



# Fleurieu Beef Group Inc.

# Annual report 2021

Incorporated May 31<sup>st</sup> 2000

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### FRONT COVER:

David Radley (*left front*), Bendigo Bank Fleurieu Relationship Manager presents Fleurieu Beef Group Inc., with a new projector and screen as part of their community support program. The new screen was immediately put to good use at the meeting. Venue for this meeting was the property of Tom and Susan Adams.

## A Brief History

In 1995 local agricultural service providers Tim Prance and Simon Ellis were commissioned to run a new course called “Prograze”; an eight session program delivered over several months and addressing the issues of pasture quality and quantity, together with animal requirements and performance. This program was delivered as a pilot course to two groups of livestock farmers; one situated on the western side of the Mt. Lofty Ranges, in Mt. Compass area and the other on the eastern side of the ranges, centered in the Port Elliot Mt. Jagged area. The Mt. Compass group comprised mainly cattle producers, whilst the other was a more diverse group in which there were both sheep and cattle producers.

At the conclusion of the Prograze course, the Mt. Compass group resolved to continue meeting through 1996 under the name “Mt. Compass Beef Discussion Group” Cattle producers from the Port Elliot Mt. Jagged area were invited to attend and thus in “Embryonic” form of the Fleurieu Beef Group was began. At a meeting on the 17th December 1996 the records show members in attendance : Margaret Sweeney, Elaine Trevilyan, Susie Gillies, Ian Gillies, Richard Lawrence, Geoff Davis, Mark Higgins, Rory Fitzpatrick, Brian Sinkinson, Kevin Young, Richard Wilson, Adrian Burton, with Tim Prance, Mike Boerema, Doug McLaren, Brian Codd, Neil Arthur recorded as apologies.

At the end of 1996 a name change for the group was suggested in order to better reflect the wide spread of producer’s properties over the Fleurieu Peninsula. Thus early in 1997 the Fleurieu Beef Group was born, with Geoff Davis as Chairman and Adrian Burton as Secretary -Treasurer. Meetings were held in the mornings of the third Tuesday’s of each month and this pattern has continued to this day.

The inaugural chairman Geoff Davis held the office until his retirement in December 2009, whilst the offices of secretary and treasurer were held at various times by Adrian Burton, Althea Grove, Richard Wilson and Michelle Sinkinson. Barb Voysey was appointed to the secretary-treasurer office in December 2001 and continued for sixteen years, retiring in 2017. The vice chairman office, held by Rory Fitzpatrick till December 2009, when he was appointed Chairman and upon his retirement in December 2015, Geoff Bowles was appointed to this office, retiring in December 2017. Mark Higgins followed on and remains chairman to the present day.



In addition to monthly meetings, farm walks, guest speakers, various tours and farm training courses, the Group has always had a strong research and development arm. In 1998 a four year trial “Tools for Grazing Strategies” was launched at “Kimberly Park” Yundi, the home of Richard and Di Wilson. The trial investigated the effects on pasture production and profit from various fertiliser applications and stocking rates as compared to the district average of both.

The years 2000 -2008 saw many significant funded projects undertaken which resulted in important outcomes on member’s properties and also on the whole Fleurieu Peninsula. Partnerships with Creation Care and Dung Beetle Solutions International saw the Group complete \$540K of funded projects for dung beetle establishment, and environmental works addressing fencing, revegetation and erosion control. Success was such that the beetle *Bubas bison*, which was first released onto member’s properties, is now considered established over the whole Peninsula. The publication “Identifying Dung Beetles on the Fleurieu Peninsula” was also produced in 2003.

In addition to the partnerships mentioned above, the Group has maintained strong links with the Mt. Compass School, The University of Adelaide Roseworthy Campus and both the Natural Resource Management Boards in our region. In recent times we have also forged close links with Climate and Agricultural Support and Fleurieu Farming Systems Inc. In 2019 the Fleurieu Beef Group Inc. website was launched: <https://www.fleurieubeefgroup.com/>



# **FLEURIEU BEEF GROUP**

## **SGS Tools for Grazing Strategies SUSTAINABLE GRAZING SYSTEM**

### **Two Regional Demonstration Sites**

## **ROTATIONAL GRAZING SYSTEM & SEEDING ON SANDS PROJECT**

**1999**

### **OPEN DAY**

**Monday 6th September**

**10am to 12 mid day  
Kimberley Park  
Yundi Road  
Mt Compass**

**12md to 1pm  
Lunch  
Sausage Sizzle**

**1pm to 3pm  
Tusmore  
Goolwa Road  
Mt Compass**

The Fleurieu Beef Group invites your attendance at this year's open day of its two project sites near Mt Compass. By adopting effective pasture utilisation and optimising pasture nutrition and cost effective control of pests and weeds the Kimberley Park Trial Site demonstrates the effect of a Rotational Grazing System on profitability and productivity.

Expect how pastures respond to weed spraying and additional fertiliser evidenced by the added weight gains in cattle grazing these areas.

