

Focus | Integrity | Performance | Profit | Commitment | Innovation

EDITORIAL

We have hit a difficult season across eastern Australia and throughout much of the country. For some areas, lack of rain has stretched over a number of years. The long, dry autumn which followed a light spring, has added to the lack of feed.

We cross our fingers that the late winter and spring delivers much needed rain, as the ramifications throughout the catchment are massive and flow on into the broader regional economies.

What has been encouraging over the last few years has been the reinvestment in efficiency, new yards, pastures, handling equipment, data capture, sustainability, education. The good times have enabled businesses to move forward, make plans for drought, succession, expansion, put away resources for less profitable times. People have been optimistic and in many businesses, the next generation has returned to take the reins.

We are progressing through our 'changing of the guard' at Rennylea. Ruth at Rennylea, Anthony and Dirk at Culcairn have taken on greater responsibility ably supported by Hayley and Fergus. Classic business cycles of growth, plateau and decline are reversed by the next generation pressing the 'refresh' button.

To enable these changes we have been giving opportunities for growth to our young team, financial literacy, prograde, genetics and marketing. In June, Ruth attended the Rabobank Farm Managers course in Adelaide, networking with a group of young guns from around Australia and New Zealand. This

was after leading a group to Japan for the Intercollegiate Meat Judging (ICMJ) in February and her report is in this newsletter.

Coincidentally, Bryan also visited Japan in June, in a tour offered to Agribusiness clients of a top four bank.

We also spent a week at **Beef Australia in May**. Beef Australia has grown to be a premium Australian agricultural event, with more than 100,000 visitors this year including 1,200 international visitors and 12 high profile chefs. Increasingly, interesting events are being timed to coincide with the expo. Lucinda was a mentor for the Graeme Acton Mentoring program in 2015 and it was terrific to catch up with the progress of the latest group of mentor partners, and Rachel Hoolihan, property manager from AACo whom she mentored in 2014/15.

Bryan, Lucinda and Ruth, participated in a number of panels and attended seminars, functions, and took advantage of the many opportunities to look at the 530 sites on display. It is an inspiring place to visit for beef industry information, networking and a lot of fun. The standard of presentations and food is very high and if you haven't been to a Beef Australia event as yet, put 2021 on the calendar!

In February Lucinda attended the **World Congress for Genetics Applied to Livestock Production** in Auckland. There were many highlights, getting close to the science around genomic predictions and what it means for a producer of genetics.

In the US database single step is giving a 40% lift in accuracy from 25% to 36%, with 450,000 beef animals genotyped. Greater accounting for inbreeding and more accurate
continued over page

predictions for half sibs. See the articles on R and D in the newsletter.

Dairy papers on inbreeding, adoption of new environmental and fertility traits in Holsteins were interesting.

For example the work on Gene Editing in US Holsteins, which has produced homozygous polled progeny. This technology has the potential to prevent inbreeding through greater numbers and diversity. Modelled responses suggest that the optimum will be a combination of homozygous polled, heterozygotes and gene edited homozygotes to produce polled Holsteins. While this is not relevant to angus, it is of great interest to Bos indicus breeders.

Prof. Wayne Pitchford from Adelaide University presented his modelling of the use of commercial MSA data to improve genetic predictions. What a great prospect this is! His paper showed that commercial cattle raised together, with a known month of birth, slaughtered in a single cohort and the knowledge of maiden versus mature dams; is sufficient to input into the genetic analysis, Breedplan. Rennylea is collaborating with a 12 month trial to progress this hypothesis

with commercial clients. Please contact Lucinda if you would like to know more!

Many other practical and more strategic topics were presented by the massive attendance of more than 800 delegates. It was wonderful to attend the conference, normally held in the Northern Hemisphere.

We are open for **Southern Beef Week on the 30th July** and look forward to welcoming visitors at Ellerslie Park. A cross section of the 164 bulls catalogued for the Spring on property Sale will be on display. It is a great opportunity to discuss your herd's direction in a relaxed environment.

Then the **Spring On Property Bull Sale is at "Ellerslie Park" on the 30th August**. The bulls will be penned from 9.00am and the sale commences at noon. Note that the sale is interfaced with Auctions Plus. The bulls were videoed on the 5th and 6th of July and the video clips are available by clicking through the link on the Rennylea website.

Byran and Lucinda

THE CHANGING OF THE GUARD @ RENNYLEA

It is a great delight to be involved as Generation 5 of our family takes over the reins at Rennylea.

