particularly issues that impact on adoption of new technology.

Market Research carried out in 1999 (PT98042) indicated widespread support for the newsletter. As a result, only minor changes were planned with the major focus being on quality of content and the move to full colour.

Potato Australia and Eyes on Potatoes were paid for by the potato levy through a separate project (PT99054, PT01035, PT04008) and advertising. An Advertising Manager administered advertising for both publications. The production and distribution of the publications was supported by an Advisory Group consisting of state representatives, Editor, Assistant Editor, Production Assistant (PT99054), Co-Editors (PT01035, PT04008) and a distributor in each state.

3 - Investigate the feasibility of an email service for keeping people up to date with R&D and spot news.

- Carry out a simple questionnaire to establish interest.
- If there was sufficient interest, develop a pilot six month service and evaluate response.
- If the service had widespread support, develop a permanent service.

During the initial interviews in the project 'Coordinating technology transfer in the Australian potato industry' – PT96009 several people indicated the need for a more regular news update (ie. fortnightly, monthly). Since then the idea of setting up an email list server had been raised and discussed.

A list server was a computer that sent out messages to a list of email addresses. People could be put on the list by sending a message to the list server with the word 'subscribe' in the message section. In much the same way they could be removed from the list by sending a message to the list server with

'unsubscribe' in the message section. Anybody wanting to send out a message to people on the list could send the message to the list server and it would automatically be forwarded on. The list server could be controlled by a moderator or open for anybody to use.

The advantage of the list server was it was quick, cheap to use and once it has been set up, the user had control over whether they were on the list or not. The type of information could be industry news or research updates.

Goal - Improve access to industry information

A good distribution system was critical for getting information out to people and an important starting point in improving access to industry information.

Business people were generally issue driven so they needed to be able to access information at the time that they required it, rather than when someone else supplied it. By having tools that provided rapid access to information, businesses could be more efficient and effective in what they did.

The use of different technologies enables user needs to be satisfied more effectively.

1 - Produce an Information Directory of people, products and services.

- Produce first directory.
- Update directory in 2001.
- Update directory in 2003.
- Update directory in 2005.

The Information Directory was to contain contact information on technical advisers, publications, technical services, peak industry bodies, groups, statistics and other information useful when managing a potato business. Much of the information was to be generated from the central mailing database (HAIDB Contact Administrator) which was maintained by the Technology Transfer Manager. The Information Directory booklet was planned to be updated every second year.

2 - Develop and maintain a national distribution system that can reach growers, researchers and the service industry.

- Develop a national system.
- Work with states to upgrade state databases.
- Validate system each year.

The national distribution system consisted of seven databases. As a result of a decision made by AUSVEG Potato Group all growers details were maintained by the states. The central database contained details of government and service industry people for all of Australia.

The databases were maintained by: New South Wales (NSW Agriculture – Finley and later Bathurst), Queensland (Queensland Fruit and Vegetable Growers/Growcom - Brisbane), South Australia (South Australian Farmers Federation - Adelaide), Tasmania (Tasmanian Farmers and Graziers Association - Launceston), Victoria (AG-Challenge - Warragul) and Western Australia (Potato Growers of Western Australia - South Perth).

The people who maintained the grower databases were also the state distributors for potato publications. The Technology Transfer Manager worked with the state distributors to ensure the accuracy of the databases. Some states were moving over to a database system that would make the task of updating information much easier.

3 - Develop an internet service that will make it easier to access industry resources

- Develop an industry strategy for the internet and allied services
- Establish an internet site

The industry's internet site would provide a 24 hour a day seven day a week information service. The focus would be on high value services that required constant updating to be effective or were difficult or not economical to provide through other means. The project 'Facilitating the introduction of electronic information products and services to the Australian Potato Industry' – PT98037 provided the background information and a proposal for a site was in the process of being developed. Outcomes of a national workshop on the issue focused on the need to start off small with high quality services valued by the industry.

4 - Produce Potato Archives to provide easy access to past research results.

- Carry out work.
- Update archives in 2002.
- Update archives in 2004.

One of the difficulties of having many research projects was keeping up with all the information. Each finished HAL (HRDC) project had a Final Report for which copies could be purchased from HAL. The difficulty was knowing what to purchase and even knowing that the report existed at the time it was needed.

So all HAL (HRDC) Final Reports, Potato Australia articles and Eyes on Potatoes articles were put onto a CDROM which would become the industry's digital library of outcomes from the levy backed research and development program.

The information would be in an internet friendly format able to be searched using a simple search engine. The long term goal was to have the CDROM updated every two years and available for sale from HAL.

If the industry wanted to, the information could be put onto the industry's internet site. Most publications were now being produced in electronic form which should make it easier and cheaper to update the Potato Archives in the future.

Goal - Improve understanding of industry information

Identifying, consolidating and interpreting information on a subject for a business person is time consuming, difficult and often poorly done due to the limited resources they have available, particularly time.

This project looked at the process this could be done for the industry to save time, protect the knowledge generated in a field, reduce work that might repeat what has already been done, make the information easier to use and provide an important first reference for dealing with issues.

1 - Facilitate development of industry books that consolidate knowledge on key topics.

- Facilitate development of a seed handling and plant establishment book.
- Facilitate development of a variety guide.
- Facilitate development of an irrigation book.
- Facilitate development of a pest and disease book.
- Facilitate development of a guide to Managing the Business.
- Facilitate development of Harvesting, handling and storage book.

Books on key topics were to be designed for use by growers, consultants and agribusiness. These would consolidate information and make it easy for people to use and gain access to current knowledge.

It had been proposed that in technical areas a literature review be carried out and published. This would then form the theoretical basis for the book. The content and design would be determined with industry. Where possible, the books would be published commercially and made available through commercial book stores. Copyright would be held by HAL so the publications could be updated even

if the original authors left the industry. The publications therefore become a resource of the industry. Any royalties would be divided between equity partners based on the initial investment.

2 - Facilitate development of management tools that will save time, money and add value to the business.

- Pest and disease field identification guide.
- Facilitate development of tools as needs are identified.

Management tools were any simple information product that could help a person manage their business more easily, effectively or cheaply, for example, the pest and disease identification guide for use in the paddock. Opportunities needed to be explored and useful tools brought to the marketplace.

Goal - Facilitate implementation of Communication strategy

To be successful, the plan needed someone managing the implementation process, in this case, the Technology Transfer Manager.

A two way communication flow between all sectors of the industry was an ideal we strived for to promote better understanding of issues, to develop empathy by participants of others needs and facilitate more effective trade and adoption of new technology.

1 - Employ a Technology Transfer Manager to implement the Communication Plan

- Help and work on projects to achieve the goals outlined in the Communication Plan.
- Provide editorial support and prepare articles for industry publications.
- Work with growers, researchers and the service industry to facilitate networking and better use of the information products.
- Work with researchers to ensure maximum benefit is gained from the work being funded through the potato levy.
- Participate on the Potato R&D Committee (later Potato Industry Advisory Committee) as a Technology Transfer (TT) Adviser and provide TT support to APIC and AUSVEG where required.
- Maintain the national distribution system.

The Technology Transfer Manager role was to ensure the Communication Plan was implemented. The following provides a work breakdown for the particular tasks.

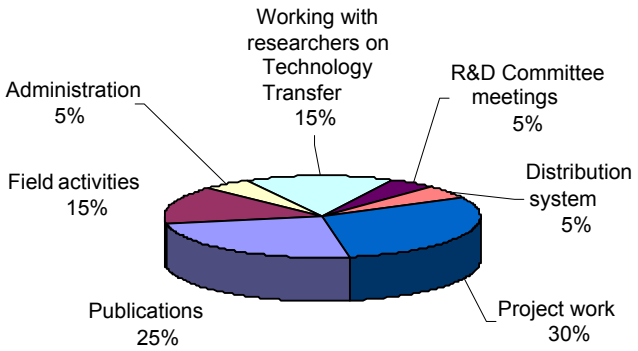


Figure 4 – Technology Transfer Managers work breakdown

2 - Facilitate networking within the industry (Networking initiatives were included in many of the strategies within the plan)

- National Conference in July 2000.
- National Conference in July 2005.
- Investigate and implement cost efficient activities to facilitate networking within the industry.

For an industry to be successful, communication between participants was essential. Within the plan, a number of strategies tackled networking issues with a strong emphasis on facilitation rather than implementation. In particular, the focus was to provide tools that allow people in regional areas to extend their network into other areas. As systems became established, this focus was likely to change over time.

National Conferences brought people together from all parts of the industry and provided opportunities to develop new contacts, catch up with new developments through formal sessions and informally in discussion and enable people to determine the main issues facing the industry. They also provided a forum for people to raise issues important to them and have leading specialists comment. For the service industry and researchers, contacts developed at conferences could prove invaluable in their work.

3 – Management structure

The management structure of the program was refined in project PT96009 and provided strong links to decision makers in the industry as well as recognising the need for local day to day support for the project leader.

Australian Potato Industry Council (APIC)

The TTM was ultimately responsible to APIC.

Steering Committee

This consisted of the Potato R&D Committee initially and later the Potato Industry Advisory Committee (HAL).

This committee was responsible for overseeing the Communication Program, providing funding support for activities and determining any changes to the program.

Management Committee

A local committee consisting of Wayne Cornish as Chairman (Chairman of Potato Growers of South Australia a commodity group of the South Australian Farmers Federation), Barry Philp (Manager Industry Development, Primary Industries and Resources South Australia) Neil Perry (Grower, Board member AUSVEG), Clinton Zerella (Grower/Packer, Fresh representative on the Potato Industry Advisory Committee), Paul Frost (Processor, Processing representative on the Potato Industry Advisory Committee) and South Australian Farmers Federation Executive Officer – Horticulture (Vacant – past representatives Jim Kelly and Adam Gray).

The principle role of the committee was to ensure the project met the requirements of the contract and provide the TTM with support as required.

Activities

The plan focused on activities that would provide the greatest returns for the investment made, given the resources likely to be available.

It was important to note that the TTM worked with many people to achieve these outcomes, particularly the Editor of the potato publications, the publications Advisory Group, publication distributors and industry and government people involved in technology transfer. The achievements were very much a team effort.

Not all activities proposed were carried out, and those that were, were not always carried out in line with the original schedule.

The major reasons for the plan changing were:

- The funding committee (Potato R&D Committee, Potato Industry Advisory Committee) did not always support the facilitated activities in the plan
- Funding delays (ie. Potato Archives – 18 months, Internet Service – 3 years).
- Changing industry priorities meant a re-alignment of the work, particularly later in the project, which impacted on the outcomes of some strategies.
- Some tasks were much more difficult to do than first anticipated.

Importantly, unlike most projects, this project was not fully funded. Many activities in the Communication Plan relied on separate funding proposals that sometimes were not supported by the Potato Industry Advisory Committee.

Goal - Raise awareness of industry issues

The TTM was Assistant Editor for the potato publications focusing on producing articles, providing a second editorial check and dealing with very technical articles or articles that required considerable industry understanding to edit successfully. The TTM worked closely with the Editor so at times these roles blurred depending on the need at the time and who was in the best position to deal with the issues.

The TTM also acted as a representative of the Australian Potato Industry Council dealing with policy issues involving the publications.

Being an advisor on the peak industry bodies and the Potato R&D Committee (later the Potato Industry Advisory Committee) meant there was a strong link between industry decision makers and the main communication vehicles for the industry. The publications could therefore respond quickly to industry needs, and most importantly, the TTM would also know the context for which this response needed to be made.

With the demise of the Australian Potato Industry Council in 2005 and incorporation of the AUSVEG Potato Group into the Board the previous year, the TTM no longer sat as an adviser and observer on any peak industry bodies. It quickly became apparent to the TTM the value of the previous arrangement.

Although still an advisor for the Potato IAC, the loss of knowledge gleaned from the peak industry bodies made it much more difficult to work out industry direction and workings, the relative importance of the various activities and what messages needed to be conveyed to the broader industry.

It is hoped though with AUSVEG running the future Communication Program, strong links will once again be established.

1 - Produce *Potato Australia* once a year as the industry's principle technical journal.

Potato Australia was produced annually throughout the period of the project.

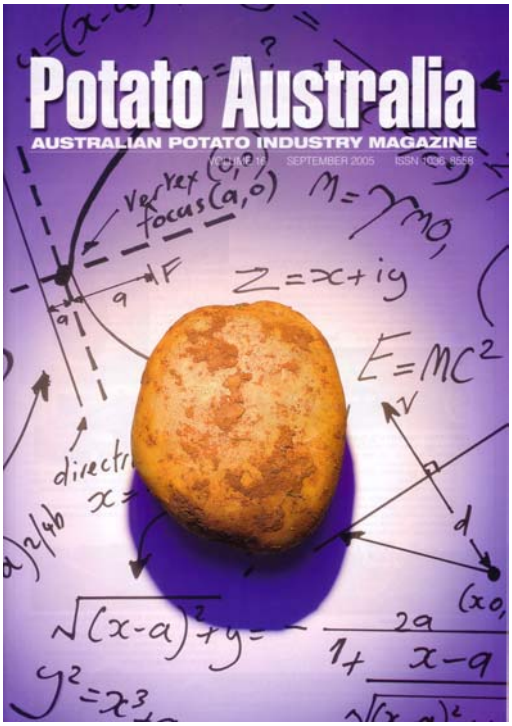


Figure 5: Potato Australia – the industry's technical journal

Potato Australia

Volume	Year	Editorial team	Number of pages
Vol 12	September 2001	Cathy Sage, Leigh Walters	60
Vol 13	September 2002	Jo Curkpatrick, Leigh Walters, Cathy Sage	68
Vol 14	September 2003	Diana Wolfe, Leigh Walters, Cathy Sage	76
Vol 15	September 2004	Cathy Sage, Jo Curkpatrick, Leigh Walters	64
Vol 16	September 2005	Cathy Sage, Leigh Walters	72

(a) Improving access to R&D outcomes
A key concern for growers was they were not hearing about outcomes from some projects and in some cases there may have been a commercial advantage for those who did.

In the early editions of *Potato Australia*, projects funded by the potato levy were listed. In 1996, the list was expanded to a more informative table format which included project leaders' contact details. Although this approach informed readers of what projects were being undertaken, not all projects were reported in the publication.

To achieve regular reporting, all existing project leaders were sent letters each April/May requesting a full article (1,000 words) or a shorter progress report (100-150 words) on the progress and outcomes of their project/s.

From 1998, the table included a reference to a progress report for all projects. In some instances, articles on projects were produced in *Eyes on Potatoes* and where this happened, reference was given to the relevant project.

Later Voluntary Contribution and AUSHORT projects were included in separate tables, when available, using the same format.

(b) Readability
The readability of articles was a major concern of growers and the TTM worked closely with the Editor to address this issue. Achieving this goal created a lot of work for both parties as many articles submitted by researchers and others did not meet editorial standards expected by the TTM or Editor.

Researchers and other experts were encouraged to write for the publications so they could work through the process of how to transfer their technological findings into information that growers could use. This writing process was seen as particularly important for any researcher or specialist who was likely to have to speak, write or communicate with the grower audience they do their science for.

Previously, extension officers often provided the interface between researchers and growers, but with severely depleted government extension services, increasingly researchers were (and are still likely to) talking direct to grower groups. Therefore it has become increasingly important that researchers go through the process of translating their science for the users of research.

The other benefit of having researchers generate articles was to ensure all their ideas were captured. An interview may inadvertently miss important issues because the process of researchers writing helps them consolidate their understanding and explanation of a topic. This process has been widely recognised as important for researchers in helping them communicate effectively with their industry users.

However, expecting researchers to write articles for an industry publication raised a number of issues:

- Researchers were often very specialised and did not necessarily have the knowledge to understand how the outcomes of their work would impact on the farm, supply chain or end user. This influenced their view about the implications of their work on industry, sometimes leading them to overstate or understate their work's potential.
- Many research groups did not have local communication or extension support to help them with their articles.
- Some researchers were just not good at writing articles for industry no matter how hard they tried.

The way we overcame these deficiencies was to work closely with the researchers. Where a researcher had good skills, the Editor and TTM had little or no editing to do. Where an article had significant problems the Editor or TTM, depending on the issue, would work with the researcher to produce a more suitable article. In some cases, this may have meant a complete rewrite focusing on the components important to industry.

In difficult articles or with particular topics either the TTM or Editor would produce the first draft after discussions with the researcher.

It was important to work with the researcher as partners to produce a better result than to dictate a particular approach. Most researchers were very helpful in the process and many appreciative of the support. Occasionally disagreements occurred, but most were worked through to both parties' satisfaction.

To have no problems would have been surprising as researchers have strong ownership of their work and want to see the best result even when some of their approaches may be biased by their science training. Empathy with their position was important if a trusting working relationship was to be established.

(c) Reacting to feedback
In 1999 independent Market Research (PT98042) was carried out to see how the publications were performing and what improvements needed to made from the perspectives of consumers, suppliers of articles and advertisers.

The research indicated that 87% of readers were quite satisfied or very satisfied with the format and general presentation of *Potato Australia* and that 86% of readers supported use of levy funds to help produce the publication.

Most readers thought nothing in the publication needed improvement (57%). In fact, no specific improvement could be named by more than 7% of those surveyed. In general, most people were happy with the publication.

Changes that were carried out by the Editor and TTM during the period of the project as a result of the market research and discussions within the publications Advisory Group including:

- Identified feature and review articles on important topics to break up the front section of the magazine, make it more appealing and to broaden the topics covered.
- Focused on producing more small articles rather than clustering progress reports. (Being mindful of comments about the publication not being as modern in its approach as it could be especially when progress reports dramatically increased in number.)
- Used professional photographers and focused more on the front cover photo to present a more attractive and modern look.
- Introduced the grouping of articles into categories to make it easier for people to focus on areas of interest and restructured the contents page.