The Tusmore Site has been set up to compare a range of techniques to establish perennial grass/subclover pastures in deep acid sandy soil which is common to the Fleurieu Peninsula. This trial will also demonstrate the effectiveness of clay spreading, pasture preparation and weed control for these type of soils.

Geoff Davis  
Chairman

**Enquires to** G Davis 8554 7214  
Kimberley Park R Willson 8556 0215  
Tusmore B Sinkinson 8556 8355

**beeflver.wps**

## Vision, Mission, Objectives and Purpose

### **Vision Statement \***

To be the first port of call for beef producers on the Fleurieu Peninsula to create sustainable, premium beef products for future world markets.

### **Mission Statement \***

To equip members of the Fleurieu Beef group to contribute to the local, state and national economies, through the production and sale of high quality beef products, on farms exemplifying health of the land, the livestock and the people.

### **Objectives and Purpose** (as per Constitution 2015)

- To identify and utilise methods of improving productivity of pastures.
- To identify and utilise cost effective control of pests and weeds.
- To promote effective pasture utilisation and optimisation of pasture nutrition.
- To identify and utilise methods of improving farm profitability.
- To promote improved farm property management and sustainable grazing systems.
- To encourage and promote the use of on farm quality assurance.
- To solicit aid from various statutory or sponsorship bodies for projects to benefit sustainability of farm practices.
- To facilitate co operation with various statutory bodies and sponsorship groups who may give support to the Group for various programs or projects or trials.
- To educate and inform members of the community through informative meetings, seminars or field days.

(\*) *subject for review*

## Officers and Members

### Officers

Mark Higgins - *Chairman*

Cherry Macklin - *Vice Chairman and Program Secretary*

Melissa Rebbeck - *Secretary*

David Macklin - *Treasurer*

### Life Members

Geoff Davis

Barb Voysey

Tim Prance

Mark Higgins

### 20 Year Members

Geoff Bowles

Richard Lawrence ●

Mark Higgins ●

Tim Prance ●

Austin Johnson †

Terry Sweetman ●

Richard Willing

Richard Wilson ●

(●) Foundation Member  
(†) Deceased

### Members

Tom Adams

Bradley Arthur

Geoff Bowles

David Dawes

Janet Furler

Richard Lawrence

Robin Smith

Terry Sweetman

Richard Willing

Richard Wilson

David Ambrose

Alistair Coles \*

Tom Cosentino

Keith Fryer

Philip Jacques

Nan Mann

Sandy Nott

Jason Patullo

Stephen Rogers

John McEvoy

Chelsea Parker

Peter Read \*

Peter Rumbold

Stephen Schmitz

Andrew Robinson

Rory Simpson \*

Geoff Stuckey

Matthew Viney

(\*) NEW MEMBER





MARK HIGGINS RECEIVES LIFE MEMBERSHIP AWARD FROM FOUNDATION MEMBER RICHARD WILSON.





CHAIRMAN MARK HIGGINS PRESENTS 20 YEAR MEMBERSHIP CERTIFICATE TO AUSTIN JOHNSON



DAVID GREENHOUGH (CHAIR HILLS & FLEURIEU LANDSCAPE BOARD) PRESENTS 20 YEAR MEMBERSHIP CERTIFICATES TO TIM PRANCE, MARK HIGGINS, RICHARD WILLING, RICHARD LAWRENCE, TERRY SWEETMAN, RICHARD WILSON. (LEFT TO RIGHT)

GEOFF BOWLES AND AUSTIN JOHNSON ABSENT.

## **Fleurieu Beef Group Inc.**

### **Chairman Report**

Welcome all members and guests to the 2021 AGM, which also celebrates the 25th anniversary of the Fleurieu Beef Group; a wonderful outcome which is the result of member commitment and contribution, combined with diligent executive committees who have pursued the vision that has carried us to the success of today. Thank you to our hosts, David and Cherry Macklin, who have again opened their beautiful property and iconic woolshed to us all.

Your executive committee has met twice this year, on 29th January to review our system of efficiently working as a team and to plan for the year ahead and on the 5th November to plan for this AGM and the 25th celebrations to follow. It has been my pleasure to co-work with the team of Melissa Rebbeck, Cherry Macklin and David Macklin, who have diligently carried out their responsibilities and delivered the program we have all enjoyed this year. When Melissa has been absent due to other work commitments, Tom Cosentino and Richard Lawrence have kindly recorded the meeting minutes; thank you both. David Macklin, in addition to the usual treasurer functions, has also successfully administered the change of our banking to Bendigo Bank; thank you.

The program delivered this year was excellent as testified by member's feedback and attendance, which has averaged twenty three per meeting, including guests. This must be something of a record in the twenty five years the Group has been operating. However one cannot help but wonder whether the main attraction has rather been Nan Mann's famous morning teas, which we all enjoyed.