There are new arrangements for contacting the business. We are currently building a new office at 'Ellerslie Park' which we plan to be completed by the spring bull sale.

Ruth Corrigan, Operations, breeding program, sale cattle & semen.
Mobile: 0400 302 629.

Bryan Corrigan, Strategy, Sales and breeding, client communication.
Mobile: 0429 038 993.

Anthony Corrigan, Deliveries, private treaty bull sales, agronomy.
Mobile: 0437 043 443.

Lucinda Corrigan, Strategic projects, administration, finance, marketing.
Mobile: 0409 038 993.

Sue Govan, Database, despatch, new office.
Mobile: 0427 038 993.



Ruth and Anthony are taking on new levels of responsibility at Rennylea and Culcairn.

THE BUSINESS CYCLE, CHOOSE TO GROW OR DECLINE IN EACH GENERATION

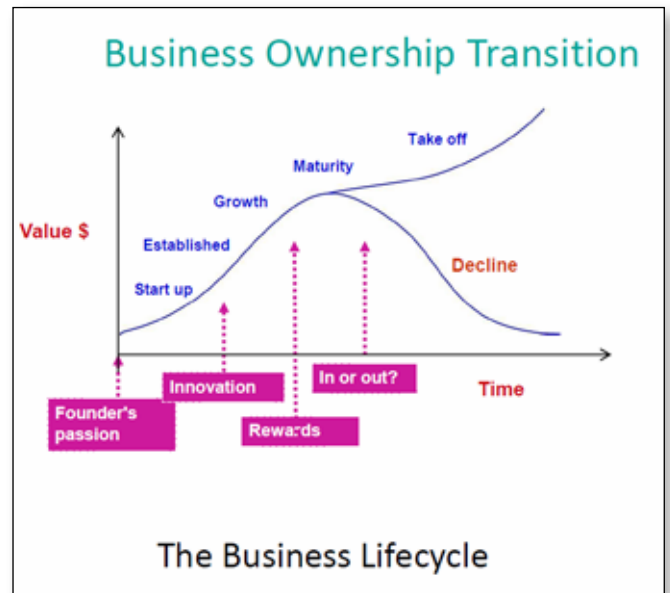
There are small numbers of businesses large and small which thrive over many generations. On the New York Stock Exchange, the Dow Jones Index is made up of 30 significant companies. Only 1, General Electric, has lasted the 121 years since the weighted index was invented by Charles Dow in 1896. And, spectacularly, GE is being 'booted off the Dow' at the beginning of July.

In the human world, communities of citizens that have long survival are called 'blue zones'. In the corporate world it is rare. However in Australian Agribusiness, it is a relatively common phenomenon.

Last newsletter, Summer 2018 (page 10), I wrote about the recent study by Meridian Agricultural Consultants on Succession in Aus Ag. The case studies from this project are on the Meridian website. Also there are 2 webinars which cover the findings, produced by Meat and Livestock Australia in conjunction with Meridian. Go to Meridian homepage, click on Library and then on Farm Success Enabling Case Studies.

Business reinvention needs to be conscious and engage with all parties as new generations come in to take the reins.

At Rennylea we are ensuring that the values, purpose and energy within the business are renewed as we pass the reins to Generation 5 of our family at Rennylea. The new arrangements are outlined below.



Drs. Toni Reverter and Sonja Dominik from CSIRO Livestock Industries visited us in May and presented the studies into the effect of genomics and transition to single step in the Rennylea herd. Here shown with Bryan, inspecting the 2017 spring N calves in the weaning yard at Culcairn.

R & D @ RENNYLEA –

As highlighted over the past 6 months we have been collaborating with a number of researchers to understand the changes to the Rennylea database since the introduction of genomics firstly, then the transition to using the genomic relationship of the animal in Single Step. This first article by Dr. Robert Banks from AGBU shows the changes from adding in genomic information compared with phenotypes only in pre-genomic Breedplan, on average across the angus database.

Changes in Accuracy – Single Step BREEDPLAN compared with routine BREEDPLAN

The differences in average EBV accuracy across all traits, and then showing some individual traits, are as follows (Note that this comparison is between BREEDPLAN without blending, and Single Step).

