



## **AUSTRALIA AND CANADA**

Peter Treloar

### **Affinities and Agriculture**

In 2002 I was fortunate to be awarded a scholarship from the Australian Nuffield Farming Scholars Association.

This association has grown from the original foundation established in the UK by Lord Nuffield immediately following the Second World War. The first English scholars traveled overseas in 1947 with a view to bringing the best the world had to offer in farming techniques back home to assist British agriculture to get back on its feet and increase production following the war.

By 1950 the scheme had expanded to include scholars from other Commonwealth countries such as Canada, Australia, New Zealand, Kenya and Rhodesia. In 2002 the Australian program had become self-funding with the establishment with its own foundation and sponsorship support from various industry bodies. I was one of ten scholars from Australia that year.

A total of nearly 200 Australian farmers have now undertaken Nuffield Scholarships and most have been able to make contributions to Australian agriculture and regional development. A recent external review indicated that Nuffield is meeting its objectives, and that through their achievements, Nuffield Scholars collectively help build the social capital of Australian agriculture and the nation.

The mission of Nuffield is to promote excellence in all aspects of Australian agricultural production, distribution and management through the adoption of local and international best practice and continuous development of a unique network of industry leaders and innovators.

Nuffield Canada has evolved in its own way and consists of an Eastern and Western region. The objective of the Canadian Association is to sponsor and facilitate a world caliber leadership program to train future leaders in Canadian agriculture.

Depending on the number of applicants and the funding available, the Canadian selection committee chooses one or two fortunate individuals as Nuffield Scholars each year. Those chosen travel to the host country where they join a group of twelve or so others selected by member countries, which then undertakes an intensive three week period of learning and exposure to global agricultural dynamics. This group study period is then followed by individual study by each student to learn about his or her chosen topic of research. A written report is submitted to the Board of Directors upon completion of study. Life long friendships are made.

### **Aims and Objectives - (Extracts from Nuffield Report by Peter Treloar)**

My original intention was to look at the value adding and niche marketing opportunities for Australian grain from a regional perspective. To form a basis for this study I needed to first gain an understanding of the grain industry as it exists now.

My travels showed me the huge populations and market potential of Asia, the government-regulated production of Europe, the vast wealth of the United States and finally, the resilience of the Canadian farmer.

Added to my aim was an interest in the social implications of government attitudes to agriculture. As a farmer, there was also a fair amount of practical agriculture. Farmers the world over want to know what you are doing and why.

While initially intending to look at value adding opportunities, my study developed into understanding grain industries, their structures, logistical operations and fundamental driving forces within communities. Further to this, I began making observations of Australian industry structures and as a result gained a better understanding of our position in a global situation.



My tour began with what could possibly be the last organized Nuffield tour of Southeast Asia. We were travelling post September 11 and security issues were coming to the fore. As we all came to realize the world became a different place following the attack on the World Trade Center. Our group went into a world that was both unsure and nervous.

During our time in Singapore, Malaysia and Thailand, we were confronted by the huge population and the demands that population makes on resources. The prospects are that these demands will continue to increase along with the population and improving economic standards.

In Malaysia there is still evidence of the British colonial influence with palm oil plantations the main agricultural land use. There are also many rubber and cocoa plantations and apart from some rice in the north of the country, very little of the agricultural land is devoted to food crops. Palm oil competes directly on the world market with the oil from soybean and canola, with the price of all three being directly related

Travelling from the hot and humid conditions of Southeast Asia, we found London in February rather bracing. My introduction to British agriculture came from Guy Smith, UK Nuffield, who along with his wife Julia, were my initial hosts.

Living and farming on the Essex coast, the Smiths occupy what is officially the driest farm in England. Growing wheat, barley, rape (canola) and beans in a 19-inch annual rainfall, I was sure I would find some similarities with our farming operation at home.

