

FINAL REPORT 2018

Project Type

Research

Applicants must read the *SAGIT Project Funding Guidelines 2018* prior to completing this form. These guidelines can be downloaded from www.sagit.com.au

Final reports must be emailed to admin@sagit.com.au as a Microsoft Word document in the format shown within 2 months after the completion of the Project Term.

PROJECT CODE	:	SPAA115
--------------	---	---------

PROJECT TITLE (10 words maximum)

Communicating innovations in Precision Agriculture: Factsheet Series

PROJECT DURATION

These dates **must** be the same as those stated in the Funding Agreement

Project Start date	July 2015					
Project End date	December 2017 (report due 28th Feb 2018)					
SAGIT Funding Request	2014/15		2015/16		2016/17	

PROJECT SUPERVISOR CONTACT DETAILS

 ${\it The project supervisor is the person responsible for the overall project}$

Title:	First Name:			Surname:		
Dr	Nicole			Dimos		
Organis	Organisation:					
SPAA Society of Precision Agriculture Australia Inc.						
Mailing address:						
Telepho	ne:	Facsimile:	Mobile:		Email:	

ADMINISTRATION CONTACT DETAILS

The Administration Contact is the person responsible for all administrative matters relating to the project

Title:	First Name:			Surnar	me:	
Mrs	Kylie			Gove		
Organisation:						
SPAA Society of Precision Agriculture Australia Inc.						
Mailing address:						
Telepho	ne:	Facsimile:	Mobile:		Email:	

PROJECT REPORT

Provide clear description of the following:

Executive Summary (200 words maximum)

A few paragraphs covering what was discovered, written in a manner that is easily understood and relevant to SA growers. A number of key dot points should be included which can be used in SAGIT communication programs

The agricultural sector sees SPAA as a trusted source of PA information, and the production of factsheets leads to new knowledge, on-going support and highlights the importance of these tools as part of their business and continues to create a network for farmers and the private sector to work together and share knowledge.

The key features of the factsheets were the tried and tested experiences, where SPAA profiled successful adoptors of the "said" innovations. These case studies included some tips and advise, how they overcame challenges and common issues.

The project produced a total of six factsheets and one poster across a range of topics, of innovations where farmers felt the information was too over-whelming or possibly not easy to attain. The factsheets were a snapshot of tools currently on the market of which adoption is in part low or interest is high.

A focus on shared experiences assisted in implementation and adoption and top tips or farmer recommendations ensure the industry remains engaged and involved.

Whilst 1000 copies of each were printed (and subsequently exhausted sheet 1-3), additional copies were made available Free of Charge (FOC) from online sources including the SPAA website. The project was a success given the positive feedback from recipients of the factsheets. It was additionally published in many farming systems group annual compendium, industry publicinations and rural media expanding the reach and distribution.

Project Objectives

 $A\ concise\ statement\ of\ the\ aims\ of\ the\ project\ in\ outcome\ terms\ should\ be\ provided.$

This project aimed;

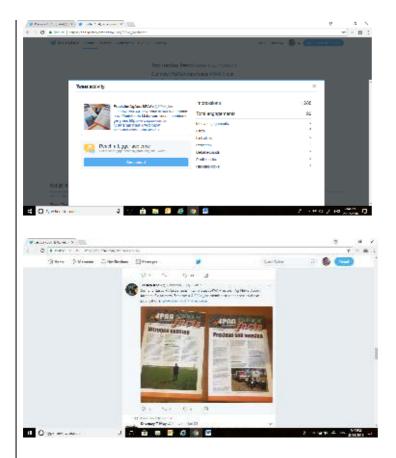
- a) To increase the effective use and adoption of precision agriculture (PA) systems by grain growers across Australia, however predominantly in South Australia
- b) To ensure that PA users are continuously challenged and engaged with up-todate and relevant information.
- c) To ensure that new users of PA are supported into their journies with farm innovations and
- d) To broaden the application of precision agriculture to ensure farm business triple bottom line goals are achieved and technologies are best applied in efficient and correct manner.

SPAA supports innovation, and innovation also includes people. SPAA being a tusted source of independent PA information provided this support and access to explain the capabilities of a range of PA innovations that are applied across the grains industry through the production of six (6) factsheets and promoting such using a myraid of extension methodolgies and placing the products onto the SPAA website for ease of access. The project looked at a range of innovative practices and systems specifically machinery and equipment, and techniques, and addressed the capacity to innovate to ensure that PA information outcomes are targeted and delivered in a timely and effective manner. The topics were decided by industry for industry.

