

THE AUSTRALIAN FODDER INDUSTRY ASSOCIATION

The History of AFIA

1995–2013



The Australian Fodder Industry Association



Compiled by:

David Sexton

Bill Gough

Peter Flinn

Graham Thomson

Darren Keating

Caitlin Scholfield

Photos and editing by Mary-Anne Lattimore

July 2014

FOREWORD

In my current role as the chairperson of the Australian Fodder Industry Association (AFIA), typically I have a forward facing view when it comes to this association. However, when I was given the opportunity to read through the *History of AFIA* I found myself getting a new perspective on AFIA and an insight into the events and people that shaped the association.

I've only been a member of AFIA for a relatively short amount of time, so many of the stories in the *History of AFIA* were new to me. The history covers the people and the challenges that pulled AFIA together. Overall, it gives the story of a small organisation that consistently punches above its weight. For such a small organisation to have achieved so much in such a relatively short time frame is quite impressive. All of the stories in this document have one thing in common – that is, they were all driven by AFIA members, as was the writing of this document.

I really enjoyed reading the *History of AFIA* and would like to thank the members that pulled it together. It is a wonderful opportunity to look back at the achievements of the association and to share the stories of its members.

I hope you enjoy reading the *History of AFIA*, and that it will inspire you to help in writing the future chapters of the history of the association.

Regards,

Ann Collins

AFIA Chairperson 2014

Contents

FOREWORD	2
INTRODUCTION	5
AUSTRALIAN FODDER FACTS	7
Fodder production	7
Fodder exports and trade	8
Australian fodder usage	8
THE HISTORY OF FODDER IN AUSTRALIA	9
The early days	9
Bullocks versus horses – the era of draught animals.....	10
Commercial hay production.....	11
Supplying the cities	11
The beginnings of mechanisation	12
Fodder in the 20 th century	13
A new era in fodder conservation.....	13
Fodder quality	15
Australian fodder exports	16
Fodder for feedlots and dairies.....	16
THE ROAD TO AFIA.....	18
Fodder quality measurement: the trigger	18
From Thaer to NIR.....	18
The broader picture – industry development and fodder testing.....	21
The move towards a "standard gauge" for fodder labs.....	22
The National Fodder Industry Forum.....	24
Finally – a national body	25
The funding crisis and the second meeting	25
The lead-up to the inaugural Annual Conference.....	25
EARLY DIRECTIONS.....	27
FROM THE NATIONAL FODDER INDUSTRY FORUM 1995	27
From Second National Conference 1997	30
INCORPORATION.....	30
SUBSEQUENT CONFERENCES 1997 – 2013	36
AFIA COMMITTEES.....	41
QUALITY ASSURANCE AND FODDER CARE.....	41

TRANSPORT SUB-COMMITTEE.....	43
EXPORTERS' STORY	45
THE QUALITY EVALUATION COMMITTEE (QEC).....	50
FODDER RESEARCH AND DEVELOPMENT	54
CHAIRMEN'S RECOLLECTIONS	59
COLIN SIMPSON	59
CHAIRMAN 1996 – 2001	59
BOB M ^c CORMACK	63
CHAIRMAN 2001 – 2004	63
CHARLIE WILLIAMS	65
CHAIRMAN 2004 – 2007	65
LYALL SCHULZ.....	67
CHAIRMAN 2007 – 2010	67
BILL GOUGH	71
CHAIRMAN 2010 – 2011	71
PETER M ^c CORMACK	72
CHAIRMAN 2010 – 11	72
JARROD O'SULLIVAN	73
CHAIRMAN 2011 – 2013	73
COLIN PEACE	74
EXECUTIVE OFFICER 1998 – 2012	74

INTRODUCTION

THE AUSTRALIAN FODDER INDUSTRY ASSOCIATION LTD (AFIA)

The Australian Fodder Industry Association Ltd (AFIA) is the national peak body for the country's hay and silage industry. It aims to enhance production and trade through programs that encourage product quality and industry profitability.

AFIA is a “whole of supply chain” blend of fodder producers, contractors, consumers, traders, exporters, grower organisations, machinery manufacturers, input suppliers, research organisations and testing laboratories.

It promotes investment into research and development, objective testing of hay and improved coordination between industry sectors. It provides a vehicle for the exchange of information and promotion of new technologies in fodder conservation, as well as networking opportunities for its members and industry lobbying.

Prior to the formation of AFIA the fodder industry was fragmented, without a peak body to represent it and with inadequate quality standards.



Delegates at the 2009 Fodder Conference

In order to facilitate effective marketing of fodder, the Federal Government provided funds through RIRDC in 1994–95 for industry consultation on a national uniform objective quality control system for Australian fodder, based on the needs and specifications of end-users. This project led to the formation and incorporation of AFIA in February 1996.

Its success can be seen by the increase in members from a few dozen to over 300 currently Australia-wide and the role it currently plays in the success of the fodder industry. Today the Australian fodder industry trades around 6.2 million tonnes of hay and 2.8 million tonnes of silage per year and is worth around \$1.4 billion.

The aim of this short history of AFIA is to document its origins and development from the perspective of some of its instigators and early members while they are available to do so. This book draws together the stories of these people, along with original material concerning the evolution of AFIA.

An old adage that has stood the test of time states: “If you don’t know where you have come from, you can’t determine where to go to”. We hope that this will be an important source of information for current members and a basis on which to develop the Australian Fodder Industry well into the future.