Many of the issues raised in the market research were considered and in some cases were already an option (such as more flexible advertising) or were not considered appropriate (such as the call for advertorials). Some ideas such as more pictures were always the aim, but with the reduced field activity of the TTM over the years was difficult to achieve. Authors were always encouraged to supply good pictures.

Feedback from APIC, AUSVEG Potato Group and Potato IAC (Potato R&D Committee) were also very important. The points raised in these forums were discussed between the Editor, TTM and publications Advisory Group.

2 - Produce *Eyes on Potatoes* three times a year for industry news and application of technology.

(a) Colour – pink rot no longer looked like green rot!
Eyes on Potatoes was produced in March, June and December throughout the period of the project. In March 2003 Eyes on Potatoes was redesigned and changed to full colour after discussions with advertisers.

Eyes on Potatoes had been green and orange which meant photos were not true colours. For diseases this was a problem. It was also a problem for advertisers as the colour combination did not always suit their advertisements, resulting in less than ideal reproduction.

Figure 6: Full colour (right) provided more flexibility than the old duotone green and orange (left)

As full colour would cost more, advertising rates would need to increase. The change had broad support as it made it easier for advertisers as most of their advertisements were already produced in full colour. The duotone, as used in the original Eyes on Potatoes, was not a preferred colour combination.

Feedback on the first colour edition was mixed although generally positive. There was some concern about the colour background and the font size. This was discussed with the Potato Industry Advisory Committee and the publications Advisory Group and changes made to improve readability. The following editions (June 2003 onwards) were received favourably.

(b) Reacting to feedback

The Potato Industry Advisory Committee also provided input into what inserts were included and used as a sounding board for issues being debated in the publications Advisory Group. The relationship between the two committees was always very supportive and professional which facilitated rapid decision making and a very healthy working relationship.

In the Market Research (PT98042) 72% of the readers considered that nothing in the publications needed improvement. Most changes carried out, except for the move to colour, were therefore refinements to further improve the publication.

Changes consisted of the following:

- Greater emphasis on photos with the introduction of full colour.
- Supporting the inclusion of Chips from New Zealand which addressed some issues about the need to tap more into overseas information.
- Targeted more articles from outside the immediate industry. This was most easily done in conjunction with National Potato Conferences where articles from the conference proceedings would be selected for broader publication.
- Overseas publications and the internet monitored for relevant material to be included.

Although many improvements were made to Eyes on Potatoes, the main ongoing challenge was to maintain a balance of high quality articles.

EYES ON POTATOES

Volume	Month/year	Editorial Team	Number of pages
Vol 11	December 2000	Leigh Walters, Sandra Lanz, Helen Sims	16
Vol 12	March 2001	Leigh Walters, Cathy Sage, Helen Sims	16
Vol 13	June 2001	Cathy Sage, Leigh Walters	16
Vol 14	December 2001	Diana Wolfe, Leigh Walters, Cathy Sage	16
Vol 15	March 2002	Jo Curkpatrick, Leigh Walters, Cathy Sage	20
Vol 16	June 2002	Cathy Sage, Diana Wolfe, Leigh Walters,	20
Vol 17	December 2002	Diana Wolfe, Leigh Walters, Cathy Sage	20
Vol 18	March 2003	Jo Curkpatrick, Leigh Walters, Cathy Sage	20
Vol 19	June 2003	Cathy Sage, Leigh Walters	24
Vol 20	December 2003	Cathy Sage, Leigh Walters	28
Vol 21	March 2004	Diana Wolfe, Leigh Walters, Cathy Sage	24
Vol 22	June 2004	Cathy Sage, Leigh Walters	24
Vol 23	December 2004	Cathy Sage, Leigh Walters	28
Vol 24	March 2005	Cathy Sage, Leigh Walters	20
Vol 25	June 2005	Cathy Sage, Leigh Walters	24
Vol 26	December 2005	Cathy Sage, Leigh Walters	28
Vol 27	March 2006	Cathy Sage, Leigh Walters	24

Over the five years of the project, Eyes on Potatoes and Potato Australia grew in size as more issues and outcomes from research were reported. Advertising revenue increased after release of the 1999 Market Research (PT98042) and further increased after the introduction of colour.

3 - Investigate the feasibility of an email service for keeping people up to date with R&D and spot news.

Work was carried out in HAL projects 'Facilitating the introduction of electronic information products and services to the Australian Potato Industry' - PT98037 and 'Business plan for a national internet site for the potato and vegetable industries' - VX00023 that established an interest in email services particularly if they had a simple opt out option. The result of this work meant an email service was built into the new internet service.

To gather further information on how people reacted to email services a number of simple trial emails were carried with target groups. There was no negative response. All early emails were very short and to the point – often one sentence.

Email lists were also set up for chemical information coming out of the project dealing with National Registration Authority and Codex reviews managed by Kevin Bodnaruk, AKC Consulting. Kevin sometimes needed feedback for the reviews and also provided regular updates. The selection was based on people most likely to be interested in this type of information. By doing this we were aware that some receiving the information may not be interested and some not on the list may be.

The result was interesting in that a few people asked to be removed but just as many asked to be put on the list. Most people provided no response but some thanked me for sending the information when dealing with them on the phone for other issues.

This showed that most people were keen to be updated especially if the information was relevant to them. The simple trials reinforced the decision to include an email update service in the Potato Internet Service. The approach to be used in the service meant users could subscribe or unsubscribe from the service very easily and were therefore in total control of what they received. This eliminated the need for someone like the TTM to make judgements as to who would be interested in a topic.

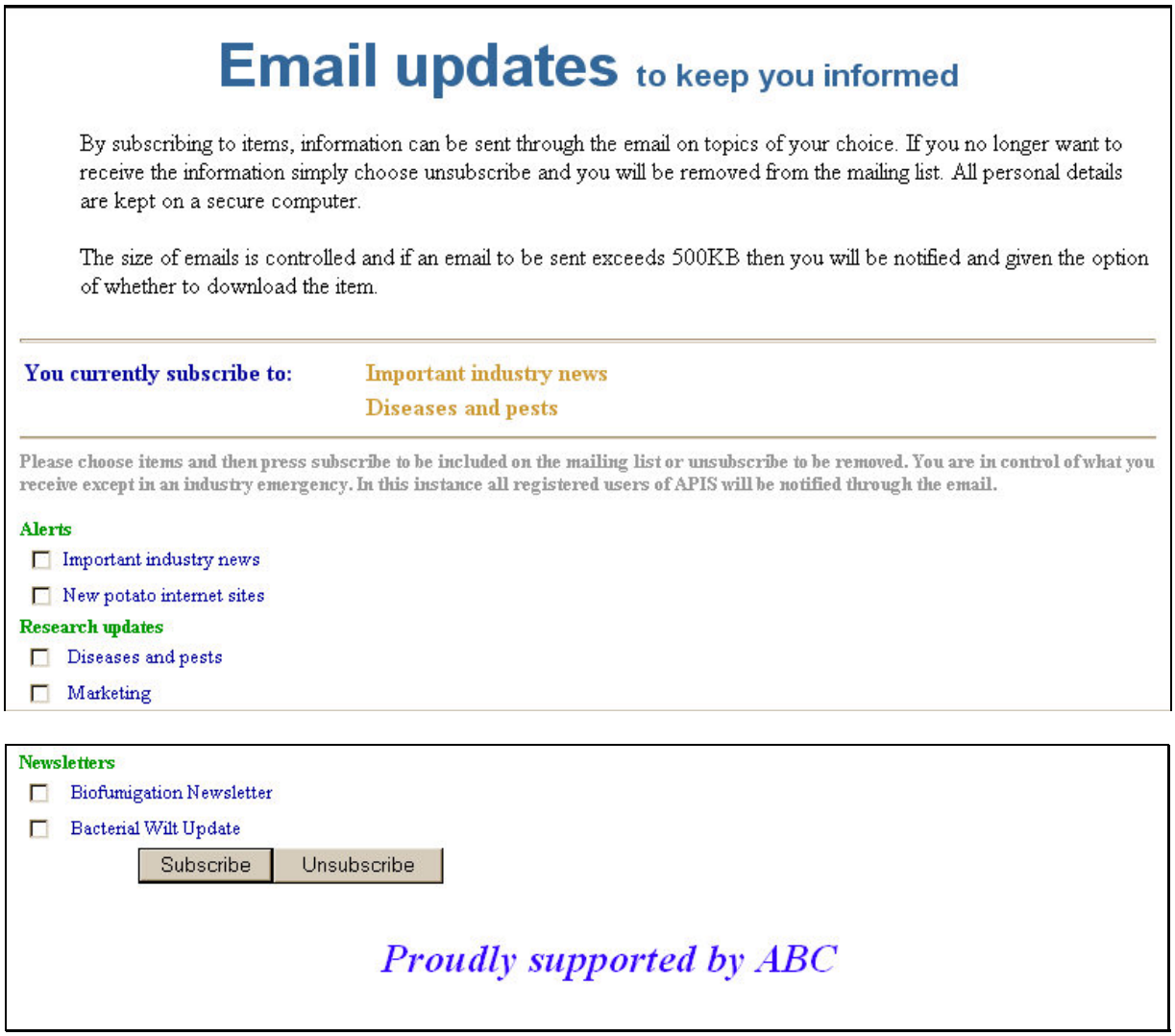


Figure 7: A mock-up of the email service proposed for the Potato Internet Service

The trials were all carried out using HAIDB Contact Administrator that had a bulk emailing facility.

Goal - Improve access to industry information

Improving access to industry information was a major focus of the project and absorbed much more project time than originally planned. This impacted on other areas of the project particularly group activities.

1 - Produce an Information Directory of people, products and services.

The Information Directory was not completed.

During the course of this and the previous project (PT96009) the directory went through a number of drafts. The difficulty was to devote enough time to the job to finish it. Long gaps between working on drafts often meant a major rewrite as the industry was changing so quickly.

The draft Information Directory was passed over to AUSVEG for assessment and possible completion. (See Appendix A – Draft Information Directory Index).

In hindsight, it really needed someone dedicated for a month to complete the job and get it out quickly before it went out of date. The TTM could not devote this amount of time with his other commitments.

Although the Information Directory was not published, a lot of the information contained in it had been included in articles published in Eyes on Potatoes.

In 2004 an 'Index of articles and HAL Final Reports' was included in Potato Australia. This included reference details for HAL Final Reports and articles from Potato Australia and Eyes on Potatoes categorised to help users find the relevant information quickly.

The index contained some of the information to be in the Information Directory. By splitting it off as a separate publication it greatly reduced the size of the Information Directory, something that was becoming a concern.

In developing the Information Directory it became apparent that information products were produced and distributed by many groups. The former was not a problem but the latter issue of distribution created significant difficulties in marketing products. Many distributors were not equipped to provide a professional service. Having so many distributors also meant promotion was very difficult. Managing the intellectual property was also very fragmented and also did not seem to be a consideration for many of the distributors. Information products were seen by many as one-off products and once stocks were gone that was it.

The easiest way to resolve the problem was to centralise distribution. This would simplify promotion, enable a professional support service to be established and cost efficiencies made through economies of scale. Given the potato industry was a relatively small market by itself the best option was to establish a system to service all of horticulture. Discussions with other Industry Development Officers (IDOs) and Industry Development Managers (IDMs) indicated the problem was common across most horticultural industries. A discussion paper was prepared, presented to HAL (Appendix G) and discussed with mid-level managers. Although there was considerable support for the idea within HAL, senior management rejected the proposal as it was not seen as part of core business.

As a result, the TTM placed new saleable products in one professional distribution centre – Roseworthy Information Centre.

2 - Develop and maintain a national distribution system that can reach growers, researchers and the service industry.

The distribution system which consisted of seven databases spread across Australia was not ideal but it worked and had good support from most of the states as they maintained control of their mailing lists and had the opportunity to insert local material.

Upgrading databases was an ongoing task with about 8% change per year. These changes were new people coming into the industry, others leaving the industry, people retiring and dying, or change of contact details particularly with the service industry.

In Eyes on Potatoes and Potato Australia, all changes to mailing lists were directed back to the TTM. The changes would then be sent to the relevant distributor.

Changes to databases were based on:

- direct contact by phone, mail, fax or email
- Post Office returns
- input from state distributors in forwarding changes or suggesting where improvements need to be made
- Communication Group undergoing a check of a particular industry group (validation run).

To make it easier for state distributors, many (WA, SA, Vic and NSW) adopted HAIDB Contact Manager to manage their mailing lists. This was one of the databases produced by the TTM which was also used by state Industry Development Officers for the vegetable industry and the publications Editor. HAIDB Contact Manager was upgraded in 2001, 2003, 2005 and 2006.

The National Database System had a more advanced version of HAIDB Contact Manager called Contact Administrator which also handled details for advertisers, internet, Information Directory and the new R&D programs for processing and fresh.

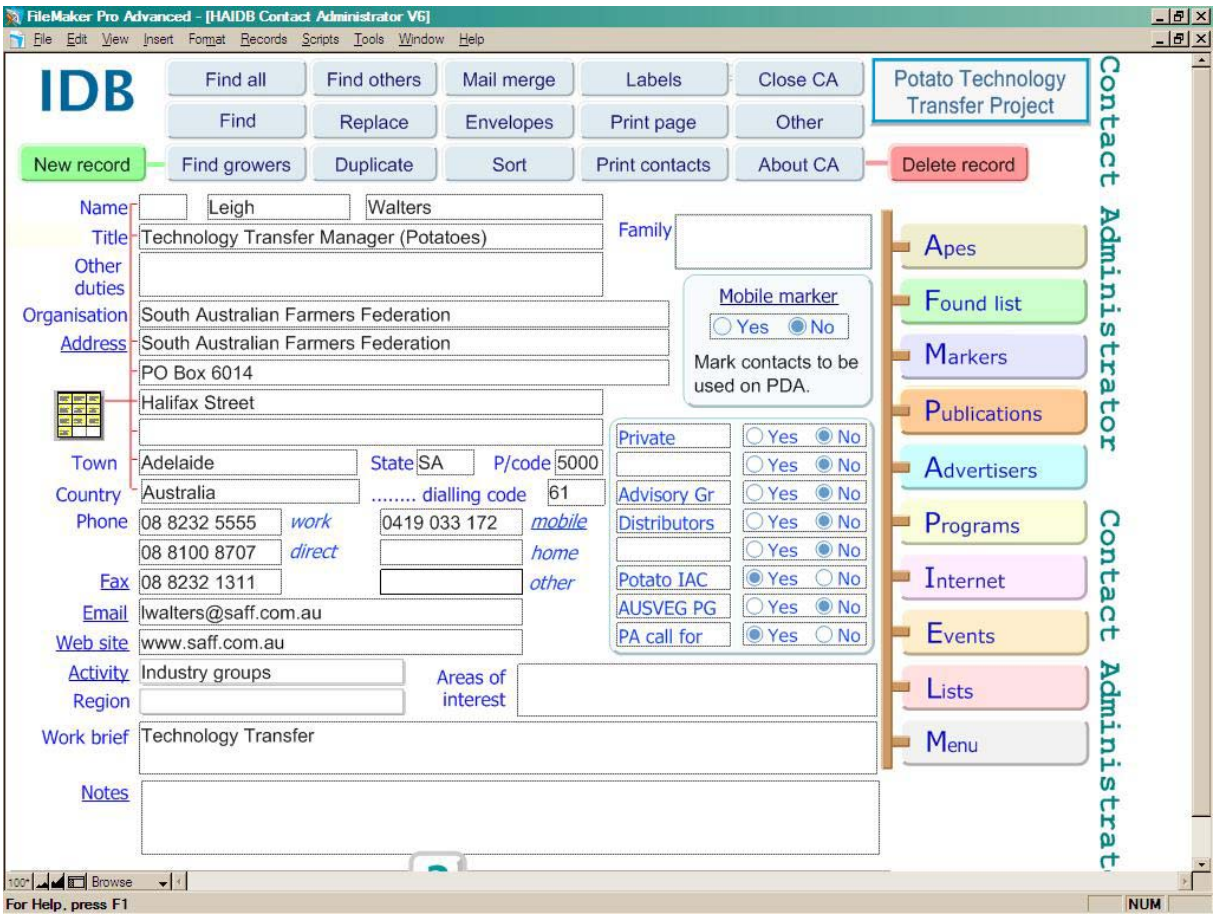


Figure 8: HAIDB Contact Administrator main page

Validation did not happen annually for all groups. With some groups contact was regular enough that changes occurred very quickly. Other groups changed often and were more regularly checked. Some groups were checked infrequently.

Validation of farmer groups was carried out mainly by the states with any changes the TTM received being sent to the relevant distributor.

As previously indicated, having seven databases was not ideal. It would have been much more efficient to have a central database and provide support services to state industry groups in exchange for help in keeping the central database up to date.

In May 2003, a Discussion Paper was put to AUSVEG outlining a proposal to move to a central distribution database. Further discussions were held between the TTM and state groups after the meeting to help members understand all the issues involved in preparation for future debate.

Due to political changes within the peak industry bodies this was not formally discussed again in the period of this project.

3 - Develop an internet service that makes it easier to access industry resources

A business plan was developed over the summer of 2000/2001 with the vegetable industry – 'National internet service for the Australian vegetable industries' - VX00023. This was submitted for funding to the National Office of Information Economy and the Potato and Vegetable R&D Committees. The former rejected the proposal and the R&D committees supported the proposal. The vegetable proposal was then overturned by AUSVEG when they reviewed their communication program.

The TTM was requested by the Potato R&D Committee to resubmit in the next funding round focusing only on potatoes. This proposal (PT04002) was supported and the project began when funding was received in November 2004.

Due to delays and problems with software upgrades (see PT04002 for more details), the final development phase could not start before January 2006. As the Communication Program was concluding in March 2006 and being transferred to AUSVEG from South Australian Farmers Federation, the project was terminated in February 2006 once the databases had been updated to a satisfactory stage.

At the conclusion of this project, AUSVEG had begun producing a password protected internet site for the potato industry and were going to include the information that had been collected in this project.

