



Office Use Only

Project Code	
Project Type	

FINAL REPORT 2020

Applicants must read the *SAGIT Project Funding Guidelines 2020* prior to completing this form. These guidelines can be downloaded from www.sagit.com.au

Final reports must be submitted by email to admin@sagit.com.au as a Microsoft Word document in the format shown **within two months** after the completion of the Project Term.

PROJECT CODE	SPA118
PROJECT TITLE (10 words maximum)	
Conversations with Farmers: Agricultural Practice Change with the 'PA-Early Adopters'	

PROJECT DURATION <i>These dates must be the same as those stated in the Funding Agreement.</i>	
Project start date	1/07/2018
Project end date	31/08/2020

PROJECT SUPERVISOR CONTACT DETAILS <i>(responsible for the overall project)</i>		
Title:	First Name:	Surname:
Dr	Nicole	Dimos
Organisation:	SPAA Society of Precision Agriculture Australia Inc	

ADMINISTRATION CONTACT DETAILS <i>(responsible for all administrative matters relating to project)</i>		
Title:	First Name:	Surname:
Mrs	Kylie	Gove
Organisation:	SPAA Society of Precision Agriculture Australia Inc	

PROJECT REPORT: *Please provide a clear description for each 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 case studies 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. Popularity demonstrated a need to learn about PA tools and technologies through shared experiences. SPAA sought to revisit ten pioneers who shaped the organisation through technology implementation to update SA grain growers and SPAA members on how PA continues (or not) play a role in their farming success.

The key features of each case studies were the tried and tested experiences, where SPAA profiled successful adoptors of the “said” innovations. Each case studies included top tips and advise, how they overcame challenges and common issues and what drives them to continue in their PA journeies.

The project produced a total of ten case studies and a collated booklet across a range of topics, of innovations where farmers felt the information was too over-whelming or possibly not easy to attain.

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

The case studies were made available as a digital resouces, available from the SPAA website, and 1000 copies of the collated booklet were printed and distributed at the 2020 SAGIT researcher forum, and subsequently distributed via ther SA grower group network. These were made available Free of Charge (FOC) from online sources. The project was a success given the positive feedback from recipients of the case studies. It was additionally published in many farming systems group annual compendium, industry publications 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.

In 2002, SAGIT played an instrumental role in the establishment of our organisation. Fifteen years strong, SPAA has proven to be an important farming group to support the adoption of precision agriculture (PA) for grain producers across SA, and many agricultural sectors across Australia.

The objectives of this project is to revisit a number of pioneering grain produces (aka early adopters) and collect information about their continued journey and adoption and use of PA technology and to glean useful insights from this information that can be suitable to those who now are ready for forge ahead. Specifically, the objectives are as follows:

- 1) To perform exploratory and explanatory case study interviews on 10 progressive/ early adopters of PA components across South Australia to explore, explain, and understand why these farmers adopted.
- 2) To understand which technology tools or components have been the most beneficial and valuable (costs vs. benefits) to adopting farmers.
- 3) To examine how management practices have changed as a result of adopting and using PA components.
- 4) To determine current satisfaction or dissatisfaction with individual PA components.
- 5) To determine if pioneering PA users plan to continue to adopt additional PA components in the future.

Case studies have been and continue to be used extensively in the various fields of social sciences. A case study is “an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. Case studies are becoming more and more “accepted, not as a replacement for theoretical or statistical approaches, but as complements that enhance understanding and adoption”. Explaining and understanding “why” and “how” becomes an important question to answer as agricultural practices and technology evolves.

This project aims to revisit stalwarts involved in SPAA’s start-up phase, to;

- Highlight
- Promote
- Encourage and
- Support

them to identify current challenges and programs required for this group of farmers and to offer the wider agricultural community with a medium to learn from like-minded farmers to assist them in their PA journeys.

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 – AgCommunicators (Ms Bridget Penna, Ms Hayley Clifford, Mr Alistair Lawson and Mr David Foxx) – contracted for 10 case studies

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. SPAA connected with all previous candidates from the original publication PA in Practice. The majority of such responded immediately and indicated a preference to be interviewed again. There were a select few who wished not to participate, but we were successful in finding 10 subjects to revisit.