Crop types and rainfall were where the similarities ended. Farming practices obviously were very different and I was surprised to discover that the mouldboard plough remains the preferred implement for primary tillage. The plough is certainly the most effective method of dealing with heavy crop residues and weed seeds invariably have difficulty emerging from a depth of 11 inches. The yields achieved are very impressive to an Australian farmer, with Guy achieving a per acre yield comparable with what we harvest per hectare.

With the Common Agricultural Policy (CAP) being developed and administered from Brussels, and the UK no longer having a specific Minister for Agriculture in their own government, British farmers are certainly feeling that they are losing control of their own industry and destiny.

Agri-political groups are active and vocal, with organizations such as the National Farmers Union (NFU) having good support and some influence on policy direction. The pressure on farmers from environmental groups and the urban population is enormous. Working and farming within the legislative framework is becoming more and more difficult, especially considering that much of the legislation seems to be plucked out of the air. Once in place, the laws are difficult to rescind, even if they are impractical or unworkable.

Brussels is home to the European Parliament and one of the mightiest bureaucracies one will find anywhere – the Common Agricultural Policy.

With its foundation following World War 2 and its original intention to guarantee food security, the Common Market has evolved into the Common Agricultural Policy under a united Europe – the European Union (EU).

The CAP influences production and as a result has an effect on both markets and prices of agricultural goods. The Europeans are working within the framework of the World Trade Organization (WTO), and as such, are able to justify subsidizing agriculture, so long as it is not trade distorting.

The aim of the policy over the next few years will be to move from production based support to environmental based support. By doing this, Europe will be able to satisfy WTO requirements and also fulfill the role of multifunctional agriculture.

Multifunctionality concentrates not only on the economic aspects of farming, but also provides other services to society. It provides for the production of safe and high quality foodstuffs, keeps the rural population intact and maintains the environment.



It must be understood that in the UK and Europe the farmed landscape is regarded as the natural environment. Farmers are more and more being rewarded for keeping this landscape as the urban population would want it to be. This is to satisfy their perception of the natural world and have it made available to them to enjoy and appreciate.

The total budget of the EU currently runs to about 90 billion Eurasia. This is just 1.6% of the Gross Domestic Product with the CAP consuming about 45% of this. These figures would indicate that subsidized agricultural is affordable for the Europeans and indeed is economically sustainable. The CAP has now become an entrenched and essential part of European social policy. The question is no longer whether to support agriculture or not, but rather how to do it.

With 30% of all farm income and probably 100% of farm profit coming from subsidies, it is necessary that this support remains and with an increasing environmental focus, it becomes easier to justify.

Subsidized agriculture has become a cost of society rather than a cost to society.

Following my arrival in Los Angeles, my first impressions of the US were from the air. Flying overnight from Los Angeles to Toronto, Canada, I was confronted by two things in particular. Firstly, the number and density of lights below, and then as dawn was breaking, my view of the Great Lakes. As an Aussie farmer on water restrictions, I could only look at these huge inland bodies of fresh water in awe and contemplate – if only. It was here that I saw for the first time Roundup Ready soybeans. The beans had been sprayed post emergent with 1.0 L/ha of Roundup, followed up by another 1.0 L/ha several weeks later. As the weeds shriveled and died, the beans continued to thrive. Jim's father (who was in his eighties) announced "that's the darndest thing I ever did see". Others obviously agreed as the majority of soybeans grown in Essex County, were Roundup Ready.

Ontario is a very productive agricultural area, growing a large range of crops and also having proximity to large population centers providing demand. While a 'single desk' for marketing wheat had once existed, the reduced acreage given over to wheat along with a strong presence from US based grain trading companies, and lack of farmer unity, brought on the demise of this marketing system. Farmer co-operatives are in evidence as they are all across Canada and it is in this way that farmers attempt to position themselves so as to have some bargaining power when selling grain and also when purchasing inputs and services.