During the project the Potato Internet Starter Pak was updated to provide links to potato sites worldwide. This product was developed in the project PT96009 as a stop gap until the internet service came on line. It was a series of internet pages mailed out automatically to people on request. When the package was updated those who previously requested the package would also receive an update.

Potato Internet Starter Pak was updated to Version 4 in April 2002 and Version 5 in April 2004.

Links in the Starter Pak were transferred into the industry database HAIDB Link Manager in preparation for the potato internet service.

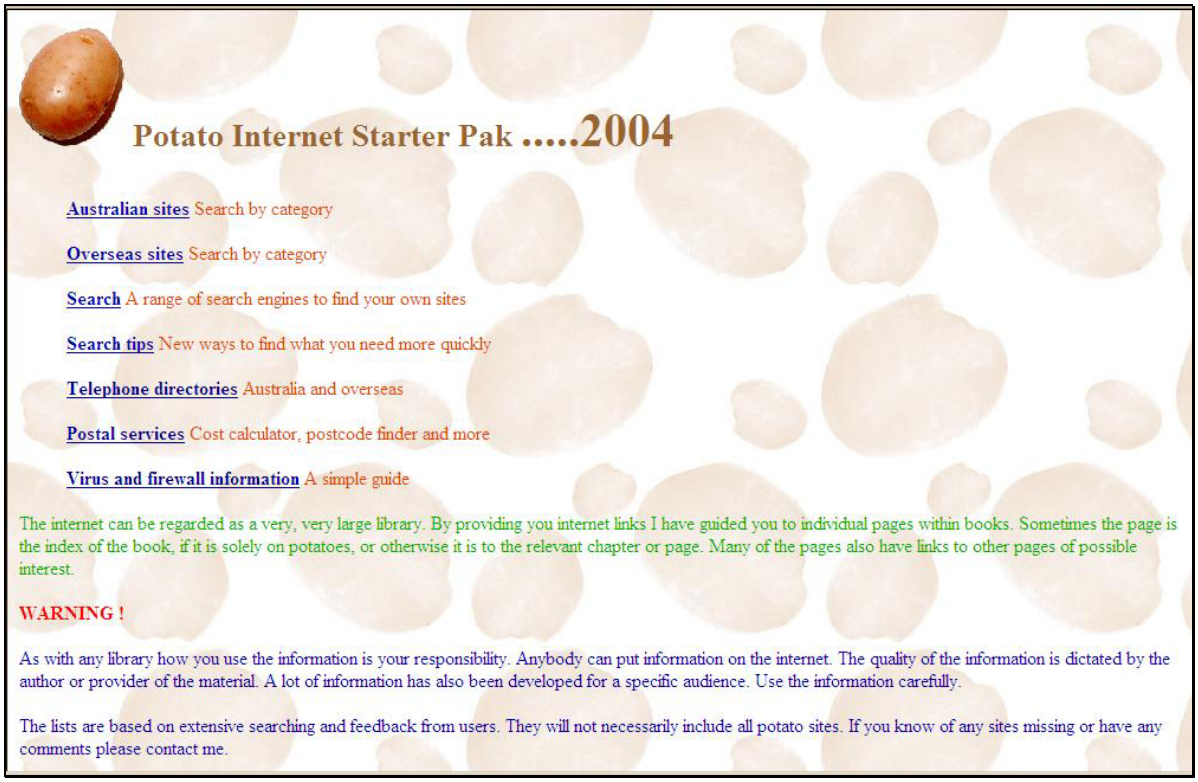


Figure 9: Opening page of the Potato Internet Starter Pak

4 - Produce Potato Archives to provide easy access to past research results.

Potato Archives (project PT00027) was produced and became the Australian potato industry's digital library. It contained past editions of Potato Australia (vol 1-16) and Eyes on Potatoes (vol 1-26), Final reports from research and development projects (160) and the proceedings from the 2000 and 2005 national potato conferences.

Potato Archives (PT00027) was a very difficult job. At one stage there were four people working on the project. Due to an 18 month delay in funding and difficulties carrying out the work, the size of the job was nearly three times larger than first quoted.

At the time the project was proposed, there were ten editions of Potato Australia, four editions of Eyes on Potatoes and about 60 HRDC Final Reports which came to just under 3,300 pages of information. However, by project end, nearly 12,500 pages of information was included. The final Potato Archives contained 16 editions of Potato Australia, 26 editions of Eyes on Potatoes, 160 Final Reports and two conference proceedings with a further eight conference and workshop proceedings prepared but not included in the CDROM version of Potato Archives.

The CDROM version of Potato Archives was completed and distributed free to levy payers in 2006 (Potato IAC decision) with copies available for sale from AUSVEG for non-levy payers.

Figure 10: Potato Archives search page

Goal - Improve understanding of industry information

Consolidating information into more usable forms was an important task.

1 - Facilitate the development of industry books that consolidate knowledge on key topics.

All books required additional funding and the support of the Potato Industry Advisory Committee.

A pest and disease book and field guide were developed by Paul Horne, Dolf de Boer and Denis Crawford, published through Melbourne University Press and distributed through Penguin. The field guide was also distributed free of charge to all levy payers.

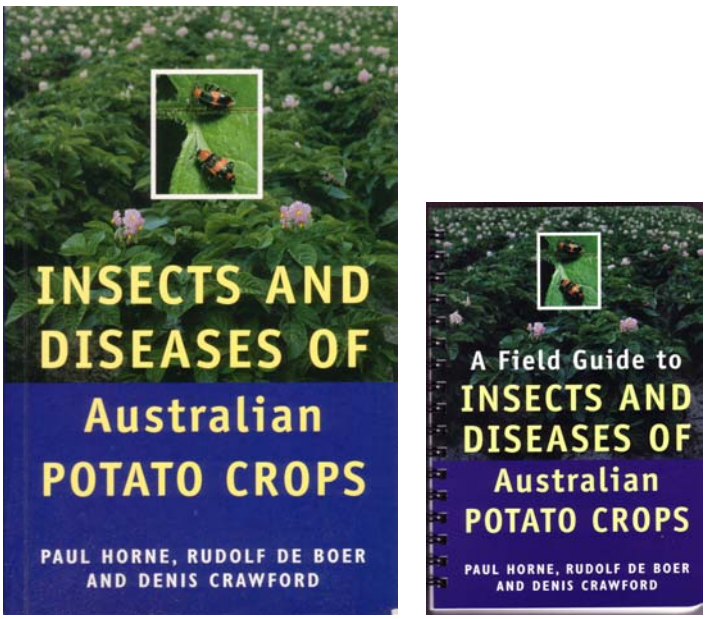


Figure 11: Book and field guide

The book went out of print in 2003. It was put to the Potato R&D Committee that a reprint and revision be undertaken but this was rejected as being too soon after the initial release.

Funding proposals for a variety guide, irrigation book and a national version of the Agrilink Potato Manual were rejected.

A Seed Management guide was produced by Doris Blaesing, edited by Cathy Sage and distributed free of charge to industry in 2006.

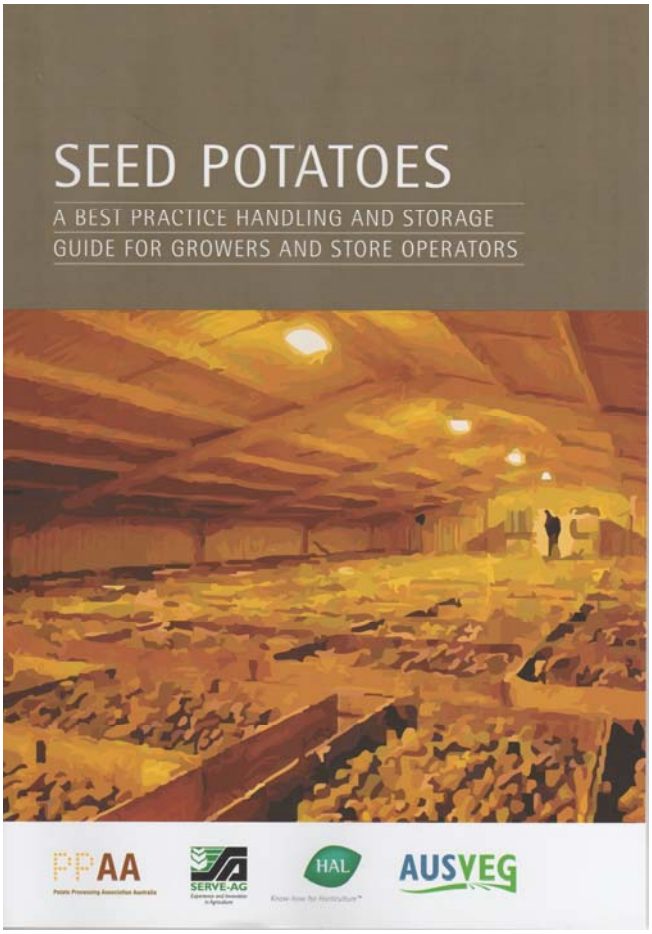


Figure 12: Seed Management guide

The CropTest - Potato Crop Nutrient Evaluation System was the industry's encyclopaedia for nutrition and was removed from sale in 2003. The software component was not fully compatible with the newly introduced Windows XP.

Given the amount invested in developing the original package, over $300,000, the TTM investigated with the developer Norbert Maier the possibility of updating the package. To see how this should be done, independent market research was carried out in 2003 – 'Market research for potato nutrition' - PT03055.

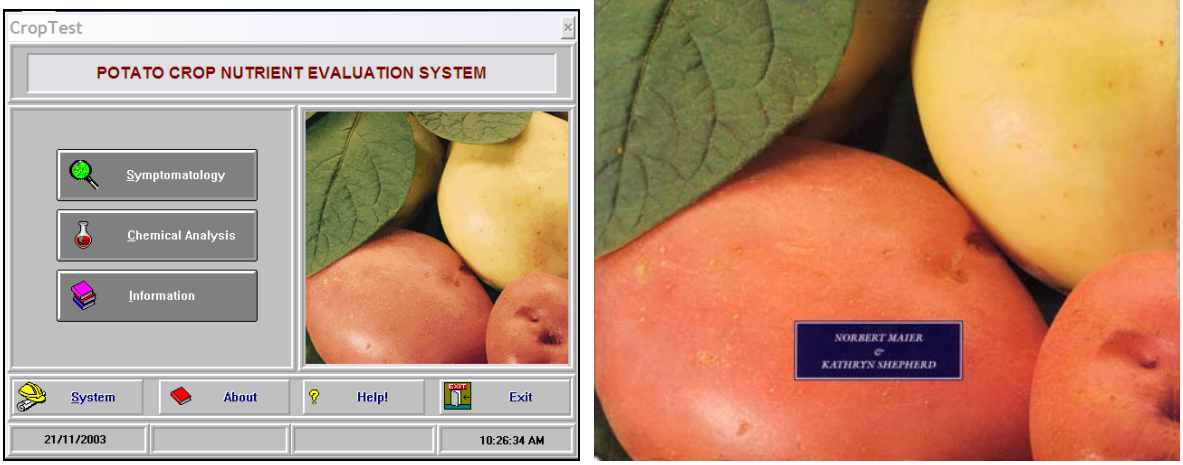


Figure 13: CropTest - front page of the software package and the manual

Although a clear need for an updated more user friendly package was identified from the research, only a field guide was supported, with a funding adjustment to this project made to carry out the work. The field guide was sent out free of charge to levy payers in December 2004 with Eyes on Potatoes and sold through the Roseworthy Information Centre.

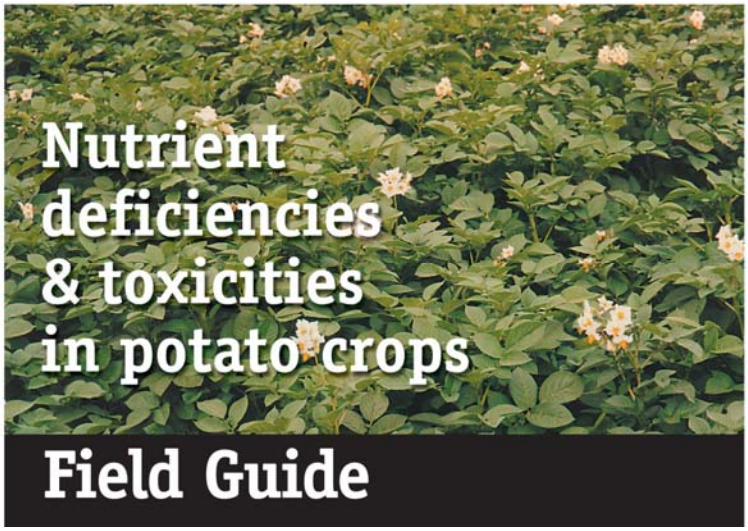


Figure 14: Field guide sent out free to levy payers

A guide to managing the business was removed in the 2001 revision of the plan.

No proposal was put forward for the harvesting guide due to a lack of interest by potential developers.

A proposal to produce a children's book through Kondinin was supported with the book being released in the second half of 2004. By December 2005 over 500 copies had been sold.

The book involved many people across the industry. Industry support was excellent. Even though it involved a lot of work for the TTM and others such as Stephen Wade from NSW Agriculture, the end result made the effort very worthwhile. The industry now has an excellent school resource.

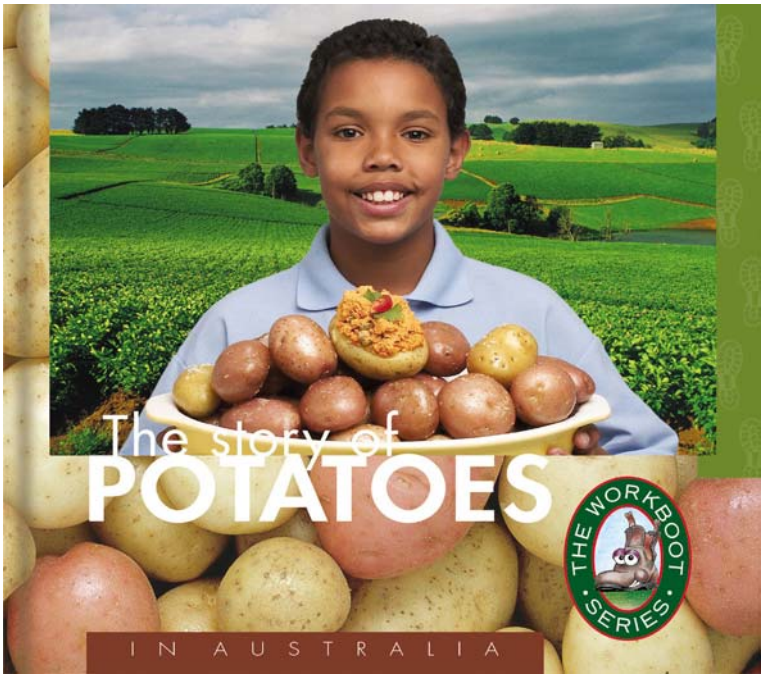


Figure 15: The story of potatoes – children's book

2 - Facilitate the development of management tools that will save time, money and add value to the business.

- Pest and disease field identification guide.
- Facilitate the development of tools as the needs are identified.

As indicated above, a pest and disease and nutrition field guides were developed. A soil insect guide was also in development by Stewart Learmonth from the Department of Agriculture, Western Australia, which had not been completed by the end of this project.

Goal - Facilitate implementation of Communication strategy

The TTM role was quite complex as the boundaries for communication needed to be flexible to meet industry needs.

1 – Employ a Technology Transfer Manager to implement the Communication Plan

There were a large range of jobs and at times it was difficult to balance the workload. In a perfect world everything ran to time, project payments were never late, researchers met schedules and funding committees always made decisions you wanted them to.

Reality was somewhat different and a lot more chaotic with the TTM juggling many jobs at once – some starting, some finishing and others in midstream.

(a) Facilitate work on projects to achieve the goals outlined in the Communication Plan

The following were formal projects initiated and managed by the TTM:

- Making past industry information from R&D more accessible (PT00027)
- Business plan for a national internet site for the potato and vegetable industries (VX00023)
- Potato Internet Service (PT04002) – cancelled due to transfer of program to AUSVEG

The following were projects funded through PT00001 by adjusting milestones and milestone payments to carry out the work (Usually smaller projects that did not warrant a full project proposal) and supported by the TTM. They were:

- producing the 'Nutrient deficiencies & toxicities in potato crops Field Guide'
- HAL sponsorship for the Potato 2005 national potato conference
- producing 'Seed potatoes – A best practice handling and storage guide for growers and store operators'

(b) Provide editorial support and prepare articles for industry publications

The TTM:

- provided editorial support for all publications throughout the period of the project and oversaw publications on behalf of the Australian Potato Industry Council (AUSVEG and Potato Processors Association of Australia after the cessation of the Council)
- worked with peak industry bodies to ensure issues important to industry were reported in the publications and promoted information products from the R&D programs
- compiled project tables and managed the Call for articles on behalf of the Editor for Potato Australia
- collected photos, information and carried interviews in the field
- provided support to researchers for writing articles, prepared first drafts with researchers for some articles to ensure industry perspective and supported HAL to ensure relevant information was included in the publications
- in late 2000, facilitated the appointment and training of a new Editor and during the transition process acted as principal editor
- with the assistance of the Editor, produced updated versions of the Publications Guidelines (April 2001, October 2002, June 2005) which was the Publications Group reference for how the publication system worked
- prepared 155 articles (some in conjunction with the Editor. Many were small items to provide balance to the publications. The full list can be viewed by searching for 'Leigh Walters' in Potato Archives.)
- prepared many additional articles for other people or groups (A first draft was usually prepared in conjunction with the Chairman/HAL adviser for many Australian Potato Industry Council, AUSVEG Potato Group, Potato Industry Advisory Committee and HAL reports.)

(c) Work with growers, researchers and service industry to facilitate networking and better use of information products

The TTM facilitated networking by linking people and providing information on the R&D program, progress of projects and information products available and how to obtain them. HAIDB Contact Administrator, HAIDB Project Manager and HAIDB Publication Manager databases from the National Database System were used to answer most enquiries as they arose. Information was provided on request or offered when a need was identified.