Trait	Difference in average Accuracy of EBV: Single Step v Routine without blending (Nov 2017)	
	Animals with genotypes	Animals without genotypes
All traits	+3.84	+0.58
WWT	+3.06	+0.24
600 WT	+2.63	+0.14
CWT	+3.59	+0.23
CEMA	+3.70	+0.77
CIMF (Marbling)	+4.49	+0.89

The actual changes in accuracy vary between traits, reflecting the fact that the size of the reference population varies between traits (the reference is all animals with a genotype and a phenotype for that trait – the phenotype can include records on close relatives, such as progeny or half-sibs).

Also, the averages conceal significant variation – some animals have increased or decreased accuracy by large amounts.

However, the overall pattern is consistent- Single Step achieves more accuracy, and the increase will be larger:

- For animals with genotypes
- And for those animals that have limited or no prior information

Overall, the accuracy increase is around 3% for genotyped animals, and around 0.5-0.8% for non-genotyped animals. So single step is increasing accuracy by more for genotyped animals than those without, but all animals are getting some additional accuracy on average.

What does Single Step mean for commercial beef producers?

For the commercial producer, if you're buying from a stud with good performance recording and genomic testing of young bulls (and heifers potentially), genomics means that the bulls available will have more accurate EBVs, and potentially will have EBVs for more traits than has previously been the case. This means that bull-buying can be more effective – more reliable EBVs on more traits.

Dr. Robert Banks

RENNYLEA GENETICS – CLOSER TO THE TRUTH

Our within herd study has focussed on two sets of data from animals born in 2014 and 2015, the Ks and the Ls. Below is the summary of the study by Dr. Sonja Dominik Quantitative Geneticist from CSIRO in Armidale. We have carried out this work under the Innovation Connections program within the Department of Industry, Innovation and Science.

Sets of BREEDPLAN EBVs from Rennylea Angus were analysed. The different sets of EBVs represented estimates on the same animals at different ages with increasing information (pedigree, genotype and increased number of phenotypes) and also estimated with different analytical approaches (blending and single step evaluation). The EBVs and their accuracies were compared for 18 traits, including weight, fertility/calving traits, carcase traits and net feed intake and docility.

Correlations were very high, indicating a small effects on the ranking of animals between sets of EBVs. This observation was consistent with the inclusion of more information and also with introduction of the single-step approach caused. In this first single-step estimation some re-ranking amongst bulls would have been expected due to its capability of the analytical approach to estimate relationships between

individuals, the reference population and even unrelated individuals more effectively. In future, single-step will underpin more consistent rankings.

The average EBV and also the variation in EBVs increased with increasing information and with introduction of the single-step approach. Changes in EBVs were larger for traits of low heritability. The accuracy increased with increasing amounts of information. With the introduction of single-step, accuracy dropped for some traits and increased for others. However, the accuracy from the single-step approach is based on quite different calculations. Most importantly, the correlations between the accuracy values of blending vs single step indicated that animals with high accuracy remain animals of high accuracy.

So what is important to Rennylea? There are many learnings from this study

- It demonstrates that the inclusion of genomic information has a greater effect on the bull ranking compared to more phenotypic information.
- In the following table, given as an example, is the analysis of the K spring bulls, EBV1 is with no genomics, EBV2 has the addition of genotypes (blended), EBV3 is just before single step and has the addition of further phenotypes, and EBV4 is the result after transitioning to single step.
- The increase in standard deviation for particular traits has increased accuracy and also increased our ability to improve the response to selection for key traits. The following table gives these changes for the same group of K spring bulls.

“CLOSER TO THE TRUTH”

Table 14. Correlations of EBVs 1 and 2 (EBV12), EBVs 2 and 3 (EBV23) and EBVs 3 and 4 (EBV34) of 18 traits and breeding objectives for K spring bulls and heifers.

Traits	Spring K Bulls			Spring K Heifers		
	EBV12	EBV23	EBV34	EBV12	EBV23	EBV34
Bwt	0.96	0.98	0.91	0.96	0.95	0.91
400Wt	0.88	0.97	0.90	0.91	0.94	0.86
GL	0.94	0.99	0.91	0.97	0.98	0.93
DTC	0.90	0.76	0.83	1.00	0.92	0.83
MCwt	0.86	0.94	0.88	0.88	0.91	0.86
EMA	0.81	0.97	0.87	0.97	0.97	0.86
RBV	0.87	0.92	0.82	0.99	0.92	0.83
IMF	0.91	0.96	0.84	0.97	0.93	0.91
NFI	0.88	0.96	0.82	0.96	0.92	0.87
Breeding objective	Index12	Index23	Index34	Index12	Index23	Index34
BO.Angus	0.83	0.90	0.86	0.91	0.87	0.82
BO.Domestic	0.87	0.90	0.87	0.90	0.80	0.87
BO.HGrain	0.83	0.92	0.85	0.91	0.93	0.84
BO.HGrass	0.86	0.90	0.87	0.90	0.82	0.82

- iv. Of particular interest is the greater accuracy on traits of interest in the Rennylea breeding goal, eg. 400 growth, mature cow weight, eye muscle area. Standard deviations are greater for all traits.