The CBOT remains an influencing factor in the pricing of many of the world's major agricultural products and a highlight of my study tour was to get onto the floor of the trading room for a morning's session. To see the hundreds of traders operating at a frenetic pace within the confines of the pits, taking instructions to buy or sell futures and options for bushels of grain that will be delivered sometime in the future is a sight to behold.

With speculation going on constantly about the relationship between supply and demand, and the physical factors that may influence that relationship, it was sobering indeed to have one young trader admit to me that he had never actually seen a bushel of corn – even though he traded corn on a daily basis.

The AWB is in fact the single largest entity operating on the CBOT and annually hedges approximately 20% of the Australian wheat crop. The total quantity of wheat hedged by AWB is at the discretion of the CBOT. For this reason, the total rarely moves above that 20% figure.

The on-going and polarized debate regarding genetically modified organisms (GMO's), and their place in modern agriculture prompted my visit to the headquarters of Monsanto. This is where the technology that has resulted in BT cotton and corn, Roundup Ready canola, corn and soybeans has been developed. Ninety percent of all cotton currently grown in the US is GM, along with about 70% of the corn and soybeans. Fifty percent of the Canadian canola crop is GM, and although the release of these crops has been surrounded by much controversy, they all seem to have been readily accepted by North American farmers and in fact, the rate of uptake has been nothing short of phenomenal.



Roundup Ready wheat has recently been developed by Monsanto but its release will be influenced by consumer sentiment, far more than the feed grains were. It would appear that it would be available for commercial release around the middle of this, the first decade of the 21st century.

Protocols are being developed with regard to storage and handling, identity preservation, traceability and quality assurance. These protocols will go a long way towards assuring consumers that they know exactly what they are getting.

It is my opinion that many of these crops have a better agronomic fit into the North American farming systems than they would have here in Australia. Given that we are already exhibiting weed populations resistant to Glyphosate (roundup), the failure to manage the use of this chemical by Australian farmers will result in the loss of the single most important tool in our current farming system.

Winnipeg is situated at the eastern focus of the vast prairie grain belt of western Canada. It is the home of the Canadian Wheat Board (CWB), the Canadian Grain Commission (CGC) and the Winnipeg Grain Exchange.

The CWB holds a single desk selling arrangement that is enshrined in legislation. This legislation requires that the Board sources and sells all wheat and barley grown in western Canada for both export and human consumption. As in Australia, the single desk has its distracters. With the CWB having control over domestic markets and its move towards a more corporate structure proceeding only slowly, my impression was that grower support for the CWB is less than that enjoyed by the AWB here in Australia.

A relatively recent introduction into the structure is that of elected grower directors. One farmer gets one vote in this electoral process, no matter the tonnage of grain he produces. This is in contrast to Australia where with an A and B class share structure, AWB has become a truly corporate body. With grower control retained through the A class shares, voting strength is directly proportional to the number of B class shares held.

The Grain Commission is the instrument that oversees the transfer of grain from the local elevators to the CWB. These elevators may be owned and operated by a co-operative body or by one of the large grain trading companies such as ADM, Cargill or Louis Dreyfuss. At the elevator a farmer may sell grain to whichever grain company he chooses and then the Grain Commission will oversee the logistics of transferring grain to the CWB.

### **Western Canada**

A real feature of Canadian grain farming is that in any given harvest, approximately 80% of the entire crop can be stored on farm. On farm storage is a large but necessary investment for Canadian farmers and has made it unnecessary for the grain handling companies to have capitol tied up in large storage facilities of their own. Farmers tend to deliver grain to the elevators at their leisure, usually through winter, but are also able to get an advance on that grain which is stored on farm.

The CWB has in recent years developed a range of pool options available to farmers. Usually 75% of the estimated pool return will be made at the first advance, with the rest paid out within a 12-month period.

The single desk has come under much scrutiny and debate in recent years and my feeling is that if the Canadians are serious about the single desk for export and all the benefits that pooling brings, they will need to consider deregulating the domestic market in the near future.

