

# Paleo Agriculture

## Building on the ancient to create a new and enriching Agricultural Age

### Introduction

When discussing competitiveness for the agricultural sector a key point is to focus on consumers and their demands. A growing new niche for agriculture is in fulfilling the market requirements for people who are now following the paleo, primal or as some people term it the "caveman" diet.

This demand is a new focus for agricultural producers, researchers, industry bodies and government policy makers, and well may bring many new and exciting opportunities to grow a sustainable agricultural sector.

This submission will focus on some of the areas that the agricultural sector will need to focus on to capture this demand. This paper will also make some further comments on the questions that have been raised in the issues paper.

### Firstly – what is Paleo?

Paleo is based on the foods and lifestyle our ancestors lived. These ancestors were around in the Palaeolithic (or Paleolithic) period which starts around 2 million years ago. As hunter gatherers our ancestors ate what was available in their specific geographic region over the seasonal year. So if the food cannot be hunted, picked from a tree or a berry, pulled from the soil or gathered from a bush it is not considered as being Paleo.

The Paleo lifestyle has gained ground in countries around the world over the last 15 to 20 years with much of the intellectual drive coming from medical professionals and researchers based in the United States of America. Demand is also expanding in the UK and Europe, and more recently New Zealand and Australia.

On the diet side for today's consumer it means eating a wide variety of grass-fed meats and wild caught seafood, eggs, organic and seasonal fruits and vegetables, seeds and nuts. In earlier times eating meats and seafood involved eating the whole of the animal – this is known as "nose to tail" eating – and is considered quite delicious and nutrient dense. So these less eaten organ and cheaper cuts are now encouraged. These products are cooked or flavoured with raw butter, lard, olive oil or other nut oils such as avocado and macadamia.

The foods to avoid or eliminate from a Paleo diet are all grains and legumes, refined sugars, manufactured oils and preservatives as these products are relatively new to our diets. Some came into being over the last 10,000 years or so since the beginning of the agricultural age but many have only been manufactured for a short time in our evolutionary history. They are causing increasing problems for a wider and wider number of people, who are now making the choice to just stop eating them.

The Paleo lifestyle also recommends that we move more. Every day we need to get our bodies moving in all manner of ways. In this we can include some short intensive bursts as well as walking and other forms of exercise, weight training and play. Our ancestors only spent a short part of their day sourcing foods and spent the rest in play and other ceremonial activities.

Getting closer to nature is also encouraged to Paleo life-stylers as well as making sure some time is spent in the sun to gain much needed Vitamin D from a free daily resource. Good sleep is also recommended plus the elimination of stress factors in our lives.

### Food quality

The focus of the food components of a Paleo lifestyle are about sourcing real, whole foods that are as close as possible to what our ancestors would have eaten. Some recommendations for this include:

Food groups	Ratings – best to least	Recommendations
Beef and lamb	Best! Better Good Baseline	100% grass-fed and finished, pasture-raised, local Grass-fed, pasture raised Organic Commercial (hormone/antibiotic free)
Pork	Best! Better Good Baseline	Pasture raised, local Free-range, organic Organic Commercial
Eggs & Poultry	Best! Better Good Baseline	Pasture raised, local Free-range, organic Cage-free, organic Commercial
Dairy	Best! Better Good Baseline	ALWAYS BUY FULL FAT Grass-fed, raw/unpasteurised Raw/unpasteurised Grass-fed Commercial or organic – Not Recommended
Seafood	Best! Better Good Baseline	Wild fish Wild caught Humanely harvested, non-grain-fed Farm raised – Not Recommended
Produce	Best! Better Good	Local, organic and seasonal Local and organic Organic or local

	Baseline	Conventional
Fats & Oils	Best! Better Good Baseline	Organic, cold-pressed and from well-raised animal sources Organic, cold-pressed Organic Conventional
Nuts & Seeds	Best! Better Good Baseline	Local, organic, kept cold Local and organic Organic Conventional

Adapted from Practical Paleo by Diane Sanfilippo, BS, NC

### Where to buy?

Paleo buyers are using a wide variety of outlets to purchase their food needs. They are frequenting farmers markets, organic food stores and local butchers, new Paleo cafes and restaurants as well as conventional food outlets and supermarkets which are also stocking organic ranges. They are also sourcing from new community supported agricultural (CSA) groups or groups such as Food Connect or Aussie Farmers where consumers purchase boxed amounts of products that are collated directly from farmers.