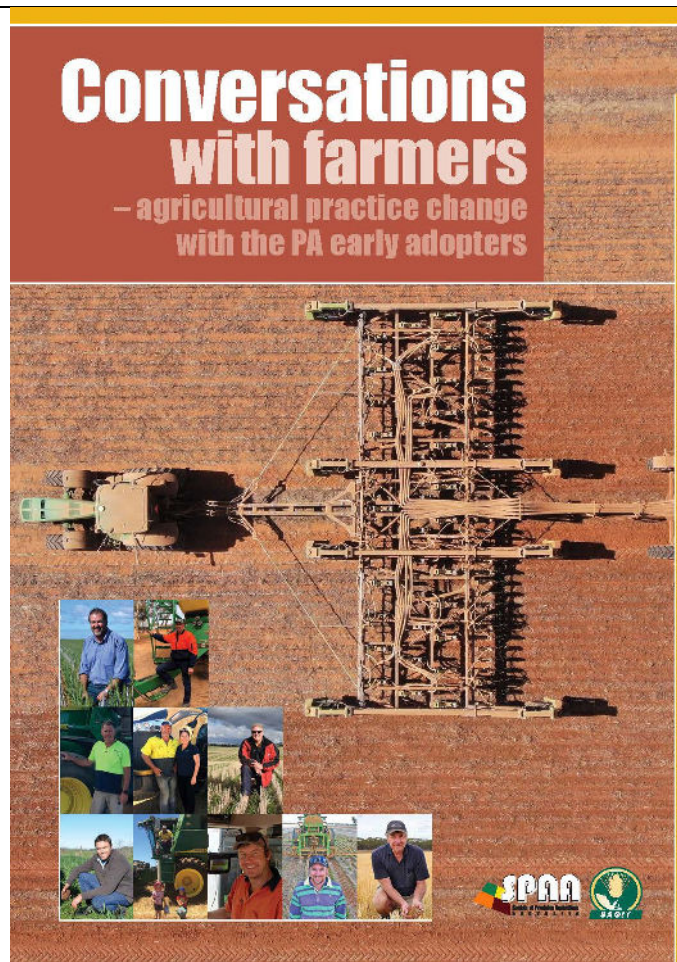
SPAA develop a Request for Services (RFS) tender process to appoint effective communicators to complete this project. We sought to appoint scientific and agricultural writers to build on our team of resources. SPAA appointed the team at AgCommunicators. Collectively, both SPAA and AgCommunicators developed the questionnaire that was approved by the SPAA communications sub-committee identifying suitable questions to enhance the knowledge of our pioneering farmers.

In two instances, the sons of the pioneering farmers were exposed in this project due to succession planning and increased involvement on the family farms, and these both have a strong interest like their fathers in applying PA technology on the farms.

We also needed to turn to one (1) Victorian producer to reach our target of ten case studies.

SPAA launched its first case study at the PA EXPO in Cummins, EP in March 2019. Following such, every two months, with a maximum of five per year. We purposely delayed the distribution over the harvest period in light on anticipated low referral. This distribution process resulted in a calculation error, with the 10th and final case study launching in September (1 month behind original proposal).

The covid pandemic did not impact the ability of the project to be compromised, however, our final candidate fell ill which led to some difficulties in completion and approvals from all parties. The only exception was the book launch, which both SPAA and SAGIT kept in touch to ensure this project component was met. A delayed meeting date was set and scheduled for Wednesday 23rd September. Regrettably Nicole Dimos (SPAA) is unable to attend the book launch due to travel/ border restrictions, however in attendance is Mark Branson (current SPAA committee member) along with two producers profiled. Link to booklet will be available from SPAA website post launch.



Despite these light 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 almost due dates and remain in budget.

Thus, SPAA believes it was successful in the project and has produced a number of case studies that are a positive contribution for users of precision agricultural tools and technologies in the provision of technical, practical, operable 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 case studies, including the distribution in national trade (digital) magazines including Australian Grain and Grain Central (online).

KEY PERFORMANCE INDICATORS (KPI)

Please indicate whether KPIs were achieved. The KPIs **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	If not achieved, please state reason.
Engage with previous participants of PA in Practice project	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Interview and prepare story X 5 case studies (year 1)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	First case study launched in March at the 2019 PA expo in Eyre Peninsula, and every two months thereafter.
Design, layout and distribute	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Promote on Social media	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	@SAGIT tagged on twitter and facebook for each launch.

Interview and prepare story X 5 case studies (year 2)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Design, layout and distribute incl Collate into a booklet(s) for distribution to FSGs	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Prepared for the postponed/ rescheduled SAGIT researcher forum (September 2020)
Promote on Social media	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Final year reporting	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Delayed by 1 month to coincide with launch. Delayed due to COVID pandemic.

