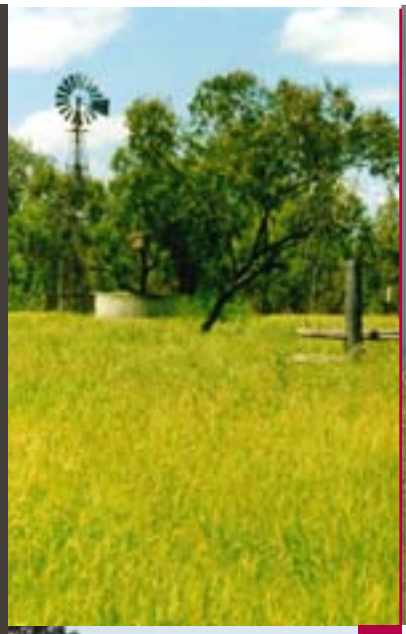
Queensland **the Smart State**



CQ BEEF

Better Economic and Environmental Futures

CQ Issue 1

futurebeef

Profit*Probe*™ Update

Mark Best, *Agricultural Economist*

Interpreting Profit*Probe*™ reports: A quick refresher

The front page of your report covers off on a number of important ratios including overall return on asset (ROA), finance, and economic ratios:

Overall return on asset (ROA)

ROA is broken up between the land business and the production business. ROA looks at what benefit you obtain from your investment in the business. A consistent theme of the results (supported by the information presented to you during the economics day) has been that the land business is supporting the production business in making appreciation, especially in recent times. Under the production business, if you're in a build-up phase, you might reasonably expect the ROA figure to be low or negative, reflecting the lack of cash flow.

How can you improve your overall ROA? One suggested way around the problem of negative results is to have an off-farm income stream, e.g., the purchase of a totally unrelated business. A Belyando team member has done this recently.

Finance ratios

Finance ratio reflects the ability to service debt or fund further property development. Equity ratio is a commonly cited finance ratio that bank managers are always interested in. Finance ratios varied very widely across the groups and are dependent upon what stage the businesses are at in regards to their respective stage of development. For example, we could reasonably expect the ratio to be relatively high in the case of refinancing for land acquisition and the like.

Economic ratios

These ratios cover turnover, overhead and gross margin ratios; their exact definitions can be found in your Profit*Probe*™ notes. Assuming the gross margin ratio looks sound, can you dilute overheads across more units (turnover), or by increasing the size of the operation by acquiring more land, as many across the project have done recently or are seeking to do? In looking across these ratios, consider your plans for generating a consistent income stream to service debt and/or reinvestment.

Queensland Government
Department of Primary Industries and Fisheries

High liabilities reflect a highly geared operation and you can get a good view of this by looking at the Liabilities ($/LSU) figure on the Gross Margin/Turnover page. In looking at your results and comparing them to the benchmark data, is there a reason why your production costs would be high in areas like animal health or freight and marketing? It may prove useful to look inside these areas and make some improvement? The productivity KPIs allows you to see where you sit amongst your benchmark group.

'Flow of Funds' page

The top section is a mini balance sheet showing net assets and total net worth. Underneath are two columns: one works like a bank balance on a cash basis, one works on a gross product basis; an economic analysis including inventories, unpaid labour and depreciation. The point to including ALL economic costs is to focus on the opportunity cost of choosing to be in your enterprise - what would you be doing if your time and investment was not in grazing beef?

Have you had the experience of looking at the overhead page and finding a nasty surprise in amongst the data?

One producer in the Burdekin team who had an excessively high overhead proposed to change their communications plan. This very simple solution reduced this overhead. Ask yourself:

- Can you cut costs in any particular area of the enterprise?
- If not, what's the cost of maintaining what you're doing now?
- How long is your current set-up sustainable?
- When will you no longer be able to sustain current production levels?

These are important strategic considerations for the future of your business operation. There has been some evidence of lower ROA, lower EBIT, lower GP/FTE and higher break even costs in smaller operations.