Experiencing some internet connection frustrations, Sonja shown here checking emails at the ‘internet café’ on one of the hills at Rennylea!

Later in the year we shall hold a genomics workshop with our collaborators to go through the studies in detail and will have experts on hand to answer questions. Invitations will be sent out electronically.



RENNYLEA L683 - changes due to single step.

	BW	200G	400G	600G	MCWT	CED	CEM	MILK	SS	DC	CWT	EMA	RIB	RUMP	IMF	DOC	ABI	GRN
Nov-17	2.4	44	82	106	78	2.9	0.8	15	2.6	-7.1	63	8.8	2.9	2.1	4.1	7	150	174
Dec-17	4.8	56	99	133	119	2.7	0.6	17	2.8	-7	78	9	1.6	0.6	3.2	7	154	176

Rennylea L683 change in breeding values as a result of the migration to single step analysis in December 2017. This level of accuracy would have taken a number of years to achieve by progeny testing.

MARBLING IS A FREE TRAIT

At Rennylea we describe marbling as a free trait. We have been asked recently what we mean by this.

There are a number of other 'free traits' it is those that do not cost feed or energy to be present in the cow herd.

The three traits that form the cornerstone of a breeding program are fertility, conformation (or structure) and docility. Like all traits there is variation in the population, these traits are heritable and can be improved without increasing cost of production.

Marbling is in the same category, we can select for and embed marbling in the DNA of the cowherd without increasing cost of production (COP). Our experience is that there is no compromise for the other free traits, that is strong negative correlations that have adverse consequences.

This is in contrast to the cost traits. If we select and increase growth, including maturity pattern (partially described by mature cow weight) higher performance will increase COP in the cow herd. This can be dramatic in a self replacing cow herd, as the mature cows increase in size so does the ratio of inputs (feed) to outputs (kgs weaned). The result is to lower fertility and increase cost of production. Milk is also a cost trait, demonstrated starkly in herds where feed is highly limited such as in Central Australia.

After 20 years of careful selection the Rennylea cowherd has very high breeding values for marbling.

The management of their progeny to express marbling is demonstrated in different value chains. For example, the highly marbled beef produced on grass at Mount Linton Station in NZ and other clients' herds who have been using Rennylea genetics for a long time.

In grain fed systems Rennylea bulls have topped 3 of the sire benchmarking cohorts for meat quality through the Tullimba feedlot, demonstrating the ability to marble on grain or grass.

Different value chains require different nutritional pathways and the associated cost of feeding to achieve the potential of the genetics.



General Manager of Mount Linton Station in NZ explaining the finer details with Ruth and Bryan during his visit in April.

Paddock Talk by Bryan

Halfway through 2018 and NSW in particular has a very tough season. At Rennylea we have been at the better end of the season, however, better is not great and we have been feeding a lot of cattle. No doubt we are closer to rain and when a break comes, markets will rally.

There have been several single step runs since the first one in December. I have only positive things to say about it, our figures have continued to bounce around but that was to be expected and will continue. With a very high percentage of our pedigrees genomically tested, our information being presented is far more accurate than most herds.

This is good news for clients, we think our investment and foresight has been well worth it. We have just completed an in herd analysis with CSIRO which has been very informative.

The next stage with CSIRO is marbling consistency. We will be collaborating with one of our clients who has a lot of carcass information on grass fed marbling. We hope to be able to get traction on carcass consistency for meat quality and muscling.

I travelled to Japan with an Agribusiness tour in June. I particularly enjoyed the many meals and assessing wagyu and angus/wagyu products, Kobe beef Teppanyaki making eating beef an art form.

My feeling is that the F1 Angus/Wagyu has a very good future as purebred wagyu consumption declines with an ageing population. This is good news for breeders of angus cattle and an increase in demand for surplus angus females. Rennylea clients will be well positioned to tap into this trade as the cattle are universally known to be highly marbled.