Venues for meetings have been spread over a wide area of the Fleurieu Peninsula, from Ashbourne to Willow Creek. In addition to meetings at the Tooperang Memorial Hall, the following members kindly opened their properties to the Group; Andrew Robinson, David and Cherry Macklin, Stephen Rodgers, Tom Cosentino, Tom Adams, Richard Willing and Janet Furler. Additionally the owners of "Kensington" at Mount Jagged also kindly opened their property for the May meeting.

Four of the ten meetings held have been associated with the Technology Project, which will continue through 2022, concluding in May. An additional feature of this particular project was the offer for members to undertake additional business training, which was delivered in the form of a “Livestock Enterprise Workshop” .Approximately 25% of the membership attended, finding the day challenging and rewarding, and upon completing the necessary application forms, the door opened to further funding, which has resulted in timely livestock handling upgrades on their properties. At this point I must acknowledge and thank Tim Prance for his diligent support and oversight of this project, both through his consultancy and also his membership; for his contribution has definitely exceeded the contractual obligations.

The three species dung beetle project, ruled off in July last year, is still included in this year’s Annual Report, because it was realised that we were on the verge of important break throughs and it was decided to continue the work on a voluntary basis, with oversight from Creation Care. Two very important successes have materialised as the result of this continuance:

Firstly the concept of small dung beetle colonies, multiplied in controlled environments through the use of on farm nurseries, and then strategically harvesting new donor colonies for transfer to other farms in the region, whilst still maintaining a viable host colony, has shown much promise. As chairman, having a long term personal interest in working with dung beetles, this work by members is a great delight and I want to thank Andrew Robertson, whose vision and enthusiasm, has been a major contributor to the success.

Secondly the work with the beetle *Bubas bubalus*, in contrast to that with *Onthophagus vacca* mentioned above has proven more complicated with large variations in nursery results. Opportunities have thus arisen for trialing and testing what we believe to be the most suitable nursery site conditions and these trials are currently under way. Having said this, three of our members; David Ambrose, Terry Sweetman and Cherry Macklin, all achieved outstanding results with this beetle in their nurseries which has enabled, what we believe to be the first release of farm bred *Bubas bubalus* in Australia! My heartiest congratulations. The Fleurieu Beef Group gladly acknowledges the critical oversight of Creation Care, without whom these successes would have been extremely unlikely.



It may be noticed in the “Offices and Members” section of the annual report, that the 20 year member Austin Johnson is deceased. Austin was too unwell to attend last year’s AGM, where the official presentation of the 20 year membership certificates took place, but later in January Lynette and I were privileged to visit and personally present the certificate. The photo of this presentation (page 9) was taken just a few weeks before his passing and his wife Joy contacted us expressing the great delight the award was for Austin. Austin hosted two meetings at his Back Valley property, where his presentations on the cattle aspects of his business were presented with a very keen engineers mind. A man who spoke his mind and significantly contributed to the Group; he will be sadly missed.

Two members of the Fleurieu Beef Group have received high public honors this year and I would like to take this opportunity to acknowledge and congratulate them both. Richard Willing was awarded the medal of the Order of Australia for services to conservation and the environment. The caliber of his contribution can be somewhat gained, considering that independently and separately Richard also received the prestigious 2021 Nature Conservation Award! Tom Cosentino was the South Australian winner of the very competitive 2021 Cattle Council NAB Agribusiness Rising Champions Initiative; “an unrivalled opportunity for beef industry participants aged between 21-40 to kick start their personal career development and network with industry and government representatives”. We appreciate the contribution Richard and Tom bring to the Beef Group.

I would remind members, especially those new to the Group; Peter Read, Rory Simpson and Alistair Coles, that through the diligent efforts of Chelsea Parker a suite of merchandise, including shirts, vests, jumpers and hats are now available for order; all having the FBG logo embroidered. A range of mugs and caps will soon be available. Thank you and well done Chelsea!

The 25th anniversary celebrations have obviously involved greater preparations than that of previous December meetings and it has been a delight to see members, family and associates pulling together in order to achieve the planned outcomes. Thank you to Stephen Schmitz, who again has kindly volunteered to source meat and cook the BBQ. To my dear wife Lynette, son Philip and his wife Kendall, who have sourced decorations, baked cakes and generally helped with the logistics of today, thank you. Jeff Edwards (Landscapes SA) has kindly waved his” magic

wand” over our draft Annual Report and produced a publication commensurate with our 25th anniversary; thank you Jeff.

May you all enjoy our celebrations; considering those who have established and maintained the relevance of the Group through all the years; those outside the Group who have given their time to help us, and the current membership whose commitment will take us into the future. This year has seen a lot of turmoil and uncertainty in Australia and the World, but let us be mindful of the Angel’s message on that first Christmas when the Christ child was born, ‘Glory to God in the highest, and on earth peace, goodwill toward men”.

