

Profitable and Sustainable Farming → Nutrient Dense Food Production



My name is John O'Brien and 50 years of experience in the cattle industry began with milking cows on the family farm at age 6. Based in Melbourne, Australia, this experience covers every aspect of the Australian and International Dairy and Beef Cattle Industries, from importing and exporting live cattle and frozen genetics, breeding stud and commercial cattle, consulting to cattle breeders in Australia, New Zealand and the U.S.A. on genetic selection and design, as well as designing Profitable Farming Systems™.

Known for being a maverick with a passionate, relentless, independent and accurate approach to the research that leads to highly accurate, proven forecasts and insights. One of my priorities has

been the study, research and analysis of the economic functionality of the modern cow (GABBY). For many decades I have studied, researched and analysed the economic functionality of GABBY in Australia, the United States of America, New Zealand, South Africa, England, Ireland, and several European countries. From what I am told this intense study over this period of time qualifies me as an expert on cows.

In simple terms, my objective is to promote the use of high quality, natural and healthy cows so that farmers have a profitable and sustainable production system, a good lifestyle and consumers enjoy naturally healthy food. My focus on the efficiency of production and the quality of the final product have been the driving factors in my research for the past forty years. And as a result of this research, I have a solid foundation for the following statement of benefits of my work and my mission:

#### Healthy cows provide healthy profits and healthy food.

Farmers benefit by growing herds that are less expensive to maintain, more fertile and produce high quality products, which translates into higher profits, more quality lifestyle sustainability and a better product to market.

Why am I doing this? Because I'm passionate about great cows, actually love cows and can talk at length about them. I am also intensely curious and less inclined to take the easy way out, would rather investigate than accept established beliefs, believe that we should live with both our head and our heart, am concerned over the current state of the beef and dairy cattle industry and the products consumers purchase, want to make money for farmers versus from farmers, want to show consumers and producers that different alternatives are available, and I desire to make a difference in the world and a difference in people's lives.

Over the last 5 decades there has been a dramatic change in the design of our cows. As you will see verified later in this Report farmers' increased costs are not being covered by returns being generated by a (supposed) better GABBY in a (supposed) better production system. An unsustainable farming situation is the picture presenting and validated by research. This document mainly discusses dairy cows; the principle is the same for beef cows.

The most successful Farming venture I have witnessed is the "Farming of Farmers".

Do you understand that Less Production = More Profit = More (for you) and Less (for others)?

Isn't it time someone wanted to make money for farmers versus from farmers - I do.

Decades of independent research clearly validates – your profit has little to do with production levels - your profit has a lot to do with cost of production – your cost of production has a lot to do with cow herd economic functionality.

Cow herd economic functionality is the key to your level of profitability and sustainability and lifestyle. The 'new age' GABBY has very poor economic functionality. Your Profit levels have little to do with production, your Profit levels have a lot to do with your cost of production and your cost of production has a lot to do with your Cow Herd's economic functionality.

Farming Nature's Blueprint Cows in natural low input Profitable Farming Systems™ facilitates you being profitable, sustainable and having a good quality of lifestyle. Cows which do not fit Nature's Blueprint (unprofitable cattle) do not facilitate this essential and naturally occurring process which is critical for your and our Planet's sustainability. A sustainable farming system must have sustainable cows. GABBY cows are not sustainable.



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A low input system means a production system where there is a margin between cost of production and returns for product even when Milk prices are low. These are Profitable Farming Systems™.

This is the opposite of the modern farming system (high input/unnatural): using *copious* quantities of chemical fertilizers; poisonous sprays; hormones; antibiotics; and expensive grain.

#### The importance of longevity

Longevity is the ability to live a long life. Longevity is a critically important trait as it is Nature's indicator of disease resistance and good physical structure. Cows with good longevity cannot be high producers at a young age. Selecting for high early production (GABBY) is selecting against longevity. With good longevity fewer replacements are required, equalling more surplus sound cows to sell, equalling more income. Cows with good longevity have a youthful look and can be 10 y.o. and look 6 y.o. They rarely require health treatment. Longevity is a *very valuable* trait which is *free*.