The key features of the factsheets were the tried and tested experiences of farmers, where SPAA profiled successful adoptors of the "said" innovation. These case studies included how they overcame challenges and common issues. A focus on shared experiences assisted in implementation and adoption and top tips or farmer receommendations ensured the industry remained engaged and involved. Case studies were sourced from a number of regions from farmers of both low and high rainfall areas. This decision was made to highlight that such technology is effective in use across a number of environments.

In addition to the production of a hard-copy factsheet, these items were promoted through the successful SPAA extension and communications formula of varied methods to convey PA information through events, social media mediums, the SPAA website and precision ag news (magazine).

An example of tweet is attached.



Thus, the project created a sense of optimism amongst the farming community by;

- adding value to the PA industry
- providing tools & resources that support the agricultural industry
- built networks and mentors.

Overall Performance

A concise statement indicating the extent to which the Project objectives were achieved, a list of personnel who participated in the Research Project including co-operators, and any difficulties encountered and the reasons for these difficulties.

Staffing:

Project manager - Dr Nicole Dimos

Project author – Rural Directions (Mr Richard Saunders) – contracted for 3 factsheets Project author – MediaRoo (Ms Alex Milner Smyth) – contracted to 3 factsheets and contract terminated

Project author – Cindy Benjamin – replacement author to complete 2 factsheets + finalise 3rd factsheet

SPAA Editorial and communications committee (in-kind) – review and approval

Self-assessment:

The project started off in great spirit with active involvement from all stakeholders involved. These included working with farming systems groups, and active involvement and strong response rate to the survey meaning that SPAA was in a fortuitous position. On release of our survey, we were overwhelmed with over 80 responses within the first 48hours, and the "carrot" of a PA services prize is assumedly the reason for such.

SPAA develop a tender process to appoint effective communicators to complete this project. We sought to appoint scientific and agricultural writers to build on our team of resources. The initial factsheets were produced to a high standard, and unfortunately the more complex topics proved challenging for the authors. The drafts were not passed by the SPAA editorial committee and SPAA was forced to terminate one author contract. A replacement was found, and a re-write of two factsheets was underway, after attempt to amend the original. This put a slight delay on distribution.

The UAV factsheet was the most challenging factsheet to produce. The main reasons for such were the plethora of information that could be attached to the product, and to summarise into 4 pages was a near impossible task.

Despite these challenges, our rigorous reporting, review and risk management process allowed us to remain focused to deliver high quality products, complete project final reporting deadlines by due dates and remain in budget.

Thus, SPAA believes it was successful in the project and has produced a number of factsheets that are a positive contribution for users of precision agricultural tools and technologies in the provision of technical and up-to-date information that both SPAA and SAGIT should be proud to have their names against. The greatest highlight was the peer recognition from industry of these factsheets, including the distribution in national trade magazines.

Key Performance Indicators (KPI)

Please indicate whether KPI's were achieved. The KPI's **must** be the same as those stated in the Application for Funding and a brief explanation provided as to how they were achieved or why they were not achieved.

KPI	Achieved (Y/N)	If not achieved, please state reason.
Identifying topics, surveys involving local FSG to gather regional issues and challenges in PA.	Y	This was a year 1 milestone that involved an online survey made available through SPAA members and stakeholders, distributed via social media, AgEx Alliance and also consultation and distribution with SA farming systems group. The topics selected for the factsheets were the highest ranking choices. A target response was achieved quickly, especially given the prize on offer which was won by an EP farmer who sourced assistance in cleaning yield data to create prescription maps.
Factsheets	Y	All factsheets were produced, and distributed by the project final reporting due date.

The topics as selected and approved were: Weed Sensing Airborne Imagery **Understanding Maps** Nitrogen Sensing Soil Sensing Each factsheet comprises of technical detail and a case study. Fitting the 'KISS' requirement was an important feature of these factsheets. This is particularly important as many of SPAA members and survey responses felt that there is a perceived complexity with the application of PA. Factsheet 6 were distributed later than proposed (early 2018) due to variations on the final copy. Factsheets were posted to all SPAA members, distributed via social media, made available on the SPAA website and also posted to seven SA farming systems groups. Web analytics indicate approximately 10 downloads / month are recorded and downloaded from the SPAA website, with increasing downloads on announcements of release. It is pleasing to report the feedback from these factsheets has been positive; including from our corporate supporters and farming systems groups across SA and interstate. In 2017, SPAA conducted a member satisfaction survey which highlighted that members valued this format of PA communications highly and sought for additional factsheets and case studies to be produced. Y This is an going task performed by Social media activities SPAA. Each time a factsheet was released, it was promoted including using the @SAGrainsTrust handle. Our SPAA enewsletter demonstrated that this was the most effective

		distribution (separate to direct mailout) as it has a reach of >1800 and analytics showed strong downloads at launch periods.
Reporting	Y	Submitted by due dates.

Technical Information (Not to exceed **three** pages)

Provide sufficient data and short clear statements of outcomes.