BEEF AUSTRALIA HIGHLIGHTS

Lisa Sharp, General Manager of Marketing, Communications and Industry Insights opened the MLA session with a terrific presentation on the **5 mega trends** that are driving international demand for protein and red meat. These trends are volatile and effect brand success.

- 1. More from less:** natural limited resources, efficiency, yield, organic food, shift to 'green tinge products'. Seeking what is natural, responsible products, promote inherent properties.
- 2. Great expectations:** fuelled by technology, launched in 2011, WeChat a platform for other services , sales rise of 3.6%. Technology means that consumers are equal. Work with products and brands.
- 3. The Silk Highway:** Shift from west to east and from north to south. The ability to pay in two short years will double in size in China. Understand where those consumers are in the mega cities .
- 4. Forever Young:** widening retiring healthcare gap and need for services in Aus. 20% over 65 and expenditure changing. Higher spending on health, little more on alcohol and more on high quality food choices less in restaurants (comparatively).
- 5. Fear, uncertainty and doubt:** People want to know Country of Origin. Quality, food safety and integrity.

There are opportunities and threats to DEMAND for red meat.

For example the concern for animals effects 8% of consumers, concern for the environment 8%. Young women are most concerned and these figures are rising.

52% of consumers are seeing these messages in the capital cities from animal activist and welfare organisations.

WHAT ARE THE SOLUTIONS ?

In a nutshell

- i. research and development
- ii. understanding data trends
- iii. effective communication, as consumers demand more

Other speakers in the MLA session covered technical developments in the value chain, including autonomous systems, robotics, measurement systems, connectivity and the Internet of Things, CT Scanning, measuring marbling in a carcass without killing the animal.

Ben Dwyer from ACC spoke about the development of an integrated supply chain with the Acton Land and Cattle Company, from 2m ha in Qld. The innovation includes tracking all cattle through the supply chain using NLIS, nutrition, collating information at induction into backgrounding and processing. The Hitachi data platform informs decision making.

Work on animal health and welfare was covered by Dr. Johann Schroder such as progress in theleria with the identification

of a new strain of the parasite. The strategy with animal welfare research is to **REPLACE, REDUCE AND REFINE**. While some aversive animal practices have a range of options such as removing horns in cattle, progress is much slower in the area of male and female castration.

The Genetics session focussed on the Genetics Taskforce and the increased investments of \$100m through the MLA Donor Company, and matching private dollars. The disruption with the introduction of single step, the opportunities with the reviews in carcase language and the potential to leverage MSA compliance data were covered. For example the cattle in the value chain that meet MSA but not company specifications (4 and 6 teeth) cost nearly \$50m per annum.

The final session was by Dr. Andrew Cromie from the Irish Cattle Breeding Federation. In that relatively small country are 1m beef cows and 1.5m dairy cows. The cattle are recorded on a single platform run by ICBF, the benefits are shared. The person who owns the animal owns the data so that control is with the farmer, protected by strong user agreements. Cattle are rated with 5 stars in the top 20% and 1 star the bottom 20%, farmer recording is rewarded and in the genomics project 600,000 cows are measured, supported by the EU.

The principles of this system sounded very attractive as genomics provides more opportunity for breeders to improve their breeding decisions, balancing the easy and hard to measure traits. Professor Ben Hayes made the prediction that 'crush side genotyping' currently in prototype will be a reality in the future, vastly reduce the cost. The technology has come out of the human medical industry.

FINANCIAL RETURNS IN THE BEEF INDUSTRY

At Beef Australia we attended a breakfast event, hosted by Bush Agribusiness. The presenters were Dr. Phil Holmes and Ian Maclean. They presented the findings from their recent publication, The Australian Beef Report. It was vintage material, backed by evidence.

Ian commenced the presentation with a focus on the fundamentals. If you aim for 5% return on assets and a beast areas costs \$1,000 then you need \$50 EBIT to achieve the 5%. So if a beast area rises to \$5000, then the EBIT required is \$200. This requires a focus on productivity and profitability. The highest EBIT in their analysis is \$300 at Alice Springs.

The second major point was **Genetics**.

“It is a national tragedy, that the uptake of Breedplan is so very low. Don’t purchase bulls without data behind Breedplan. Genetic improvement is “the greatest free lunch”.

It is more than that because producing seedstock is a leadership position. Find out what the target herd does in terms of measurement.

Thirdly, **invest in Research and Development** and respect the IP. Subsidised extension in agriculture degrades intellectual property. Invest in continuous improvement and training.