GABBY cows can appear (and are) worn out at 4 to 5 y.o. – should they even get to that age. Selection for early high production (GABBY) is direct selection against longevity. With GABBY, you end up with a higher percentage of young cows in your Herd-which are more expensive to maintain; less productive; and requiring much health treatment. In this situation (poor longevity with GABBY) you have less surplus sound females to market and quite often have to purchase replacements as enough cannot be bred due to poor fertility and a large fall out at an early age. All ends up showing up on the **wrong side** of your **balance sheet**.

All the principles of breeding GABBY select against longevity. GABBY have poor economic functionality. The level of economic functionality of your cow herd *is the key* to your profitability and sustainability.

#### What is Nature's Blueprint Cow?

Natures Blueprint Cow is the most economic functional design of a cow inadvertently created (over time) by nature through nature's unrelenting selection law – Survival of the Fittest. This evolution is termed natural selection. Nature's Blueprint Cow is not Breed specific.

Over decades we have seen good Cattle Breeders (Master Breeders) working in sync with nature, carefully combining artificial (man-made) selection with natural selection with the results benefiting both the cow and the farmers. A cow with balanced functional traits is the result. As with everything in life balance is very important.

These Master Breeders never lost sight of the number 1 requirement of nature – the fittest *will survive and thrive (thriving was the #1 focus)*. Using great observation powers these astute Breeders worked in sync with nature to develop cows (beef and dairy) which functioned efficiently for their Owners in converting available resources into a highly nutritious Consumer products.

What differentiates a Nature's Blueprint Cow from GABBY? Nature's Blueprint Cows are moderate in height; have wide, deep, angular bodies; a strong top line; a moderate sized well supported udder; good feet and leg structure; and a sleek coat. GABBY is tall, narrow with poor physical structure and poor coats. NBPC are very fit, strong and thrifty, GABBY are unfit, frail and unthrifty.

This correct exterior body conformation (phenotype) brings with it a muscle composition and glandular system which are superior in function hence a naturally more thrifty and healthy animal.

Here's the important part for you. Nature's Blueprint Cow's correct exterior body conformation creates a muscle composition and glandular system which are superior in function, hence a naturally more thrifty and healthy animal. This means the Nature's Blueprint Cow is better at digesting its food and extracting nutrients, so it can function and be productive and reproductive on lower energy food (grass/forage versus grain). Research conducted confirms that the rumen in a Nature's Blueprint Cow is much greater in size than in GABBY. This facilitates the natural, slow processing and maximum nutrient extraction from grass which the tall, narrow GABBY, with a much smaller rumen, is unable to do.



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Therefore GABBY requires heavy supplementation with expensive grain and other supplements to compensate this deficiency. And this *all costs you*.

This is why many farmers now have to feed their calves grain once they are weaned. More cost to you.

Nature's Blueprint Cows can therefore function and be productive and reproductive on lower energy/lower cost food (grass/forage versus grain). This efficient body shape (phenotype) has low maintenance requirements (compared to GABBY). Maintenance requirements are a huge cost in any Bovine production system. Hence the term low maintenance.

#### Nature's Blueprint Cows are low input, low maintenance, low cost, efficient and productive Cows.

Over the last 5 decades there has been a dramatic change in the design of our cows. Nature's Blueprint Cow is a moderate framed, wide based and angular cow – GABBY are tall, long and narrow. Many suggest GABBY is bigger. I suggest GABBY is taller and narrower which **does not** equate to bigger **in volume**.

Let us look at why and how the World has moved away from Nature's Blueprint Cow and the effect on farmers and consumers.

#### The Cost of 'progress' and the price you pay for it

Well as we have witnessed many times in History: man often believes they know better than nature and – by ignoring nature - they can make some gains – 'real progress' is 1 of the terms used - when in fact - all they are really interested in is making money with little regard to the casualties to the Farmer, the soil, the cow and the Consumer along the way.

There is now much evidence and information available to validate that our modern ways ('sold' as progress) of artificially forcing our soils to grow higher volumes grasses/forage or crops – by applying Chemical Fertilizers and spraying (anything considered a weed) with poisonous sprays has done great damage to the structure and mineral content of our soils and (hence) the nutrient density (food value) of the plants it now produces.

Little has been mentioned about the damage which has been done to the design of our beloved bovine (cow) species over the last 5 decades. Whilst we are very aware of the term GMOs in plants - for the changes which have occurred to the design of our dairy and beef cows – I suggest the term *HMOs* (humanly modified organisms) is more exact. Hence, we have GABBY.