It is interesting to note that the only time a load of grain is rejected at the elevator is if the moisture content is too high (as in Australia), but all grain is screened before being transferred to port. There are some advantages in doing this – only sound grain is loaded onto the train for the long haul to port giving freight savings, and the elevator - company is entitled to the earnings from the sale of the screenings. These companies also have the opportunity to blend grain to ensure that a bulk shipment comes within the specifications required.

Across the Canadian prairies, one finds a cropping regime and rural social structure very similar to that found in the Australian wheat belt. Wheat, barley, canola and pulses are grown in rotation, with co-operative structures the tradition.



Unsubsidized farmers have been faced with the same dilemmas that we have in Australia. Improved farming techniques and varieties have resulted in production increases.

This in turn has seen a reduction of real farm gate returns. Without the government-funded support that exists in the US and Europe, the smaller farms are becoming nonviable. Consolidation into bigger holdings occurs, with the resultant fall in rural populations.

Obviously this is a social problem rather than an economic problem; however, true first world nations find an economic solution to these issues. Europe, Japan and the US are keeping their rural populations and regional infrastructure intact through agricultural subsidies. Countries such as Canada, Australia and New Zealand have a different approach. Without a large industrial base, subsidized agriculture is not an option. What we have seen is that the quest for increased productivity becomes an integral part of the farm business surviving. The real challenge with this approach is to develop farming systems that are truly sustainable.

Environmental concerns and social issues must be dealt with and while pondering this, I recognized a great affinity between Canadian and Australian farmers. Tough climates, tough operating conditions and tough economic realities have resulted in common traits such as a positive attitude and remarkable resilience.

My journey westward included several more investigations into practical farming, including a visit to Jim Halford's farm and workshop at Indian Head, Saskatchewan. Jim's farm exhibited many long-term trials (20 years plus), demonstrating the benefits of a no-till seeding system. The system has an increased reliance on chemical application, particularly knockdowns, but the enhanced soil health and stability is a major positive in fragile soils. Following my return, our family purchased one of Jim's Conserva-Pak seeding bars and zero tilled our entire crop for the first time.

Also at Indian Head is the renowned Agricultural Research Foundation Farm. As with most research centers, it is situated on prime agricultural land. The mission statement of the foundation is "the promotion of profitable and sustainable agriculture by facilitating research and technology transfer activities for the benefit of its members and the agricultural community at large".

At Elie in Manitoba, I visited a very new but small-scale flourmill supplying flour for the domestic market. The mill is state of the art and computer control allows milling to take place 24hrs/day, 7days/week, producing 200 tonnes of flour/day. At a cost of approximately 5 million Canadian dollars to build, a dozen local investors, including the manager, were found to fund the project. The owners felt that the CWB was something of an impediment to their operation and their lives would be made much simpler in a deregulated domestic market.

Further west at Rosetown, Saskatchewan, I discovered a grower owned feed processing plant where things had gone terribly wrong. Despite the best of intentions, some poor financial decisions made by the manager, who was an employee rather than an investor, had seen the plant running at a loss. Although still operating, it was employing minimal staff, and processing only a small tonnage of grain in stock feed. Good management is just as crucial in a co-operative venture as it is in any other business.

## **Alberta**

As a guest of Glenn Tole, the Canadian Wheat Board field officer based at Airdrie, I gained more of an insight into the on ground functions of the CWB. The Board is not only charged with the responsibility of selling the Canadian crop, it also carries out Research and Development projects, including the breeding and trialling of new varieties.