Happy Christmas and New Year to you all,

*Mark Higgins*



FBG MEMBERS ATTEND A FIELD DAY LOOKING AT PASTURE AND SOIL HEALTH (MAY 2017)

## Secretary Report

The 2021 year has brought about many opportunities for FBG members, with exposure to bull selection, insurance, carbon farming and ag tech opportunities. There is no doubt that FBG members experience a broad cross section of activities and information to support the growth of their businesses. In addition, the connectivity between members' means additional value and input is provided with help on hand if needed.

We have been particularly fortunate in 2021 with record prices for beef coupled with the fact we have enjoyed freedoms in SA due to good Covid 19 management. In addition, as we live on the land, we have sparseness to enjoy on the beautiful Fleurieu rich in biodiversity.

I have been privileged to witness our FBG producers being exceptional custodians of their own properties and biodiversity taking a keen interest in sustaining and regenerating it for future generations. Our members have grown their awareness of the need to conserve the top 10cm of the soil as it sustains most life on earth and is also the backbone of production and profitability. FBG have been involved in many carbon farming activities as referenced by our chairman's article. I predict that the Australian Carbon Credit Unit will have an increasing impact on how we farm. It is currently icing on the cake with the extra carrot to improve soil carbon with a current record price of \$37 per tonne up from \$16 per tonne just 6 months ago. Now is an exciting time as we can not only improve our soil health and productivity, but we can also get paid for the increase of carbon through activities we are already doing including dung beetles, increased grazing intensity, multispecies pastures, ground cover management and more. It will be interesting to read this article back in 5 years' time and see where the ACCU price gets to.

Through my final analyses of the dung beetle/biochar project, I was overwhelmed to see that we could build soil carbon by 4tonne/ha within 9 months. Under the current ACCU if this method was used to build soil carbon it could mean a payback of \$543/ha just by feeding biochar through cattle. This project also showed addition of biochar to the dung compared to dung alone being buried by dung beetles increased pasture production, provided up to 10mg/kg more fungi and 34mg/kg more available phosphorous, higher ME, more molybdenum and more sulphur. The final report is on the FBG web site.



As many of you know I have always been motivated by carbon drawdown and the opportunities this provides me as a beef grower and more widely for agriculture and circular economic improvement. I have been exploring opportunities in this area through my many roles as a researcher, consultant, elected member and the 10 boards and groups I am part of. This has led me to some amazing opportunities and has also kept me extremely busy. I therefore need to step back as the secretary for the FBG for now. I will though continue to be a member of FBG and bring project opportunities and programs to the group when they arise. I will maintain my stakeholder relationships and assist the new secretary as much as possible.

My personal opinion is that there should be movement on the executive board for various reasons; to share the workload, allow new information, new opinions, fresh blood and dynamics flow through. Hence when a certain person with potential secretarial or board talent comes into the group, I feel we need to do all we can to nurture them, encourage them and support them to take on leadership roles. As a very capable person now provides this opportunity, I know you and they will be in fabulous hands. I am certainly not leaving, just taking a step sideways for a moment to catch my breath.

I thank all FBG members for allowing me to be your secretary over the last 4 years. Thanks also for your interest in the various initiatives I have brought to the group and for your friendships and support. Thanks also the executive Mark Higgins, Cherry Macklin and David Macklin for all of your hard work. Thanks to Tom Cosentino and Richard Lawrence for filling in as secretary when I have not been available. I am much more enriched to have worked with all of you and very grateful.

I do look forward to coming to meetings with less on my plate and with the opportunity to socialise and talk about cattle more. I wish you all a Merry Christmas and a fantastic and prosperous 2022.

Yours sincerely

*Melissa Rebbeck*



## FBG Financial statement of the year ending June 30, 2021

### Income

	\$
Membership subscriptions	2850
Technology Project Grants	25 000
Interest received	5
<b>Total</b>	<b>\$ 27 855</b>

### Expenditure

Honorariums	1 440
Bank fees	28
Morning Teas	120
Hall Hire	230
Technology project acquittal	5 836
Secretarial services	211
Christmas meeting costs	312
<b>Total</b>	<b>\$ 8 177</b>

### Surplus

<b>Total (income minus expenditure)</b>	<b>\$ 19 678</b>
-----------------------------------------	------------------

### Balance Sheet at 30th June, 2021

Accumulated funds 1st July, 2020	4 427
Surplus for the year	19 678
<b>Represented by Bendigo / Beyond Banks</b>	<b>\$ 24 105</b>

## Projects

### Field testing of three new dung beetle species on the Fleurieu Peninsula

Project began in September 2019 in partnership with Creation Care and funding of \$29 850 GST exclusive from the South Australian Government 'Supporting Sustainable Primary Production' Grant through Natural Resources AMLR NRM Board. Projected end date June 2020 with ongoing works proposed.

Purpose: To improve beef farm grazing capacity and resilience, and reduce the impact of cattle dung carbon and nutrients in water bodies and the atmosphere by-

- On nine pilot farms establishing three new spring active dung beetle species, *Onthophagus vacca*, *Bubus bubalus* and *Copris hispanus*.
- Developing beef producer's knowledge of rearing and managing dung beetles.
- Providing farmers with a "seed stock" of these new dung beetle species in order to breed more beetles for release on their farms.
- Defining optimal environmental conditions for all three new species so that future beetle release sites can be selected that match the beetle's requirements.