## So how did we get here?

Over decades of careful observation, Master Cattle Breeders made steady genetic progress in the economic results. This is the basis of artificial selection working successfully with natural selection. These Master Breeders were artists and improving cows was their passion and lifetime ambition. They knew that the perfect cow or perfect bull do not exist and relentlessly worked towards developing those that were functionally efficient and healthy.

These great cattle breeders had an instinctive ability to be able to evaluate how individual strains would respond (adaptability) to different nutritional environments **before** the cattle actually were introduced to these environments (there are big differences in the nutritional environments of different farms/different areas).

The Master Breeders who have consistently bred superior cattle (functionally efficient and adaptable) are those who combined artificial and natural selection *without* ever compromising fitness.

Then something happened, in the name of progress, there was a demand for increased production and the need to produce more per cow at a younger age. The Master Cattle Breeder was replaced with experts, such as industry bodies, geneticists, breed societies, artificial breeding companies, promoters and consultants. And this is the result:

- Fitness was ignored as the number one selection criteria
- Great promoters mistakenly considered to be great breeders (promoters are interested in making money; breeders are interested in breeding great cows)
- Artificial Breeding Companies (ABCs), Breed Societies and industry bodies gaining enormous power and decision making
- Computer generated breeding values becoming the paramount selection tool



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- Promotable for the seller becoming more important than profitable for the end user, the farmer
- Ignoring all sound breeding principles when applying selection principles and tools
- Selecting against longevity and inviting frailty
- High input farming considered to the only way to farm
- Farmer's margins reduced due to the very high cost of farming frail cows
- Farmers lifestyle dramatically diminished and their sustainability threatened
- The use of chemical fertilizers, poisonous sprays, GMO seeds, and antibiotics at an all time high
- Genetic defects
- Supplying the consumer with products with reduced nutritional value produced in very unnatural/unhealthy ways

What also must be understood is that nothing happens in isolation. For example, when you select for a trait to be present at higher levels than naturally occurs, then other traits will be affected. Higher production = lower fertility. This is a breeding principle that has either been misunderstood or simply ignored by those responsible for the modern unbalanced GABBY cows.

Here is something to consider: when a cow reaches the age of 4 and has been relatively trouble free, then and only then does she become a very profitable cow for the Farmer. GABBY struggles to get there. Nature's Blueprint Cow blossoms at 4 years old

But Nature's Blueprint Cow did not produce enough to fit into this new plan (progress) of production at any cost. Why? Because Nature's Cow had been carefully selected and evolved to be functionally efficient - having low requirements of supplementary feed and health care (low cost). They do not and cannot have a propensity for high early production.

They have acceptable levels of production, which also means sustainable levels of production, not the levels of high production that progress was looking for.

For these 'progressive' operators the cow which does produce along their lines does not function well in a natural environment. Taller, longer, narrower strains of cattle were identified as higher producers therefore erroneously identified as having superior genetics. These animals are good responders to artificial, high input feeding, such as feed lot environments where they will produce large volumes of low nutrient dense food and have great trouble rebreeding.

So the focus shifted from functional cows to cows with high early production and growth. And the frailer they became the more feed they were fed, and the more antibiotics they were given, and the more caesareans were performed at birth. And the farmers' costs kept rising.

More (for others) equals less (for farmers) in this sad financial story (see later).

I firmly believe everyone is making money from GABBY and this high production system except the Farmer.

Vested interests farming farmers – the most successful farming venture I have witnessed.

**Incorrect cow design is the systemic cancer of productivity gains**. GABBY is a very poor convertor of available resources (see later). The quest to satisfy this very inefficient model's demands is sending farmers into financial ruin; devaluing the nutrition value of Consumer's food; and doing untold damage to our precious soils.

In this 'production' plan – sold as productivity and genetic gains – the true costs were never considered or accurately evaluated and in many cases farmers ended up 'buying' any extra production through extra feed and supplement purchasers. In these HMO cows higher production is selected for at an early age (too early) which resulted in many cows not making it to 4 y.o in a herd(poor longevity).

Many farmers have raised mortgages to dangerous levels to support this very inefficient cow and the system tailored around it.

A natural human trait: Once we believe we have the secret to higher production we take our eye off cost of production.



