Introduction  
This paper was kindly sent to us by Keith Murdoch, after he saw Native Angus listed on the RBTA website with an estimated population of fifty females. After reading this paper, some email discussion with Keith and investigations, I removed Native Angus from our website as the type was not rare, in my opinion. Should anyone’s opinion differ they are welcome to send us a paper explaining reasons, it shall be added to our website for balance and review by all interested.   
  
It is laudable some people have maintained the original type of Angus and avoided genetics to the contrary. There are indeed cattle here called Native Angus, as those in the UK, which preserve old lines. That is a Good Thing and should ensure the original type of animal does not disappear. Currently they are registered with Angus Australia, not separately. Angus Australia have not answered any of my queries.

However it appears there are more cattle that fit this category, simply called Angus. Numbers of these, whilst not huge, are certainly not under threat. One must bear in mind that Angus are the most numerous cattle in Australia and we are in the top 10 of the world’s biggest beef producers. Thus the original style animal is in a minority, however, in the best studs, so the future is hopeful indeed.  
  
Ausline and Lowline are two breeds that are Angus derived - both Australian breeds - fortunately neither, at time of writing, are rare. Both have comprehensive information on their respective websites. Ausline allow Native Angus as ‘upgrades’.  
  
This is an excellent paper, which Keith worried would upset people but which, to his gratification and surprise, was very well met – he had great feedback. Keith’s Sparta stud had zero American genetics. In 1989 he got an Australasian on-farm Angus record average of $5505 a beast. Many other records and prizes went to the stud. Keith is proud that renown stud Millah Murrah uses Sparta genetics, and follow his breeding philosophy of keeping to the original Angus type. They have a good website, and their introduction to Keith’s paper is good reading. One may not agree with all he says, but most is gold. Keith knows at least four top Australian studs and the same number of NZ studs that have zero American genetics.

Thank you Keith for sending this paper – his original was meticulously typed on a typewriter - a labour of love. A valuable insight to a passionate cattle breeder’s hard-earned knowledge.

Janet Lane for RBTA, May 2019.

**SPEECH TO ANGUS AUSTRALIA**

**BREEDING BEEF CATTLE IN A HARSH ENVIRONMENT**

*Presentation to Angus Australia NSW State Committee, July 2018*

Keith Murdoch

Thank you for the invitation to speak to you today. I have now retired to Merimbula and have other interests. I no longer have to endure 19 years of drought, a metre of snow or sitting on a young horse on top of a typically treeless Monaro hill with a lazy wind blowing straight off the snow. We call it lazy because it doesn’t go around you. There are many things I miss including the stark beauty and resilience of the Monaro country and a great love for the Angus breed and its welfare. I no longer have a financial interest in cattle so I feel free to speak my mind.   
  
Stud cattle breeding is a tough and fickle business. My father didn’t give me any encouragement. He said “If you burn your arse you can sit on your own blisters”. However he did allow me to take over and reorganise what became a very successful commercial herd, producing some Australian record prices.   
  
I have spent my whole life with Angus cattle, horses, sheep and sheep dogs. I am not mechanical. Kathy says that I drive like I am still on a horse. Maybe I could be called a stockman.

I have grown up with cattle that have had to compete with sheep and still thrive and survive in a harsh environment. My stud prefix always reminded me of the toughness, courage and temperament that is required.  
My live has been spent observing. I want you to remember the word “OBSERVATION.” It is the key and most important word for any cattle breeder. Another essential key word in “INTEGRITY”. As we go along I will tell you 6 other key words. I am here today to help, maybe with a different perspective to what you are used to hearing.   
  
Selecting cattle for a harsh environment is no different to selection in general. The only difference is that faults and problems become more obvious when cattle are put under pressure. It is not rocket science, all you need is a good natural eye and 2 key words and you will be able to make a quick initial decision.  
  
The next key word is “CLASS”. I guess you all know a classy looking woman when you see one. It is the same for livestock. To be a sire you have to look like a sire. A plain looking animal is not likely to be a successful sire. Class is all about quality and this will flow through to his daughters.  
  
Let’s say at a quick glance we have been lucky enough to find a classy, balanced, free wheeling bull. Now we look at the basics starting with his scrotum and that he has a tight pizzle. You will have also noticed his hair. Hopefully he has a nice soft coat. I cannot emphasise enough how important this is. You can’t have a quality carcass if you haven’t got quality hair. Not only do they do better in tough conditions but these softer coats are an indication not only of fleshing but also of milk and femininity which we expect him to pass on to his daughters.

The head should have already caught our eye. We are looking for a big wide muzzle and a deep strong jaw as well as a nice kind eye. The head tells you a lot about the animal. You may not eat it but they have to use it to eat.

