



BIGG's Producer Survey Report

June 2020

Prepared by Georgie Keynes, BIGG Executive Officer

This survey is supported by the SA Murray Darling Basin NRM Board through funding from the NRM levy.

TABLE OF CONTENTS

SUMMARY	3
BACKGROUND	4
SURVEY RESULTS AND DISCUSSION	4
Q1. Farm Details	4
Q2. BIGG Relationships	5
Q3. BIGG's effect on the local farm grazing systems	5
Q4. BIGG's effect on individual skills and knowledge	6
Q5. Level of Practice Change	7
Q6. Practice Change Figures	7
Q7. Property improvements as a result of practice change	8
Q8. Communication	8
Q9. On-farm issues which BIGG could support	9
Q10. BIGG Projects for the Future	9
ADDENDIX 1 – SURVEY OUESTIONNAIRE	11



Summary

An online survey of Barossa Improved Grazing Group (BIGG) producers was conducted in June 2020 to gain feedback on how well BIGG has delivered locally specific research, development and adoption projects to benefit local land managers, and to identify emerging issues and opportunities.

BIGG members manage land with rainfall from 300mm to 610mm, they are predominantly large landholders, however there is a small percentage who are involved with smaller holdings. Sixty five percent of members run sheep, with the remainder running cattle. BIGG must ensure it delivers projects to accommodate this diversity.

The survey demonstrates that BIGG is regarded as being valuable to the farming community with strengths in providing networking opportunities and bringing resources into the area. BIGG can improve by ensuring they remaining locally relevant.

BIGG has created change, with 93% of survey respondents agreeing that being involved with BIGG has increased their capacity to make decisions and 28% strongly agreeing that BIGG has provided knowledge to change how they do things. An area for BIGG to focus on is improving skills, which rated lower than knowledge and capability.

One hundred percent of survey respondents indicated that they have made a practice change because of being involved with BIGG; 71% demonstrated a moderate change and 21% a major change. The main changes identified by survey respondents were in the following areas:

- Soil moisture monitoring/ soil testing/ fertilisers and lime
- Pasture Choices/ pasture management/ pasture improvement
- Ewe and Drought Containment
- Rotational grazing/improved timing of grazing/increased pasture usage
- Increased livestock condition/improved lambing percentage

BIGG's communication outputs continue to remain relevant and valuable with the top five preferred methods of communication being the main communication delivery mechanisms that BIGG use. This includes workshops, E-newsletter, informal farmer gatherings, webinars and conferences.

The survey identified the main issues affecting local producers which included soils, grazing management, livestock nutrition, water for livestock, pasture management and livestock technology. BIGG has targeted soils, grazing and pasture management, and can demonstrate practice change in these areas, however the other areas, particularly water for livestock is an emerging issue for the local area.

These priority issue areas are validated with survey respondents highlighting that the greatest project opportunity is in water security and infrastructure, followed by feed base management, drought recovery, soil health and soil moisture monitoring.

Many of these topics have the opportunity to be inter-related, and included with some of the lower priority areas such as precision livestock technology, pasture trials and demonstrations and soil biology and developed into one or more projects, which will provide benefits to the local farming community.

Background

BIGG's current strategic vision is for resilient landscapes and land managers with a mission to improve farm grazing systems. This was developed in conjunction with <u>BIGG's strategic plan</u> for 2019-2022.

To ensure BIGG is meeting these targets, the strategic plan details the importance of monitoring and measuring our outputs and members needs in the areas of research, development and adoption. The aim is to ensure BIGG is providing <u>locally specific</u> RD&A projects targeted to <u>benefit</u> Barossa land managers.

This is the first survey developed and delivered for BIGG members in it's 7-year history and will now be delivered annually to measure change over time. The survey results will determine if BIGG is reaching targets and provide direction for future operations. It will also be used by the BIGG Board to develop BIGG's Monitoring and Evaluation Framework.