(d) Working with researchers to ensure maximum benefit is gained from the work being funded through the potato levy

The TTM was involved with a number of projects to differing degrees based on need. In the following projects a significant commitment was made. For many projects, support was given by phone (eg. contacts, who to discuss proposals or ideas within industry, what work had been done, what industry information was already available, how to interact with grower groups)

The projects the TTM made a significant contribution to were:

- Communication of management strategies for potato virus diseases in Western Australian potato crops (PT00034) – organised national distribution and marketing of the video
- Development and implementation of industry biosecurity plans (HG03070) – provided technical, networking and editorial support
- Eyes on Potatoes and Potato Australia (PT01035, PT04008) – provided editorial, technical and networking support, and oversaw project on behalf of the peak industry bodies
- Insects and diseases of Australian potato crops – field guide and book (PT98043, PT02038) – provided support for Potato R&D Committee, HAL and authors, organised distribution of field guide
- Market research for potato nutrition software (PT03055) – organised the market research and facilitated reporting
- National potato cyst nematode management strategy (PT99055) – developed hygiene strategy component, provided editorial, networking and technical support
- Processing potato industry R&D program (PT04016) – provided support in developing the program and managing the communication component
- Publication of best environmental management practices for sustainable vegetable and potato production in Western Australia (VX01030) – editorial and technical support
- Seed potato handling and storage - implementing best practice (PT01030) – subcontracted work and provided editorial and networking support
- The Workboot Series - The story of potatoes in Australia (PT02007) – provided technical, photographic, networking and editorial support.

(e) Participate on the Potato Industry Advisory Committee (formerly APIC R&D Committee and Potato R&D Committee) as a Technology Transfer (TT) Adviser and provide TT support to APIC and AUSVEG where required.

In May 2001, the government advisers (Barry Philp and Rowland Laurence) resigned from APIC. They regarded the TTM as being able to satisfy many of the Council's needs. If required they could attend to provide additional support on request.

The TTM attended all the Potato Industry Advisory Committee, Australian Potato Industry Council and AUSVEG Potato Group meetings and provided regular communication updates and support as required. After cessation of APIC and the disbanding of the AUSVEG Potato Group, the TTM only attended Potato IAC meetings to the close of the project.

Outcomes for the meetings were written up with the chairman (for Eyes on Potatoes and Potato Australia).

Industry statistical data was maintained as requested by the Australian Potato Industry Council and supplied as required to support decision making. The information was also included at times in Eyes on Potatoes and Potato Australia.

(f) Maintain national distribution system

The national distribution system was maintained by the TTM working with state distributors. HAIDB Contact Administrator was developed to maintain all industry contact information. Contact

Administrator was also used for mailouts, managing bulk emailing and providing network support for the industry.

HAIDB Contact Manager, also developed by the TTM, was used by state distributors in New South Wales, South Australia, Victoria, Western Australia and the publications Editor. The program was updated in 2001, 2003, 2005 and 2006.

(f) Support staff

To help implement the Communication Plan, Wendy Fishers was employed as a Technology Transfer Assistant from April 2003 to December 2003 and Trish Dempsey from July 2004 to February 2006.

Wendy's role was to provide general administration support to the project and work on the Potato Archives.

Trish was employed to provide general administration support (3 days a week) and maintain the internet service (2 days a week). Initially though most of Trish's time was spent on Potato Archives (PT00027) and general administration due to the delays with the internet service.

With the large workload created by Potato Archives, Kieran Walters was employed to provide support for the Potato Archives and the Potato Internet Service from December 2004 to February 2005.

Alison Pitman was employed from January 2005 to October 2005 to provide support for PT00001 by working on parts of the Information Directory, preparation for the Potato 2005 conference and Potato Archives (PT00027), where she spent most of her time. Alison's scientific and communication background greatly enhanced the group's ability to deal with a number of complex jobs.

An important part of the job was facilitating better communication by linking people. A continuous flow of people requested information about who did what in the industry in particular disciplines, who to contact about different industry issues or, from overseas, doing business and making the right connections in Australia. The National Database System made the job of answering most of the enquiries very simple.

(g) Other tasks

The TTM role also involved activities such as:

- sub-contracting jobs and managing relationships
- scanning globally and nationally for new information
- answering enquiries on a wide range of industry matters
- acting as a store and supplying backcopies of publications as required
- facilitating commercial distribution of industry R&D publications as required
- supporting researchers to develop information products - design, production and marketing
- facilitating funding of information products and communication activities not covered in existing projects
- linking research groups with a common interest
- helping researchers to interact better with industry - who to talk to, what groups to work with and what to consider
- carrying out a survey in Potato Australia in 2003 of information needs for hygiene strategy, internet and publications

2 – Facilitate networking within the industry

Facilitating networking focused on bringing people together to interact so as they could learn from others working in the industry. Conferences were a major focus of the work but small group activities were also supported and carried out where possible. The latter were more effective in reaching people who were not able to travel to conferences.

(a) National Conference in July 2000

The Potatoes 2000 national potato conference was organised by South Australian Research and Development Institute on behalf of the Australian potato industry. The TTM was a member of the Conference Organising Committee on behalf of the industry and provided the following support:

- general support in the planning phase
- helped promote the conference through Eyes on Potatoes, Potato Australia and email alerts.
- produced the state newsletter
- carried out final editing and layout of conference proceedings
- organised post conference tours at the Waite Campus
- organised group sessions at the conference
- took photos at the conference which were used in a conference feature in September 2000 Potato Australia

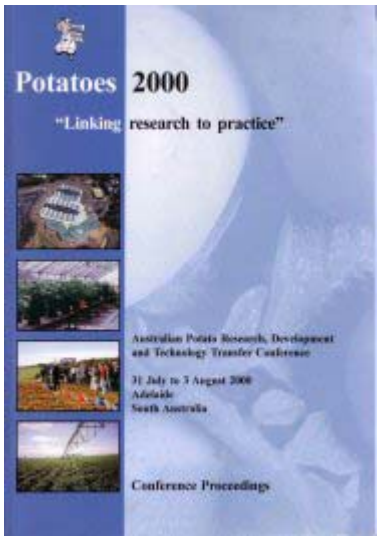


Figure 16: Potatoes 2000 Conference Proceedings

(b) National Conference in July 2005 (see Appendix F)

The Potato 2005 national potato conference was organised by Seed Potatoes Victoria on behalf of the Australian potato industry. The TTM provided the following support to the Conference Committee:

- provided general support in the planning phase
- produced the state newsletter
- helped promote the conference through Eyes on Potatoes, Potato Australia and email alerts.
- organised media support
- developed conference internet site (See Figure 17 and 18)
- took photos at the conference which were used in a conference feature in December 2005 Eyes on Potatoes.

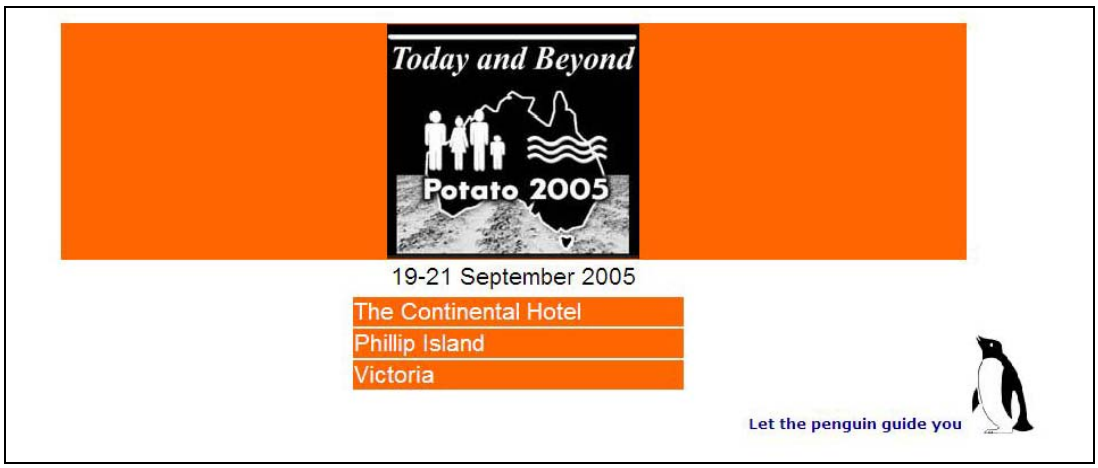


Figure 17: Opening page of conference internet site

Figure 18: Contents page of conference internet site

(c) Investigate and implement cost efficient activities to facilitate networking within the industry

Group sessions were an important way of bringing people together to discuss the Communication and R&D programs. The need for such sessions was borne out in work carried out in project PT96009 which highlighted that many growing regions felt isolated from the main R&D program activity due to their location.

Unfortunately group activities were put on hold from 2003 onwards due to the heavy workload in other areas of the program.

The following group activities were carried out:

Date	Location	Participants
28 Jun 2002	Brisbane, Qld (Northern Smiths Crisping Group)	~20+1S
2 July 2002	Bundaberg, Qld (Growers)	~10+1S
9 Sep 2002	Rocky Cape, Tas (Growers/Processors)	24+4S
10 Sep 2002	Longford, Tas (Growers/Processors)	14+4S
11 Sep 2002	Devonport, Tas (Growers/Processors)	33+4S
12 Sep 2002	Scottsdale, Tas (Growers/Processors)	7+4S
26 Sep 2002	Bordertown, SA (Growers)	~12+1S
25 Nov 2002	Penola, SA (Growers)	3+2S

S – Service industry

Other networking activities were not investigated due to the workload created by other parts of the project.

The many other people in the service industries carrying out group activities were supported where possible. This was through providing contacts, carrying out mail outs, informing people of an activity or advising how to organise an activity to attract the most participants. Group organisers' needs were many and varied but were often easily satisfied using the TTM's resources.

(d) Other activities

(i) National Business and Marketing Conference, August, 2002 – Mt Gambier, South Australia

Support provided by the TTM:

- promotion through March and June 2002 Eyes on Potatoes
- program development
- networking
- display in trade exhibition
- photography
- conference feature in 2002 Potato Australia
- inclusion of conference papers in December 2002 and March 2003 Eyes on Potatoes.

(ii) Potatoes by the sea – Third biennial seed workshop, August 2003 – Portland, Victoria

Support provided by the TTM:

- presentation on Cost benefit review of potato research

(iii) Carryover work from PT96009 – Code of Practice for diseases

The Code of Practice for diseases (and in particular Potato Cyst Nematode) was work carried over from project PT96009. This was largely due to initiation of the project 'National potato cyst nematode management strategy' - PT99055 and the need to further develop Potato Hygiene Strategist.

- **Potato Hygiene Strategist**

Interviews carried out in project PT96009 showed many people were not interested in adopting a hygiene strategy focused solely on Potato Cyst Nematode.

Many growers were more concerned with diseases already on the farm that impacted on their economic viability rather than diseases they may or may not get in the future. For a hygiene strategy to be adopted or at least seriously considered, it needed to encompass all plant disease threats being faced by growers and most importantly, had to be practical to implement for the whole business.

Growers manage a business that may encompass a number of crops and livestock. Some growers may also do contract harvesting, spraying, haulage etc. They look at the business as one entity with a number of different parts. Hygiene strategies need to be holistic in nature accommodating the variability of businesses. They also need to have the flexibility to address specific needs of disease threats.

As one grower said in discussions about harvesting, what was the difference between a potato harvester moving between properties and a bean harvester as both can carry soil and therefore spread disease.

Existing approaches to hygiene failed to address the needs of many growers even though there was a broad recognition of the need for an approach and acceptance of general principles. A new approach was needed.

When looking at what could be done for potatoes, it quickly became clear that the information required for decision making was fragmented and in some cases hard to get. Before proceeding, existing knowledge needed to be consolidated or any strategy would rely too much on simplistic remedies that could not be properly considered in the context of an individual's situation.

The focus of the work therefore changed to consolidate existing hygiene knowledge.

The approach used a user centric design. This involved working out the nature of the end product and working backwards to fill in the information.

Step 1 was to determine user needs. From the work already carried out, these were identified as being:

a) What management changes needed to be made to reduce diseases important to the grower?
b) A means of prioritising the changes for the farm.
c) Support information for 'fine tuning' the strategy.

It was important to address issues important to growers. Doing this would provide growers with the interest to use the information. Over time the strategy could be broadened.

A computer based package allowed the information to be consolidated and priority given to the most important issues. It also allowed the user to try different scenarios to test the impact on the priorities. Other benefits included the ability to be able to update information through the internet and inclusion over time of other useful management tools that would further personalise the strategy for the individual's farm.

A prototype package was developed called Potato Hygiene Strategist.

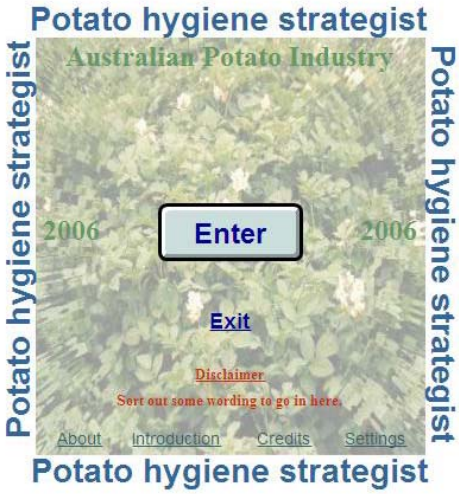
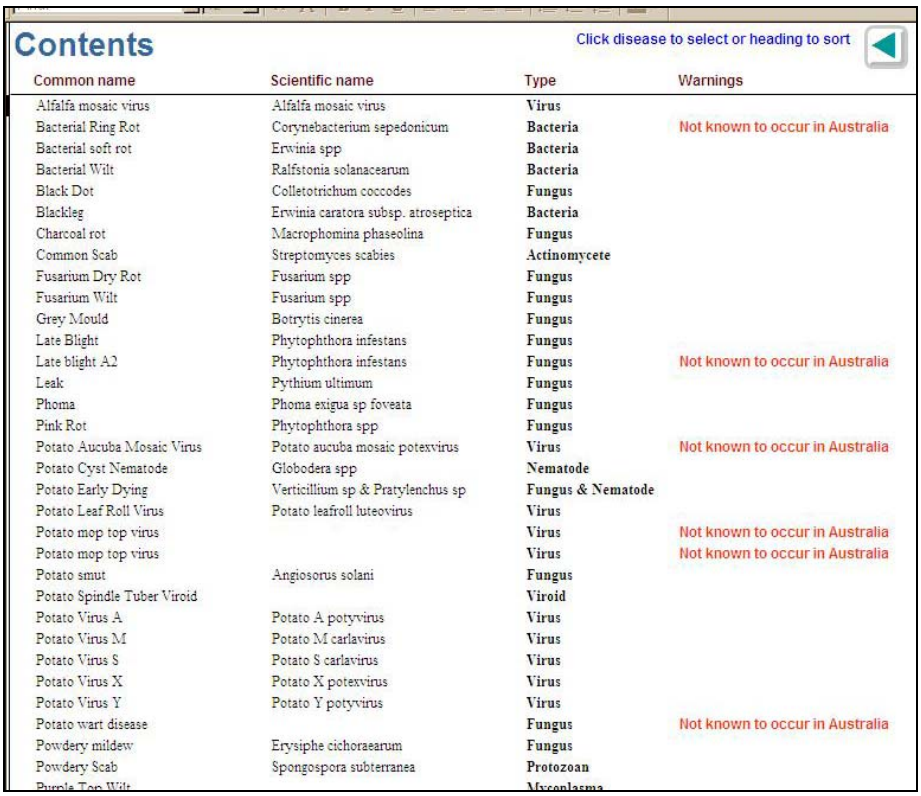


Figure 19: Entry page Potato Hygiene Strategist (Prototype only)

The prototype could contain information on all diseases relevant to the Australian potato industry including exotic diseases not yet present in the country.



Common name	Scientific name	Type	Warnings
Alfalfa mosaic virus	Alfalfa mosaic virus	Virus	
Bacterial Ring Rot	Corynebacterium sepedonicum	Bacteria	Not known to occur in Australia
Bacterial soft rot	Erwinia spp	Bacteria	
Bacterial Wilt	Ralfstonia solanacearum	Bacteria	
Black Dot	Colletotrichum coccodes	Fungus	
Blackleg	Erwinia caratora subsp. atroseptica	Bacteria	
Charcoal rot	Macrophomina phaseolina	Fungus	
Common Scab	Streptomyces scabies	Actinomycete	
Fusarium Dry Rot	Fusarium spp	Fungus	
Fusarium Wilt	Fusarium spp	Fungus	
Grey Mould	Botrytis cinerea	Fungus	
Late Blight	Phytophthora infestans	Fungus	
Late blight A2	Phytophthora infestans	Fungus	Not known to occur in Australia
Leak	Pythium ultimum	Fungus	
Phoma	Phoma exigua sp foveata	Fungus	
Pink Rot	Phytophthora spp	Fungus	
Potato Aucuba Mosaic Virus	Potato aucuba mosaic potexvirus	Virus	Not known to occur in Australia
Potato Cyst Nematode	Globodera spp	Nematode	
Potato Early Dying	Verticillium sp & Pratylenchus sp	Fungus & Nematode	
Potato Leaf Roll Virus	Potato leafroll luteovirus	Virus	
Potato mop top virus		Virus	Not known to occur in Australia
Potato mop top virus		Virus	Not known to occur in Australia
Potato smut	Angiosorus solani	Fungus	
Potato Spindle Tuber Viroid		Viroid	
Potato Virus A	Potato A potyvirus	Virus	
Potato Virus M	Potato M carlavirus	Virus	
Potato Virus S	Potato S carlavirus	Virus	
Potato Virus X	Potato X potexvirus	Virus	
Potato Virus Y	Potato Y potyvirus	Virus	
Potato wart disease		Fungus	Not known to occur in Australia
Powdery mildew	Erysiphe cichoraearum	Fungus	
Powdery Scab	Spongospora subterranea	Protozoan	
Purple Top Wilt		Mycoplasma	

Figure 20: Contents page Potato Hygiene Strategist (Prototype only)

The program could be the repository for existing knowledge on the diseases. Information would need to be compiled by pathologists and extension people and then edited to ensure it was suitable for the target audience of growers and technical service providers.