In 1963 a Scottish breeder Wyn Colville judged at Sydney, followed by a tour of Queensland. When he returned I was lucky enough to have lunch with him. He said, “I came in for a lot of criticism at Sydney for being too hard on jaws and muzzles. But after seeing all the poorest conditioned cattle in Qld I wish I had been a lot harder.

Next we check the feet. We know that because he is balanced all the structure is correct so half the battle is over. We need a big hard foot with ideally no turn in his claws. A big foot allows the weight to be spread over a bigger surface area and therefore the bull is sounder. If you go to a sale and all the bulls have perfect feet alarm bells should be ringing as there is only one reason why they are perfect.

We observed at that initial look that his head was attached at the correct angle and that his neck was suitably long so he can graze without having to spread his front feet. We also noticed that he was long. If he is long in the quarter great, but if he is long in the boss this is an indication of an inefficient animal who will do it hard under tough conditions.

We also need him to have optimum muscle but not excessive because that leads to a fertility problem. Our bull must make two tracks in the snow, with plenty of width so there is sufficient room for efficient conversion. Hopefully this width will flow through to a good hindquarter. He will also need to be able to easily put on a covering of fat to get through the tough times. In other words he needs our next key word, a very good “CONSTITUTION.”

Another key word is “EFFICIENCY.” It is so important that we have already mentioned it. The only sure thing with cattle breeding is that in the long run the best converters will win.

There is one criteria that is essential. Our bull must be out of a very good hard working cow. Maybe we can get a look at his mother and the cow herd, and ask questions. I also researched and kept records on certain cow herds.

We seem to have selected an exceptional bull. This is not likely to happen so we may have to be willing to compromise. This is where we need to know the strengths and weaknesses of our own herd.

The next key word we need to remember is “FASHION”. Fashion is cyclic and is set by the Americans. They always go well past the commercial reality. Eventually it has to come back to profitability.

In the 50’s the fashion was baby beef and the Americans bred some unbelievably small cattle. Thankfully the Scottish didn’t go as far and bred some small but quality cattle. There were some incredible world record prices at Perth, Scotland, particularly by Bob Adam of Newhouse, with the US herd Black Watch Farms being the most prominent buyer, culminating with Wyn Colville selling Lindertus Evulse to Argentina for 60,000 guineas. This fashion carried on through the 60’s.

In 1964 I competed in the judging competitions at Sydney, winning the Angus and then the Special Oral (on Poll Herefords) against the placegetters of all the other breeds. Was I a good judge? The answer is NO! Like so many breeders today I had been brainwashed. Luckily I didn’t compete the next year as I was starting to think for myself and didn’t consider the smaller Scottish influenced Angus were suited to our commercial operation. I got my start by going against the fashion and later by going in harder during the beef depression.

In order to keep abreast of the American trends for years I subscribed to the American Angus Journal and another monthly – Blacks Unlimited. I saw the next fashion developing led by the showring and particularly the junior heifer shows. It seemed to be a competition where the tallest animals won. To get them tall they were getting them narrow. To get them even taller they straightened the hind leg. The worst structural thing you can do to cattle. They also seemed to bring in some outside help.

The American Angus Assoc. seemed to be very aware of the situation. They had a problem in that they couldn’t legally deregister these cattle as they were already registered. All they could do was publish a list of bulls carrying genes not characteristic of the Angus breed. This list was regularly published in the Angus Journal and seemed to go on forever, page after page.

The Australian Angus Society should also have been aware, particularly as the main aim of the Constitution is to keep the breed pure. This fashion should not have lasted long as you would think that some intelligent person would have realised that daylight doesn’t weigh very much. They also should have been aware of the Canadian Holstein bull “Lin Mac” who put serious recessive genes through the whole of the Australian Friesian herd.

Former CEO Graham Truscott said to me, “we are going to align ourselves with the chicken industry; select the 3 best bulls and get everyone to use them.” He left me scratching my head. Who will select these bulls and what will they fall back on after the impending disaster? What about the narrowing of the gene pool?

Why is it that Australians punch above their weight yet have this complex that everything American must be bigger and better?

A few years ago I was standing with Roly Powdrell of Turiroa, at a sale in NZ and looking at one of the sires. Roly said, “this is exactly the bull we need in NZ.” I replied, “Isn’t that the bull you were looking for 30 years ago.” He said, “Yes I know.” This indicated how much progress has been made. NZ has woken up a lot earlier than us mainly because their hill country has sorted out unsuitable cattle.

A big concern is that a whole generation of young people have no idea of the virtues that the Angus breed used to possess and what a proper Angus even looks like. They seem to think that the current problems are normal.

There are plenty of reasons why this fashion is a disaster, but let’s pick one. Why would anyone in their right mind change a breed form one where you don’t need to check your heifers when they are calving, to one where they have to be supervised? There is not a lot of weight gain in a dead calf.