This is an extension project and does not provide results of a technical nature. The content within the factsheets display such.

Whilst every effort to ensure the detail included is sound, SPAA also sought to include a practical example from farmers from a range of growing environments including low rainfall zone to high rainfall.

Each factsheet was stringently reviewed by a scientific editorial committee, along with consultation with the SAGIT scientific officer to ensure the content was technical sound.

Copies of all six (6) factsheets are included with this report.

Conclusions Reached &/or Discoveries Made (Not to exceed one page)

Please provide concise statement of any conclusions reached &/or discoveries made.

The Precision Agriculture Factsheet Series sought to deliver targeted and highly relevant information about PA tools, technologies and techniques across South Australia (and nationally). Adoption of PA remains variable and the challenge was to produce a document that would serve as a benefit for all. For some regions, PA use is advanced and fairly sophisticated, the PA factsheets aimed to build further value, whereas more basic information was required to areas where PA adoption has been poor/ or of technology that is new or unfamiliar in application. In both cases, it is foreseen that the recipients of these factsheets have increased knowledge and confidence to implement PA tools.

The use of farmers as case studies was highly beneficial in communicating the benefits of PA tools, and allowed readers to read how these tools work as components of a larger farming system. This also assisted in providing the networks, knowledge and confidence to move to the next stage in their own PA journey.

SPAA has undertook a feedback procees from its members, with very positive reponses across the board. This feedback provided an opportunity for SPAA members to nominate the topics they'd like to learn more about, further enhancing the success of SPAA to produce additional print PA material in coming years.

SPAA is confident that it achieved its goals in completing this project. Over 1000 people have benefitted from the production of these factsheets (mailed or

downloaded copy) proving to be a popular addition in the office for our members and stakeholders and SA grain producers, and continues to provide ongoing and up-to-date support to aid the adoption of PA application in the agricultural industry.

Intellectual Property

Please provide concise statement of any intellectual property generated and potential for commercialisation.

Nil produced.

Application / Communication of Results

A concise statement describing activities undertaken to communicate the results of the project to the grains industry. This should include:

- Main findings of the project in a dot point form suitable for use in communications to farmers;
- A statement of potential industry impact
- Publications and extension articles delivered as part of the project; and,
- Suggested path to market for the results including barriers to adoption.

Note that SAGIT may directly extend information from Final reports to growers. If applicable, attach a list of published material.

- Factsheets Technical details, "How to" and tips, along with case studies X6.
- A minimum 1000 were printed and disseminated via the SPAA membership and enewsletter database, via SAGIT database, through Ag Ex Alliance enewsletter and through farming systems groups. An online version of each factsheet was made available from the SPAA website. All hard-copies have been exhausted and on-going promotions result in further downloads of the factsheets. Eg. The weed sensing factsheet is promoted during summer fallow management.
- The "Weed Sensing" factsheet was also printed in the Weekly Times newspaper, as well as the 2017 Grain Yearbook. This extended the reach to a national year, and by far was seen as the most popular topic of the series.
- Along with copies sent to FSGs, a number of these groups also requested digital copy to enable it to be printed in their annual results compendiums. This expands the reach of the factsheets, eg. The EPARF annual results book is distributed to 1000 farming businesses. MSF, CWFS and UNFS also printed in their annual book. WANTFA has sourced copies for their new magazine to be launched in Autumn 2018.
- Social media email marketing (enews)/ facebook/ twitter a quick and inexpensive way to reach a wide audience. SPAA currently participates in email marketing and twitter. SPAA initiated a facebook account, and although slowly growing, provided another avenue to distribute the factsheets.
- At the conclusion of the project, SPAA will feature in an enewsletter and precision ag news the with links to all.

The success of this project is a result of involving the end-user from start to finish.

There was much appreciation and satisfaction in producing items that responded to the needs of industry.

POSSIBLE FUTURE WORK

Provide possible future directions for the research arising from the project including potential for further work and partnerships.

SPAA conducts a members and stakeholder survey every 2 years to identify the key mediums for communicating PA. An astounding result was captured in 2017, with the most preferred format to receive PA information was through additional factsheets (76%) as well as the #learnfromafarmer profile series. These included snapshots of farmers using the same technology under different environmental/ climatic environments to demonstrate the tools efficacy or application under different growing zones as well as shared journeys. They also reported enewsletter as a preferred method to receive information so future PA communications will be distributed in this manner.

This will form the basis of new proposals for consideration to SAGIT.

AUTHORISATION

Name: Dr Nicole Dimos

Position: Executive Officer

Signature:

Date: 28th Feb 2018

Submit report via email to admin@sagit.com.au as a Microsoft Word document in the format shown *within 2 months* after the completion of the Project Term.