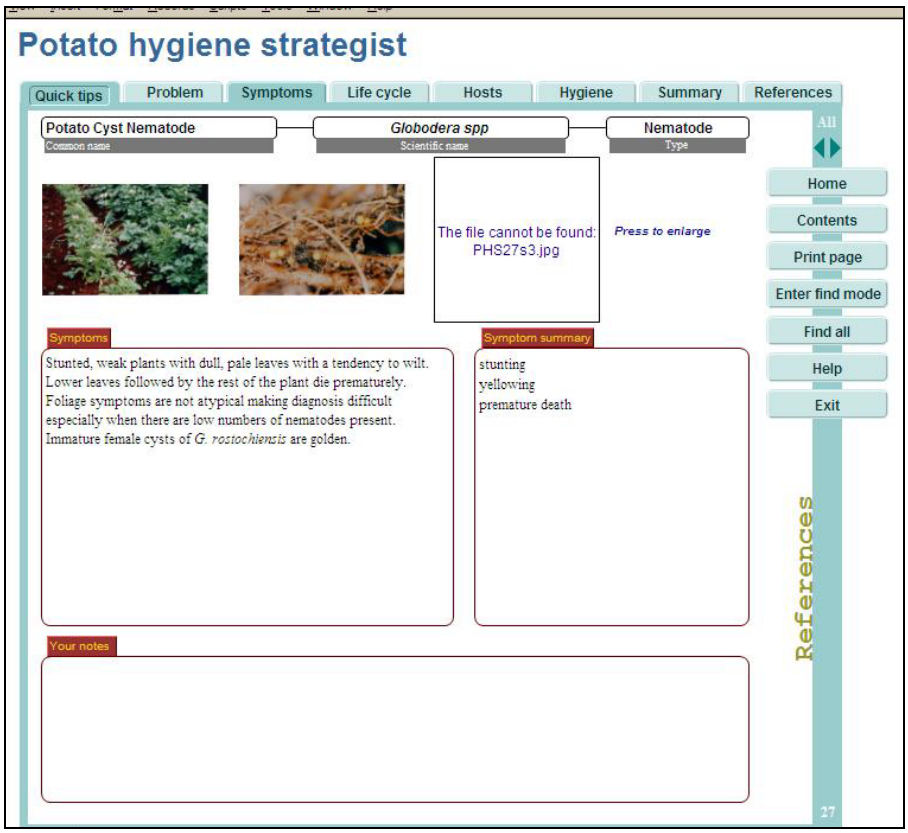


Figure 21: Symptoms page Potato Hygiene Strategist (Prototype only)

Using the Find mode of the program meant diseases with particular range of symptoms could be quickly identified.

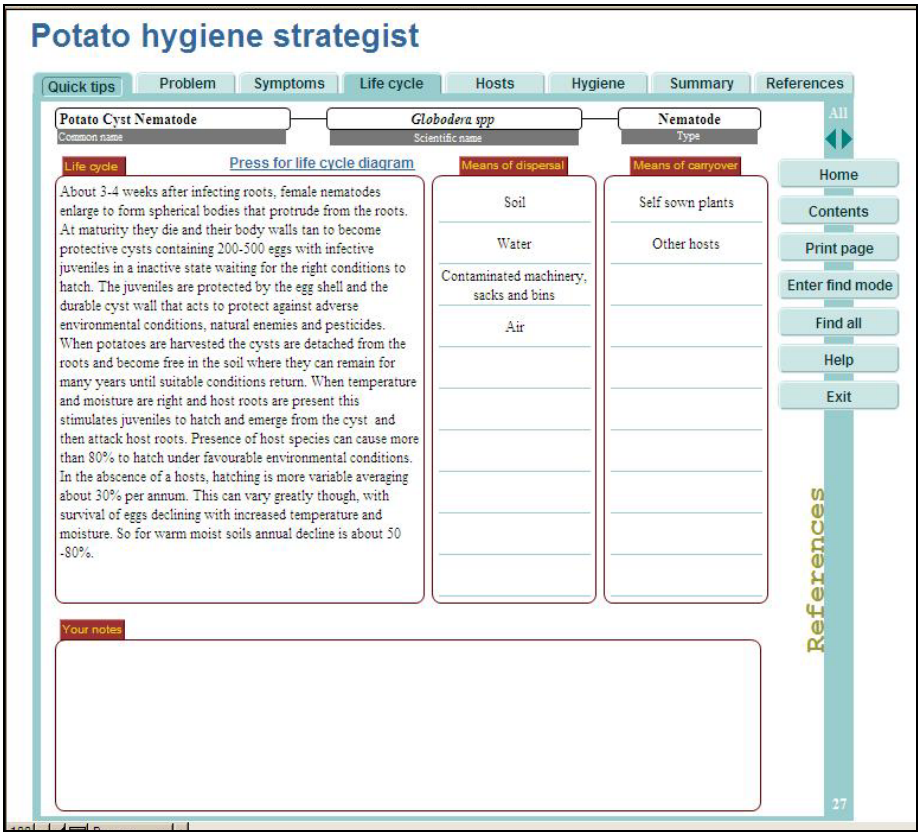


Figure 22: Life cycle page Potato Hygiene Strategist (Prototype only)

Note that many of the pages have a 'Your notes' section at the bottom or on the side. This would be for users to put in their own notes. The program therefore became not only a repository for industry information but also a record of individual experiences or research. Having all the pertinent information in one spot meant that growers and technical service providers could quickly access all their information quickly.

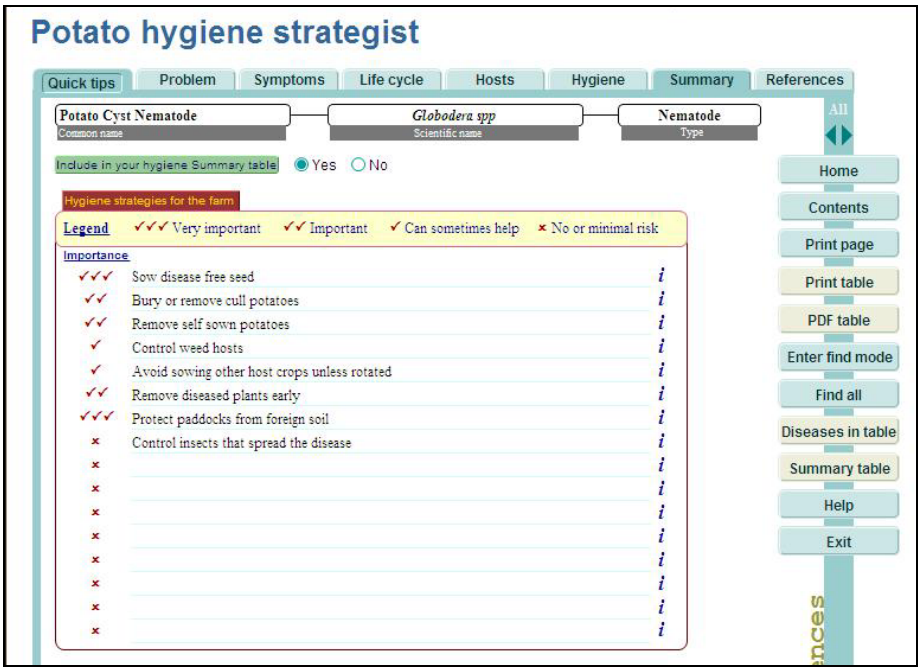
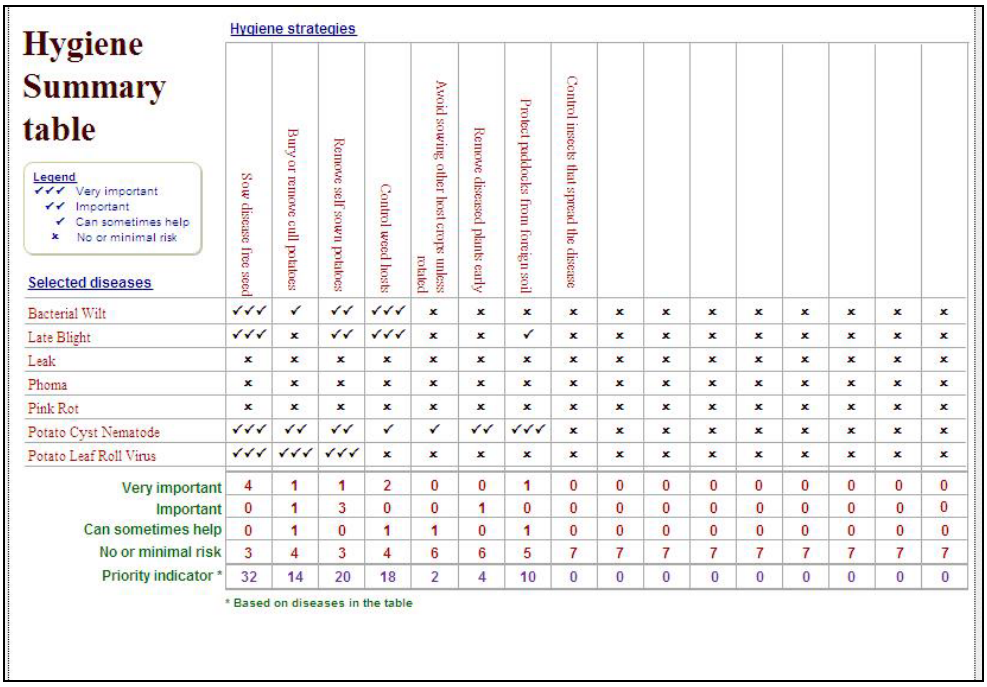


Figure 23: Summary page Potato Hygiene Strategist (Prototype only)

Besides having a description of hygiene practices (Hygiene page) the Summary page enabled hygiene strategies to be rated for a particular disease. This in conjunction with selecting the diseases a grower

wants to include in the Summary table, provides the means of prioritising hygiene strategies for the farm.



Hygiene Summary table

Legend
✓✓✓ Very important
✓✓ Important
✓ Can sometimes help
× No or minimal risk

Hygiene strategies

Selected diseases	Sow disease free seed	Bury or remove cull potatoes	Remove self sown potatoes	Control weed hosts	Avoid sowing other host crops unless rotated	Remove diseased plants early	Protect paddocks from foreign soil	Control insects that spread the disease								
Bacterial Wilt	✓✓✓	✓	✓✓	✓✓✓	×	×	×	×	×	×	×	×	×	×	×	×
Late Blight	✓✓✓	×	✓✓	✓✓✓	×	×	✓	×	×	×	×	×	×	×	×	×
Leak	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Phoma	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Pink Rot	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Potato Cyst Nematode	✓✓✓	✓✓	✓✓	✓	✓	✓✓	✓✓✓	×	×	×	×	×	×	×	×	×
Potato Leaf Roll Virus	✓✓✓	✓✓✓	✓✓✓	×	×	×	×	×	×	×	×	×	×	×	×	×
Very important	4	1	1	2	0	0	1	0	0	0	0	0	0	0	0	0
Important	0	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0
Can sometimes help	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0
No or minimal risk	3	4	3	4	6	6	5	7	7	7	7	7	7	7	7	7
Priority indicator *	32	14	20	18	2	4	10	0	0	0	0	0	0	0	0	0

* Based on diseases in the table

Figure 24: Summary table Potato Hygiene Strategist (Prototype only)

The Hygiene Summary table is simply a way of visualising a lot of information very easily and providing a few simple tools for prioritising the risk. The prototype used an exponential separator to provide weighting.

Priority indicator = Very important total x ES^3 + Important total x ES^2 + Can sometimes help total x ES^1

Where ES was the exponential separator and for the example was 2. The process of creating separation to reflect the differing levels of risk was an arbitrary one that would require further consideration and refinement. However, the table clearly highlights the principles behind the approach.

The priority indicator was important as it focused people on the most important strategies first and the reasons for using them. Too often the whole exercise of managing diseases appears daunting and the industry needs tools to help them move forward in their thinking. Potato Hygiene Strategist helps users do just that. It was not a perfect approach but neither were most others currently in use. Over time the approach could be refined and improved.

The prototype could not be progressed as money allocated from savings had to be used to finish Potato Archives. This work was not originally budgeted for in the project. Given the heavy workload in the later stages of the project, it was put on hold.

Just before project end, the prototype was sent to the Technical Operations Committee of the Processing R&D program and Plant Health Australia for further consideration.

- **Code of Practice for Potato Cyst Nematode (PCN)**

Work carried out in project PT96009 established a hygiene strategy based solely on Potato Cyst Nematode had little chance of success as many growers were more concerned about diseases they had rather than ones they might get. Any hygiene strategy had to be holistic, encompassing the broad range of disease threats likely to be faced by the grower.

Initial work on the strategy involved a literature review, development of a simple model to measure the impact of different rotations on PCN build-up and detailed discussions with nematologists

involved in the earlier outbreaks in Victoria and Western Australia, grower groups affected by the outbreaks, and service industry people and growers not directly affected by the earlier outbreaks but who had indirect involvement.

This work was put on hold after the initial interviews and the focus moved to developing Potato Hygiene Strategist which would provide the technical information for a more broadly encompassing strategy.

The PCN situation changed with renewed interest by peak industry groups in developing and gaining a consensus for a national plan resulting in a project starting in 2000 – 'National potato cyst nematode management strategy' - PT99055.

The hygiene part of the plan was developed in this project – PT00001. Earlier work was revisited and a draft strategy produced.

The draft strategy was refined through five sets of interviews with different industry groups (Appendix B). The first industry group would be sent a draft strategy to read. Each participant would then be contacted by phone and the strategy discussed with any concerns or comments being noted. The strategy would then be refined using feedback from the first group then sent out to the next group of participants for further refining. The process was repeated for the five groups.

The aim of the interviews was to identify likely problems if the draft strategy was implemented and refine the strategy to overcome these problems where possible.

The process highlighted and reinforced earlier findings in project PT96009 that practical problems existed in implementing an effective PCN strategy. For example:

- Disposal of waste water from packing sheds onto areas not used for cropping was not always possible due to a lack of suitable land.
- Controlling access to farms was more difficult with some farms due to the number of entry points and the level of uncontrolled external traffic such as contractors, consultants, sales people, etc. This was further aggravated when leased land was involved and the grower could not oversee all contractor activities.
- How does a grower enforce hygiene practices when council workers have right of access and their equipment sometimes moves large amounts of soil.
- Washing down contractor's machinery was difficult to implement especially when contractors were operating on a range of crops and there were tight harvesting deadlines. A lot of machinery was not designed for easy washdown. Multiple farm entries also made the location of washdown areas difficult.

These were only a few of the issues raised which highlighted the difficulty of developing a national hygiene strategy as regions differ enormously and even individual farms have special needs.

The interviews were an excellent reality check to highlight what was achievable. It also highlighted the ideal strategy could not be implemented in all cases, and when it couldn't, modification of the strategy needed careful consideration based on an understanding of the biology of the pest. For a grower to do this in many of the instances would be difficult without technical support.

See Appendix C for the DRAFT Code of Practice to minimise the risk of Potato Cyst Nematode being introduced into cropping soils which was included in the draft National PCN Management Plan.

Based on the last group meeting for project PT99055, feedback highlighted the need to develop separate hygiene strategies particularly for processors. This was not progressed with the TTM before the project was wound up. It remains one of the outstanding issues still to be dealt with by whoever finalises the plan.

Since termination of PT99055, more work has been done on hygiene protocols as a result of the PCN outbreak in 2003. The current national hygiene strategy or code of practice would need to incorporate what has been learnt since completion of the work.

The challenge now is to develop the on-farm technical resource through Potato Hygiene Strategist to enable growers to develop a hygiene strategy suitable for their property.

(iv) New work not in the Communication Plan - Processing Potato R&D program

The processing industry began a new R&D program in 2004. This involved a communication sub-program managed by the TTM. As PT00001 was due to end in December 2005, it was decided the work be absorbed into the existing project and any changes made in the new project that followed.

The Processing Potato R&D program consisted of a Steering Committee (Potato IAC), an Advisory Committee, Program Coordinator and six sub-programs – DNA probe tests, Soil amendments, Crop rotations, Enhancing resistance, Resistance screening and Communications. It was a $14.5 million program over five years.

Early communication work focused on establishing the program, addressing internal communication needs as researcher were spread across seven research centres in three countries and raising awareness about the program within the industry.

Internal communication

PP Matters – Internal newsletter
An internal newsletter was prepared with the Program Coordinator and emailed out to all program participants (~ 48) after each six monthly Technical Operations Committee meeting. Three were sent out (in June 2005, December 2005, March 2006).

Contact Directory and Contact list
An internal contact directory was produced containing a description of the program, information on research centres and contact details for all participants including a job description. A contact list was also produced with essential contact details that could be stuck up on the wall. HAIDB Contact Administrator was modified to accommodate the new requirements. The first edition was sent out in September 2005 and an update in March 2006

Communication Guide
To facilitate communication within the program communication, guidelines were compiled and sent out to all program participants in June 2005.

Program name and logo
A national competition was announced in the December 2004 edition of Eyes on Potatoes to find a name for the program. Due to the lack of a response, ideas were requested from the research team and IAC, a name agreed and logo developed.

Technical Operations Committee meetings (TOC)
The TTM participated in these meetings and planning sessions, providing communication support as required.

External communication

Research updates
Produced program updates with the researchers to inform industry of what was happening in the program. Articles in Eyes on Potatoes (December 2004, March 2005, June 2005, March 2006) and in Potato Australia (September 2005).