The survey was conducted with a 10-question survey questionnaire (Appendix 1) which was developed using the survey tool SurveyMonkey and emailed to BIGG's subscribers (340) who responded to it online.

The survey results are presented and discussed in this report.

Survey results and discussion

Q1. Farm Details

Twenty-five out of 340 BIGG subscribers responded to the survey, representing seven percent of the survey pool.

The total number of hectares from all respondents was 17,000 hectares. The largest hectares managed was 5,500 with the smallest 5ha. Ninety five percent of the respondents managed land greater than 100ha, demonstrating that the majority of BIGG producers are larger land managers, however there is still a small proportion of smaller landholders who have an involvement with BIGG.

Sixty five percent of respondents managed sheep ranging from a mob of 3000 breeding ewes to 80. Cattle managers made up the remainder of the survey with herds ranging from 200 breeding cows to 5.

The average stocking rate was 8, however over half of the respondents ran an average stocking rate above 9. There were also respondents that had a stocking rate below 3, demonstrating the wide range of different regions encompassed by the BIGG area. This is further quantified with rainfall figures with the highest being 620mm per annum and the lowest 300mm per annum.

Q2. BIGG Relationships

Over half of the respondents had been involved with BIGG since 2012. The remainder had been involved with BIGG for between 3 and 5 years.

This demonstrates that BIGG maintains good relationships with the producer members.

There are very few new members surveyed, with no respondents having a relationship for less than 2 years. This provides an area which BIGG should focus on to ensure the membership can continue into the future.

Q3. BIGG's effect on the local farm grazing systems

With all areas scoring 'strongly agree' and no area receiving a 'strongly disagree', the results indicate that BIGG is performing well in all areas.

BIGG's strengths in improving local farm grazing systems are in bringing resources into the area with over 76% of participants strongly agreeing (Figure 1), this is followed by providing networking opportunities with 69% strongly agreeing. This is followed by being a well run organization.

Areas which BIGG could improve on include supporting the needs of local farmers, with a low weighted average of 4.3 and becoming a more valuable resource for local farmers with a weighted average of 4.4.

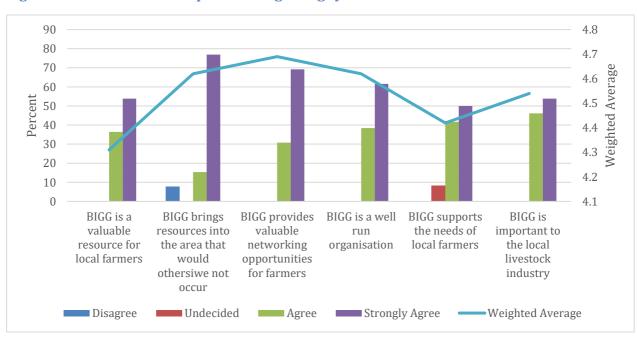


Figure 1: How does BIGG improve farm grazing systems in the area?

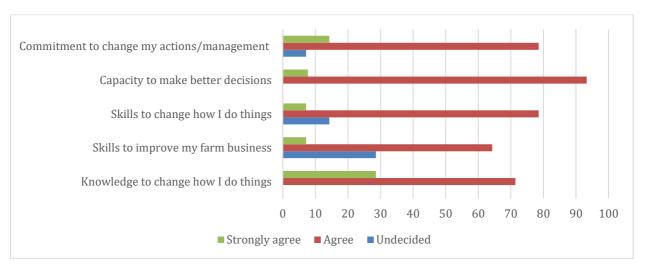
Q4. BIGG's effect on individual skills and knowledge

All survey respondents agreed that BIGG has improved their individual capacity and knowledge. The strongest areas include 'knowledge to change how I do things' with 28% strongly agreeing.

Ninety three percent of participants strongly agree that being involved with BIGG has increased their capacity to make better decisions (Figure 2). This is followed by 73% agreeing that BIGG has increased a commitment to change actions and management.