Visit our website:

To visit our website, go to www.dpi.qld.gov.au, and then follow these links:

- Animals
- Beef
- Beef extension projects (in links at the bottom of the page)

The site provides project staff contact details and profiles, information on how the project works, and grazier information tables for the three Burdekin grazier teams.

Your feedback and suggestions on how to improve the site are welcomed.

To do list:

In between everything else to do within your business, here's some things that you may want to do springing from the ProfitProbe analysis:

1. **Think about how you'd like to collect data for the next round.** Is there a better way of splitting out your business for comparison, e.g., a breeding enterprise versus the fattening operation, trading? How much time are you spending between the enterprises in labour? Are your purchase/sales dockets and stockflow numbers in order? This will be VERY important when completing **Profit***Probe*™ next time (for the 2006/07 financial year) and into the future.
2. **Start acting on your plans.** You may have had a plan for looking at a certain aspect or area of your operation BEFORE you actually undertook this project, like marketing, which has now been confirmed by your **Profit***Probe*™ results as an area where quick gains may be made. How about making the calls that you need to in order to get the knowledge and the information that you require?

Pursuing specialists through *CQ BEEF* – Property mapping and planning

Kevin McCosker

The issue of property mapping and planning came through at a couple of Biloela *CQ BEEF* group meetings, with most of the questions around the use of specialist mapping programs and how these could be of practical assistance in property development planning.

Cameron and Kristy Gibson, beef producers from Coonabar near Rolleston, were invited to a group meeting in June to talk to the group about their personal experiences in using mapping software for property development and record keeping. Cameron gave us some live examples of how advanced software is used on Coonabar for development planning, and also related some of his less-than-favourable experiences. Capability of the software was impressive, but user-friendliness was a problem.

Most group members were interested to learn more and the consensus was that we would contact the AgForward group to find out if they could help. They delivered in spades. An abbreviated workshop was conducted in August where two experienced AgForward staff came to Biloela and customised their presentation to suit the group's needs and wants.

Group members got to spend half a day getting a hands on feel for how mapping software works, including tasks like measuring paddock sizes, drawing paddock infrastructure, mapping land types, and interfacing with handheld GPS units. The AgForward staff provided Regional Ecosystem (RE) maps and satellite imagery for all group members. Most group members have also received high resolution SPOT satellite imagery through the Fitzroy Basin Association.

What next?

This was an initial taste of what AgForward had to offer – most group members have sinced signed up for a full day workshop with the AgForward team in November, and some are also participating in GPS training in October.

The AgForward team are keen to work with the CQ BEEF project, so if you're interested then contact your group facilitator and talk to them about it. There are a range of workshops planned for CQ over the coming months.

How was it rated?

Bilo group members were asked to comment and score (out of 10) the Property Mapping workshop (after the AgForward staff had left):

10 - I have to score it 10 because when I came here today I wasn't interested at all and now I'm fired up, buying software, and going to the full workshop in Nov!

9 - Better than I thought it was going to be.

9 – It surpassed my expectations. I was pessimistic beforehand but feel very differently now.

8 - Great, very user-friendly.