Poster display
Developed a poster display and printed handouts about the program. These were used at the Potato 2005 National Conference and at field days in Tasmania.

PowerPoint presentation
Produced a PowerPoint show on the program which could be adapted by program participants for talks with industry groups.

International communication

This focused in the early stages on ensuring international participants were included in all internal communications so they felt part of the team.

Discussion

The TTM role was challenging as the project involved managing an industry wide communication program, a major development program and later establishing the communication component of a new $14.5 million research program for the processing potato industry. On top of these challenges, the industry underwent considerable change throughout the period.

Goal - Raise awareness of industry issues

The challenge for communicators raising awareness of industry issues was not losing sight of who was the target audience. It would have been very easy to overextend the communication reach and reduce the effectiveness of what was done.

The policy of channelling most information through Eyes on Potatoes and Potato Australia was very successful based on earlier market research (PT98042) and very cost effective. By dealing through two communication channels, industry knew where to look for what was happening and fewer resources were required.

The policy of having growers and technical service providers as the main target audiences also served us well. Having an informed service industry was important if high quality services were to be maintained for growers competing in an increasingly competitive marketplace.

Work carried out at the former Cooperative Research Centre for Soil and Land Management (Weis, 1994) and by the author clearly established the importance of technical service providers in technology transfer and their need for information support.

In the past, state departments of agriculture provided a lot more support for the service industry through their extension services but with those resources all but gone in many areas, the responsibility had fallen back more on industry. How the service industry evolves over time is difficult to say as there seem to be fewer well trained extension people entering the industry to work in government or private enterprise.

At this stage, it would appear services will become more specialised and there will be fewer generalists than we have experienced in the past. This in itself will create new opportunities but will also put more pressure on small family farms as growers will have to develop greater expertise to use the services effectively. Larger farms will tend to have people specialising more in different farming operations and will be in a better position to take advantage of the newer agronomic services.

The nature of communicating with businesses will also gradually change over time especially as younger growers enter the workforce who have grown up with the newer technologies.

The internet will play a bigger role and particularly some of the newer internet technologies which are gradually starting to address users' needs more effectively through better search engines and more interactive services.

New telephone services will also start to provide some very exciting opportunities for user driven information services as will convergence of television and internet services. The latter convergence has real potential to start replacing what we read in publications. Opportunities in this area of technological development making it easier for people to keep up to date are quite staggering. There are a number of hurdles to jump though before we will start to see real benefits in this area.

Publications for the foreseeable future will remain the communication vehicle of choice other than talking to people. Internet and the allied services though will gradually increase in importance over time.

The internet has been an important tool but during the time frame for this project, many people still did not use it or lacked skills to take advantage of it. This issue could be regarded as a generational problem but that would do a major disservice to the many people who have started to use the new tool in their businesses.

Many growers and service industry people were not very computer literate based on discussions in projects PT96009 and VX00023. These discussions and the following group sessions in project PT96009 and this project however did identify a keen interest by many to learn.

In some regions growers have taken advantage of local training centres such as schools (eg. Riverina) or mobile training centres as existed in Western Australia. In many regions though there was a lack of support or the support was not seen as appropriate to the audience. Growers indicated at some meetings they would prefer someone who was familiar with the industry and their needs to be running the course (eg. TTM, Industry Development Officer, Extension Officer, Consultant).

Whether this would be cost effective needs to be investigated.

The other factor that needed to be considered was the growing globalisation of the marketplace. This had the potential to greatly change the information needs of the industry very quickly.

For this project the communication challenge was relatively straight forward in scope even if it was difficult to implement at times.

Goal - Improve access to industry information

The changes begun in this program will address many needs but will also show up some glaring deficiencies in our current approaches.

The difficulty in compiling an up to date information directory will probably be best addressed by moving it to the internet. In this way information can be more rapidly updated regardless of how quickly the industry is changing. It can also be done on smaller parcels of information making the task more manageable for small teams.

Potato Archives will hopefully be the start of something much larger. Accessing information quickly to make decisions is still an important priority. What Potato Archives will highlight is the need for higher quality Final Reports to be produced in a form that is more interesting to read or view. Why does a Final Report have to be printed? The newer technologies provide many exciting opportunities for making a much more interesting and valuable report.

Potato Archives in the future will probably consist of videos, interactive reports and slide shows. These options could provide links to more detailed information in areas of interest to the reader therefore hiding detail except to those who are want to see it. So one report for all audience types could really become a reality rather than a difficult balancing trick as it is currently.

Providing better access to information will generate a thirst for more information and create higher expectations of what can be achieved. So Potato Archives is one step down a long path.

The new research programs such the Processing R&D program are still in their early stages but already researchers are talking about how to have industry more involved by using the internet to make it a more interesting and valuable learning experience. The desire by researchers to develop closer links with growers and processors using the newer technologies in innovative ways needs to be fostered. Communicators will need to support, encourage and foster industry friendly approaches, the latter being the biggest challenge.

With so much information bombarding the industry, anything the industry produces will need to be exciting and something people will want to look at. This will require a greater emphasis on how people want to learn and what technologies can do to facilitate this process.

The issue of a national distributor for information products has still not been adequately resolved. If the industry is to leverage its intellectual property to ensure it capitalises on its benefits, this situation needs to be addressed.

The TTM believes the best solution is that HAL establish a national distribution centre to help better use the outcomes from the national horticulture programs (Appendix G). Having each industry establish its own distribution centre is not an efficient use of resources.

As there is no other national group with the strong links to most horticultural industries, HAL is one of the few organisations that could establish a national distribution centre and fund it in the early stages through a cross industry project. Given that adoption of R&D outcomes is an important part of HAL's charter, establishing a distribution centre to provide better access to technology from the R&D programs should be considered as part of the core business of the organisation.

Even though the original proposal for such a centre was rejected by HAL, the issues the TTM had in establishing a national distributor for potato industry publications points to why this decision needs to be revisited.

Goal – Improve understanding of industry information

The initial aim was to carry out a literature review to determine what books, leaflets and material was out there and useful and then develop products that would be copyrighted through HAL and distributed commercially.

Literature reviews were not carried out as the products developed were initiated by research groups in response to industry needs. Given the extra costs involved in carrying out and publishing a proper literature review and the available funds required, the TTM did not pursue this outcome.

The Pest and disease book was distributed commercially and the text copyrighted to Horticulture Australia. The process though, due to the confidential contractual arrangements between Horticulture Australia and Melbourne University Press, meant the TTM was not able to adequately carry out his role. This highlighted a major weakness in the Horticulture Australia contractual arrangements where the TTM had quality control responsibilities but no contractual support to carry out such activities.

If the TTM had editorial oversight, aspects of the book's layout would have been questioned. However, the process excluded this from happening. Most of the TTM's quality control activities were carried out without any contractual backup. This was a situation that would be considered totally unacceptable in most industries outside agriculture.

A major deficiency emerging from this work is the lack of support for investing in pulling together or consolidating information on particular management procedures, diseases or new ways of tackling aspects of management such as diseases and irrigation. The process of consolidation forces experts to tackle many of the more complex issues which are difficult for lay people to understand unless they have a very good grasp of the topic. It also forces them to suggest solutions that could work on the farm.
As well, pulling all the information together and reviewing the situation highlights deficiencies and can help focus future research.

Another concern is that many of the people who can take on the consolidation task easily are fast disappearing from the system as they retire or move into other disciplines.

If the industry is not careful, when they do come to doing the task they may find the process very costly and it may also not provide what they want due to the lack of expertise to do the job. Consolidation is not an exciting topic but it needs to be an ongoing activity built into the communication program.

There is also too little focus on evolving existing products.

The CropTest Nutrient Evaluation System is an excellent example of a product that only partly met user expectations in its original form but had enormous potential if redeveloped and updated.

The reality of the situation is that we may not get the product right the first time. This does not mean we toss it away when a large part of the work has already been done. Redeveloping an existing product is often much cheaper than starting again.

The internet offers so much in so many ways and yet it is still regarded in very simplistic terms. In future the internet needs to be part of the industry's core business and fully leveraged to take advantage of what it has to offer. This has to be done with due consideration of the resources required to update information on the service so as not to overload the communication staff.

New technologies such as AJAX (Asynchronous Java and XML) mean that internet services can become more like desktop programs. One only has to look at the services such as Google Earth that uses AJAX to realise the opportunities these technologies have to offer. In conjunction with personalisation, there is now the opportunity to develop sophisticated interactive programs that better meet the needs of growers.

The movement of Potato Hygiene Strategist to the internet would provide one tool that could tackle the need to develop more practical hygiene strategies suited to a farm. At present we are trying to provide a 'one product fits all' type solution when in reality what is needed is a solution that can be tailored to a particular business. Many of our more difficult management problems fall into this category and the internet has the potential of providing sophisticated services that are easy to use to address these more complex needs.

Goal - Facilitate implementation of Communication strategy

If communication is to evolve to levels that will make it much easier for growers and industry participants to easily learn new technologies, then our approach has to change.

We rely too heavily on researchers being expert in too many fields. Most researchers are not product developers, distributors or marketers. Many research groups also do not have this expertise and are not experienced in contracting the required services. As a result, we generate products that are poorly designed and not marketed properly.

A TTM can intervene if he/she knows what is happening, but researchers are very possessive of what they develop and reluctantly pass over control. In the current system, milestones theoretically address the problem but in reality the Industry Services Manager from HAL has to make the decision and with busy schedules does not always consult the TTM or necessarily sees the need to do so based on their understanding of the work.

In some cases the final communication was left off projects and supplied separately so there could be more control over the outcome. This sometimes worked but it could also result in the researcher disowning the follow-up work as there is no financial incentive to be involved in most cases and they regarded their role ending on completion of the main project.

When the researcher had the contract with HAL, there was no legal basis or incentive for the TTM to be involved. Dealing with quality issues when there was no contractual interest in the process was difficult and frustrating. In many cases, researchers did see the benefit and worked with the TTM. Relying on goodwill alone though was not the best way for an effective system to operate.

Industry interaction

Balancing the workload was a major challenge in this project and the area of work that suffered the most was field work. This was unfortunate as many growers lacked personal contact from someone

involved in the R&D program or peak industry bodies. Earlier group sessions clearly demonstrated a need for this type of work.

From the TTM's perspective, lack of direct communication with growers and other industry people also impacted on feedback into the Communication Program. Field visits were an important way of informing people but are also an essential learning exercise for the TTM.

Group sessions also proved a good way of dispelling myths about industry matters that inevitably develop in communities through a lack of understanding of what is going on.

Technical support

Introducing new technology onto the farm can be difficult. Growers often need support to do it effectively.

The state of technical support in the potato industry needs further investigation. Over the last nine years, the TTM witnessed a decline in technical support services in many cropping areas. The decline included government extension officers, consultants and agribusiness advisors.

The processing industry maintained their field staff support network in many instances but the loss of the Crisping Research Group was a disappointment to many growers and others in the service industry. This service was well regarded by those involved and created significant benefits for the industry - see 'Review of potato research & development program' - PT02033.

If we are to maintain a viable industry and compete, we need skilled field people available to support development. Whether they are in government or private enterprise is not important.

The situation with researchers was not much better. Except for the input of new people through the Processing Potato R&D program, most potato research groups appeared to be declining in size.

Ongoing employment of researchers in potato fields was also a concern when salaries were linked solely to project funds, which is tending to happen more and more. Retention of a core group of researchers focusing on potatoes was essential if we are to build our knowledge base and compete in the future.

Market forces are unlikely to address the situation. Education and training are a long term commitment. To fill a skills void takes many years and in the meantime many businesses may not be able to survive.

The situation becomes even direr if Australia starts importing significant quantities of potatoes. A business's strategic strength to compete comes from innovation.

At present we are mining our intellectual resource. Without replenishment the potato industry faces difficult times ahead.

Funding

Unlike most other HAL projects, the Communication Program was not fully funded and although the Communication Plan had been endorsed by the Australian Potato Industry Council, there was not a firm commitment to fund activities.

Many of the activities involved developing new projects and seeking appropriate funding. Although this gave considerable flexibility it resulted in a lot of extra work in preparing funding proposals. Delays in funding caused by internal structural changes at HAL also meant work could sometimes not be started as planned which caused problems in workload balancing.

Early changes to the Communication Plan by the Potato R&D Committee also meant the plan could only be regarded as indicative and therefore work could not be started in advance of funding being received. This greatly reduced program flexibility.

Given the length of the funding cycle, the uncertainty of commitment and delays caused by restructuring in HAL, a less than ideal environment was created for running a large program.

Despite the funding difficulties, many aspects of the project worked extremely well. Support for the program from the peak industry bodies was very high although this waned near the end of the project due to delays in some of the work caused by funding and technical difficulties.

Relationship with Steering Committee

The relationship between the TTM and the Steering Committee (Potato R&D Committee/Potato Industry Advisory Committee) was very close, which greatly contributed to the success of the program.

However, not all was ideal as the Steering Committee had a very heavy workload, met only once every six months and had little time to spend on Communication.

Many aspects of the project were quite easy to assess and were therefore not a problem. Some parts of the project though were quite complex and the period of time allowed for discussion was inadequate in hindsight.

The committee members also suffered from the problem of having to remember what was decided in previous meetings, generally six months before. Given some aspects of the work stretched over quite a long period of time – up to seven years in case of the internet work, maintaining a continuity of understanding, appreciation of past decisions and support over the period proved difficult.

Another aspect many committee members had difficulty with was the funding delays. The funding cycle meant project planning had to start at least 18 months in advance for formal projects. In reality the funding cycle for the internet project was nearly four years and Potato Archives two and a half years. Most other work was at least 18 months to two years.

Potato Internet Service time scale:

- Established need through industry interviews in 1996-97 (PT96009)
- Established what type of service was to be developed in 1998-99 (PT97025, PT98037)
- Development of Business Plan with vegetable industry in 2000-01 (V00023)
- Potato Internet Service funded in November 2004 and work commenced
- Work delayed due to major upgrades in database software until January 2006
- Project cancelled as PT00001 concluding in March 2006

Unfortunately the delays resulted in the demise of the project. This was a disappointing outcome given most of the difficult work had been done. The complex nature of the project meant that it could not be easily passed over to AUSVEG given the stage of its development. Running the two different internet services (potatoes and vegetables) separately was not practical either as it would have produced an administrative nightmare for AUSVEG staff.

The Potato Internet Service was a purpose built service to specifically meet the industry's needs. It could have easily become one of the leading potato information services in the world. Few internet services were so well researched in the development phase. Unlike many services, this one was designed starting at the user and working backwards.

Even with these difficulties the relationship with the Steering Committee was very strong and having the TTM on the committee as an adviser provided significant benefits for the Communication Program.

Evaluation

There was no formal evaluation carried out on the program as market research had only recently been finished just prior to completion of this project to establish the requirements of a new communication program to be run by AUSVEG.

How far have we come

The greatest impact the communication program has had, from the TTM's perspective is to improve information flow in the industry. The extent to which people are better informed is probably not appreciated by many people because the changes have happened gradually over many years. We have come a long way and the Communication System has become part of the normal landscape so in many ways it is taken for granted. This is a normal evolutionary process but also creates a number of dangers for decision makers.

The next five years will be challenging as the industry becomes more integrated into the global marketplace.

Recommendations

There are many things I would like see changed to facilitate better communication. The industry though has come a long way over the past five years and change is often a slow process.

The funding process still needs further refinement and in many ways is quite crude. We also still fail to capitalise on a lot of what has been developed. The current system relies heavily on the TTM and Potato IAC, but both are expected to do too much in too little time.

The issues I see need addressing and my recommendations for change are as follows:

Issue 1

The TTM is responsible for improving communication and adoption of outcomes from the R&D program but has no contractual protection to ensure outcomes are met and is often not involved in contractual discussions involving technology transfer components of the project. In some cases this has been due to confidentiality clauses between HAL and third parties. HAL representatives are not always in the best position to make the best decisions in these instances without advice from the TTM.

Recommendation

HAL review how communication is carried out in projects from a contractual perspective with a view of developing a more effective process. Any new process would need to ensure the necessary expertise is used when it is required and may involve group assessment to harness the necessary skill mix.

Issue 2

The internet is becoming a more important tool for industry and users need to be skilled in its use. Many growers are not skilled in using a computer or the internet.

Recommendation

Industry should work with other groups to facilitate computer and internet training, using people who have knowledge of the potato industry.

Issue 3

Growers often learn best from interaction with other growers, researchers and technical service providers. Many isolated regions also receive little external input and have no levy funded research in their region. Growers and the service industry are therefore questioning the value of their investment in the potato levy as they believe they are not receiving any tangible benefits from the R&D program. This may be due to a real deficiency in the R&D program or a perceived deficiency due to a lack of awareness or understanding.

Recommendation

The industry needs to facilitate more group sessions to ensure potato communities understand the value of the R&D work, are able to capture the benefits and can input into future evolution of the R&D program.

Issue 4

The industry lacks a central distributor for publications. Being aware of, gaining access to and promoting publications is therefore difficult.

With so many small poorly resourced distributors, intellectual property is not being properly managed, resulting in the benefits of technology investments not being fully realised.

Recommendation

There needs to be a central distributor for horticultural publications that is also responsible for managing the industry's intellectual property. The best organisation to facilitate this would be HAL as they have a responsibility to ensure industries and the country are benefiting from the technologies being developed in the R&D program.

This maybe addressed by establishing a new distributor or contracting an existing distributor. Initial funding could be made available through a cross-industry project with the view of it being largely self-funding over time.

Issue 5

There has been a decline of communication and extension services in government departments and a lack of these services in many private research groups. Many researchers need support to effectively communicate and commercialise their research.

Recommendation

That a practical publication be developed on how to communicate and commercialise research outcomes.

Issue 6

The decline of technical expertise in the industry both in research and extension (government and private) is a real concern. Our ability to compete relies on innovation and our ability to differentiate our product. Technical service providers play an important role in this process.