*O. vacca*

*B. bubalus*

*C. hispanus*

(Photos courtesy of Creation Care)

The final report for this project was tabled 8<sup>th</sup> July 2020 and is available on the Fleurieu Beef Group website. Field results enabled all the objectives listed above to be achieved and the report is highly



recommended as a breakthrough for establishing dung beetles on farms through the use of nurseries and relatively small colonies.

Creation Care and the South Australian Government, together with Fleurieu Beef Group members, who diligently managed the nurseries over several months, are all to be congratulated for delivering such a successful collaborative approach to the an important problem.

Although this project “officially” was ruled off in mid-2020, it was realised that we were on the verge of major breakthroughs with the beetles *Onthophagus vacca* and *Bubas bubalus*. Thus with oversight from Creation Care, several members kindly volunteered to continue the work on their properties and this effort continues today. The important results achieved thus far may be summarised as follows:

**O. vacca.** From the project successes, members realised that the successful nursery multiplication of beetles on their farms could be used as “mother ships” - able to send satellite colonies of beetles to other farms in the region, where they would be placed in nurseries for multiplication. This process has begun and should be repeatable indefinitely, site conditions considered.

**B. bubalis.** These beetles proved more difficult to multiply than *O. vacca*, with large variations in members results. However this important information has provided a basis for further studies which are continuing today. Three members achieved very good rates of multiplication which has resulted, in what we believe, the first release of farm bred *B. bubalus* in Australia.

## Producer Technology Group Project

July 2020 marked the commencement date of this two year project which is funded to the tune of \$25,000 by the South Australian Government through the Minister for Primary Industries and Regional Development. Fleurieu Beef Group invited other livestock producers from the region, to join us in this important venture and Tim Prance of T Prance Rural Consulting is the overseeing consultant.

Areas of investigation are broad; including water, soils, pasture, livestock handling, genetics and other topics of Group interest. A plan of events has been established and it is anticipated to hold at

least eight sessions over the two years. At the outset a SWOT analysis of farms was carried out and this was followed up by a session on using electronic identification to source individual animal carcass and feedlot performance.

The 2021 program is included in this report, where the areas of investigation are recorded and the project continues into 2022; a feature being a planned bus trip to the Struan Research Centre and a beef farm practicing technologies associated with this project. Through the year several members participated in the “AgTec Rebate” scheme where a workshop and rebate scheme, offered as an extra to the project, enabled members to purchase hardware, software and particular training at 50% to 75% discounts on normal purchase prices.



MEMBERS TOOK THE OPPORTUNITY TO UPDATE THEIR CATTLE CRUSH AND AUTOMATED WEIGHING SYSTEMS AS PART OF THE AGTEC REBATE.

## 2021 FBG Program

DATE	VENUE	TOPIC	ACTIVITY	CONTACTS
16-Feb	Seven Oaks' Back Valley Rd, Back Valley	Remotely monitoring stock and water supply	Farm walk	James De Barro, Alpha Group - Keith Ph: 0417 946 053
16-Mar	Cliff Farm, Green Road, Ashbourne	Carbon mapping and biochar trail	Dug soil sample, took PH and discussed soil composition	Melissa Rebbeck Ph: 0427 273 727 and Ed Scott Ph: 0403 313 741
20-Apr	Ridge Road, Parawa	Internet connectivity	Farm visit and discussion	Mike and Dan Hayes, In2it - Naracoorte Ph: 08 8762 4587
18-May	Kensington' Woodcone Rd, Mt Compass	Bull selection & Assessment	Examined and compared several bulls in the yards	Joel Stuart Ph: 0401 914 969
15-Jun	3957 Victor Harbor Rd, Hindmarsh	Using satellite imagery to assess pasture growth	Measured pasture and set up app on phones	Phil Tickle, Cibo Labs Ph: 0437 593 037
July	CANCELLED DUE TO COVID			
17-Aug	Tooperang Hall	Farm occupational health and safety	Discussed procedures and liabilities relating to agriculture	Colin Stephan Ph: 0427 406 039
21-Sep	Blackfellows Creek	Lawrie & co increasing soil carbon and carbon credits		Peter Davidson Ph: 0407 992 532 and Mathew Denton Ph: 0417 847 993
19-Oct	Springmount Rd, Hindmarsh Tiers	EBVs	Compared bulls in cattle yards	Penny Shulz Ph: 0417 853 094
16-Nov	Tooperang Hall	Fatness and resilience In cattle and genetics	2 Roseworthy students Maddie and Phoebe gave presentations	Professor Wayne Pitchford Ph: 0418 809 688
21-Dec	Cliff Farm, Green Road, Ashbourne	AGM 25th celebrations		Hon. David Basham





## 7 ways FBG have paved the way for carbon neutral beef

By Mark Higgins- chairperson FBG Inc.