With a substantial live stock industry in Alberta, mostly feed lotting cattle, many grain growers had real concerns regarding the regulated domestic grain market. It would appear that grower support for the CWB falls to about 50-60% of farmers in this province. Once again, the Canadians tend to look at the Australian situation of a deregulated domestic grain market with some envy. (End extracts from Nuffield Report)



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Finally, to direct comparisons between Australia and Canada. Obviously the first thing that strikes me as a farmer is that here in western Canada you are growing the exact same crops that we are in southern Australia, i.e. wheat, barley, canola and pulses. Despite the fact that you are almost twenty degrees further from the equator than I am, I too grow spring varieties. With a Mediterranean climate we experience a cool rainy winter and hot dry summer. We plant our crops in May/June, going into winter and plant growth continues through until harvest in November/December.

The family farm is the basis of the rural economy in both countries and due to the continuing cost price squeeze, which you will be only too aware of, we have all seen the rural population decline – particularly where agriculture is the sole industry.

We both export a majority of our produce onto the world market, domestic markets are relatively small although they are growing and continue to grow as a result of intensive livestock operations. To maximize effectiveness selling into a distorted world market, both countries have established a single desk for marketing wheat (and some other grains as well). Pressure is mounting from many quarters for us to dismantle these arrangements, both from within national borders and outside.

Both countries have a history of farmer co-operatives which in the main have been effective and well run. In recent years these co-operatives have evolved into commercial entities and are now finding some difficulty balancing customer service with shareholder returns.

In Canada and Australia agriculture extends right to the margins. Here the wheat fields push north to the forest and in Australia reach inland until it becomes too dry to grow even wheat. The climatic extremes generally mean that by world standards yields are low but quality is good. Farming to the margins will make us both vulnerable to climate change. In Australia the projection is for the majority of the wheat belt to become hotter and drier – not a good thing when you are already on the edge of the desert.

Farmers all over the world have been caught up with increased input costs and decreasing returns, although in some countries agriculture has been insulated from this scenario by government support. Most of us have managed to increase production to address this problem; the dilemma of course is that as real prices decrease and we grow more to compensate, the cycle continues.

Although it is not the case for me personally, most growers in Australia and certainly all growers in western Canada, have a long haul to get their product to port. Rail is the usual mode of transport however, in Australia at least, the rail system has been in decline due to lack of profitability when compared with road transport. I would suggest that historically both countries have exported grain to Europe and the Middle East, with the future focus for both Canadian and Australian grain exports will be in Asia. There, huge populations are driving phenomenal economic growth and as per capita income increases, so the diet will tend to become more Westernized and demand for grain will increase.

There are of course other commonalities between our two great nations. The most obvious is that we have all come from somewhere else to live in a new land. As a result of this settlement we both have displaced Aboriginal populations which are experiencing seemingly insurmountable social and cultural crises.

Both are large countries with relatively small populations concentrated into the more climatically agreeable parts of the landscape. Our people travel. Wherever you go in the world you will find Canadian accents and Australian accents, often talking to each other. A common language is a great source of comfort and of course we have our primarily British heritage. Both countries are members of the Commonwealth of Nations and the Queen of Canada is also the Queen of Australia – still.

Our countries converted to the Metric system of measurement in the early 1970's with an assurance that the rest of the world would also make the change. Of course that did not happen and it would seem that now, thirty years on, there are just as many miles and acres out there as there are kilometers and hectares.



Canada is a signatory of the North America Free Trade Agreement and Australia now too, has a free trade agreement with America. Further agreements and trade alliances will be a feature of international trade going forward.

There are some significant differences between our two countries as well. Available water resources are the most obvious. Canada it would seem has a greater volume of water per head of population than any other nation on earth. Most of Australia functions with an extremely limited water supply and much of the population, including those living in the capital cities, are on permanent water restrictions.

Australia is an island nation having no border with any other country. Our nearest neighbors are across the water to Papua New Guinea, Indonesia and New Zealand.

A couple of final but very significant differences - you drive on the right hand side of the road, us on the left, you have Christmas in the middle of winter, for us in the middle of summer.

The strongest bond of all is that as Canadians and Australians, we live in sound democracies and have individual choice and opportunity. We are the luckiest people in the world.