AgForward workshop

Property and area	Business partners	Location	Average annual rainfall	Land types	Enterprise
Mackenzie River group					
Kohler 3485 ha. Bonnie Doon 2868 ha.	Geoff & Julie Beak, and Geoff's parents, Ron & Val in the Boonie Doon operation	Kolher 12 km north of Dingo. Boonie Doon 45 km NE of Emerald	600 mm	Brigalow/Blackbutt	Breeding growing and fattening, selling direct to meatworks. Markets include Jap Ox and domestic trade. Some backgrounding, selling feedlot entry steers direct and for re-stockers.
Redrock 7661 ha Selection 4423 ha Bloomfield 3426 ha Washpool 4002 ha	Murray & Debbie Haigh	Redrock 75 km NE of Emerald Washpool 45 km north of Blackwater	600 mm	Open forest country with areas of brigalow, coolibah, box, bean tree, bauhinia, blackbutt, yellow wood and some ranges with lancewood and narrow leaf iron bark.	Cattle breeding and fattening. Majority of cattle are sold direct to the works, with steers targeted at the Jap ox market.
Namgooyah	Lauchie & Carly Ward	40 km north of Dingo	650 mm	Brigalow/blackbutt country, brigalow melonhole country and brigalow/yellow wood scrub soils	Brahman and Droughtmaster cows mated to Charolais bulls to produce feeder steers. Also Senepol stud.
	Brett & Renee Christie	40 km north of Blackwater	625 mm	Cleared brigalow and bauhinia on scrub soils with some sandy country timbered with box trees	Have commercial breeders at the moment and sell most of the weaners straight off mum, working towards having a bull breeder herd with our highest grade Brahman cows over Charolais bulls, aiming to supply CQ beef producers with functional bulls.
Bajool group					
Comerford + 2 other properties 7366 ha	Cedric & Therese, Don & Ailsa Creed trading as Beefy	Bajool	800 mm	bloodwood ironbark ridges, brigalow, softwood scrub, bluegum flats	We fatten sale animals for meatworks. Steers sold as feeder steers (approx-400kg), cull cows sold as stores and fat trade heifers. We breed on the coast (Bajool) and fatten in the Callide Valley (Goovigen).
Rockley + other property in Banana Shire 5806 ha	Chris, Sally and Ashley Kirk	Bajool	650 mm	Briglow, Open Forest, Alluvial, Blue Gum Flats, Softwood, Briglow Belah, Narrow Leaf Ironbark.	About 800 breeders on coastal country. Stud bulls trucked to briglow country until sold. Steers also fattened on briglow. About 400 trade cattle are also finished for the EU market All finished cattle go direct to meatworks. We currently have about 800acres of leucaena & are trying to plant around 300 acres per year.
Fern Hills + 3 other properties 8454.35 ha	Bruce & Fay McCamley and family trading as Fern Hills Grazing	Bajool	863 mm	Forrest type timbers, bloodwood, narrow leaf iron bark, yellow stringy bark, box and spotted gum, Creek flats running to steeper hills and range country, open brigalow	The business runs commercial cattle, Brahman stud, and commercial Charbrays. Steers are sold to mainly direct meatworks. Stud Brahman bulls sold through Society sales and paddock sales. Charbray weaner bulls are sold in the paddock.
Moncton Hills 4033 ha	David & Wendy Parsons	Raglan	650 mm	3793 ha cleared, mainly duplex soil, with smaller areas of scrub and alluvial/loam soils. 240ha spotted gum, iron bark, bloodwood and wattle.	We have a breeding and fattening enterprise and run a commercial herd of Grey Brahman cattle. Bullocks are sold at meatworks, cull cows and reject heifers are also usually privately on property. We grow a small amount of Lucerne mainly for our own use. When times are good we sometimes sell a few bales.
Kelcolin	Colin & Judy Weeks and Scot & Amy Weeks	Bajool	650 mm	Briglow, narrow leaf iron bark, forest mainly box	In our cattle enterprise we breed and sell mainly store cattle from weaners to eighteen months. Our purchases of cattle are mainly replacement bulls. We also have a hay enterprise where we produce hay hoping to sell enough to cover the yearly production costs so the remaining hay is fed to our own stock at no cost.
Prospect Vale, Banarabin, Alma Vale & Centre Creek 15,654 ha	Ewen & Kathy Besch	Bajool	1000 mm	Banarabin is narrow leaf Ironbark country with duplex soils. Prospect Vale is red soil forest country with an average 40 inch rainfall. These properties have black speargrass oversown with stylos such as seca, verano, amiga as well as buffel and bisset bluegrass. Alma Vale and Centre Creek are undulating country with Bloodwood on clay soils carrying Buffel and blue grass with couch along the creeks with sago grass.	We ran Poll Herefords until 1982 before using Droughtmaster and Red Brahman bulls. Currently on Prospect Vale most of the bulls are Droughtmasters. On Banarabin, Charbrays were also used but Droughtmasters are the predominant breed now used. Prospect Vale and Banarabin carry approximately 500 breeders; the progeny of which are finished on the Centre Creek and Alma Vale properties. As well as finishing their own production the family purchase 400 stores privately and from Gracemere Saleyards. Finished animals are sold into the Jap Ox market with 6-8 teeth at 36- 42 months.