The concept of neutral net Carbon emissions has been circulating in the scientific community for several years, but through 2021 it has become an issue spoken of by politicians and the wider community. Though the presence of Carbon in the atmosphere (CO<sub>2</sub>) is widely known to be essential to all plant life, and thus animal life, including our own, it is the excess above certain thresholds which scientists state will lead to detrimental climatic conditions upon the Earth. Other gasses such as methane (CH<sub>4</sub>), which enters the atmosphere from many different sources including cattle, who burp it out of their mouths as a consequence of their digestive processes, are known to be major contributors to these detrimental climatic conditions.

Since its earliest beginnings Fleurieu Beef Group members have been involved in a variety of trials, strategies and on ground works, which although they appear insignificant on their own in mitigating greenhouse emissions, yet when combined into a management package provide real means of contributing to Carbon neutral beef production on their farms. Although not an exhaustive list, the following will give the reader an indication of the trials, works and ongoing developments which are taking place on member's properties today.

1

### Removal of CO<sub>2</sub> from the atmosphere by woody vegetation

Through the process of photosynthesis, woody plants like Australian natives, remove carbon from the atmosphere and store it in their above and below ground masses, thus creating a net draw down and storage of atmospheric carbon (CO<sub>2</sub>). This effective carbon sink is utilized by members of the Fleurieu Beef Group when they revegetate gullies, hills, water courses, erosion sites and poorer land class areas that are unsuitable for cattle production. These areas also provide shelter and comfort for the cattle, enhancing weight gains whilst also providing important wild life corridors for the movement and spread of native species across the landscape.



PLANTING ESTABLISHED IN 2005



CARBON SINK 2021



2

**Storage of carbon in soils by dung beetles**

Although Australia has its own native dung beetles, adapted to feed on dry fibrous pellets of marsupials, these proved to have minimal impact on dispersal and burial of cattle dung. Thus from late 1960's CSIRO began sourcing beetles from other countries and introducing them to Australia. Fleurieu beef Group members began work in this area in 2002, and with the assistance and over sight of Dr Bernard Doube released the beetle *Bubas bison* onto their farms, which has now spread over the whole of the Fleurieu Peninsula.

Burying huge quantities of cattle dung through the long winters, this beetle increases soil carbon levels, again helping to resolve global warming issues. Another consequence of this timely dung burial is that it interferes with the life cycle of cattle intestinal parasites, thus dramatically reducing chemical means of treating this infection; not only mitigating the exposure of our food chain to industrial chemicals but also reducing the need to manufacture them.



DUNG BURIAL WITH SUMMER ACTIVE BEETLES



DUNG BURIAL WITH WINTER ACTIVE BEETLES

3

**On-farm dung beetle nurseries ensure successful establishment of new species**

Establishment of dung beetle nurseries on member's properties has great promise, for in these structures new species of dung beetles are rapidly propagated under controlled conditions, in order for donor colonies to be relocated to other regions, where the process can be repeated. This strategy, developed in conjunction with Creation Care, avoids the risk that large numbers of valuable and relatively rare species are exposed to unknown detrimental environmental factors. The ultimate objective of this strategy is to efficiently enable the establishment of dung beetles on Australian farms, so that in all seasons of the year, complete burial of dung takes place; thus storing carbon in the soil year round.



DUNG BEETLE NURSERY ON FARM

“I’d love to see sheep & cattle farms where you can see livestock breeding taking place and then alongside will be a dung beetle nursery where the mini livestock are bred and reared- and considered just as important. We believe they may have capacity to be a major force in on farm carbon neutrality programs”.

Dr Russ Barrow, Charles Sturt University

4

**Biochar in cattle dung increases levels of soil carbon**

Trials with Biochar also show promise: biochar is added to feedstuffs fed to cattle in order to increase efficiency of daily weight gain (feed conversion and hence methane reduction) and is then passed out in the dung. Consequently when buried by dung beetles, improves pasture production, soil carbon and microorganisms in the soil. The addition of Biochar to the dung compared to dung alone being buried had the effect of: increased pasture production; increased fungi by up to 10mg/kg; increase of 4tonnes/ ha soil carbon; 34mg/kg more phosphorus, with higher molybdenum and sulphur; improved pasture ME. The final report is available on the FBG website.



5

**Extension and education improves cattle efficiency, lowering emissions**


Fleurieu Beef Group has run many workshops, including “Bred Well Fed Well” where members have had opportunity to gain practical understanding of achieving real genetic progress in their cattle. This knowledge has helped in bull and heifer selection, while several members have also begun AI programs. Genetic gain achieved from these programs is direct and cumulative; improving the present and future generations of cattle. The learning paths explored through the technology project have also addressed strategies to achieve efficient production systems, as measured by emissions per kilogram of beef produced. Again, this improved production efficiency helps reduce atmospheric carbon contribution from agriculture.