An area which BIGG needs to focus on is increasing skills, with both skills questions rating higher in the undecided category with 28% for improving farm business and 14% changing how I do things.

Figure 2: Increased in individual skills and knowledge as a result of interactions with BIGG

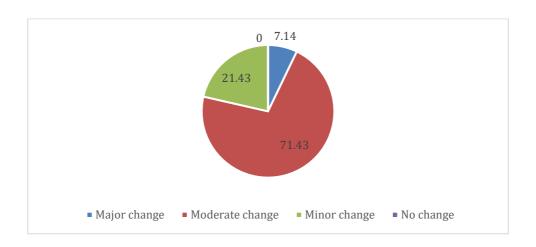


Q5. Level of Practice Change

One hundred percent of survey respondents have made changes as a result of being involved with BIGG. The greatest value was a moderate change with 71%, followed by 21% making a major change and 7% a minor change (Figure 3).

These figures will provide a good benchmark to continue monitoring BIGG's performance into the future.

Figure 3: Increased in individual skills and knowledge as a result of interactions with BIGG



Q6. Practice Change Figures

The results (Table 1) demonstrate that the total area of land affected by practice change in 3,545ha, which is 24% of overall area surveyed.

The total number of livestock affected are the same as the total number of livestock on each of the respondents property, so has not been reported in the results.

Table 1: Total area improved as a result of practice change

Total Ha surveyed	Total Ha Improved	Percentage
14295	3,545	24%

Q7. Property improvements as a result of practice change.

Survey respondents gave feedback how they have improved their property as a result of involvement with BIGG. The improvements listed a number of times include the following (number of responses indicated by the number):

- Soil moisture monitoring x 4
- Soil testing/soil amelioration/fertilisers to maintain soil nutrient levels x 4
- Pasture choices/ pasture management/ pasture improvement x 3
- Ewe and drought containment x 2
- Rotational grazing/improved timing of grazing/increased pasture usage x 3
- Increased livestock condition/improved lambing percentage x 2

Other responses included:

- Oestrogenic clovers
- Tree planting
- Broadleaf weed control through grazing management
- Improved ground cover
- Improved pasture utilisation
- Drought management

Q8. Communication

Communication plays a large role in BIGG's operations. The top five preferred method of receiving BIGG information (Table 2) to improve farming systems is through:

- 1. Workshops,
- 2. E-newsletter
- 3. Informal farmer gatherings
- 4. Webinars
- 5. Conference

Surprisingly Facebook is one of the least preferred method of communication, with Youtube videos scoring higher.

Table 2: Preferred method of communication of BIGG information*

Communication type	Score
Facebook	6
Webinar	10.67
E-newsletter	11.46
Website	9.38
Workshop 1 day session	11.64
Informal farmer gathering (ie pasture walk)	11.09
Other farming group (ie Ag Bureau)	8.75
Conference	10.29
Industry specific course	9.18
Newspaper articles	6.63
Re-seller advice	4.71
Farm Consultant advice	8
Youtube videos	6.25

^{*}Respondents were asked to rank the top 5 communication methods.

Q9. On-farm issues which BIGG could support

Survey respondents provided the top five on-farm issues affecting farming businesses. The top six responses based on a weighted average (Table 3) (the top 5 and 6 scored the same weighted average) were:

- 1. Soils
- 2. Grazing management
- 3. Livestock nutrition
- 4. Water for livestock
- 5. Pasture management
- 6. Livestock technology

Table 3: On Farm issues affecting local farming businesses

On Farm Issues	Slightly important	Highly important	Weighted average
Pasture Management	33.33	58.33	2.5
Grazing Management	8.33	83.33	2.75
Water for livestock	40	60	2.6
Soils	10	90	2.9
Livestock nutrition and health	18.18	72.73	2.64
Re-vegetation and improving biodiversity	60	30	2.2
Native pastures (improving production)	30	50	2.38
Livestock genetics	30	50	2.3
Pest plant and animals	33.33	55.56	2.44
Innovative technology- Pastures	37.5	50	2.38
Innovative technology- livestock	30	60	2.5
Adaption to climate change	60	40	2.4
Mental health	57.14	42.86	2.43
Business Management	62.5	37.5	2.38
Non livestock farming industries (grapes or crops)	33	44	2.22

Q10. BIGG Projects for the Future

At the previous strategic planning sessions in 2019 BIGG developed a list of areas to focus on for future project opportunities. Respondents were asked to either agree, strongly agree or indicate that the issue was not important.