CQ BEEF Biloela group scenario analysis

Backgrounding versus Japanese Oxen production

Mark Best

Introduction

This analysis is a gross margin comparison of two beef cattle production options. These are:

1. Backgrounding operation growing out steers for one year; and
2. Jap Ox production, grown out on property to meet the Japanese Oxen (Jap Ox) market specification.

Comparison methodology

The method used was to input the information into the Bullocks[1] program and measure expected gross margins. Bullocks compares gross margin on a per adult equivalent[2] (AE), on a per annum basis. Thus, results generated (gross margin per AE) are directly comparable for herds with different ages of turnoff. Expected live weight gain was in the order of 0.65 kg per day, reflecting typical live weight gain from the existing production operation. Scenario changes were made by manipulating input data within the programme.

Scenario data

Animals are bought in as 220 kg steers at $1.90/kg live weight, for a gross purchase price of $418 per head. Delivery charges are $7 per head. Induction costs included tick fever innoculation and hormonal growth promotant (HGP) treatments. Variable expenses include an allowance of $3 per head for ongoing tick treatments (backlining), as well as $2 per head per week for additional management production practices. eg. Fence maintenance, checking of waters and other general production management practices, etc. Mortality rates were set at 1 per cent and an interest rate of 9 per cent was used in the analysis. The MLA livestock transaction levy of $5 per head was applied. Input data is summarised in Table 1.

Backgrounding operation

Animals were kept on property for one year (365 days) and turned off at an average weight of 457 kilograms. Sale price was $1.50/kg and freight charges were $8.50 per head.

	Purchase weight	220 kg
	Price	$1.90/kg
	Purchase price	$418/hd
	Delivery	$7/hd
Induction costs	Tick fever vaccination	$3/hd
	HGP	$7/hd
Variable costs	Ongoing tick treatments	$3/hd
	'Production costs'	$2/hd/wk
	Mortality rate	1%
	Interest rate	9%

Table 1: Input data, including production costs per head

Jap Ox production operation

Animals were kept on property for a total of 609 days (87 weeks) for a targeted average turnoff weight of 616 kilograms. Dressing percentage used was 54 per cent for an average dressed weight of 333 kilograms. Sale price used was $3.20/kg (dressed) and freight charges were $35 per head.

Initial result

Initial results show that the gross margin returns for backgrounding to be in the order of $175/AE[3] and for Jap Ox $279/AE. Therefore, Jap Ox can be seen as superior to backgrounding under the input assumptions used in terms of gross margin per adult equivalent on a per annum basis.

Scenario changes

With initial results found, other questions can be explored, including:

- What happens if backgrounding sell price is $1.40/kg?
- What happens if Jap Ox sell price is $3.00/kg?
- What happens if Jap Ox sell price is $2.80/kg?

Sensitivity test results

Results from the price changes include the gross margin for the backgrounding operation falling to $111/AE at a selling price of $1.40/kg. For the Jap Ox scenario, at prices of 3.00/kg and $2.80/kg, expected gross margin results are $234/AE and $188/AE respectively. Results for different selling price scenarios are shown in Table 2.

Discussion

The sale price of backgrounding operation animals would need to increase to $1.66/kg to be equivalent to the Jap Ox operation gross margin of $279/AE. This is an increase of 11%. Similarly, if the Jap Ox sale price were to fall to $2.63/kg, then the Jap Ox gross margin would be equivalent to the existing

[1]Bullocks is a program contained within the Breedcow and Dynama package of herd budgeting software.

[2]Adult equivalent (AE) is a method of comparison between animals of different feed requirements, used as a means of comparing different animal classes across a time period.

[3]Gross margin per adult equivalent per annum.