FBG members have also participated in the “Farm 300” series of workshops, where many insights into reducing their on farm methane and carbon footprint were presented. Through this program members became much more aware of how improving their production efficiency, reduces methane intensity. The final report is available on the FBG website.

EMPEROR

(AMF,CAF,DDF,NHF,MAF,OSF,RGF)

Te Mania Emperor E343 | 29AN1810 | Owned by: Murdeduke and ABS Australia



**Rare Gem to be Remembered as a Beef Legend Forever**

- Vastly recognised sire who set beef industry on fire when he was purchased for an Australian record \$91,000 in 2011
- Emperor has left a legacy like no other
- Used in 18 different countries, 344 registered herds, a record 87 45 registered progeny
- 955 structurally assessed, 4737 scanned, 2592 docility records, 1034 genomically tested
- Emperor daughters are an outstanding legacy to the Angus breed
- Retains a profound influence over the seedstock and commercial Angus sector to this day

Reg. No.	VTME343
Born	09/08/2009

Te Mania Yorkshire Y437 (AI)  
**Te Mania Berkley B1 (AI)**  
 Te Mania Lowan Z53 (AI) (ET)  
 B T Ultravox 297E  
**Te Mania Lowan Z74 (AI) (ET)**  
 Te Mania Lowan V201 (AI) (ET)



Emperor at 2 years.

	CE-DIR	CE-DT	GL	BW	200D	400D	600D	MCW	Milk	SS	DTC	CWT	EMA	RIB	Rump	RBV%	IMF%	NRF-F	DOC	A/Breed	DOM	H/Grain	H/Grass
<b>EBV</b>	+4.7	+4.9	-6.8	+5.1	+52	+96	+126	+124	+12	+2.0	-6.8	+64	+3.7	+1.4	-0.2	-0.3	+2.4	+0.17	+3	\$137	\$120	\$154	\$128
<b>ACC</b>	98%	96%	99%	99%	99%	99%	99%	99%	99%	99%	92%	98%	98%	98%	98%	98%	98%	95%	99%				
<b>%Rank</b>	33	31	17	71	31	23	22	12	89	46	16	52	83	12	43	81	32	50	62	19	26	18	22

EBVs as at 1st July 2021 TOP 20%

INFORMATION UTILISED TO MAKE CONSISTENT GENETIC PROGRESS, REDUCING EMISSIONS PER KG WEIGHT GAIN

(SOURCE: 2018-19 ABS BEEF SIRE DIRECTORY; USED BY PERMISSION)



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### Improved pasture production draws down atmospheric carbon (CO<sup>2</sup>)

The grazing of pasture by cattle stimulates the growth rates of these pastures. People in urban areas observe this effect when they cut their lawns; the more often they mow the grass, it responds with vigorous growth. Fleurieu beef producers utilise this principal, adding pasture rest periods so that maximum growth from photosynthesis, due to adequate leaf area, takes place. This continuous cycle of rested growth followed by harvest of the pasture mass, improves the effectiveness of drawing carbon dioxide from the atmosphere. Cattle provide many advantages in this cycle, as compared to mowing the grass, for they are able to convert the grass into a high quality foodstuff (beef), whilst their residues of dung and urine are important organic fertilisers which further stimulate pasture growth. The increased root mass of the pasture is also an important means of directly increasing levels of soil carbon.

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### Research and outreach

The Fleurieu Beef Group has developed and mutually maintained close links with professionals who are leaders in their field and who require access to farms, in order to carry out their research and trials. These partnerships are vital to achieve carbon neutral beef production, creating a real sense of personal ownership and involvement, as our members participate in “Citizen Science” whilst forging life time friendships with industry leaders.



**GEOFF BOWLES SPREADING BIOCHAR WITH THE AIM OF IMPROVING SOIL HEALTH, BUILDING SOIL CARBON AND MAXIMIZING PRODUCTION OF HIS LUCERNE Paddock**

**Acknowledgements:** Dr Bernard Doube and Melissa Rebbeck for their assistance in the preparation of this article.

From the Archives

**FLEURIEU BEEF GROUP NEWSLETTER #2**

A few of the "more troublesome members" of the group have conspired to submit the enclosed material to Gerald Martin as a required preliminary stage of making a formal application for PIRD (Producer Initiated Research and Development) funding for our group for the 1997-8 financial year.

Please read this material carefully and decide:

- 1) whether you believe it is a fair and reasonable reflection of what has been discussed in our group;
- 2) whether, as a group member, you are interested and prepared to commit yourself to being actively involved in putting the proposal into operation.

If we decide to continue with our formal application, an eight page document needs to be completed and lodged with Gerald Martin prior to 28th. February 1997. We have therefore decided that it would be unreasonable to expect all of the necessary information to be formulated at our next scheduled meeting (on 25th. Feb.), typed up and posted the following day.