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 case studies 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 case study was stringently reviewed by a SPAA scientific editorial committee and communications committee for readership.

Digital copies of all ten (10) factsheets and the collated booklet 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 “Conversations with Farmers” Series sought to deliver targeted and highly relevant information about PA tools, technologies and techniques across South Australia (and nationally) through shared experiences. 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 case studies provided a conversations 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 undertaken a feedback process from its members, with very positive responses 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. Numerous people have benefitted from the production of these case studies proving to be a popular addition in the online library and office for our members and stakeholders and SA grain producers, and continue to provide ongoing and up-to-date support to aid the adoption of PA application in the agricultural industry.

There was much appreciation and satisfaction in producing these case studies and SPAA is grateful for the opportunity to respond to the needs of industry. The success of this project is a result of involving the end-user from start to finish.

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.

- 10 case studies were produced and launched every two months. Case study 1 was launched at the PA EXPO in Cummins. Each case study featured; PA timeline, producer top tips and answering the reciprocal questions. The case studies were launched via SPAA enewsletter (distribution list >2500) and its social platform facebook and twitter (combined following >3000). SAGIT was accordingly "tagged" on each launched case study and shared the content with its supporters. Numerous examples as shown highlight the reach of the distribution of the case studies. These platforms demonstrate the effectiveness to distribute content quickly, as well as inexpensively. A copy of the questions asked to each candidate is attached.

- A print run of 1000 of the collated case studies was produced. It will be launched at the 2020 SAGIT researcher forum. It will be distributed to all members with the October 2020 (Spring issue) of Precision Ag News.

In addition, copies of the booklet is being disseminated via SAGIT database (additional copies to remain with SAGIT), through Ag Ex Alliance member database and through farming systems groups. In the interim, a number of these groups as part of the AgEx Alliance network have promoted local champions within their results compendiums.

An online version of each case study and booklet is available from the SPAA website.

<https://spaa.com.au/resources/>

A number of case studies have featured beyond SPAA communication channels including Australian Grain, Grain Central and Australian Grain Annual Year book. This extended the reach to a national audience.

Sample screen shots from social media and grain central online;

PrecisionAgAus(SPAA) @SPAA_Inc · Jul 3

Launching case study 9 of the "where are they now?" #PA early adopters project. Learn why understanding soil types & adjusting inputs to suit variability is helping with efficiency & increased yields @leighbryan farm. @SAGrainTrust Download your copy here tinyurl.com/yceocqoq

CASE STUDY NINE

Tailoring the farm by soil type

Being able to adjust inputs to suit the varying soil types across their property has helped the Bryan family farm more efficiently and increase overall yields.

2 6

PrecisionAgAus(SPAA) @SPAA_Inc · May 5

Launching case study 8 of the "where are they now?" #PA early adopters project. Learn why @AndrewSarge @BrookParkSA family still use #PA & how yield and pH mapping help to make effective on-farm management decisions. @SAGrainTrust Download your copy here tinyurl.com/yaumocjb

CASE STUDY EIGHT

PA data improves yields

Reduced costs and improved yields are the focus for the Sargent family, who currently use yield and pH mapping to make effective

2 5

PrecisionAgAus(SPAA) @SPAA_Inc · Mar 3

Launching case study 7 of the "where are they now?" #PA early adopters project. Learn why @AgCactus & family say it pays 2 Bat the front of change who r currently utilising yield & protein maps 2 identify soil shortfalls. @SAGrainTrust Download your copy tinyurl.com/sa73kn3

CASE STUDY SEVEN

Reaping efficiency rewards with PA adoption

It pays to be at the front of change for the Baldock family, who are currently utilising yield and protein mapping to identify soil shortfalls on their Eyre Peninsula property.

2 6

PrecisionAgAus(SPAA) @SPAA_Inc · Jan 15

Excited to launch Case Study #6 from our Conversation with Farmers project funded by @SAGrainTrust Kym I'Anson #PA strategy to improve his soils is paying dividends. Read what's changed in the last 10 years for @IAnson_Farms Downlaod your copy now spaa.com.au/portfolio-item...

CASE STUDY SIX

PA used to improve soils

On-the-go pH mapping has formed an integral part of Kym and Katie I'Anson's Mid North business while also playing a critical role in improving soils.

2 6

Society of Precision Agriculture Australia - SPAA

July 3 · 🌐

Being able to adjust inputs to suit the varying soil types across Leigh Bryan's family farm has helped be more efficiently and increase overall yields.