You may have noticed that I have been talking about selection and strangely haven’t mentioned Breedplan. In 1982 I purchased a Victorian stud. It was one of the first performance tested herds on AHIR under the old ratio system. Breedplan was in its infancy and we received or first breedplan report. I couldn’t believe how accurate it was. I have stayed within herd breedplan ever since because I knew the raw data was correct and I could use it as an aid to breeding. The trouble is they kept changing the formula, and every time they changed it, it became less accurate to the piont where if I was still in the industry I would be going back to the old ratio system. A few years later we had Group Breedplan. A brilliant idea as they could make a lot more money and then later they would be able to extend it to other countries, and if they could produce EBV’s for a lot more characteristics there would be even more profit. Breedplan has become a growth industry that we are not supposed to question.   
  
There are people behind the scenes who seem to lack practical experience, but have a vested interest in promoting the scheme and making it look good regardless of the accuracy. It is also very open to cheating. However it is great for people with limited experience who think that by buying cattle with the top figures they have some of the best cattle in the country. They do not realise there are optimum figures and that the ones with the big figures are very inefficient animals. It is wonderful for corporates as they have shareholders and like to be able to quote figures to them. It is a big help to farm advisors who may not have bred anything themselves.

I would look at sale catalogues with all the scientific figures. Some would have 50 bulls by 20 odd different sires. Where is the science in that and how do you control a breeding program? They obviously don’t know what they are doing and are taking pot luck. Not to mention the photos. We won’t go there!

Max Hopper was a mathematician who had a small Angus stud in Gippsland. He produced a multi page document explaining how the Breedplan formula was flawed. Very few people read it. Flicking through 30 pages of algebra isn’t everyone’s cup of tea. Never the less in my opinion he has been proven correct. Group Breedplan is about marketing, its help to breeding is debatable and is limited by the accuracy of the data that is fed into it.

There are so many examples of things not adding up. How can a grass fed herd in Australia be compared to a grain fed herd in America? Why do they have EBV’s for scrotal circumference? There are only two sizes – big enough or not big enough. Why does breedplan not want breeders to use raw data? Why does an EBV with an accuracy of 9% end up being heavily downgraded? Growth figures are progressively getting bigger so why aren’t the cattle? Where are all the elephants? EMA is obviously flawed. Why are there EBV’s for marbling when the feedlots are finding that marbling of Angus is decreasing? It is an end product for God’s sake. There are a lot of basic things you need right before you worry about marbling. In fact if you have a good cow herd and quality hair you don’t have to worry about it at all. It is one of the marvellous qualities that McCombie and the founding fathers bred into our breed. Through all the fashion changes we haven’t managed to breed these qualities out but we are making a fair fist of it this time. If I continued I would also produce a 30 page document. I know when we think about it we could find many examples that are hard to explain.

Breedplan tries too promote birth weight as being the main factor in calving ease. It is not. If heifers have the correct skeletal structure and are managed properly the birth weight doesn’t matter. The most important thing about milk is how well a cow can milk late in her lactation. If she can do this she will milk well right through her lactation.

When the first American Angus Assoc. Cow Energy values were released, Shock-Horror, a high percentage of our most heavily used sires scored in the bottom 5%.

There are even people who are such exceptional cattlemen that they go to a sale and buy bulls without even looking at them. There are people who buy bulls with a bad temperament because they consider they have great figures and can wear the problem. One day they or an employee may wear it literally. There are studs that wean their calves at 3 to 4 months. Why? This is beyond my comprehension. How is it possible to have EBV’s on these cattle?

Use Breedplan by all means but remember it is a Guide not a Gospel and should not be preached as such.

The whole sad saga has seen the technocrats become the breeders and the breeders have become the multipliers. It is easy to breed good figures buy very hard to breed good cattle. I like the NZ breeder Pat Watson’s analogy, “that if you decided to go sky diving would you go with an instructor who has never been sky diving himself!” This is exactly the situation with breedplan.

In my day we ran our bulls down from the hills on the morning of the sale. We didn’t wash them and they were entirely grass fed except in a really bad year they may have had some hay. It was very rare to have to replace a bull.  
  
I would like to tell you about a bull that was knocked down at auction by a guest auctioneer with both parties willing to bid twice as much. Afterwards the buyers from WA offered to use the bull for 2 years and then let the losing bidder from Tasmania, have him for the same money. He was to use him for 3 years with the breeder to get him back for meat price. The new owners couldn’t believe that when he arrived in WA he looked as if he hadn’t even travelled and was still exactly the same bull that they had bought.