There are also an increasing number of cookbooks and websites that are catering for information on Paleo recipes and places to source these goods.

However it is a confusing area if you want to easily identify a Paleo compatible item.

Organic certification can be helpful. The organic industry is growing fast around the world as consumers seek to find comfort about how their food is being produced.

Recent data from the organic industry is provided in the table below:

#### Key statistics of Australian Organic Industry

- \$1.2B in 2012 (including \$400 million imported due to lack of local supply – 25%)
- Total food industry in Australia value \$130B (Organic market represents 0.9%)
- **IBIS World 2014 predicts Australian organics to grow by 13.7%** - third only to diamonds and the Australian Stock Market
- Growth of the organic industry between 2008 and 2010 was 15% - consistent growth
- **Australia represents 28% of all organic land worldwide but only 1.8% of the global organic market – opportunity to expand dramatically.**
- Asian population is 4.99 Billion, top 2% represents 99 million people. According to the Commonwealth of Australia 2014, *Agricultural Competitiveness Issues Paper*, Canberra, February., Australia can only export enough food to feed 60 million – this is an opportunity to **maximise export dollars** to both the farmer and local community

#### Global statistics of organic industry

- **\$64B worldwide and still growing at 10.4% YOY** (20% growth in USA, 5% in EU)

- Organic industry holds 12-17% share of category in produce in the USA and 4.3% of total food sector
- Organic industry holds 19% of the food sector in Germany.
- US Farm bill 2014 (\$57.5M transition to organics, oversight of NOP \$75M/5yrs)  
Opportunity for the Federal Government to invest in the fastest growing industry to feed a growing affluent Asia.

(Thank you to Adam Wilson from Soil Systems for the above data)

Further work is needed to quantify the demand for organic products that is coming from consumers both domestically and internationally.

However even organic certification can be an issue for a Paleo purchaser as shown in the earlier table on food quality guidelines. For instance organically certified animals can be fed organic grains. Some other issues identified to date are:

<b>Products</b>	<b>Issues</b>
Meats	Although there is a new standard for grass fed beef it is hard to identify other animals such as pigs, goats, chicken and lamb as grass fed. There are a number of new industry standards being developed but further research is required to better understand these standards in relation to Paleo requirements.
Fresh produce	With year round supply of many fruits and vegetables coming from imported as well as local sources consumers are losing their knowledge about what is local and seasonal. Some issues are occurring for people eating products year round which humans were not designed to do. Also the commercial imperative to have products on the market to fill windows in a calendar means that some products are being sold when they are not fully ripe and ready to be eaten.
Seafood	Much seafood is imported and is from farmed enterprises though this is not identified at the point of sale. Some regional fishing groups are doing a good job of promoting their sustainable practices and these initiatives need to be supported more widely.
Dairy	In many countries around the world raw dairy products are available though not in Australia, which puts Australian consumers at a disadvantage. Such restrictive practices need to be reviewed as they could also be a great base as an exporting industry, in both products and skills.
Wild harvested	Outside an organic certification there is currently no standard for wild harvested products for Australian natives such as wattleseed, bush tomatoes or freshwater fishes. These indigenous products could find a valuable outlet in the Paleo world but need to be supported and acknowledged that they are a resource that is sustainable.

### **Alternative Production Systems**

Although organics are widely known by consumers, other production systems appeal to growers and could be considered in choosing a more competitive production program that could be considered as appealing to a new niche and growing consumer market.

In the grazing industry many growers follow farm practices promoted by Allan Savory under the Holistic Management framework or from the Grazing for Profit programs promoted by Terry McCosker and the team from Resource Consulting Services (RCS). These have had great impact over

many landscapes and are also improving environmental outcomes with a focus on biodiversity as well as improved animal health.