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**More and more at what cost:** 'The more we feed the more production we will make and the more money also.' So we will feed them grain and if they get sick we will give them antibiotics and then (new discovery then) if we give them hormones (in some cases) they will give more milk or produce more meat. 'Wow this is great progress.' is the theory.

n.b. This great idea never considered that this extra production from these frail cows would come at a cost and - as many farmers have discovered - a cost *higher than the extra production earned.* e.g. Major losses in cow fertility rates; higher cow health costs; major birthing difficulties; and higher feed requirements all leading to higher cost of production for farmers. Supporting the demands of GABBY is putting many farmers in dangerous financial positions – not to mention the loss in quality of lifestyle.

### A Case Study: The Holstein Cow

Until five years ago, the Holstein cow was commercial dairy farmers' favoured cow breed worldwide. This breed was 'sold' to them as being the solution to more production (each cow could produce more milk) which was mistakenly assumed to mean more profit for the farmer.

As the experts designed, redesigned, and promoted this black and white cow to be better and better, ignoring natural selection and heavily relying on computer generated breeding values as being a superior selection tool, nature 'decided' enough was enough and took over.

With continual artificial selection and total disregard or respect for survival of the fittest, what has evolved is a strain of cow which is extremely hard to get pregnant and has a high percentage of difficult births, both indicators that the natural selection process is trying to cull them from nature's herd. Note: Master Breeders do not tolerate infertility and calving difficulties because in nature these traits naturally wipe the bad cattle strain out.

And now, infertility and calving difficulties, leading to paralysed and crippled cows and dead calves, are both accepted as the norm in the Holstein breed, instead of being viewed as a reason to stop promoting and evolving this breed. These are two of the biggest problems in the Holstein breed Worldwide. Why? Because these experts have not selected against these problems they have actually selected for them. For the farmer this makes no sense or dollars.

And all the experts behind the system and genetics which go with it are ALL paid for by the farmers.

**Rising Costs:** Any system producing a commodity product is always battling with rising production costs and you are no different. Raising prices received is not an option to cater for increased cost of production.

Therefore, to be sustainable a producer must become more efficient – makes sense. The dairy industry has been told by experts that they (the experts) are supplying them with the best genetics available identified and evaluated by these experts. Is this true – I have been saying **NO** for many years. You decide after reviewing the picture presenting in the following analysis:

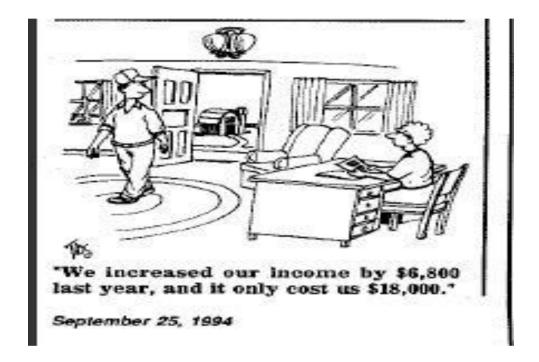
Using Australian Industry Publicised Statistics									
Year	Number of Dairy Farms in Victoria	Total number of Dairy Cows in Victoria	Dairy Cows per Farm	Total Victorian Milk Production in million Litres	Milk production per Farm in Litres	Annual milk production per Cow in Litres	Actual annual milk production per cow accounting for longer lactation length	Tons of Concentrates used per Farm per year	Kgs of Concentrates per Cow per year
1999	7,806	1,377,000	176	6,870	880,092	4,989	4,989	140	794
2012	4,556	1,059,000	232	6,213	1,363,696	5,867	5,444	370	1,592
% Increase							9.13%		100.57%



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PLUS in this same period fertility rates have dropped significantly - the cost - impossible to value!

Where is the benefit to you the Farmer? Even at higher milk prices than farmers are receiving today this situation does not balance up *without* adding the cost of lost fertility when farmers have done everything humanely and financially possible to maintain fertility rates. If the following wasn't so true it *would* be funny.



#### The modern production system is a great business model – for whom – not the Farmer.

Many of these so called revolutionary tools – which farmers 'have to have' – are introduced to fix a problem created from using the introducing Company's last revolutionary tool! This is the only sustainable part of the modern farming model – suppliers business' supplying solutions mooted to fix problems created by the last revolutionary tool. E.g. selecting for more production has led to reduced fertility – now there are all sorts of expensive programs (mooted) to improve fertility; mineral supplements because the soil is devoid of minerals from the heavy use of chemical fertilizers; feeding and drenching programs for young livestock because they are too frail to function on grass. **And the farmer keeps paying.** 

#### I repeat - everyone is making money from GABBY and this high production system except the Farmer!

**The Alternative:** The cow nature designed – through natural selection – functions well in all environments. These strains produce good quality milk and meat and are very efficient (profitable) for their owners.