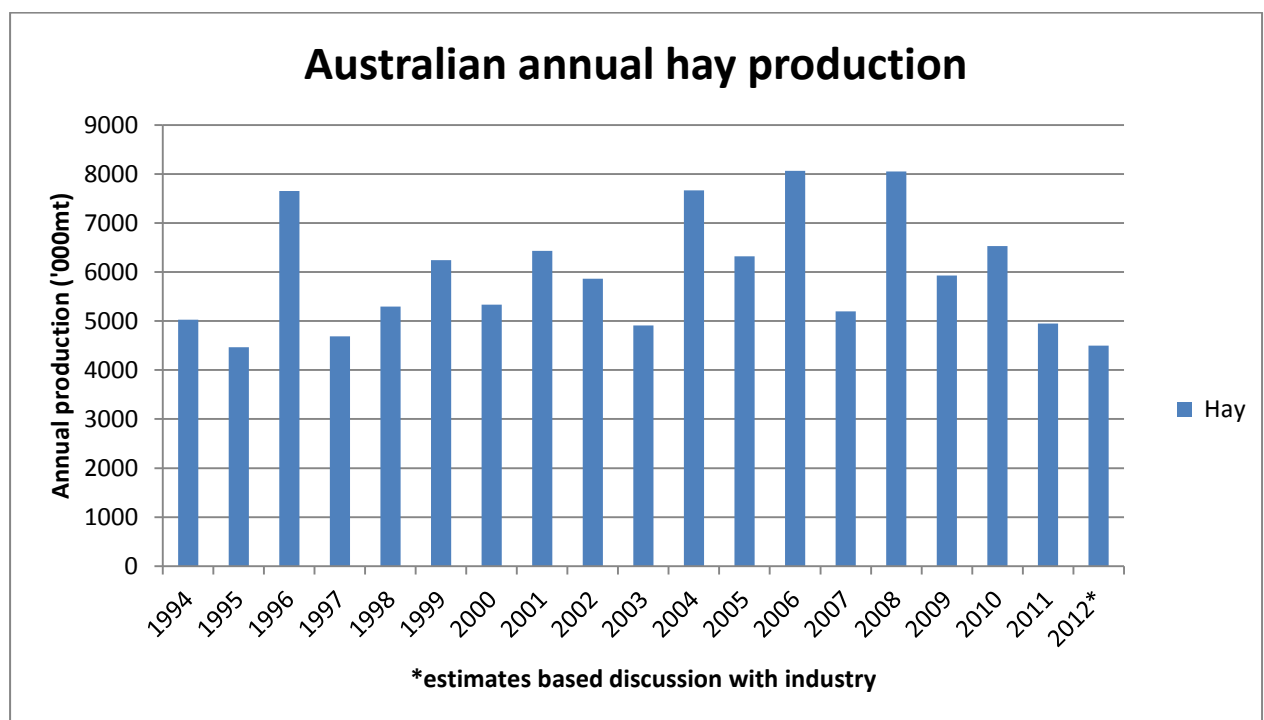
AUSTRALIAN FODDER FACTS

David Sexton and Darren Keating

This section brings together an overview of the how, what and where that makes up the Australian fodder industry.

Fodder production

- Australia produces on average 5.9 million tonnes of hay annually.
- The average annual value of hay production is estimated at over \$1.5 billion.
- Around one-third of Australian commercial scale farms make hay or silage each year.
- On average, Victoria accounts for around 38% of total Australian hay production, with NSW 21%, Western Australia 15%, South Australia 12%, Queensland 10%, Tasmania 4% and the Northern Territory 1%, based on figures from 2006–07 to 2011–12.
- While total hay production volumes vary greatly from season to season, typically over 20% is traded.
- Pasture hay accounts for the largest share of total hay production (43%), with cereal hay 32%, lucerne hay 20% and other hays 5%.



Fodder exports and trade

- Exports of oaten hay and cereal straw from Australia were 811,666 tonnes in 2012–13. Since 2002 oaten hay exports have averaged over 700,000 tonnes annually.
- In 2013 Australia's key export markets were Japan (63%), South Korea (19%), and China and Taiwan (6% each).
- In 2013 WA exported 43% of the total volume of Australian fodder exports, SA 33%, Victoria 21% and NSW 3%.
- World trade in hay and hay products was valued at US \$1.2 billion in 2006. USA is the world's largest exporter (46%), Australia the second largest (21%), with the EEC 17% and Canada 15% (based on 2006 figures).
- Severe drought in 2002–3 and 2006–7 in NSW and Qld resulted in the proportion of hay traded rising by over 50%. In Victoria severe drought in 2006–07, coupled with low irrigation water availability, increased the proportion of hay traded by 61%, compared to an average of 19% for the previous decade.

Australian fodder usage

- Typically, Australian annual hay use has exceeded hay production, as seen in June 2005 when hay stocks were only 50% of annual usage.
- The biggest buyers of hay are estimated to be hay exporters, followed by dairy farms, broadacre/livestock farms, the horse industry and feedlots.
- The largest user of fodder in Australia is the dairy industry, consuming an estimated 31% of hay and 57% of silage. Broadacre agricultural/livestock industries use around 45% of hay and 21% of silage. Feedlots account for around 2% of hay used and 13% of silage. Exports account for 12% of hay usage and the horse industry an estimated 6% of hay usage.

THE HISTORY OF FODDER IN AUSTRALIA

David Sexton

The early days

The First Fleet arrived at Botany Bay Australia in January 1788 after a journey from England of eight long months, with a load of convicts, their guards and goalers and various livestock.

“The livestock landed consisted of one bull, five cows, a bull calf, an entire horse, three mares, three colts, twenty-nine sheep, nineteen goats, seventy-four pigs, and about 300 turkeys, geese, and fowls. The cattle and horses were the property of the Government, the smaller animals and poultry belonged to private persons.” (Blair’s “History of Australia” (1879)).

The first recording of fodder harvesting in Australia was by John Easty, one of 160 Royal Marine privates sent in the transports to guard the convicts at Botany Bay, who noted in his journal entries for 20 and 24 January 1788:

“A party of men went on shore a cutting grass for the cattell with a party of marines from each ship the officiers over haleing the Country....men on shore cutting Grass getting Everything in readiness to Leave this harbourCame to an anchor again the Grass Cutters went on Shore Supply.”

In the early years of settlement, animal production was focused mainly on extensive grazing. On occasions, native grasses were harvested for hays, together with oats and wheat, but hay-making and other forms of fodder conservation were not widely practised and hay was expensive.



Bullocks versus horses – the era of draught animals

Livestock flourished and a century later, in 1888, there were 1.2 million horses, 8 million cattle and 80 million sheep in Australia.

The rise of the horse as the dominant form of personal transport and traction (draft) power for agriculture, construction and land transport led to the first major increase in demand for fodder in Australia from the first half of the 19th century. Muscle, both human and animal, provided the means of traction in the first century after European settlement in Australia.

Bullocks provided much of the muscle for heavy haulage in the early years of settlement. They were better suited to the lack of roads, as well as being more robust and cheaper than horses. Importantly, bullock fodder was free until settlement became denser after the 1860s. However, from as early as the 1830s, as horse numbers increased and horse prices fell, draught horses began to replace bullocks.

Draught animals continued to be important in Australian agriculture and transport throughout the 19th and early 20th centuries and it is interesting to compare the roles of bullocks and horses. Economic and physiological factors, draught capacity and the nature of the terrain were the major determinants of the use of bullock or horse teams.

There were a number of reasons for the early domination of haulage by bullock teams. Bullocks cost less to acquire and operate and they were in far greater supply from the 1820s when a pair of draught horses cost £90 (\$180) while the work equivalent, four bullocks cost £60 (\$120). This cost ratio of 3:1 remained roughly the same until the turn of the century when a team of 10 horses then cost £500 (\$1000) compared to a 20-bullock team of £250 (\$500).