Environmental factors are very important. These include assessing land condition, where most damage has been done historically, where properties are too small in the mulga lands and Mitchell grass density is still eroding. It is important to make environmental preservation a priority and give land a spell. Plant buffel grass, let natives come in and regenerate.

A fascinating discussion on environmental management in northern Australia followed. Issues for southern Australia include acidity, sodicity and water erosion. Dr. Mark Stafford Smith has researched extensively land stewardship in the pastoral areas, including burning, capping water, controlling feral animals. There are many links on line for further information.

People factors are central commencing with those at the top in management. Focus on productivity, skills and ability. Ensure you have very good direct reports.

There was great humour around the quote to ‘treat bonuses like a brown snake, and avoid them’. Having experienced this at Rennylea, where bonuses became an expectation and not a surprise we chose to package them into salaries.

Make sure all staff have position descriptions which is very important, and then undertake appraisal at the end of the year. Rewards such as tickets to a sporting event are appreciated.

Perhaps the most challenging points of the presentations came in the discussion of Business Fundamentals. Challenging because of the need to acknowledge what is ‘in’ and ‘out’ of our control.

“The average balance sheet can’t handle destocking,” said Phil. A growing animal needs to put on 150kg per annum as a minimum goal. Focus on reducing cow mortality, improving calving and weaning rates and focus on productivity per head in the rangeland.

“No qualifications required to be a producer or a consultant. Intellectual capital is unvalued.” negligent if you don’t buy it into the business. Michael Porter wrote about ‘barriers to entry’, there are none in consulting or farming.

There is increasing demand for great service people and professional managers.

John Maynard Keynes “Markets can remain irrational for a lot longer than you can remain solvent.”

Finally keep your powder dry and be counter cyclical, don’t get overtaken by the emotion of high land prices. And rate operating profit above capital profit.



Bryan explaining a finer point of marbling with Michael Gannon of Khancoban Station and Don McRae, Whanregawin Station, Molesworth.

A SNAPSHOT OF CHANGING DEMOGRAPHICS AND CONSUMER DEMAND IN JAPAN

By Ruth Corrigan

Ruth led an Intercollegiate Meat Judging Committee (ICMJ) trip to Japan at the end of February for 10 days. The purpose was to build on the relationships fostered through the annual competition held at Charles Sturt University, which a team of students from Japan attends each year.

Introduction

Japan is a fascinating country to visit with rich traditions and food culture, colliding with the fast-paced modern world of the world's 3rd largest economy. Whilst travelling in Japan we were exposed to a number of key players with in the beef supply chain from genetics providers and farmers, through to processors and retailers, along with service and education providers. It became evident that food and beef consumption trends are evolving within the Japanese economic and social climate. And while tradition remains important, there are some new trends emerging.

Demographics

Japan is facing a rapidly aging population following decades of improved life expectancies and falling birth rates. At current rates its population will fall by 25 million people by 2050 and the number of people over 65 will increase from 27% to 38% (Reynolds 2017). This poses a number of problems for government including labour shortages, increasing public debt with pensions and social welfare, and threatens the

existence of rural communities. It also has implications for the food and beef industry which will be discussed further.

The average age of farmers in Japan is now 66 and 93% of Japanese live in urban areas. Urban sprawl is eating into prime farm land. The Japanese beef herd is in decline, from 2011 to 2016 it fell from 2.76M head to 2.48M head (including Wagyu, Holstein and F1) (ALIC in MLA 2018). Japan's food self-sufficiency is 39% and it relies heavily on imports for over half of food consumed (Austrade 2018). A presentation by The Department of Food and Water (DAFW) highlighted plans to tap into lucrative export markets for high quality Japanese beef. These factors present challenges in the future for Japanese beef production and there are some parallels which can be drawn with the situation in Australian farming in recent times.

It would seem to me, as a young farmer, that the tides have changed in Australia and a combination of favourable seasons (in southern Australia), commodity prices and plenty of optimism and opportunities surrounding the future of food production have reignited interest for young people in farming and agribusiness. On a positive note, at the Japanese ICMJ competition we met a number of young professionals working in the meat industry and even one young female farmer who had returned to her family's wagyu farm in Hokkaido following study.

continued over page



The travelling group at the McDonalds secret test kitchen in Japan with Miwa who had previously visited Rennylea and the beef supply chain team.