To be profitable and sustainable farmers require better cattle NOT cattle with better numbers.

'Breeding functional cows has never been and will never be a science.' any Master Breeder.



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- √ GABBY has very poor economic functionality
- ✓ Cow herd economic functionality is key to your level of profitability, sustainability and lifestyle
- ✓ Natures' Blueprint Cow's function is on the same page as the KPIs of economic function
- ✓ L.P.E.M.P. Less Production Equals More Profit for You

Comparison of Economic Functionality						
Nature's Blueprint Cow	GABBY					
Producing acceptable levels of nutritious products	Producing high levels of low nutrition value product					
Providing consumers with cost effective; naturally	Providing consumers with unnaturally produced;					
produced; high nutrient dense; healthy food	low nutrient dense; unhealthy food					
Ideal for sustainable and profitable farming	Antagonistic to sustainable and profitable farming					
Affording farmers a good lifestyle	Antagonistic to farmers having a good lifestyle					
Working for farmer's profitability	Working against farmer's profitability					
Keeping farmers sustainable	Making farmers unsustainable					
Very efficient at feed conversion (low input)	Very inefficient in feed conversion(high input)					
Maintain a healthy body weight in a natural environment	Lose body weight very easily in all environments					
Low maintenance requirements	High maintenance requirements					
Able to function and produce well in grass/forage	Unable to function and produce well in					
(natural) based environment	grass/forage(natural) based environment					
Superior endocrine and immune systems	Inferior endocrine and immune systems					
Very rarely require health treatment	Continually require health treatment					
Very adaptable to nutritional and environmental	Very sensitive to environmental and					
changes	environmental changes					
Predictable with high pre potency	Unpredictable with low pre potency					
Good longevity	Poor longevity					
Good survivability	Poor survivability					
Rarely require feed supplementation	Constantly require feed supplementation					
Very fertile	Very poor fertility					
Able to birth easily	Many deaths and damaged cows at birthing					
High percentage still in herd at 4 y.o.	Low percentage in herd at 4 y.o.					
Balanced in traits	Unbalanced in traits					
Low cost of production	High cost of production					
Organic and in sync with nature	Inorganic and out of sync with nature					
Designed by nature for function	Designed by experts against nature					



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**In summary:** Because of correct conformation/body shape/phenotype Nature's Blueprint Cow has the ability to efficiently merchandise naturally produced lower energy food (forage versus grain) and still produce a nutritious product. Farmers Worldwide – unless heavily subsidized - are struggling with rising costs.

Your survival hinges on their sustainability and level of efficiency of production. Farmers cannot charge more and more for what they produce. They have to be efficient at what they produce. The most important organism on your farm is your cow. A Farmers' cows design is the key to being profitable and sustainable. You must have a cow which is designed to be sustainable and work in sync with nature.

A cow which works for you (not the reverse) is the key. Discerning consumers are demanding cost effective, healthier, nutrient dense and naturally produced food. Farmers' sustainability is of great importance to the consumer for where else will they source their food in years to come? In Australia all bovine production systems are under financial threat. Unfortunately the big end of town has an (unspoken) belief they will be able to source all the food they require from Countries i.e. China should Australian farmers be unable to produce food. Import food from China, a Country which still allows the use of poisonous sprays which were banned in Australia several decades ago!

Farmers cannot stop rising commodity prices. They can reduce their usage and reliance on them by ensuring their cows are the most efficient convertors of available resources into healthy, nutrient dense foods. The only vehicle which can cost effectively and sustainably serve the farmer and the consumer is Nature's Blueprint Cow. We must return to this naturally – time tested – design – the design which nature intended.

#### And finally

An Artificial Breeding Company with Worldwide presence has this picture on their website. This is very symbolic of the design of GABBY.

'A bloody mess' is what I think.

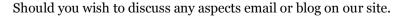


Trusting you found this Report interesting and thought provoking.

Should you have any questions please email to <a href="mailto:contact@naturesblueprintcow.com">contact@naturesblueprintcow.com</a>

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John O'Brien