Bullocks were hardier animals and less susceptible to digestive problems and disease but in 1858 a single disease, pleura-pneumonia, killed an estimated 1.5 million cattle and had a more devastating impact upon bullock haulage than any other factor. A heifer imported from Britain to Victoria spread the infection to teams and herds.

The fencing of properties forced the bullockies to use commercial supplies of fodder and greatly narrowed the comparative operating costs. As a consequence, the bullock teams tended to move to more remote areas. Moreover, road improvements, such as the extensive metalling of the surface, tended to favour horse teams. Horse-based transport was also more easily integrated with the developing river and railway transport networks. The seasonal limits of riverboat operation made speed of delivery a vital factor; here horses displaced the bullock teams by virtue of their greater speed and their ability to haul larger loads.

Finally and most importantly, the advance of horse haulage was favoured by closer settlement and the production of fodder for sale. Horses became the main source of

power on these farms and for some, fodder production was the main aim of their operation.

Commercial hay production

In the 1830s the Hawkesbury district became a surplus fodder producer and fed many of the animals used in the Sydney-Parramatta area. Until the 1870s Melbourne and most country towns drew fodder from farms in their immediate hinterland and this stimulated the early change from bullocks to horses in town and city cartage.

In the great river basin region from northern Victoria to central Queensland the scarcity of commercial fodder supplies from 1830 to the 1860s meant that hay at Deniliquin and other towns often cost as much as £25 (\$50) per ton. This meant that bullock teams were far cheaper to operate than horses. From the 1870s many farmers along the Murray and its tributaries supplied fodder to produce merchants who in turn sold to horse teamsters, stations and townsfolk.

The exchange system developed to the stage where fodder grown in the river basin might be sold hundreds of miles to the far north and western districts of New South Wales. McCulloch and Company made Echuca the key point in the distribution system; wagons carried fodder to railway sidings or direct to Echuca from whence it was taken by river steamers to towns and pastoral properties throughout the Murray–Darling basin. Thousands of tons of oaten hay, oats, bran, grass hay, chaff and crushed maize made their way through the network. In times of drought, supplies of fodder were often the most important cargo, given place over all other goods, except perhaps ‘grog’. The interconnection of the teamster, railway and river steamers integrated the flows of fodder and enabled draught horses to become the dominant form of draught power in agriculture and haulage.

Supplying the cities

In 1836 the towns of Portland, Victoria and Adelaide, South Australia had been established, with hay and chaff being conserved as animal feed in their adjacent regions to supply local, town and city with fodder needs.

The expansion of the cities and the loss of grazing areas led to the development of extensive fodder production, transport and distribution systems to fuel the city horses. In the hinterlands of Melbourne, Sydney and Adelaide, particular areas became the hay and oats production centres. In New South Wales the decline in the cost of cartage as team transport made use of the ‘Great Roads’ system meant that fodder, hay, oats and bran from the Hawkesbury and Hunter River districts were supplied at reasonable cost to the Sydney market. Produce or fodder merchants established a supply and distribution system in Sydney which continued to expand throughout the 19th century.



Carting hay with horses 1914

Photo: M Lattimore family

Hay was also important in Victoria. In 1851 almost 21,000 tons of hay was produced – 42 % of all cultivation – and by 1900 output was 680,000 tons. It is estimated that almost 20% of this fodder was consumed by horses in Melbourne and the railways were able to haul the surplus of these bulky products long distances at low cost.

In the cities it was sold in the Hay Market and distributed to stables of the carrying companies, the brewery teams and hundreds of private horse owners. The teams' owners who had large number of horses in heavy work, purchased large quantities of hay, oats and barley for stable feed.

Clydesdale horses were mainly used to draw farm machinery. Chaff (chopped hay) was the main source of feed for horses and chaff mills were a common business around major settlements. Straw, a by-product of wheat grain harvesting, was used for animal bedding and was mixed with clay to build "wattle and daub" housing, used as a roofing material and as bedding for animals.

The beginnings of mechanisation

Hay was cut by hand with sickles in the early days, but horse drawn twine binders were developed around 1885. These machines made sheaves of directly cut cereals, wheat, oats and barley. The binder cut the herbage with a knife bar mower, a reel and canvas elevator conveyed the stalks to a binding platform where they were tied with twine by a knotter to form a sheaf. This was dropped on the ground for initial drying.

After a few days drying, sheaves were stood on end with pitchforks to form stooks, and final drying and curing occurred before carting to the stack.

Stacking was a skill and great pride was taken in forming a symmetrical haystack. Salt was often added to each layer of the stack to retard mould growth.



Stacking stooks to dry

Photo: P Dann



Traditional hay stacks made with stooks

Photo: M Lattimore family

Steam traction engines also entered the agricultural scene where they were used for baling hay, threshing grain and cutting chaff.

From the early 1860s to around the turn of the century, the broad pattern of Australian land use was firmly established through the closer settlement legislation such as the Robertson Land Acts of New South Wales and areas under cultivation expanded in all colonies. In this period, transportation systems were developed for moving agricultural products including fodder from source to market. Australia became an important exporter of a wide range of agricultural products and more intensive livestock industries such as dairying developed further, boosting the demand for fodder.

Fodder in the 20th century

The motor age began in Australia at the beginning of the 20th century. However, at first motor vehicles were too fragile to be of much use on rough country roads and so for the first two decades of the new century, horses continued to dominate the road transport and farming scene. Throughout Australia, working horse populations peaked around 1920, but are estimated to have fallen continuously since. Uncertainty surrounds estimates of horse numbers on non-commercial scale farms and non-farming holdings, but these are also believed to have declined.

The severe Federation drought in eastern Australia in the late 19th and early 20th centuries, combined with the rabbit plague, wreaked havoc on the agricultural economies of the eastern states. Following the drought in 1910, national livestock numbers increased steadily until the mid-1940s although not as rapidly as in the previous period. There were also notable regional droughts in the 1930s and 1940s which, together with the Great Depression and World War II, had significant impacts on the regional structure of agriculture. The Soldier Settler Schemes post-World War I and II, together with expansion in irrigated agriculture to around 3% of Australia's crop and pasture lands, further intensified land use and expanded industries such as dairying, boosting fodder production. Dairy cattle numbers increased five-fold between 1900 and 1964.

A new era in fodder conservation

The 1950s heralded a large expansion in Australian crop and pasture areas through increased use of mechanisation and the adoption of a wide range of technologies.