Within the cropping industries growers are also attracted to Biodynamic and Permaculture Design systems. Other growers are going for multi-species farming operations under ideas from people like Joel Salatin from Polyface Farm in Virginia USA and promoted locally by Taranaki Farms and the younger farmers in groups such as Regenerative Agriculture.

In these changes there is a movement away from risky monocultures into layered or rotated polycultural production systems that are more resilient during climatic and diseases pressures. Much more research and development and support needs to be focused on these productive and biological systems.

These alternate systems also encourage and support greater numbers of people on a given enterprise and can lead to regional regeneration and community enrichment outcomes.

### **A New and Profitable Market**

Recent indications bear out that the demand for grass fed animals is having a very positive impact on beef prices to producers. As Minister Joyce states the issues paper aspires to “bring a better return to the farm gate” and this market does that.

Charlie McKillop from ABC Rural reported this month that national meat processor Teys Australia will pay a premium up to 80c a kilo for “cattle raised on pasture only following a major supermarket’s decision to sell certified grass-fed beef for the first time”.

This is the market talking. It would pay to listen to this demand as a new industry – which I have loosely termed Paleo Agriculture – responds positively to the Paleo lifestyle choice being made by a rapidly growing domestic and international consumer market.

Market research is required and a whole of a supply chain approach is need to achieve market differentiation and to connect local and regional farms practicing grass fed and organic approaches into this new and exciting market place. If this is done then the goals of this exercise in looking at new ways to increase agricultural competitiveness would be fulfilled for this market.

### **Some other areas for comment from the Issues Paper**

<b>Issue</b>	<b>Response</b>
<b>Who is involved?</b>	<p>The issues paper on page 4, paragraph 3 discusses the main players that will be involved in achieving improved agricultural competitiveness beside the Australian Government. These are stated as individual farm businesses, industry bodies and state and territory governments. These groups will have a pivotal role; however two other main players have been overlooked in this analysis.</p> <p>One main player that has been overlooked is the Regional Natural Resource Management bodies that operate all over the country and are increasingly assisting rural landholders in a variety of ways, particularly in extension.</p> <p>These activities can have strong impacts on agricultural competitiveness and</p>

	<p>resilience in the longer term.</p> <p>The other main players are private consultancies and educators in the agricultural sector such as Resource Consulting Services (RCS). RCS has played a key role in developing the current and future generations of farmers to now only work on their production and financial management skills, but the personal side as well – which can bring great results in leadership and direction to both the farming enterprise and the wider industry .</p>
<b>Learning from top performing farms</b>	<p>Benchmarking is a great tool to ensure producers understand their enterprises and how they are performing against their peers. Better support needs to be given to these programs which already exist in a number of forms throughout various industries.</p>
<b>New investment models and structures</b>	<p>In a trip to South Africa several years ago many of the horticultural enterprises there were trialling new and innovative models of support to new entrants to the market as part of Black Economic Empowerment targets. I would recommend that these are given further study so as to see what lessons can be learnt to attract new entrants and younger operators into the Australian agricultural sector.</p>
<b>Extension and support</b>	<p>Good research and development is continually being lost to industry as there is not enough focus on how to assist farmers’ trial and learn in their own areas. Greater focus needs to be played to extension activities as part of the design of all R &amp; D Programs. Group extension models are very valuable as well as one-on-one.</p>
<b>R &amp; D Aligned</b>	<p>There are quite a number of R &amp; D agencies and programs but limited ability for them to work on multi-enterprise farms – indeed many growers pay a number of R &amp; D levies – but get little value when wanting to address soil, water and ecosystem practices. I would recommend that this review reconsider the value that was found in an overarching R &amp; D body like the previous Land &amp; Water Australia. It is still sorely missed in many quarters.</p>
<b>Regulation</b>	<p>Some regulation can be positive in bring about a fairer return to the farmer. This is especially the case in the power differential between farmers and large supermarket chains. It is recommended that the Horticultural Code of Practice is widened to include the supermarket sector.</p>

### Disclaimer

Please note that the opinions expressed above are the comments of the author and should not be seen as being endorsed by any of the organisations the author is associated.

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