We are thrilled to launch Case Study nine from our South Australian Grain Industry Trust project revisiting 10 early #PA adopters to see what's changed for them over the past 10 years. Download your copy here <https://spaa.com.au/portfolio-item/conversations-with-farmers-case-study-9-leigh-bryan/>

CASE STUDY NINE

Tailoring the farm by soil type

Being able to adjust inputs to suit the varying soil types across their property has helped the Bryan family farm more efficiently and increase overall yields.

204 People Reached 10 Engagements

Boost Post

2

Society of Precision Agriculture Australia - SPAA

March 3 · 🌐

It pays to be at the front of change for the Baldock family, who are currently utilising yield and protein mapping to identify soil shortfalls on their Eyre Peninsula property.

We are thrilled to launch Case study seven from our South Australian Grain Industry Trust project visiting 10 early #PA adopters to see what's changed for them over the past 10 years. Download your copy here <https://spaa.com.au/portfolio-item/conversations-with-farmers-case-study-7/>

CASE STUDY SEVEN

Reaping efficiency rewards with PA adoption

It pays to be at the front of change for the Baldock family, who are currently utilising yield and protein mapping to identify soil shortfalls on their Eyre Peninsula property.

198 People Reached 5 Engagements

Boost Post

1 Like Comment Share

Society of Precision Agriculture Australia - SPAA

January 15 · 🌐

Excited to launch Case Study #6 from our Conversation with Farmers project funded by South Australian Grain Industry Trust. Kym I'Anson #PA strategy to improve his soils is paying dividends. Read what's changed in the last 10 years for @IAnson_Farms Download your copy now <https://spaa.com.au/portfolio-item/conversations-with-farmers-case-study-6-kym-ianson/>

CASE STUDY SIX

PA used to improve soils

On-the-go pH mapping has formed an integral part of Kym and Katie I'Anson's Mid North business while also playing a critical role in improving soils.

488 People Reached 20 Engagements

Boost Post

2 2 Shares

Society of Precision Agriculture Australia - SPAA

November 13, 2019 · 🌐

Case Study 5 is now launched! CONVERSATIONS WITH #PA FARMERS – with Robin from Bulla Burre. Learn how his #PA journey has evolved over the last 10 years. Download your copy here <https://spaa.com.au/portfolio-item/conversations-with-farmers-case-study-5-robin-schaeffer/> Made possible through funding by South Australian Grain Industry Trust

CASE STUDY FIVE

PA benefits shine with scale

Setting up collaborative Farm Bulla Burre with the Gladigan family in 2009 gave Robin and Rebecca Schaeffer the scale to further explore PA technologies.

457 People Reached 18 Engagements

Boost Post

2 1 Share

GRAIN CENTRAL

SEARCH

Paddock mapping lifts yields for SA farmer

South Australia · Last 11 2020

<https://www.graincentral.com/ag-tech/paddock-mapping-lifts-yields-for-sa-farmer/>

Case study

2020 A decade of field mapping combined with satellite NDVI imagery is now helping to lead South Australia



Metrics indicate strong impressions and people reached. Each case study was shared or retweeted.

POSSIBLE FUTURE WORK

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

Farmers love to learn from farmers. SPAA conducts a members and stakeholder survey every 2 years to identify the key mediums for communicating PA. In our 2019 survey, results indicate the following preferences for learnings about PA, technology and innovation;

- 56% factsheets
- 53% case studies
- 53% regular newsletter – from previously ad hoc distribution to monthly. Given the popularity of this medium, all products are promoted through this platform.
- 49% product reviews
- 47% YouTube videos – we have since implemented “Three Minutes With....” showcasing PA projects

With this in mind, SPAA is currently developing a communications and marketing plan to address the needs of our members and stakeholders. With the most recent completed projects supported by SAGIT being factsheets and case studies, SAGIT has been instrumental in working with industry to target information.

Future ideas that will form the basis of new proposals for consideration to SAGIT include snapshots of farmers using like technology as a product review. It shall not form the basis of an endorsement, but rather encapsulating grower perceptions of technology. Software and hardware systems will be explored. We would explore the tools efficacy or application under different growing zones as well as shared journeys.

This project was opportunistic due to the effects of the COVID pandemic, resulting in information being shared to the wider SA grain growing community, and further afield.

AUTHORISATION	
Name:	Dr Nicole Dimos
Position:	Executive Officer
Signature:	<i>Nicole Dimos</i>
Date:	15/09/2020

Submit proposal 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.