New crop types and improved crop varieties were cultivated and livestock to suit varying regional conditions were bred. Land use intensified throughout the higher rainfall areas of the southern and eastern portions of the continent.



Windrowing hay

Photo: P Dann

Over the same period, road trucking of livestock and fodder connected national markets and reduced the impact of both local and widespread droughts. The area planted to grain crops increased four-fold between 1950 and 1984. During the same period, there was a 40% increase in sheep numbers and a 90% increase in cattle numbers. Dairy cattle numbers began to fall from the mid-1960s with Britain joining the closed

European Community market.

With the advent of tractors, especially the small grey Ferguson in the 1940s, horse drawn binders were adapted to be towed by these machines. Stationary balers were starting to be used to make rectangular 25 kg hay bales. Wire was used to tie the bales. Pasture or cereal hay was cut with a sickle bar mower, dried, raked into a windrow then transported to the baler.

In the 1950s, tractor pulled balers, manufactured by New Holland, Massey, International, and M^cCormick, were producing 25 kg rectangular bales. This mechanisation allowed for increased hay production, especially after the introduction of bale loaders attached to the side of the truck. Some farmers loaded 25 kg hay bales onto trucks manually with wool bale hooks.

In the 1950s Allis-Chambers balers were producing 25 kg round bales. Larger 40 kg fodder rolls were produced by Econ Fodder Rollers in the early 1960s. Various systems of conserving loose hay were also in use including the JayHawk system. Hay was made and generally stored in the corner of the same paddock.

The 1950s and 1960s were characterised by a large increase in broadacre stocking rates in southern Australia, sustained by an increase in improved pastures and fodder crops and an increase in fodder conservation. The proportion of grain crop area planted to oats and mainly used for livestock feed increased from around 8% at the turn of the century to around 25% in the mid-1960s, before declining to less than 5% in the 2000s.

In the 1960s mechanisation of fodder conservation increased with the introduction of disc mowers, mower and windrowers, mower-conditioners and a variety of hay rakes and tedders.



Total stocking stabilised in the 1970s. Falling wool prices and increased sales of lamb on export markets reduced sheep numbers whilst rising cropping productivity increased crop returns and encouraged crop planting in southern Australia. Beef cattle numbers increased steadily, particularly in pastoral northern Australia where introduction of *Bos indicus* cattle, live cattle export, better pastures, grain finishing and a range of improved management practices boosted farm productivity and profitability.

Fodder conservation in pastoral areas was minimal with control of stocking rate and livestock movement generally the most common practices to deal with drought and seasonal feed shortages. Opportunities for fodder conservation in pastoral areas were limited, although fodder production increased in localised areas of northern Australia, however the increase was small in absolute terms. Beef cattle now account for a larger proportion of total national stocking than at any other time in our history.

Fodder quality

During 1968 research on measuring the nutritive value of fodders was commenced in Victoria and South Australia. This research demonstrated the importance of improved fodder quality, especially to increasing milk production in the dairy industry.

With this increased awareness of fodder quality in the farming community, Agricultural Show Societies introduced objective laboratory test results combined with visual appraisal in judging hay and chaff entered in the fodder classes.

In 1974 chaff millers in South Australia developed technology to unroll large round bales to cut into chaff mainly for the horse industry.

At the same time a new industry evolved with the export of live sheep and cattle to the Middle East, Asia, Mexico, South America and Europe. In order to feed these animals new forms of fodder had to be generated such as pellets. Hay was the main ingredient and the new round bales made hay the most cost efficient source.

Since the 1970s, there has also been a significant change in livestock feeding practices. The use of grain as a supplement and for drought feeding has increased. There has also been an increase in the number of farms buying fodder as part of their normal feed management and as a reserve for periods of drought. As a consequence, the proportion of annual fodder production traded has increased.

In the early 1980s the machinery manufacturers developed a new hay baler which produced large square rectangular hay bales (2.2 m long by 1.1 m wide and high, weighing up to 800 kg). This again improved efficiencies and reduced costs in the industry, so



much so that during periods of drought, fodder can be transported around Australia at a viable cost.

Australian fodder exports

During the late 1980s overseas demand for fodder, particularly from Japan for oaten hay and straw, resulted in hay producers and processors from Western Australia, South Australia, Victoria and NSW entering export hay markets in Japan, South East Asia and the Middle East.

Japanese dairy farmers had traditionally sourced their fodder from the USA but in the early 1980s Japan banned roughage from that source due to the discovery of Hessian fly in the USA (Japan was free of this pest) and the Japanese Government policy of increasing minimum milk butterfat and protein levels which required high quality roughage. This provided an opportunity for the Australian Fodder Industry and also to supply out-of-season roughage in to Japan dairies.

During 1990–91 quality control of export hays to ensure freedom from annual ryegrass toxicity (ARGT) free ryegrass was achieved with the introduction of a government testing service.



Export hay is compressed into small, “double-dumped” bales to allow efficient transport in shipping containers.

By 2012 Australian annual hay and straw exports averaged around 700,000 tonnes, primarily to Japan (85%), Taiwan, South Korea, Malaysia and China.

Fodder for feedlots and dairies

Grain finishing of beef cattle first appeared in the 1960s, but it was from the early 1990s that the proportion of Australian cattle finished on grain really began to accelerate. By 2003, almost 30% of Australian beef production was finished in feedlots. Rations based on hay and silage in feedlots have become an important sector of demand for fodder.

The use of hay and silage on Australian dairy farms has always been high relative to other livestock industries and during the 1990s utilisation of fodder increased again as Australian dairy production expanded. From the early 1990s, dairy farms began to use intensive feeding practices for cows, taking advantage of relatively low feed-grain prices. Increased volumes of hay and silage were also used for dairy feed as more intensive management was adopted in the face of rising land prices and increasing competition for irrigation water.



While milk production has declined slightly in recent years in response to industry restructuring and reduced profitability, the dairy industry remains Australia's largest fodder consumer. On average this industry is estimated to use 31% of hay and 57% of silage annually and is currently the second largest buyer of hay behind exporters.

Widespread drought from 2002 and an expanding hay export market have increased fodder demand, while production has fallen in some regions. In combination with high world grain prices, this has resulted in strong hay prices. This has led to substantial shifts to utilisation of cereal and other crop-based hays and expanded the use of grain, oilseed and legume crops for hay and silage production.

Currently, the fodder market continues to grow and change. Technological advances, control systems monitoring quality and improved storage of fodder, such as in hay sheds and silage pits, mean that high quality can be sustained over a longer period, adding value to the end product.