The demise of state government extension services is impacting on government and private industry. Previously government departments, through the extension services provided an important training ground for people in government and private industry.

There has also been a decline in researchers in many key disciplines. In the case of plant pathology, Plant Health Australia has been looking at the issue. The problem though extends far beyond plant pathology.

Recommendation

1. That a skills audit be undertaken of technical service providers (government and private) particularly looking at graduates who have entered the workforce in the past ten years and explore how well they are able to meet industry needs and how they are gaining the necessary skills to carry out their jobs.
2. Market Research carried out to identify the needs of industry with regards to technical services.
3. Develop a strategy to address the deficiencies.

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Management Committee
Wayne Cornish Chairman of Potato Growers of South Australia), Neil Perry (AUSVEG Board member), Barry Philp (Primary Industries and Resources South Australia), Clinton Zerella (Fresh Potato representative Industry Advisory Committee), Paul Frost (Processing Potato representative Industry Advisory Committee) and Jim Kelly and Adam Gray (South Australian Farmers Federation).

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Industry participants who commented on PCN Code of Practice
See Appendix E.

Kondinin – Story of Potatoes
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Bibliography

Blaesing D (2006) Seed potatoes – A best practice handling and storage guide for growers and storage operators, Serve-Ag
Horne P, de Boer R and Crawford D (2002) A field guide to insects and diseases of Australian potato crops, Melbourne University Press
Horne P, de Boer R and Crawford D (2002) Insects and diseases of Australian potato crops, Melbourne University Press
McGregor I, Higgins C and Starck N (2001) Evaluation of potato publications, Horticulture Research and Development Corporation Final Report PT98042
Nicholls C (2004) The story of Potatoes – The Workboot Series, Kondinin Group
Peterson J (2003) Review of potato research & development program, Horticulture Australia Final Report PT02033
Sage C Ed. (2004) Nutrient deficiencies & toxicities in potato crops – Field Guide, Horticulture Australia
Tan ZH (2003) Market research for potato nutrition software, Horticulture Australia Final Report PT03055
Walters LJ (2006) Coordinating technology transfer in the Australian potato industry, HAL Final Report PT96009 – in press
Walters LJ and Feutrill C (2002) National internet service for the Australian vegetable industries, Horticulture Australia Final Report VX00023
Walters LJ et al (2006) Making past industry information from R&D more accessible, HAL Final Report PT00027 – in press
Weis V (1994) Agricultural Advisers Survey, Cooperative Research Centre for Soil and Land Management

Unpublished projects

Berg G, Merriman P and Sully S (Unpublished) Australian Potato Cyst Nematode, Management Plan (Draft), Agriculture Victoria, HAL Project PT99055
Eccles J (Unpublished) Printing of the field guide of insects and diseases of Australian potato crops, Horticulture Australia Limited, Horticulture Australia Project PT02038
Horne P (Unpublished) Preparation of field guide and reference books for pests, beneficials and diseases of potato crops, IPM Technologies Pty Ltd, Horticulture Australia Project PT98043
Jarosz N (Unpublished) Facilitating the introduction of electronic information products and services to the Australian Potato Industry, Department of Primary Industries, Water and Environment, Horticulture Australia Project PT98037
Jarosz N (Unpublished) Technology transfer of R&D outcomes and communication within the potato industry through 'Potato Australia' and 'Eyes on Potatoes', Department of Primary Industries, Water and Environment, Horticulture Research and Development Corporation Project PT99054
Sage C (Unpublished) Communicating R&D outcomes to the potato industry through 'Potato Australia' and 'Eyes on Potatoes', SageWords, Horticulture Australia Project PT01035
Sage C (Unpublished) Production of Eyes on Potatoes and Potato Australia, SageWords, HAL Project PT04008
Turner R (Unpublished) Development and implementation of industry biosecurity plans, Plant Health Australia, HAL Project HG03070

Appendix A: Draft Information Directory Contents

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Appendix B: Test group for code of practice

Round 1
Bruce Ure (Vic) - Grower
Rene de Jong (Elders – Vic) – Agribusiness
Basil Mondello (SA) – Grower/Packer
Tony Gietzel (Snackbrands) – Processor field services
Mike Hughes (DPI - Qld) – Government extension
Sandra Lanz (Lanz Consulting - NSW) – Consultant

Round 2
David Anderson (WA) – Grower
Derek Cameron (Wesfarmers – SA) – Agribusiness
Terry Fremond (Western Potatoes) – Packer agronomist
Peter Hardman (Simplot) – Processor field services
Bruce Fry (DNRE - Vic) – Government extension and seed inspection

Round 3
Peter Lyons (Vic) – Grower
Naomi Strong (Wesfarmers – Qld) – Agribusiness
Graeme Henman (Saffries) – Processor field services
Stephen Wade (NSW Agriculture) – Government extension
Prue McMichael (Scholefield Robinson Horticultural Services - SA) - Consultant

Round 4
Bev Steggles (Alan Steggle Potato Processing - NSW) – Packer/Processor
Kan Moorthy (Smiths) – Processor field services
John Fennell (PIRSA - SA) – Government industry development
Tony Pitt (Ag-Challenge - Vic) - Consultant

Round 5
Wayne Cornish (SA) – Grower
David Addison (Tas) – Grower
John Doyle (NSW) – Grower
Doug Green (Serve Ag - Tas) – Agribusiness
Lyle Grayson (Qld) – Packer
Barry Philp (SA) – Government extension
Roger Tyshing (TFGA - Tas) – Industry Development Officer

Appendix C: DRAFT Code of Practice to minimise the risk of Potato Cyst Nematode being introduced into cropping soils

To minimise the risk of Potato Cyst Nematode (PCN) being introduced into cropping soils do not bring foreign soil into areas where potatoes are being grown. All foreign soil should be regarded as a potential source of PCN.

Foreign soil is any soil not known to be free of PCN.

The most effective way of spreading PCN cysts is with soil. Soil containing cysts can move by wind and water, but in most cases it is moved in the greatest quantity by man through the movement of machinery, bags and bins. Therefore any strategy to reduce the movement of foreign soil onto the farm reduces the risk of infestation from PCN.

What can be done

1. Avoid bringing foreign soil onto the farm

- Do not bring foreign soil to areas where potato crops could be grown or stored on the farm or to areas that could expose cropping soils such as drainage lines above a paddock.
- Protect paddocks from runoff from areas containing foreign soil - especially if they are eroding or involved in high risk activities such as growing bulbs, corms or tubers from areas where PCN is known to occur. Test areas for PCN that could pose a risk.
- Restrict movement of off-farm machinery and vehicles to a small area of the property to reduce the chance of foreign soil contaminating paddocks where crops are grown. Where this is not practical, inspect and where necessary, clean down machinery and vehicles. Where practical, locate loading points at the edge of the property. Have an area prepared for the wash down of vehicles and machinery that need to enter the property. Use signage to indicate where people should or should not go.
- Prevent soil moving from potentially contaminated areas of the property (where foreign soil is present) to clean areas. Do not use farm machinery for the home garden.
- Remove foreign soil from bins, bags, trucks, machinery, irrigators and other vehicles and equipment before entering paddocks. Equipment shared between farms poses a considerable risk if it is not cleaned down properly.
- Ensure visitors (eg. farmers, sales representatives, agronomists) have cleaned their footwear before entering a paddock. Have boot cleaning gear available or plastic over boots for visitors to use.
- No potato bins and bags that are sent back to farms should contain any foreign soil or have been used for other purposes such as storage of waste or other products. Preferably use new bags. Return bags and bins to farm of origin.
- New paddocks to be leased, share farmed or on loan for cropping should be tested for PCN if there is any doubt about whether it is present. Clean down any machinery before moving it between properties.
- Waste foreign soil from packing sheds, handling areas and processors should not be spread onto paddocks used for potatoes when produce is received containing soil from other properties. Document where the soil goes for future reference.
- Waste water from packing sheds and processors should not be discharged into waterways or when receiving produce from other properties, on paddocks used for potatoes.
- Farmers should not allow foreign soil originating from overseas onto their farm. Businesses should prevent foreign soil from overseas contaminating packaging, equipment, potatoes and other produce going to potato farms. Farmers should also not accept imported farm machinery, equipment or other goods that have soil with it that originated from overseas. If a business receives anything from overseas with soil in it they should contact AQIS.
- Seed should have only a small amount of soil on it. It should be dug when the soil is not wet, and if necessary, brushed to remove most of the soil prior to its delivery to the buyer.
- The amount of soil carted on potatoes and in the vehicle should be kept to a minimum.

- Rotate stock so they graze in a paddock not used for potato growing before entering a paddock that will be used for potatoes.

2. **Buy seed from farms known to be free from PCN**
   - Purchase seed from paddocks that have been tested for PCN (eg. Certified seed) and for which laboratory results can be provided.

3. **Prevent PCN becoming established in an area**
   - Learn how to identify PCN and when crops have similar symptoms, promptly identify the cause. Seek professional assistance if there is any uncertainty.
   - Report any suspected PCN outbreaks immediately to the local Department of Agriculture, so that if its presence is confirmed, every attempt can be made to eradicate the pest.

The above practices will also assist in restricting the spread of a wide range of soil borne diseases.

Common questions

Why have a Code of Practice when we do not have PCN?

Where there has been past outbreaks of PCN, quarantine restrictions are still in place. Although there has been an enormous effort to contain and eradicate the pest, we must always be vigilant.

If PCN were introduced into a paddock today it would be unlikely that it be detected for several years until numbers built up and crop damage became visible, it was detected by a soil test or the cysts were observed on the roots during a routine inspection. During this time there is the risk of it being spread to other properties. The Code of Practice reduces the risk of properties receiving soil containing PCN.

Is movement of cysts by wind a problem?

Although cysts can be transported by wind, the likelihood of an infection starting this way is low compared to the risk from bringing foreign soil onto the farm in bags, bins and machinery.

With better management techniques, wind erosion is less of a problem than it used to be. Many of our potato growing areas with light soils that are more susceptible to erosion, also tend to have longer rotations and larger distances between farms, which greatly reduces any risk.

Is movement of cysts by water a problem?

Movement of cysts by water, although possible, requires water flowing over land containing cysts, the cysts being removed from the soil into the water flow and then ending up on a paddock where potatoes are to be grown. The risk in most instances is likely to be low but precautions may need to be taken on some properties.

The greatest risks are in hilly regions where water can sometimes flow easily from one property to another or where drainage from one property enters the waterway and the water used by other properties for irrigation. The risk is reduced where there is good ground cover and increased where there is erosion.

Is there more than one type of PCN?

There are two known species of PCN – golden cyst nematode (*Globodera rostochiensis*) and the white potato cyst nematode (*Globodera pallida*). Within each species there can be different types or races. The species and races can differ in the way they perform in different soils and climates. The differences can affect how quickly an infestation will be detected, impact of rotations and what management strategies need to be adopted for control.

What about resistant varieties?

If a potato variety is resistant then it is difficult for the PCN to reproduce on its roots. This results in a reduction of PCN in the soil. As potato roots stimulate the hatching of nematode eggs there will usually be a greater decline of PCN after a resistant variety than a non-host crop that the PCN does not attack.

There are some resistant varieties available to growers that are very effective in reducing PCN in the soil or preventing PCN from building up. As a management tool they are very important but need to be used based on an understanding they are not infallible. The resistance in a variety may not protect against all races or species of PCN.

What about rotations?

Rotations only become important when PCN is present. The goal of the Code is to reduce the risk of bringing PCN onto the farm in the first place.

Rotations of one potato crop in seven years or longer are likely to reduce the chance of PCN becoming a problem based on overseas experiences. Shorter rotations using susceptible varieties, and particularly when white potato cyst nematode is present, are not likely to prevent the build-up of PCN. Long rotations are not an economical option to prevent the build-up of PCN for many farmers although should be considered when it is a viable alternative.

As a general rule the shorter the rotation the more quickly PCN will build up.

For a rotation to be effective the paddock needs to be free of self sown potatoes and solanaceous crops and weeds such as eggplant, tomato and nightshade. These plants can maintain populations of PCN.

The climate and soil are not always going to be favourable for the build-up of PCN. It is quite possible that PCN will not persist in some areas of Australia. Overseas experience though suggests that PCN can persist in most potato growing areas.

The difficulty for us in Australia is that we have no real understanding of how PCN will perform in our environment. In past outbreaks, the paddocks have been fumigated so we have not been able to collect this information. Until we have PCN present in paddocks that have not been fumigated, so that we can monitor its normal progress, we can only use the experiences of our overseas colleagues to predict how it will build up and decline in our growing regions.

How reliable are soil tests?

Soil tests are not perfect. PCN initially develops in hot spots (where there are infested plants) and then spreads through the paddock. If the wrong areas are sampled no PCN will be detected.

Cultivation spreads the cysts across the paddock and down through the cultivation layer. So over time PCN will be more easily detected as it builds up in numbers and becomes more evenly distributed.

Why should we report an outbreak?

If PCN becomes established to a point where it cannot be practically eradicated, it will reduce farmer's ability in affected areas to access markets overseas for a wide range of produce. Internal trade will also be affected, as other parts of Australia will seek to protect their ability to trade internally and externally.

For the individual it may seem a difficult choice, as reporting an outbreak will result in the affected area being quarantined. Failure to report it though could result in the build-up of the PCN and its spread to other areas.

Appendix D: Technology Transfer Survey 2003 form

Technology Transfer Survey 2003

As a way of collecting information to aid in the development of information products I will be sending out a survey every so often. I would greatly appreciate if you can fill it in and fax it back.

The surveys will be fairly short and quite easy to fill in so they will not be too painful. Information you send back will assist in the production of the potato publications, CDROM products and the internet.

Send fax to: (08) 8232 1311

Potato Technology Transfer Survey 2003

Please take a few minutes to complete this survey and return it as soon as possible.

A bit about you

Town _____

State ❒ NSW ❒ QLD ❒ SA ❒ TAS ❒ VIC ❒ WA (Tick one box)

Occupation ❒ Farmer ❒ Processor ❒ Government ❒ Consultant

❒ Merchant ❒ Rural Supplier ❒ Other (Tick one box)

Improving hygiene on the farm – disease management

Which of the following would you like to see articles on in the potato publications?

❒ Controlling volunteer potatoes
❒ Managing cull piles
❒ Stock management
❒ Weeds - how important are they
❒ Shed management
❒ Water management
❒ Cleaning machinery
❒ Using disinfectants
❒ Managing waste soil
❒ Controlling people movement on the farm
❒ Rotations
❒ Designing the farm to reduce risk
❒ Seed storage
❒ Receiving and handling seed
❒ Drainage management

Home entertainment

Do you have a? ❒ Video Cassette Recorder (VCR) ❒ DVD player ❒ Neither

Computer

Do you have a computer? ❒ Yes ❒ No (if No go to Eyes on Potatoes)

What features does you computer have?

❒ CDROM drive ❒ DVD drive ❒ Speakers ❒ None of the features

Are you connected to the internet? ❒ Yes ❒ No

Rate your internet connection speed

❒ Very good ❒ Good ❒ OK ❒ Poor ❒ Very poor

Do you have problems with your line dropping out?

❒ Rarely ❒ Sometimes ❒ Often ❒ Do not know

Eyes on potatoes

How do you like the new look Eyes on Potatoes?

❒ Very good ❒ Good ❒ OK ❒ Poor ❒ Very poor

Do you have any ideas on how Eyes on Potatoes can be improved?
Would you like to see articles on particular topics in future editions?
If so, note your ideas down on a separate piece of paper and send it back with this questionnaire?

Appendix E: Technology Transfer Survey 2003 results

(Article from March 2004 Eyes on Potatoes p13)

Potato Technology Transfer survey

Unfortunately we only received 22 replies to the survey sent out with last years Potato Australia – 15 farmers and seven others.

Due to the low interest I have cancelled the proposed series of articles on improving hygiene on the farm. I will revisit the issue at a later date if there is sufficient interest.

Thank you to those who did respond. I apologise for any inconvenience. The following are the responses received for the disease hygiene question. The responses to the other questions were insufficient in number to report.

Improving hygiene on the farm – disease management

Which of the following would you like to see articles on in the potato publications?

Responses	Topic
9	Controlling volunteer weeds
3	Managing cull piles
4	Stock management
15	Weeds – how important are they
8	Shed management
15	Water use management
9	Cleaning machinery
11	Using disinfectants
3	Managing waste soil
4	Controlling people movement on the farm
15	Rotations
9	Designing the farm to reduce risk
14	Seed storage
12	Receiving and handling seed
2	Drainage management

Leigh Walters
Technology Transfer Manager
Australian Potato Industry

Appendix F: Potato 2005 National Potato Conference

Potato 2005 National Potato Conference
18-21st September 2005
The Continental
Cowes, Phillip Island
Victoria

Convenors report

The 2005 National Potato Conference (Potato 2005) at Phillip Island in September 2005, attracted 353 registered participants and 32 trade exhibitors. The aim of the conference was to be a forum for the industry to take stock and look at where it is going. New ideas, new technology, new opportunities, looking to the future and analysing industry trends were the major topics addressed by speakers.

The last National Potato Conference held in Victoria was at Warragul in 1990. Seed Potatoes Victoria and ViCSPA have been jointly running major events in a workshop style format every second year and in 2005 were approached by AUSVEG to host a National Potato conference in lieu of the smaller seed conferences.

Participants were dominated by potato growers, but included a broad cross section of the industry from trade suppliers, research workers, company representatives to administrators. The state by state break down was:

57%	Victoria
12%	Tasmania
9%	New South Wales
8%	South Australia
5%	Western Australia
5%	Queensland
4%	New Zealand
2%	Others

It was pleasing to see so many growers at the conference, particularly a number of younger growers. These are the people who will determine the potato industry's future. It was terrific to see these young farmers take some time away from the farm to participate in a major industry event.