Competition from other protein sources

Meat is an important component of the Japanese diet. The Japanese consume 6kg of beef per head per year and this figure is steady. The consumption of cheaper proteins – chicken and pork – has risen from 1kg in 1960 to around 12kg today, and continues to rise, providing competition for cheaper cuts of beef. Seafood is the most important protein source for the Japanese and peaked at 40kg per person in 2000. It has since declined to 27kg, as other proteins grow in popularity and fish stocks are over-exploited (McDonalds Japan 2018).

Japanese bred beef, mainly Wagyu with some Holstein and Holstein-X, accounts for 40% of beef consumption. Country of origin labelling ensures consumers are able to distinguish local beef from imported beef and Japanese consumers have a clear preference for home grown beef (Nason 2018). This high quality and highly marbled meat goes primarily into traditional dishes and for special occasions. At home beef is traditionally eaten at Udon (a festival to honour ancestors), causing a spike in August, and also increases around Christmas and holidays (ALIC in MLA 2018).

ALIC reported that 70% of Japanese beef is consumed out of the home, particularly at the ever increasing number of yakiniku restaurants or fast food chains. Fast food can be basically split between western style burger chains or Japanese style beef brisket and rice bowls or 'Gyodon' chains. The majority of grinding beef going into hamburger chains is Australian (McDonalds Japan use 100% Australian beef), while the ability of the US to provide cheaper and large quantities of low quality cuts such as short plate briskets means the US is the main supplier for the latter (pers comm. A. Cox).

Affordability

Japan has been through a 20 year period of deflation and low or negative economic growth. Throughout our tour of Japan we were exposed to anecdotal evidence of the high cost of living in comparison to low wage growth, and the unaffordability of traditional highly marbled domestic beef for the young and older generations in Japan. Students we met were more likely to eat cheaper forms of beef at fast food restaurant chains, aside from special occasions. Japanese from the over 65 category older generation, made up of many retirees and pensioners, are also struggling to afford traditional high quality wagyu beef. In many cases beef is substituted in the home with more affordable chicken or pork.

Food trends

A presentation by Austrade (2018) made note of the 'polarisation of eating out patterns – fast food restaurants versus full course menu restaurants'. You really got a feel for this during our stay in Tokyo where cheap and quick beef is available on every street corner through burger or Gyodon chains. Comparatively, Tokyo is jam packed with modern and more traditional full menu restaurants. At these restaurants there tended to be highly marbled domestic beef on the menu which lends itself to the traditional yakiniku style BBQ

or shabu shabu cooking methods. We ate 200 day grain fed Australian rump at one of these BBQ restaurants and interestingly the staff sliced the beef thinly following cooking like the Japanese beef on the menu (though this is thinly sliced prior to cooking).

There has been significant growth of western style steakhouses across Japan. In some supermarkets in Hokkaido and Tokyo we found Australian and US beef sold as steaks, including ribeye, sirloin, porterhouse and fillet cuts – these were still vastly outnumbered by traditional cuts of meat. A recent article on Beef Central (Nason 2018) reported on the trend of 'fast steak houses'. Since 2013 the Ikinari restaurant chain has opened 130 outlets in Japan where customers dine standing up to maximise space and time efficiency.

Consumers place great importance on packaging and the presentation of food and meat. We were blown away on many occasions by the amount of packaging in supermarkets and retail outlets. Individually portioning is common, and often smaller portions are packaged within larger packaging. An aging population has meant the growth of easy to eat, single portioned packaged, natural, healthy and functional food (Austrade 2018). The question which plagued our group on many occasions was what on earth do they do with all the waste?! (Burning and sea containers is the answer, pers. comm. Fujimoto).

Health

The Japanese have one the highest life expectancy rates of any nation (Reynolds 2017). In some instances it seemed like the health issues which plague western society, obesity and high blood pressure and cholesterol, were not a prominent public health concern. Whilst visiting McDonalds the issue of 'healthy choice options' was raised and whether or not they use nutrition as an important part of their marketing campaigns. McDonalds did not view this as a major factor for the Japanese fast food consumer. As an observation, we rarely saw anyone overweight whilst travelling in Japan.

Rather the two factors underpinning brand integrity are high quality product, and food safety and traceability. In 2014, a chicken contamination scandal saw McDonalds brand trust fall from 40% to 10% overnight (MLA 2018), following a long term decline. A marketing campaign emphasising the 'clean, green' Australian beef supply chain followed and has been successful in turning around consumer trust. McDonalds is once again increasing sales and opening new stores in Japan.