The market has come a long way since the early days of harvesting native pasture to feed hungry horses.

References

Braden, LG (1969). "Bullockies". Rigby.

Cochrane, MJ (2009). "Hay and Fodder conservation in South Australia". A history of Agriculture in South Australia. PIRSA.

Kennedy MJ (1992). "Hauling the Loads - A history of Australia's working horses and bullocks." Melbourne University Press.

Martin, P (2009). "The Australian Fodder Industry- An Overview of production, use and trade." Publication No. 09/001, RIRDC.

THE ROAD TO AFIA

Peter Flinn

It might be assumed by some that the idea to form AFIA as a national industry body was the result of lengthy and well-organised deliberations by a national committee. Nothing could be further from the truth. It happened suddenly and by chance.

Former AFIA Chairman Bill Gough once referred to me as the "grandfather of AFIA" but although I was there at the beginning, AFIA was most definitely not my idea.

The road to AFIA was long, windy and rocky. In some ways it was akin to the adventures of Christian in John Bunyan's "Pilgrim's Progress", who experienced places such as the Hill Difficulty, the Slough of Despond, Doubting Castle, Vanity Fair and even the Valley of the Shadow of Death, before reaching his final goal. Those who attend the successful AFIA conferences of today should understand that the organisation in its early days really struggled to survive, and only through the efforts of various determined and dedicated individuals was it able to step back from the precipice and later thrive. It could be argued that the Australian Fodder Industry still has a way to go to reach Bunyan's Land of Beulah or the Celestial City but is now in there with a fighting chance, courtesy of AFIA.

Fodder quality measurement: the trigger

The laboratory measurement of fodder or feed quality is not a subject likely to warm the hearts of farmers or agricultural scientists. In fact it was described by CSIRO scientist Ken Christian in 1972 as a "scientific backwater". It is rather galling then, to consider that I spent much of my 33-year career with the Victorian Department of Agriculture in this very backwater. Yet it was this topic that led directly to the formation of AFIA. This requires some background explanation.

From Thaer to NIR

Prussian aristocrat Albrecht Thaer (1752–1828) was an eminent agriculturalist and professor, commemorated by impressive statues in Berlin and his birthplace Celle, in Lower Saxony.

Among his many achievements (but probably due more to the work of his analytical chemist Heinrich Einhof (1777–1808)) was the development of "hay values" for comparative evaluation of animal feeds. These were based on the solubility of feeds in various solvents and later formed the basis of feed value tables across Germany and other countries.

This work eventually led to the routine "proximate" system of feed analysis, developed at Weende,



Peter Flinn with statue of Albert Thaer,

Germany by Henneberg and Stohmann in the 1860s. This system, still often used today, involves measurement of moisture, ash, crude protein, crude fat and crude fibre. The difference from 100% of the sum of these constituents is known as nitrogen-free extract and is supposed to represent the digestible carbohydrates.

Despite crude fibre being long regarded as a meaningless measurement, especially for ruminant feeds, nothing much happened in this field for the next 100 years until Peter van Soest devised the detergent fibre system (neutral detergent fibre NDF, acid detergent fibre ADF and lignin) in the 1960s. These improved but still empirical fibre measurements are widely used across the world but their use in predicting animal performance can be described as at best, variable.

A major breakthrough by Tilley and Terry in 1963 was the measurement of *in vitro* digestibility, whereby a feed sample was digested with rumen fluid from a fistulated animal, followed by acidified pepsin. The disappearance of feed dry matter following this two-stage process was found to be closely related to *in vivo* digestibility of that feed in the animal. Another advance in the mid-1970s enabled the enzyme cellulase to replace rumen fluid in the laboratory digestion with minimal loss of accuracy and avoiding the inconvenience (for both the analyst and the fistulated animal) of working with rumen fluid.

Even so, all these "boil and stir" laboratory methods were (and are) slow, tedious, labour-intensive and some of them are downright hazardous. Enter the revolutionary development of near infrared spectroscopy (NIR) – described in the 1950s as a solution in search of a problem, following components of the technology first being developed for military purposes during World War II.

It was not until the 1960s, that Karl Norris, an agricultural engineer working for the USDA, first used an NIR spectrometer to measure moisture and protein in grain. Karl, now aged 92 and amazingly still active in this field, is regarded as the father of NIR as we know it and his early work set off an explosion of NIR instrument developments, software and applications around the world.

In 1976, a classic scientific paper appeared in the Journal of Animal Science, co-authored among others, by Karl and another NIR giant, John Shenk. It was the first paper to report that NIR could be used to measure forage (or fodder) quality. At the time, as the analytical chemist employed at the Pastoral Research Institute, Hamilton, Victoria, I and many others were sceptical. Was it really possible to shine near infrared light onto a fodder sample and use the absorption pattern obtained to predict protein and fibre content, or even digestibility and voluntary intake? I was, in turn, amazed, affronted and even worried about whether such a technique would make my job redundant! Perhaps NIR would be a "flash in the pan".

Of course it was not but I soon discovered it was not that easy. There were many traps for young players – rigorous calibration based on high quality laboratory data was crucial and NIR was a dangerous technique in the wrong hands.

It took another 10 years before I was able to obtain a suitable NIR instrument at Hamilton at a cost of \$100,000. This was a tortuous process.

In the meantime, my colleagues and I embarked on a comprehensive three-year survey (1979–1981) of pasture hay quality across western Victoria, the first of its kind. This involved asking farmers why they made hay, the time of closing, mowing and baling, and weather conditions at the time. Two hay samples were taken from each property visited, with one dissected into grasses, legumes and weeds to determine botanical composition, and the other analysed for protein, neutral detergent fibre (NDF) and digestibility (using the pepsin-cellulase method). This provided a valuable data base and led to the conduct of various hay-feeding trials with sheep and beef cattle at Hamilton from 1982 to 1984 in order to compare animal performance across different hays.

The 300 hay samples and associated analytical data also set the scene for my first NIR calibration. In 1981 I visited Ian Murray, an enthusiastic advocate for NIR at the School of Agriculture, Aberdeen, Scotland. He later agreed to scan our hay samples on his then state-of-the-art instrument and attempt a calibration (a mathematical relationship between the NIR scans and the laboratory measurements). It worked! The results were far better than I had dared to hope, given that up to that time forage calibrations were confined only to pure species. Our hays were anything but that – a real mixed bag.