The international keynote speakers were well received and among the most highly regarded speakers at the conference. Use of international speakers was a drawcard for the conference and provided new ideas and approaches to diseases, marketing and other problems associated with potato growing. Our international speakers included Alison Lees from the Scottish Crops Research Institute, David Higgins from the Higgins Group in UK, and Kevin Wilcox from Potato Promotions Committee in New Zealand.

The only problem with the program was the concurrent sessions, where people wanted to attend both sessions at once. The concurrent session format was always likely to be criticised in this way while the alternative was to have a much longer program of formal presentations.

More than 60 posters were displayed in the conference venue, and all were extremely well presented and informative. The themes ranged from soil disease to hygiene methods to current disease detection methods used by each State.

Feedback from the conference was excellent from participating growers and industry people. The range of topics covered by speakers and the informal and interactive atmosphere was ideal for all to gain as much insight as possible into the issues being discussed. The speakers, too, were pleased at the feedback growers gave them, and were more than happy to answer questions posed to them after their speeches were over.

Potato 2005 at Phillip Island met its stated objectives and created an opportunity for people to meet and exchange ideas, provided technical updates on research and new products, and helped closer business relationships. The conference appears to have contributed in a substantial way to the overall goal of ensuring we have a successful and viable potato industry in the future.

Organisation

Chairman	Con Powell	
Convenor	Tony Pitt	
Host	Seed Potatoes Victoria	
Committee	Linda Bennison	Laura Logan (Bowles)
	Rosa Castello	Con Powell
	Nigel Crump	Tony Pitt
	Bruce Fry	Frank Rovers
	Bob Gray	Graham Rowe
	Des Jennings	*Leigh Walters**
Major sponsors	HAL	National Bank
	Vin Rowe Farm Machinery	Elders
	Nufarm	
Proceedings editors	Tony Pitt	Caroline Donald
Media coordinator	Cathy Sage	
Photography	Leigh Walters	Cathy Sage
Web site development	Leigh Walters	
Reference Group	Terry Buckley (SA)	Andrew Hayton (SA)
	Peter Dawson (WA)	Mike Hughes (Qld)
	John Doyle (NSW)	Iain Kirkwood (Tas)
	Laurie Eldridge (WA)	John Rich (Tas)
	Ron Gall (NZ)	Stephen Wade (NSW)
	Lyle Grayson (Qld)	

* Involved in first meeting only then provided support as required

Promotion

(i) Articles – national potato publications – pre-conference

The story behind Potato 2005 – Eyes on Potatoes December 2004, p20-21
The National Potato Conference 2005 – Eyes on Potatoes March 2005, p13 (p1)
Potato 2005 – National Potato Conference – Program of Events - Eyes on Potatoes June 2005, p10-11 (p1)
Registration booklet mailed out in July 2005
Industry email alert sent out
Industry updates sent out to Reference Group and Industry Leaders – December 2004, May 2005 and September 2005
Media releases sent out August-September 2005 (Managed by Cathy Sage)

(ii) During conference

All media managed by Cathy Sage, SageWords. A dedicated room with external telephone line set up for visiting media who had been invited prior to the conference. Support for media

included media packs, media download (FTP) site (media notified of address pre-conference) and media contact for arranging interviews and providing support before and during the conference. A media alert, media release and speaker highlights were sent out before and strategically during the three days of the conference to daily and regional media across Australia. Several media attended including WIN TV, ABC regional radio, ABC Country Hour, The Weekly Times, Good Fruit and Vegetables, Southern Farmer and Gippsland Farmer and the Ballarat Courier.

National enquiries were fielded from the Mercury (Tasmania), The Advocate (Bernie, Tasmania) and the Devonport City News (Tasmania) and stories ran on 98.9FM Brisbane radio and Our Big Back Yard (National ABC radio).

No media evaluation was done so an exact report of articles and interviews was not possible.

(iii) Articles and access to proceedings after the conference
Conference feature in December 2005 Eyes on Potatoes, p16-23
Potato 2005 Conference Proceedings available on Potato Archives or could be purchased from Seed Potatoes Victoria for $20.
Selected conference articles included in December 2005 and March 2006 Eyes on Potatoes.

Program

Monday 19th September

8.00 - 8.30 am **Registration**

Session 1 PRODUCT POTENTIAL

8.30 – 8.40 am **Welcome**
Conference Chairperson, Con Powell

8.40 – 9.40 am **Drivers For Australian Agriculture – And Potatoes: How they Operate and What You Can Do About Them**
Professor Neville Norman
Associate Professor of Economics, University of Melbourne

9.40 – 10.30 am **Potato industry trends in the UK.**
David Higgins, The Higgins Group, Scotland

10.30 – 11:10 am **Morning Tea and Trade Fair**

Session 2 PRODUCT POTENTIAL (Continued)

CONCURRENT SESSION FLINDERS ROOM

11.10 – 11.35 am **What's Hot and What's Not – What Consumers are Saying.**
Dean Harris, Market Equity

11.35 – 12.00 pm **"Hakas and Hangis" – Selling spuds the New Zealand way**
Kevin Wilcox, Chairman, Potato Promotions Committee New Zealand

12.00 - 12.20 pm **Umpiring the market game – ACCC at work**
John Martin, ACCC

Session 2 ORGANISED MANAGEMENT

CONCURRENT SESSION BASS ROOM

11.10 – 11.35 am **Dispute Resolution for Produce & Grocery Industry Members**
Bob Gaussen, Produce & Grocery Industry Ombudsman

11.35 – 12.00pm **Getting a Fair Go – Horticulture Code of Conduct**
Euan Laird, AUSVEG

12.00 - 12.20 pm **Good, Better and Best Practice in the Workplace**
Stuart Bailley, Victorian Workcover Authority

12.20 – 1.45 pm **Lunch and Trade Fair**

Session 3 TUNING THE TECHNOLOGY

PLENARY SESSION FLINDERS ROOM

1.45 – 2.25 pm **Innovations from Science for the modern Potato Farmer**
Alison Lees and others, Scottish Crop Research Institute

2.25 – 2.45 pm **Five Year Review of the Outcomes of Pathology Research**
Dolf deBoer, Vic DPI; Calum Wilson, TIAR and Trevor Wicks, SARDI

2.45 – 3.05 pm **Five Year Review of the Outcomes of Agronomy Research**
Phillip Brown, TIAR and John Fennel, PIRSA

3.05 - 3.45 pm **Afternoon Tea and Trade Fair**

TUNING THE TECHNOLOGY (Continued)

CONCURRENT SESSION FLINDERS ROOM

3.45 – 4.10 pm **Hatches and Matches: The National Potato Breeding Program and Recent Changes**
Tony Slater and others, National Potato Breeder, Vic DPI

4.10 – 4.35 pm **Potato Virus Y – A Re-Emerging Problem?**
Brendan Rodoni, Vic DPI

4.35 – 5.00 pm **Benefits of Virus Testing in Seed Schemes**
Mark Holland and Roger Jones, AGWEST Plant Laboratories

TUNING THE TECHNOLOGY (Continued)

CONCURRENT SESSION BASS ROOM

3.45 – 4.10 pm **Precision Detection Methods for Soil Borne Diseases**
Robert Faggian and others, Vic DPI

4.10 – 4.35 pm **Checklist and self assessment for potato storage and handling**
Doris Blaesing, Serve Ag

4.35 – 5.00 pm **Turning ideas into profits on the farm**
Andrew Weidemann, Birchip Cropping Group

6.00 - 8.30 pm **Evening excursion to the Phillip Island penguin colony (Optional)**

Tuesday 20th September

8.00 – 9.15 am **INDUSTRY MEETINGS**

CONCURRENT SESSIONS

Annual Meeting of ViCSPA	BASS ROOM
French fry contract growers	ZARIGANI ROOM
Horticulture Australia Levy Payers Annual General Meeting	FLINDERS ROOM

9.30 - 5.00 pm **INDUSTRY TOURS**
Three tour options available. Tours will commence and finish at Cowes and groups will be taken to a number of venues around the district.

Tour Option 1
Visit the Koo Wee Rup district and examine potato storage sheds, PCN Control Area and protocols, irrigation machinery and prescription fertilizer blending.

Tour Option 2
Visit the Mornington Peninsula and look at vegetable packing and marketing, organic production, planning issues with urban encroachment and wineries.

Tour Option 3
Visit South and West Gippsland. Early certified seed crops, commercial plantings at Thorpdale, potato planters and wineries.

6.00 – 7.00 pm **Pre dinner refreshments in the Trade Fair Area**

7.00 pm CONFERENCE DINNER FLINDERS
Guest Speaker: Paul Martell

Wednesday 21st September

7.45 - 8.15 am Registration (for single day attendees)

Session 4 ATTENTION TO WATER

PLENARY SESSION FLINDERS ROOM

8.15 – 8.30 am **Conference opening**
Bob Cameron, Minister for Agriculture, Victorian Government

8.30 - 9.00 am **National Water Policy**
Craig Bradley, National Water Commission, Canberra

9.00 – 9.25 am **Water Trade – Whet is it and How can I use it?**
Charles Thompson, Member of the HAL Water Initiative

9.25 - 9.50 am **Improving the Efficiency of Irrigation**
Kain Richardson, Potato farmer, Ballarat

9.50 - 10.10 am **Recycled Water for Potato Production**
Daryl Stevens, Coordinator, Reclaimed water in Horticulture

10.10 – 10.40 am **Morning Tea and Trade Fair**

Session 5 TOMORROWS TREND

PLENARY SESSION FLINDERS ROOM

10.40 –11.10 am **Industry outlook for French Fry manufacturing**
David Antrobus, McCain Foods

11.10 – 11.40 am **The Processing Potato Research Program**
Paul Frost, Potato Processors Association of Australia

11.40 – 12.30 pm **Industry Open Forum**
Forum Topic: The National Potato Breeding Program
Simon Drum, Paul Frost

12.30 – 1.40 pm **Lunch and Trade Fair**

Session 6 OPPORTUNITIES FOR FAMILIES

PLENARY SESSION FLINDERS ROOM

1.40 – 2.10 pm **Farming in 2020 – Will You be Ready**
Roger Gaudian, National Australia Bank

2.10 – 3.00 pm **Incorporating family life with the family farm (Panel of three speakers)**
Wayne Tymensen Crisping Grower, Coralyn, Victoria
Graham Ramsay Fresh Market and Crisping Grower, Bundaberg, Qld
Paul Myers Seed Grower, Warragul, Victoria

3.00 – 3.30 pm **Conference Outcomes and Summary**
Rob Dimsey, Vic DPI

Appendix G: Discussion paper – Why the horticulture industry needs a national distributor

AUSVEG Discussion Paper

National Distribution System

The following is a proposal to consolidate potato contacts into a national database to improve the efficiency and flexibility of the system. Please consider the following document carefully, as a successful distribution system is the backbone to industry communication for both industry organisations and the national R&D system.

The reasons for considering such a change have been brought about by the following:

- Difficulty of being able to validate the system when I do not have access to the grower databases and the implications of the new Privacy Act.
- Changes in industry and government organisations that are impacting on their current or future ability to maintain accurate mailing lists.
- The need to develop a national database for the National Vegetable Internet Service that is a password protected site.
- The need to maintain a national database for the Information Directory.
- The need to avoid the perception that there is a conflict of interest which could undermine the levy system and industry organisations.

Note – An underlying philosophy for this change is the need to maintain a strong national and state distribution capability to all industry participants to facilitate technology transfer and communicate issues of broad industry interest.

What I am proposing

The following is what I am proposing:

- That the national potato distribution system be consolidated into one database – growers and industry support people.
- Potato Australia, Eyes on Potatoes, Information Directory, inserts and any other national potato publications be distributed from a central mailing house.
- That the distribution system be managed by the Technology Transfer Manager of the Australian potato industry, or if that position no longer exists, an alternate agreed to by AUSVEG Potato Group, Potato Processors Association of Australia and Horticulture Australia. If the levy system ceases to exist then the decision as to who manages the database rests with the Australian Potato Industry Council.
- The Technology Transfer Manager of the Australian potato industry or the alternate is to operate under clearly defined rules that would be agreed to by AUSVEG Potato Group, Potato Processors Association of Australia and Horticulture Australia. If the levy system ceases to exist then agreement would be through the Australian Potato Industry Council.
- That the terms and conditions of using the database are communicated and agreed to by those on the database (As required by the Privacy Act).
- That state grower organisations are able to mail out information to the potato industry in conjunction with national potato publications at no cost if the item does not move the mailing package into a different mailing cost category (ie. Usually based on weight) and deadlines for mail delivery and size requirements are met . If the insert moves the package into the next mailing cost category the industry organisation or NSW Agriculture will pay for any difference in mailing costs. (Same as current arrangement.)

- That the industry organisation or proxy (eg. At present NSW Agriculture distributes for NSW) can request mailing labels up to four times a year, for mailouts in their state, at no charge if they sign a confidentiality form indicating they will not use the information for any other purposes than for the potato mailout. Additional mailouts may incur a charge to cover costs. This excludes mailouts of a commercial nature as these will be managed centrally. The organisation will not be able to copy the labels into their own database. This is important to meet the provisions under the Privacy Act. Any arrangement we enter into must be communicated to the industry and they agree to participate through the validation system.

The reasons for change

Validating the system and the Privacy Act

Validating the system up till now has been relatively straight forward as all the state participants have been very cooperative. It does though require additional work by myself as service contacts from external databases (NSW and WA) have to be checked against the central database. This is not difficult but time consuming. The grower databases I can only compare the number of growers as indicated by the Australian Bureau of Statistics (ABS) to the State totals. In the past the ABS grower numbers have proved to be very accurate. Where these deviate more than 10% I know I have a problem. Given the ABS figures are usually two years old expecting greater accuracy is not realistic.

The issue that is not addressed adequately with the current system is the changes introduced with the Privacy Act and the implications this has on sharing information. This has major implications for the publications, internet service and information directory.

The Privacy Act requires the persons on the database to be in agreement with how their information is used and be able to update it on request if the details are incorrect. If we were only running a publication service this would not be an insurmountable problem but does create additional work when validating the databases. Add though an Information Directory and a password protected internet site that requires a user database as well and the problem rapidly escalates in size and complexity. Validation now becomes a process of multiple validations and authorities for different systems – a process confusing and potentially annoying to our industry participants who expect a cost effective, efficient system.

Centralising the database would simplify validation, corrections to mailing details and the process of obtaining permission for all services – publications, internet service, information directory and general potato mailouts.

Changes to industry and government organisations

In the case of NSW Agriculture when Stephen Wade leaves the position there is unlikely to be the commitment by the department to maintain an industry distribution database. Government is pulling out of extension very quickly. Will NSW Farmers take over the job?

In the case of industry organisations the situation is also changing very quickly.

QFVG – They are currently moving from a compulsory system to a membership system. At present they have committed to supporting the maintenance of a complete potato grower database. Will they see this as being part of core business in the future?

SAFF Potato Growers of South Australia – The PGSA is a commodity Group of SAFF and maintains a separate mailing list for the entire SA potato industry. They have indicated no change to this policy. At present I maintain the grower database on behalf of SAFF as it is simple for me to do. If I was not there would there still be the commitment? Again, do they see it part of their core business?

TFGA Potato Council – Maintain a membership list only. This use to include most growers except for the fresh industry, which was quite small. In later times the membership numbers have dropped opening up a significant gap between the total number of growers and the membership numbers. Is it in their interest to maintain a total industry list?

Victorian Potato Council – Tony Pitt maintains a total grower list. Will the Council see this as something they really need to do if there was an option?

Potato Growers of WA – Maintains a total grower list and benefits from the Statutory Marketing arrangements. The state probably has no reason to question current arrangements, as there is no conflict with core business.

National Vegetable Internet Service

A decision was made at the National workshop to develop an internet strategy for the industry held in Melbourne in June 1999 that the National Vegetable Internet Service be a joint vegetable and potato initiative and it be a password protected site. The latter means that we need to maintain a national database of users.

For the service industry this is not difficult as we have a central national database. For growers though we have major problems. It means that we have to develop a central national grower database in addition to our existing distribution system databases. Although this can be done, it is messy. It would be much simpler to have all users on the one database so validation and permission for participation, as required under the Privacy Act, can be obtained easily.

Otherwise we are maintaining grower databases for the publications, a national database for the service industry for the publications and the information directory, and a separate database for the internet service.

For the service industry contact information permission is required before any information can be included so a central database would simplify this process.

Information Directory

Like the internet service the Information Directory requires permission before any contact details can be included. Having a centralised system for the service industry greatly simplifies this process.

Need to avoid the perception that there is a conflict of interest which could undermine the levy system and industry organisations

In the past the industry organisations have tended to focus on representing all the potato industry in their state. I question whether this can be done in the future and the industry organisations survive.

Using a public good role as a way of providing membership benefit is fast becoming a two edged sword. For members it raises a number of questions – why does the organisation maintain their involvement in a public good activity, is this really core business, is this the best use of my membership dollar and why be a member when I will get the benefit anyway.

For non-members, participation in public good activities can be a good marketing tool but what happens when it is used as a lever? For example, what happens when industry organisations do not have complete mailing list for a publication that is to go out to all growers. Will the organisation be seen as providing public good or preventing levy payers, who are not on the mailing list, receiving what is rightfully theirs? If it is the latter, the industry organisations will be viewed negatively as well as the levy system.

I believe the perception of a conflict of interest between the levy system and industry organisations is real in some areas and one we need to guard against.

Points to note

The following points should be noted before any decision is made:

- From a purely cost point of view for the levy system there is no benefit in having one database over seven databases. The current system is cost effective.
- Any cost savings from the proposed change will be for the industry organisations and for the Technology Transfer Manager.
- The success of any system will depend on a Win-Win situation for the industry organisations and levy system while protecting the privacy of the growers and the service industry whose details are contained on the database.
- The gains for the Technology Transfer Manager will be a simpler system which takes less effort to maintain and therefore frees up time for him to undertake other communication work of high priority to the industry.

Leigh Walters
Technology Transfer Manager
Australian Potato Industry
6 May 2003