All 21 project areas received an agree or a strongly agree, which demonstrates that these projects are relevant to the local community. The areas which BIGG should focus on, as determined by the top five weighted average (Table 4- denoted in dark blue) are:

- 1. Water security and infrastructure
- 2. Feed base management (pasture varieties and species/ grazing crops)
- 3. Drought recovery
- 4. Soil Health
- 5. Soil Moisture Monitoring

The following topics were above the weighted average mean value (2.33), but not in the top five (Table 4- denoted in light blue). These are the topics BIGG should continue to be aware of. These topics include:

- profit drivers for animal production
- containment areas
- pasture trials and demonstrations
- soil biology
- precision livestock- technology
- managing climate change and variability

All of the remaining topics still received at least an agree or a strongly agree, demonstrating they are still of interest to the local community so must continue to remain on the project list.

There were no further comments as to other project opportunities.

Table 4: Project areas to focus on in the future*

	Not		Strongly	Weighted
Project Area	important	Agree	Agree	Average
Grazing management	9.09	54.55	36.36	2.27
Feedbase management	0	27.27	72.73	2.73
Oestrogenic clover	30	60	10	1.8
Pasture Trials and demonstrations	0	50	50	2.5
Soil health	0	45.45	54.44	2.55
Soil biology	8.33	41.67	50	2.42
Precision Tech- pasture	9.09	63.64	27.27	2.18
Precision tech- livestock	8.33	33.33	58.33	2.5
Stock repro and improvement	18.18	36.36	45.45	2.27
Managing climate change and				
variability	0	54.55	45.45	2.45
Soil moisture monitoring	7.69	30.77	64.54	2.52
Native pasture management	10	70	20	2.1
Landscape management	20	60	20	2
Sheep	27.27	36.36	36.36	2.09
Cattle	22	55.56	22.22	2
Drought recovery	0	40	60	2.6
Containment feeding	0	58.33	41.67	2.42
Profit drivers for animal production	0	50	50	2.5
Integration of crops and livestock	25	37.5	37.5	2.13
Water security and infrastructure	0	22.22	77.78	2.78
Mental health	0	70	30	2.3

^{*}Top five weighted average denoted in dark blue, everything else above the mean denoted in light blue, under the mean denoted in white.

Appendix 1 – Survey Questionnaire

Please help us!

BIGG has been working with producers for over 7 years.

Please complete this 5 minute survey to help us remain relevant and provide the information you want to improve your farming system.

All responses will remain anonymous so please be honest.

1. Farm details	(onl	y what you	are com	fortable	providing)
-----------------	------	------------	---------	----------	------------

Closest Town	
Rainfall (mm)	
Average stocking rate (DSE/Ha)	
Number of breeding ewes	
Number of breeding cows	
Other livestock	
Total number of ha managed	
Total ha cropped	
Total ha grazing	
Total ha other (eg grapes)	

Your relationship with BIGG

BIGG's mission is to improve farm grazing systems- how have we improved your farm grazing system?