Then followed an intense period of presenting results at conferences, writing research grant applications and generally annoying anyone willing to listen, from the Minister for Agriculture downwards. Attempts to seek \$100,000 for one laboratory instrument were considered unrealistic, even insane. Some scientists regarded NIR as black magic. There were many knock-backs and much derision until one memorable 15-minute meeting I had with the Australian Livestock Exporters Association (ALEA) in May 1986. A Senate Committee Report into the live sheep export trade the previous year had recommended minimum quality standards for pelleted diets fed to export wethers and a rapid laboratory test for pellet quality. NIR seemed to be the answer and due to the influence of ALEA on the Australian Meat and Livestock R&D Corporation (AMLRDC later MLA), the wheels started to turn rapidly. Within weeks, a major AMLRDC loan (not grant!) had been approved, with the remaining amount covered by a grant from the Australian Special Rural Research Fund (ASRRF, forerunner of RIRDC) and from the Victorian Department of Agriculture.

The Pacific Scientific model 6250 NIR scanning instrument arrived at PRI Hamilton in November 1986. It was the first of its type in Australia dedicated to fodder and feed analysis and also the first in Australia to be driven by ISI software produced by NIR legend (and my mentor) Dr John Shenk who came to Hamilton to install it. That started a life-long friendship with a brilliant, unique, irascible, highly controversial and unforgettable personality, which ended only when I attended his funeral in the USA in 2011.

Interestingly, the ceremony and seminar which launched the installation of the Hamilton instrument was attended by a certain well-known district hay producer who I had recently met during dealings with participants in the live sheep export trade. Some of the above adjectives used to describe John Shenk could equally be applied to him. His name? William J. Gough Esq. This gentleman and I have collaborated (and sparred) in the fodder industry journey ever since.

At the same time I was attempting to negotiate some study leave, to enable me to work on NIR research with Ian Murray in Aberdeen. Eventually this occurred, I obtained an M.Sc. from the University of Aberdeen and I will forever be grateful to the then Director-General of the Department of Agriculture, Dr David Smith for his approval of what turned out to be the highlight of my career.

By 1988 a range of NIR calibrations had been developed and the commercial FEEDTEST service was starting in earnest. The proceeds from this were essential to repay the loan on the NIR instrument which was duly accomplished, and on time. Hay producers and livestock feeders were also beginning to see the benefits of testing for fodder quality.

The broader picture – industry development and fodder testing

One question asked of participants in the 1979-1981 hay survey was whether haymakers would ever consider selling the hay they produced. Only a very few answered in the affirmative. Many were adamant that doing so would be selling the fertility of the farm. It was far more appropriate to retain the hay for feeding out on-farm.

Obviously, as time went on, this attitude changed significantly. Whilst there has always been *ad hoc* selling and buying of hay, especially during times of fodder shortage, it has taken a long time to be recognised as an industry in its own right. The term "fragmented" has been frequently used to describe the fodder industry.

There was one significant attempt in Victoria in the 1980s to combine a hay quality grading system with a means of bringing buyers and sellers together. This was called "Haymarket", designed by the Australian Lucerne Co-Operative Ltd (ALCOL). The grading system gave equal weight (in points) to both subjective (colour, botanical composition, maturity, aroma, absence of noxious weeds and foreign matter) and objective (protein, digestibility) criteria.

The 1990s saw two major developments – the increased interest in domestic fodder trading driven by demands from the dairy industry and the growing hay export industry, particularly oaten hay to Japan. In both cases there was an increasing awareness of the importance of quality, and how it was measured but there were differences apparent in the export and domestic markets as to how quality was defined.

It must be stated that FEEDTEST was not the first feed quality testing service in Australia. The NSW Department of Agriculture had some years earlier commenced such a service based at the Glenfield Veterinary Research Station. In those days that service was free. It was later moved to the Elizabeth Macarthur Agricultural Institute at Camden, then briefly run by the University of New England, Armidale before being shut down. NSW DPI later established a new Feed Quality Service at the Wagga Wagga Agricultural Institute where it still operates.

Agritech Laboratory Services, established in Toowoomba Queensland by cereal chemist Don Law, has also been testing agricultural products including fodder and

feed for many years. It is now operating as part of SGS Australia Ltd. Ruminant nutritionist John Milton also set up his own laboratory, Independent Lab Services in Perth during the 1990s as part of his consultancy business.

Today there are several other laboratories in Australia which offer fodder quality testing but the above four were the key players in events leading up to the formation of AFIA.

The move towards a "standard gauge" for fodder labs

Managing a fodder testing laboratory occasionally involves disputes over analytical results. A hay vendor may arrange to have a sample tested and a buyer of the same hay may also arrange an independent test. Obviously, the results should be the same, within acceptable error limits. Sometimes they can be significantly different. Why? Hay is a variable product and careful representative sampling is essential. If not, sampling error can be large.

Customers can also split samples, and send a sub-sample to two or more different laboratories. This of course is the customer's right but what if there are wild differences between laboratories for the same constituent or if laboratories provide different measurements altogether? It has happened and unless quickly dealt with and remedied, can erode confidence, not just in a given laboratory but in fodder testing across the board.

The consequences of these problems were exercising my mind at the start of the 1990s and it seemed appropriate to apply the well-established concept of "ring tests" to fodder analysis. Such tests involve the careful preparation of one or more samples, split into as many sub-samples as there are laboratories in the "ring" and distributed by a central (and impartial) organiser. Each laboratory then analyses the sample and sends the results back to the organiser, who applies statistical tests to determine whether the laboratories "agree" on that sample. The process must be handled carefully and confidentially, but has been used for many years in different industries.

At this time I also became aware of a European ring test, co-ordinated by Dr Jos van der Meer in the Netherlands, specifically for determining digestibility by either the *in vitro* or pepsin-cellulase method. It seemed a good idea to institute something similar in Australia. I consulted the then "guru" in this field at the time, an eminent scientist who would have been in an ideal position to run the ring test. His response? "Peter," he said. "A ring test is the best way I know to make enemies." He was adamant that he would not support the concept. I was taken aback, although years later I accept there is an element of truth in what he said!

As time went on, I was convinced that Australian fodder testing laboratories were operating like the railways in colonial times. Different gauges were used in different States and until the 1960s, a traveller from Melbourne to Sydney had to change trains at Albury in the middle of the night. The laboratories devised their own methods independent of each other. If the fodder industry was going to grow and be taken seriously in both domestic and export markets, some kind of agreement on

methodology, together with a standardised objective description of fodder across the country was essential. But how?

This message, with constant repetition in all sorts of forums, began to resonate. The local hay contractors like Bill Gough and Graham Thomson were convinced something needed to happen. Movers and shakers in the live sheep trade like Adrian Baker of Rural Export and Trading (WA) also agreed. Support was forthcoming from various producer groups and farm advisors.