Table 2: Sensitivity matrix

Price ($/kg gross)	GM/AE	
	Backgrounding	Jap Ox
$1.50	$175	
$3.20		$279
$1.40	$111	
$3.00		$234
$2.80		$188

backgrounding operation gross margin of $175/AE. This would represent a decrease of 18% in selling price.

Factors such as the risk exposure incurred in growing animals out beyond the year long production cycle of backgrounding, as well as the cash flow impacts of switching from backgrounding to longer Jap Ox production has not been considered in the above analysis. Cash flow budgeting is commonly used to explore such issues. Similarly, the subject of resource sustainability is not covered in this analysis.

Future analysis

With ongoing analytical support offered as a part of the *CQ BEEF* project, it is probable that there will be opportunities to apply the methodology outlined above to other *CQ BEEF* groups.

Wayne and Judy Moxham-Price

Biloela grazier team:

Wayne and Judy Moxham-Price own and manage the 4500 acre *Mrs Smiths* in the Burnett Catchment, and 1300 acres at *Pindari/Conor-Mor* in the Fitzroy Basin, south of Thangool. They have two adult sons who are both currently living overseas.

The Moxham-Prices' downsized from a larger breeding and growing enterprise in 2003, retaining one-third as a breeding block and also holding on to the fattening block *Pindari*, where they now live. They only recently purchased *Conor-Mor*, a small neighbouring block.

This move brought about work and lifestyle changes for Wayne and Judy. It has enabled them to pursue off-farm and non–agricultural investments and they are developing a 10 year retirement plan.

Nevertheless, Wayne and Judy are still very interested in their beef business and aim to keep it ticking along healthily. Their mission statement has been and will continue to be: 'to turn beef production inside out where taste and tenderness is the true test'. The focus of their operation is on meat quality, rather than a concern for a particular breed.

They currently run composite cattle comprising of Belmont Red, Charbrays and Brangus. In the past, in search of meat quality, they moved into other breeds such as Wagyu but felt that while the meat from Wagyu was definitely of the highest quality, the cattle had distinct environmental limitations!

Steers are now targeted at the four tooth Jap Ox market with heifers targeted towards the 0-2 tooth domestic trade. Cull and non pregnant cows are sold into the US cow market. Until two years ago Wayne and Judy treated all steers and heifers with HGP's but this practice has now ceased. This has been done with an eye to the EU market as a five year leucaena development plan is put into place.

The leucaena is the newest development on the fattening blocks with the first 120 acres being planted in February. It was planted in twin rows with 6 m spacings and is growing well to this point. The rest of the creek flats and other scrub country on the Moxham-Price's property will also be put to leucaena. The total area to be planted, paddock layouts and watering points will be determined once a computer mapping software program is purchased. This is a matter that the Biloela Grazier team aims to investigate in their upcoming meetings!

Judy and Wayne joined the *CQ BEEF* project to continue to learn and to gain ideas and insight from other producers. Their ProfitProbe results are being used to identify areas that can be fine-tuned to improve the profitability, efficiency and sustainability of the beef enterprise. The results will also be used to ascertain whether different strategies of beef production can be used more profitably within the enterprise, such as buying in replacement heifers rather than breeding their own.

As Wayne and Judy's two sons are currently living overseas, a holiday to Eastern Europe is probably not too far away. Their dream holiday would be four weeks in Alaska.

CQ BEEF – an opportunity to compare and benefit

Ewen Besch

Fifth generation Central Queensland cattle producers Ewen and Kathy Besch have joined their district *CQ BEEF* project group to enable them to compare and review their current business and management practices.

The Besch family operate a family aggregation of three Bajool and one Dululu district properties covering 15,654 hectares.

Ewen and Kathy have four children and three grandchildren. One son Tony and his wife Jodi live and work on the properties and another son Ian, also works for the enterprise part time. Ewen and Kathy have previously completed a DPI&F FutureProfit course to hone their grazing business management skills.

Prospect Vale and *Banarabin* carry approximately 500 breeders and the progeny are relocated to the family's finishing properties *Centre Creek* and *Brooklands*.