2. BIGG began in 2012. How many years have you been involved with BIGG?

3. How does BIGG improve farm grazing systems in the community?

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
BIGG is a valuable resource for local farmers	0	0	0	0	0
BIGG brings resources into the area which would not occur otherwise	0	0	0	0	0
BIGG provides valuable networking opportunities for farmers	0	0	0	0	0
BIGG is a well-run organisation	0	\circ	0	\circ	0
BIGG supports the needs of local farmers	0	0	0	0	0
BIGG is important to the local livestock industry	0	0	0	0	0

4. How does BIGG support your farming system? Participation with BIGG has increased my: Strongly Disagree Disagree Undecided Agree Strongly Agree Knowledge to change how I do things Skills to improve my 0 0 farm business Skills to change how I do things Capacity to make \bigcirc \bigcirc better decisions Commitment to change my actions/management 5. As a result of your involvement with BIGG, what level of change have you made to your property management practices Major change Moderate change Minor change No change Unsure Other (please specify) 6. Can you put a figure on the practice change? Hectares of land improved Number of sheep affected Number of cattle

7. Can you list 3 of the ways you have improved your property?

1
2
3

affected

Other

8. Please rank (top 5) how you prefer to access information to help improve your farming system

≣∣	\$	Facebook
≣∣	‡	Webinar
■	‡	E-newsletter
■	‡	Website
■	‡	Workshop-1 day session
≣	\$	Informal farmer gathering (ie pasture walk)
■	\$	Other farming group (ie Ag Bureau)
■	\$	Conference
≣∣	\$	Industry specific course (ie Lifetime Ewe)
■	\$	Newspaper articles
≣	\$	Re-seller advice
≣	\$	Farm consultant advice
≣∣	‡	Youtube videos
≣∣	‡	Other

9. What are the most important issues affecting your business that BIGG could support? Don't need to rank alljust choose 5

	Not important to my business	Slightly important	Highly important
Pasture management (ie sowing, fertiliser, machinery)	0	0	0
Grazing management (stocking rates, livestock requirements, feed budgeting)	Ο	0	0
Water for livestock (security, infrastructure)	0	0	0
Soils	0	0	0
Livestock nutrition and health	0	0	0
Re-vegetation and improving biodiversity	0	0	0
Native pastures (improving production)	0	0	0
Livestock genetics	0	0	0
Pest plant and animal	0	0	0
Innovation and technology- pastures	0	0	0

Innovation and technology- livestock	0	0	0
Adaption to climate change	0	0	\circ
Mental health	0	0	0
Business management	0	0	\circ
Non livestock farming industries (e.g. grapes or crops)	0	0	0
Other (please specify)			

10. BIGG current list of focus projects are as follows, what projects would you like to see BIGG focus on (please choose at least 5):

	Not important to my business	Agree	Strongly Agree
Grazing management (e.g. rotational grazing, grazing timing, pasture utilisation)	0	0	0
Feedbase management (e.g. pasture type and variety selection, grazing crops)	0	0	0
Oestrogenic Clover	0	0	0
Pasture trials and demonstrations	0	0	0
Soil health and management (acid soils, erosion)	0	0	0
Soil biology	0	0	0
Precision technology for pastures (biomass measurement, soil mapping, telemetry use)	0	0	0
Precision technology for livestock (virtual fencing, EID, stock handling technology)	0	0	0
Stock reproduction and improvement (e.g. stock selection, identification of high performers, genetics, ASBVs)	0	0	0
Managing climate change and variability	0	\circ	0
Soil moisture monitoring of grazing systems, 4 local weather stations, improve knowledge and use	0	0	0

Native pasture management- native grass nurseries, improving production on established pastures	0	0	0
NRM, landscape management and biodiversity- creating biodiversity 'corridors' across the local landscape	0	0	0
Sheep- (e.g. improving lamb survival, mulesing, use of electronic identification, low stress stock handling)	0	0	0
Cattle (improving production system, feed budgeting)	0	0	0
Drought recovery- pastures, livestock, water	0	0	0
Containment feeding- sheep and cattle	0	0	0
Profit drivers for animal production	0	0	0
Enterprise benchmarking	0	0	0
Integration of crops and livestock	0	0	\circ
Water security and infrastructure	0	0	0
Mental health	0	0	0
Other (please specify)			