In 1993 I had a visit from Warwick McClelland, a well-known Mallee grain-grower and Chairman of the Victorian Farmers Federation (VFF) Grains Group. Although a grains man, he had a real interest in the fodder industry as well and was convinced that an objective quality grading system was needed for both fodder and feed grains.

Subsequently, two meetings (20th July and 10th September 1993) were held at Farrer House, Melbourne (VFF Head Office) chaired by Warwick McClelland. An "Objective Hay Standards Working Party" was established, and included the following members:

W. McClelland and C. Aucote (VFF Grains Group), P. Jones (VFF Pastoral Group), N. Campbell (UDV), D. Sexton (Weekly Times) and P. Flinn, K. Bishop, D. Pye, J. Boomsma, D. Hopkins and F. Mickan (Department of Agriculture).

The working party was very much aware that a national approach, rather than one confined to Victoria, was essential in obtaining an industry-wide system for fodder quality grading and description. No-one wanted a repetition of the railway gauge saga! However, this VFF initiative was crucial in demonstrating industry support in a quest for funding to develop the system. To achieve this, research proposals were submitted to three R&D Corporations in late 1993 – Grain (GRDC), Dairy (DRDC) and Rural Industries (RIRDC), the latter having the fodder industry as one of its portfolios. Two of the three submissions were unsuccessful but RIRDC's response was encouraging. However, it took more than a year, including a revamped submission, two industry workshops in Adelaide and Perth, a major RIRDC review of fodder R&D and even meetings with a Federal MP before final approval was given in 1995 by RIRDC to fund research project DAV-104A, entitled "A uniform objective system for quality description of Australian fodder products". The project, managed by Agriculture Victoria at Hamilton, received funding of \$67,500 spread over two years.

The VFF Objective Hay Standards Working Party, this time including hay producer Bill Gough and hay trader Andrew Lang, met at Farrer House for one last time on 21st June 1995. The purpose of the meeting was to plan for the National Fodder Industry Forum, funded from the new RIRDC project and scheduled for October 1995.

The train looked as if it was finally on the rails and ready for the real journey!

The National Fodder Industry Forum

The staging of this Forum, on 4–5 October 1995 at the Airport Function Centre, Attwood Victoria, was the first task the Project. It proved to be a landmark in the history of the Australian fodder industry.

A major effort was made to bring together the key players in the industry, including producers, processors, traders, end-users, advisors and representatives of fodder testing laboratories, research organisations and the media. Thirty-eight delegates attended. This effort was greatly assisted by the VFF which provided secretarial assistance and importantly, an independent facilitator to conduct the Forum, Ian Crook.

It is noteworthy that this was the first time ever in Australia that representatives of the major fodder testing laboratories had met in the same room at the same time!

The purpose of the Forum was to seek agreement on the criteria needed for a uniform system of objective quality description of fodder.

However, following preliminary discussions at the 1994 RIRDC Fodder Workshop in Adelaide and the subsequent review of fodder R&D, an additional objective of the Forum at the initiative of RIRDC and put forward by RIRDC representatives Brian Stynes and Peter Peterson, was to gauge the opinion of attendees on whether a national body should be formed to co-ordinate the activities of the Fodder Industry.

The Forum commenced with short presentations on prospects for the fodder industry, options for quality measurement and description systems, nutritional requirements of ruminants, and customer requirements for fodder measurement and description from the viewpoints of a producer, processor, exporter, beef feedlotter, dairy farmer and live sheep exporter. The remainder of the Forum consisted of plenary and small group discussions on the various issues.

The discussions were lively, firstly on the definition of "fodder" and then on the appropriate criteria for defining fodder quality but there was unanimous support for the formation of a national fodder industry body.

Fodder was defined as the wide range of crop and pasture species grown that are harvested and lightly processed to facilitate both on-farm use and domestic and export trade.

The major outcomes of the Forum were:

1. An agreement that the principal quality criteria of fodder should be moisture, metabolisable energy and crude protein, with a prediction of voluntary intake to be included at a later date, depending on the development of an appropriate method.
2. An agreement that the fodder testing laboratories represented would work towards the development of uniform procedures for fodder analysis.
3. The formation of a Steering Committee to establish a national fodder industry body.

Finally – a national body

To maintain the momentum from the historic National Fodder Industry Forum, the first meeting of the Australian Fodder Industry Steering Committee (AFISC) was held in Sydney on 16–17 November 1995.

AFIA was about to be born!

The funding crisis and the second meeting

Despite the high expectations of RIRDC support at the Melbourne Forum, it quickly became apparent that interim funding to assist the fledgling national body was not forthcoming. Although it was clear RIRDC policy not to fund the day-to-day activities of industry bodies, AFISC members were convinced that some RIRDC support was essential to "get the show on the road" in order to arrange expected sponsorship, start moves towards planning an industry levy for R&D and for some secretarial work.

Strong representations were made to RIRDC Managing Director Keith Hyde in a letter from AFISC Chairman Colin Simpson dated 22nd November 1995. A flurry of negotiations then ensued, with a formal application for out-of-session urgent funding sent to RIRDC on 18th December 1995. By 2nd January 1996 Colin Simpson was relieved to be able to inform the Committee that RIRDC had approved funding of \$15,000 to allow the establishment of AFIA. This literally made the difference between life and death for the new industry body.

The second meeting of AFISC took place at the Head Office of Agriculture Victoria, East Melbourne on 1st February 1996. New member Kevin Roberts (representing ALFA) joined the other six members at the meeting, together with Keith Hyde and Peter Peterson (RIRDC).

Major decisions made at this meeting included the commissioning of a strategic plan for the fodder industry from Macarthur Consulting; the adoption of the pepsin-cellulase method for estimating metabolisable energy of fodder (provided samples with known *in vivo* digestibility were available in sufficient numbers and quantity) and the appointment of Anne Fleming as official secretariat until, initially, 31st July 1996.

The first AFIA Newsletter also appeared immediately following the February 1996 meeting.

The lead-up to the inaugural Annual Conference

AFIA was officially incorporated on 9th February 1996 with the certificate presented to Chairman Colin Simpson by NSW Minister for Fair Trading, The Hon. Faye Lo Po'.

An AFIA Committee Meeting was held by teleconference on 5th March 1996 where the annual membership subscription for individuals was set at \$150 and a list of potential sponsors was finalised.