We would like you to be part of a planning meeting which will be held in the home of Richard Willson (on the corner of Yundi Road and Proctor Road) on either 16th or 17th February. (Please note specific details below.) At this meeting we intend confirming whether or not we should proceed, and if so, preparing as much of the full application as possible. It would be greatly appreciated if you could carefully consider the headings of the application form and ideally come to the meeting with some written material which we can all share.

**PLEASE RESPOND TO THIS SECTION BY 5pm ON FRIDAY 14th FEBRUARY**

BY PHONING ADRIAN BURTON ON 569076;  
BY PHONING RICHARD WILLSON ON 560215; or  
BY FAXING RICHARD WILLSON ON 560240

Are you in favour of our group continuing with an application for PIRD Funding? Yes or No

If Yes, are you prepared to commit yourself to helping the group put such a proposal into operation?

Please indicate your first, second and third preferences for times for the proposed planning meeting.

- Sunday 16th Feb. 9am to noon .....
- Sunday 16th Feb. 2pm to 5pm .....
- Monday 17th Feb. 9am to noon .....
- Monday 17th Feb. 2pm to 5pm 1-3/7
- Monday 17th Feb. 7pm to 10pm .....

**YOU WILL BE ADVISED BY PHONE OF THE MOST POPULAR TIME REQUESTED FOR THE MEETING**

The following information is intended to give you an idea of the headings of the full application form for PIRD funding.

**Group Contact Details:** This will cause no problems to complete.

**Group Background, including year of formation:** We started as a Prograze group in 1995

**Project Name (ie Subject Area):** Something like, "The implications of current beef marketing specifications on producers."

**Overall Aim of the Project:** Something like "To devise and implement a range of practical, farm-based strategies to most appropriately meet these specifications."

**Objectives:** What are the specific tasks needed to achieve our aim? These objectives will serve as measuring sticks along the way. When we review our objectives we will know when certain goals have been met.

**Methodology:** This is where we list the actions which will enable our group to meet the project's objectives. We need to make it quite clear that our group has a definite method of achieving results.

**Sequence of Activities:** We need to specify what our planned activities will be and when they will occur. We need to include four report dates for the three progress reports and the one final report.

**Expected Benefits to Group Members:** For example, if one of our activities was an education trip through an abattoir to learn more about feedback sheets, we would need to explain how this information will help us become better producers.

**Assessment of Potential Benefit to Growers Outside Our Area:** How can the results of our proposal be shared with others?

**Summary of Financial Support Requested**  
**Anticipated Operating Expenses** (such as materials, testing fees, equipment hire etc....)

**Anticipated Travel Expenses:** Do we plan a bus trip for example? Car travel can be reimbursed at a standard rate of 35 cents/km.

**External Contractor Details:** Do we wish to engage a facilitator or bookkeeper etc.?

**Other Support:** Could our group obtain any support from other organisations? We have been working closely with DPI. It is important to list member involvement and commitment to our project.



Post Office Box 220,  
Mount Compass.  
S.A. 5210.  
Friday 7<sup>th</sup> February 1997.  
Phone (085) 569076

MRC PIRD Coordinator,  
Mr Gerald Martin,  
Willunga. S.A.

Dear Gerald,

On 31<sup>st</sup> January 1997 Mr Geoff Davis, the President of the Fleurieu Beef Group, sent you a fax containing broad information about our group and a brief outline of why we believe we may meet the criteria for PIRD funding. Please find enclosed a Preliminary Application Form, together with some additional information about our group. The diagram is a summary of the information contained in this letter.

The Fleurieu Beef Group originated in early July of 1995. As members of a ProGraze course, we aimed to improve our pastures and pasture management which we saw as positive steps to help us increase both the quality and quantity of our beef production. In turn, we hoped this would flow through to an improvement in our practical effectiveness as beef producers and ultimately to an improvement in our net financial return per hectare.

Since the completion of this course (in December 1995), we continued to meet on a monthly basis. With the guidance and assistance of Mr. Tim Prance (from PISA), our group undertook farm walks and arranged discussion sessions on a wide range of issues pertaining to beef production. In January 1997 our group received a welcome influx of new members and our recent discussions have highlighted our growing awareness of the changing market requirements for beef.

It is currently our intention to focus on the marketing of our beef and gather as much documentation as possible about beef marketing specifications. We then intend discussing and evaluating the implications of these specifications in terms of beef production on the Fleurieu Peninsula, with a view to devising and implementing a range of practical, farm-based strategies to best meet these specifications.

We recognise and accept that this will be a process of education (or perhaps re-education) for our members, as we find ways of taking ongoing action which is consistent with current market requirements. We intend undertaking a farm-based evaluation programme, with a view to monitoring and recording both the process in which we become involved, and the outcomes of that process.

This information has been presented as a means of alerting you to the fact that our group has identified a number of avenues to pursue over a period of time and, with your support, we may consider PIRD funding for several different stages of the enclosed model.

Yours sincerely,

(Adrian Burton)  
(Secretary / Treasurer, Fleurieu Beef Group)