As well as finishing their homebred cattle, the family buys an additional 400 store cattle annually through private paddock sales and from Gracemere Saleyards. Finished animals are sold into the Jap Ox market with 6-8 teeth at 36-42 months.

Banarabin is narrow leaf Ironbark country with duplex soils and *Prospect Vale* is red soil forest country with an average 1600 mm rainfall. These coastal properties are predominantly black speargrass oversown with stylo legumes such as Seca, Verano and Amiga as well as the improved grasses buffel and Bisset bluegrass.

Centre Creek is best described as undulating country with bloodwood eucalyptus on clay soils carrying buffel and blue grass with couch and sago grass along the creeks.

Ewen and Kathy believe *CQ BEEF* will help them to identify where their activities differ from other businesses on similar country.

'Based on our current stocking rates, we would like to know if our investment in supplementary feeding costs compare favourably with others,' Ewen said.

Ewen has fed Prolix supplement to their stock for the past three years and believe the benefits of their feeding regime become evident after rain when supplemented animals quickly gain weight. Some dry licks have been used this year at *Banarabin* with good results.

'From our involvement with the *CQ BEEF* group, we will have an opportunity to learn and benefit from management practices used successfully in similar businesses.'

Some pasture renovation has been done using a Yeoman plough although the benefits are at this stage unknown due to the erratic rainfall during the last twelve months.

The Besch family ran Poll Herefords until 1982 before introducing Droughtmaster and red Brahman bulls.

At *Prospect Vale* most of the bulls are Droughtmasters. Charbray bulls were initially used on *Banarabin* but Droughtmasters are now the predominant breed.

A major problem the family encounters is a shortage of labour experienced in livestock and general farm duties. There is also an issue securing tradesmen and the family find that it is often simpler to do jobs themselves rather than pay for the travelling time from Rockhampton (45 minutes).

Another impediment to conducting their business is that the area is poorly serviced for internet and mobile phone reception.

Benchmark surveys – a big thankyou!

A total of 46 benchmark surveys were completed by producers from the Nebo, Mackenzie River, Biloela, Moura & Bajool groups. Thankyou for taking the time and completing this survey for the *CQ BEEF* team. The results are currently being analysed and will published in the next edition. This benchmark survey will be a valuable tool for the team to tailor the project to your groups needs and to help track the groups' progress.

Staff profiles

Mark Best, Agricultural Economist

FAMILY: Married to Lilly, recently had a son named Steven.

CHILDHOOD: Originally out of Sydney.

CAREER: Joined DPI&F in early 2003, working in the rural market development / trade division initially, then restructured into the strategic policy division for a (very!) short stint.
Enjoying working on actual agricultural economics now. Currently doing a bunch of beef economics including Beef Systems Extension.
Also worked for the New South Wales Grains Board in the late 1990s in coarse grains contracting/logistics. Spent time in the Army, including operational deployment to the Solomon Islands.

BRAG SHEET: Don't know if this qualifies: once wrote off the family car on the way to the airport to see my girlfriend overseas - the holiday was rescheduled and she become my wife!

Ford Mustang knowledge expert.

HOLIDAY: Go to see the family in Thailand pretty regularly, still need to go to North America, love to see Machu Picchu one day...

Lindy Symes, Industry Development Officer

FAMILY: Single

CHILDHOOD: Born in Taroom Queensland, and spent majority of my junior years there.

CAREER: Joined DPI&F in August 2007.

Prior to this, worked for Heytesbury Beef on *Pigeon Hole Station* in the Northern Territory, where I was working on the Pigeon Hole Project. I had nearly completed 5 years with the company.

Prior to Heytesbury employment graduated from UQ, St Lucia campus in 2002. Completed a degree in Agricultural Science (Animal Science)

BRAG SHEET: Nothing much.

Have spent all of my life in the beef industry, and have grown up in the bush. I have no desire to ever live in town.

Love challenges, and like to be challenged.

HOLIDAY: Northern Territory is a bit of a fad for me at the moment. Beautiful country up there, and the wet season is really pretty. At some stage would like to go on a working holiday overseas possibly the US, Canada, Sth Africa, Argentina as starters.