Two years later I happened to be in Tasmania when he arrived at the Quarantine Station. Once again he looked like he hadn’t even travelled. He did stud duty in 4 states. As a 15YO he was at Bovine Semen Bundanoon and still had all his shape. David Brown said he was the most intelligent bull they had e3ver had int eh Centre. His other calved as a 2YO and missed calving for the first time as a 20 YO. That is what I would call constitution and longevity.

I will share some things with you that I have observed :

I guess the obvious thing in more recent years is the number of cattle of poor type and structure. High maintenance cattle that are hard to fatten. Poor structure has also seen a rise in arthritis.

My father said that if your cattle losing condition you are losing money. If he was still alive today he would not be able to comprehend that there are people breeding cattle that have trouble even putting condition on. He told me, “Never believe a photo.” He was 50 years ahead of his time.

In handling cattle the most important thing is to give them time to think. Some need more time than others. We are lucky in that a proper Angus is the most intelligent of the temperate breeds. This can be utilised to make cattle handling a very simple operation. In the wrong hands it can have the opposite effect.

When cattle are heavily supplemented or raised on very good country the breeder is likely to get a false impression as to how good his cattle are. Most people get fooled by condition. It takes a lot of experience to be able to mentally undress them.

Cows must have neatly shaped udders with teats and I emphasis 4, not too long and thick and not short and thin. The cow with the biggest udder is not necessarily the best milker.

NZ cattle are very impressive on their NZ grass. Don’t get carried away by them. They wouldn’t look as good on our grass. Don’t get me wrong, there has always been a lot of wonderful cattle in NZ.

I find that a good footed bull in NZ is not necessarily good footed in our country. You need to select a bull with a good hard foot as they don’t have the extremes of hot and cold and wet and dry that we have on the Monaro. The hair on a lot of the NZ cattle has always been a worry to me but they seem to be a little better when in our climate.

Professor Bonsma’s theory that cattle bred closer to the Poles are a lot bigger than the same cattle on the equator I have found to be mostly true. There are variations but be warned.

One thing not many people realise is there is a tendency for cows to calve according to the barometric pressure. When it drops they tend to start calving. That is why cows with a problem often end up in bad weather.

When a bull walks he must plant his hind foot exactly where he lifted his front foot. If he over-reaches a little, that is something you may be able to live with, but if he under reaches don’t touch him.

Sometimes you need to put a bull in with other bulls. One trick I used was to spray him with diluted Dettol. If it is too strong it will scald him so be careful. I found the other bulls will chase him but not touch him. By the time the smell wears off he is part of the mob.

Let’s say you select a bull and you manage to see his mother and she is a beautiful, great big cow. Once again alarm bells should be ringing. There is no way in a genuine stud operation that a hard working cow, who has raised a calf every year can be that big.

Feed-lotters and agents are much better judges of steers and fat stock than they are of breeding stock.

Weak muzzles and jaws go hand in hand with poor temperament.

Line breeding has always been one of the great breeding tools. Unfortunately with todays composite type Angus it is no longer an option.

All people make mistakes. That is why they put rubbers in the end of lead pencils. I have looked at photos in the AB Centre’s brochures and shaken my head. People were making the biggest mistake of all. That is using bulls they know very little about and especially on the maternal side. In other words they were breeding blind. Any bull is only as good as his daughters. That is why we have to be super confident that he is going to pass on the maternal attributes we require. Many of these bulls had bad feet. How did I know this when I could hardly see their feet? The reason is that they were long in the dewclaws. A good footed bull is short in the dewclaws.

Another thing I have noticed, but Dalgety’s stud stock manager Peter Norrie put it very concisely when he retired. He said “I have seen a lot of good breeders and a lot of good promoters but I have rarely seen a good breeder who was a good promoter or a good promoter who was a good breeder.”

In my time I have seen 3 temperate breeds become very popular. Investment has poured in from people whose principle income is not derived from the cattle industry. Good sound advice is hard to come by. Chances are that they may be attracted to the best promoters and they may also have the resources and ability to be good promoters themselves. Two of these breeds no longer enjoy their former popularity.

To get our show back on the road we must start at the grass roots, get back to basics and put sound selection ahead of unreliable figures. Ask yourself, “Should I select the best bull or the one with the best figures?”

The answer is in our last and most fundamental key word. It is also the underlying theme of this address. It is called “COMMONSENSE”.

In talking to you I have been describing problems the Angus breed has to face, however other breeds are facing similar problems. The Angus that made our breed so popular are not the same Angus we are breeding today.  
  
Kathy and I have enjoyed our time in the cattle industry, but it is not just about the cattle, it is also about the wonderful people we have met. Cattle people with interesting backgrounds and from different parts of the world.

I would like to thank you for listening and hope you have got something out of this presentation.

The future is in your hands.

Keith Murdoch.