In contrast to what was suggested by McDonalds, health concerns associated with consuming highly marbled meat were expressed on numerous occasions. At Oono Farms near Obihiro, farm owner Yasuhiro Oono expressed his preference for leaner Holstein or F1 beef, and his experience with the growth in demand for leaner beef. He stated 30-40% of Japanese prefer lean beef to heavily marbled meat (pers. comm. Yasuhiro Oono). Oono farms produce 4000 head of Wagyu, F1 and Holstein feeder steers a year, and currently Holstein and F1 steers far outnumber purebred Wagyu. Their main restraint is the cost of Wagyu calves being \$5000 US versus \$1500 US for Holstein calves.



The ICMJ group at Oono Farms, Memuro, Hoddado. Yashiro Oono, Centre, Farm owner; hosts Tatsuhiko Goto left from Obihiro University and Tatsuki Kamata right, from Hokkaido University. Left to right on behalf of the Australian ICMJ Association is Tammy Biffin, Sydney University; Ruth Corrigan, Rennylea; Tegan Bathgate, Signature Beef; Kristy Walters, Harmony Food and Ag, and Rachel Relf, Ausmeat.

Hokubee beef at Sapporo produce 'Meltique Beef', a product where lean Australian beef primals are infused with natural animal tallows to improve meat quality. It is promoted as a healthier alternative to highly marbled wagyu beef, providing a comparable eating experience, with only half the calories of naturally marbled meat. Hokubee promote the advantage of using Australian product and reference 'Australia is one of the safest beef exporting countries in the world' (pers comm. Fujimoto). Food safety is once again the number one issue of importance.

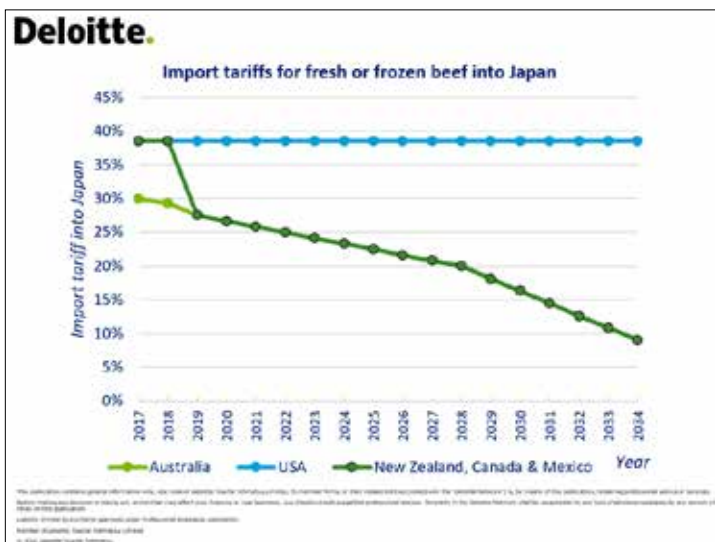
Summary

Beef is culturally very significant to the Japanese people. Beef production in Japan faces pressures from an aging population and urbanisation. At a consumption level beef is competing against cheaper protein sources. Dining trends in Japan are evolving and there is a stark contrast between convenience and fast food chains, and traditional full course dining restaurants. The highest level of product quality and food safety remain the most important factors in ensuring Japanese consumers continue enjoying their beef.

Please note: This report is a summary of my thoughts compiled over the trip, using anecdotal and published evidence we received whilst on our industry tour. It is my interpretation of what's happening with regards to beef

trends in Japan and by no means a thorough examination of literature or information available across the industry.

Projected tariffs into Japan for Australia following the (bilateral) Japan Australia Economic Partnership Agreement JAEPA and the newly signed multilateral Comprehensive and Progressive Trans Pacific Partnership (CPTPP). Other members of the CPTPP, New Zealand, Canada and Mexico also stand to gain market share at the expense of the USA.



Focus | Integrity | Performance | Profit | Commitment | Innovation



www.facebook.com/RennyleaAngus



twitter.com/CorriganLucinda



JBAS8

BRYAN & LUCINDA
CORRIGAN
"OLD RENNYLEA"
BOWNA VIA ALBURY NSW 2642
TELEPHONE 02 6020 2032
MOBILE 0409 038 993
BRYAN'S MOBILE 0429 038 993
email:
rennylea@bigpond.com

SUE GOVAN
TELEPHONE
02 6029 7078
MOBILE
0427 038 993

RUTH CORRIGAN
MOBILE
0400 302 629
ANTHONY CORRIGAN
MOBILE
0437 038 993