A two-day Committee Meeting was held at the Airport Function Centre, Attwood Victoria on 27–28 May 1996. Real progress was starting to occur with funding of \$34,050 secured from the Department of Primary Industries and Energy to cover the

cost of preparation of the Strategic Plan by Macarthur Consulting. The first of many long and agonising discussions took place on the proposal for a levy on baling twine to raise funds for research and development (R&D).

Lengthy discussion also took place on product description and laboratory co-ordination. A proposal was made for the 16 hay *in vivo* "standards" to be produced as part of RIRDC project DAV-104A to form the basis of the agreed laboratory method for estimating metabolisable energy (ME). The 16 "standards" would become the property of AFIA.

The concept of a Vendor Declaration Form was also agreed, using the current ALFA form as a model.

Importantly, it was recognised at this meeting that a sub-committee of AFIA could and should handle laboratory co-ordination issues. However, it was another three years before this was actually formalised.

A further one-day meeting, specifically for representatives of fodder testing laboratories, organised and funded by RIRDC but under the chairmanship of AFIA, took place at the Sheraton Airport Hotel, Sydney on 11th June 1996. This provided a valuable opportunity for a detailed discussion on testing methodology and the proposed fodder classification system.

It was with some satisfaction with progress made, but with recognition that many challenges lay ahead, that the AFIA Committee approached what turned out to be a very successful inaugural Annual Conference, once again at the Airport Function Centre, Attwood Victoria on 18–19 July 1996 with keynote speaker the Hon John Anderson MP, Federal Minister for Primary Industries and Energy.

Bunyan's Land of Beulah was still well away on the horizon, but we were at least through the Wicket Gate!

EARLY DIRECTIONS

David Sexton

FROM THE NATIONAL FODDER INDUSTRY FORUM 1995

The National fodder Industry Forum was held on 4–5 October 1995 to address two key issues:

- A national system for the measurement and description of fodder.
- The formation of a national fodder industry body.

In total 35 people attended the forum: 6 producers, 2 end users, 7 processors/traders/exporters, 4 technical analysts, 14 researchers and 2 from the media.

The proceedings from the forum were the transcripts of:

- Output from the small groups and plenary sessions of the forum.
- Papers and other background material presented at the workshop.

At this forum, the following were defined:

- Fodder
- The fodder industry
- The customers of measurement and testing services
- The customers' requirements of the laboratories in regard to a system of measurement and description of fodder, and its commercial implementation
- Other important aspects of laboratory service – from the customers point of view
- The role and functions of an industry representative body, with some key performance indicators
- A steering committee, with terms of reference to oversee the establishment of an industry body by July 1996

Fodder Definition

Earlier meetings had recognised, although not highlighted, that the fodder industry consisted of more than hay of various types. An important outcome of this workshop was definition of "fodder", which goes beyond various types of hay to include silage and straw.

Fodder was defined as: *the wide range of crop and pasture species grown that are harvested and lightly processed to facilitate both on-farm use, domestic and export trade.*

Measurement and Description

The forum defined the measures and description required of fodder. There was an agreement that the principal quality criteria of fodder should be moisture, metabolisable

energy and crude protein, with a prediction of voluntary intake to be included at a later date, depending on the development of an appropriate method.

There was also an agreement that the fodder testing laboratories represented would work towards the development of uniform procedures for fodder analysis.

National Body

The linkages from the national fodder industry body to agriculture in general – in the public, private and representative areas were defined.

The forum envisaged the national fodder industry body having a close relationship to the National Agricultural Commodities Marketing Association Inc. (NACMA) working with them to amend certain standards for the measurement and description of other animal feeds as they are listed in the NACMA manual.

RIRDC, as key sponsors of the forum and supporter of industry, agreed to sponsor the operations of the Steering Committee to establish the national fodder industry body.

The Steering Committee therefore had terms of reference and the funding to establish the industry body and oversee the establishment of the national measurement and description standards according to the requirements of the customers.

Australian Fodder Industry Steering Committee (AFISC)

A committee for this inaugural national body was elected at the forum with their terms of reference including the development on an industry future plan.

Under the Ausindustry Agribusiness Program within the Department of Primary Industries and Energy the AFIA received funding to carry out a Strategic Development Plan. This plan, which mapped the industry vision for a 5 year periods, was drawn up by Macarthur Consulting Pty Ltd of Brisbane and presented and subsequently ratified at the first AFIA Annual General Meeting in July 1996.

The plan identified the key issues facing the fodder industry, its stakeholders and strategies to achieve the plans objective. Future directions to be achieved in the plan are best summarised by a statement issue by AFIA in April 1996:

“The newly formed Australian Fodder Industry is moving quickly to guarantee safe, quality products for its customers and growth markets for its members. Traditionally the fodder industry has been large and fragmented with little focus on cohesive industry development in response to customer needs. However a new era began in February 1996, with the formation by the key industry players of the Australian Fodder Industry Association, Inc. (AFIA)

Chairman of the AFIA, Mr. Colin Simpson said at the recent ABARE Outlook Conference that the AFIA intends to build a professional industry able to consistently deliver quality products to key livestock sectors) dairy, beef, bloodstock, sheep and live export) here and overseas. “This development program will get under way in April. Eager endorsements for this proactive approach by the AFIA have already been received from the Victorian Farmers Federation, the NSW farmers’ Association, the Australian Dairy farmers’ Association and the

Australian Lot feeders Association” he said. The program will promptly get underway as a national project supported jointly by the fodder industry, Rural Industries R & D Corporation and the Federal Department of Primary Industries and Energy.

Three consecutive development stages will be implemented. The AFIA has appointed Brisbane based Macarthur Consulting to professionally design and guide the industry through the development program over the next four months.

Firstly, in April the consultant will independently undertake fodder and livestock industry research and consult widely with all parts of the national fodder industry. Face to face interviews will be held with key producers and stakeholders in related livestock sectors across all States.

The aim is to identify the central issues for fodder industry development and then jointly document and prioritise these with the AFIA’s Interim Committee. The interviews will also gather industry’s opinion regarding priority research and development activities and sources of funding for the AFIA.

In the second stage the consultant will draft a Fodder Industry Development Plan documenting the priority issues, industry goals, R&D program, and what will be done by whom to achieve the desired outcomes in each case. The draft will include an organizational plan for the AFIA and budgets identifying the sources of funds and how and where funds will be used over the next five years to fund priority tasks. This draft plan will be reviewed in detail and finalized by the Steering Committee at its meeting in May”

“Stage three will launch the AFIA and the Industry development Plan at the first National Fodder Industry Conference held over two days in mid-July in Melbourne. Expert local and overseas speakers from the fodder, dairy, lot feeding, bloodstock and export sectors will present papers on issues critical to development of the industry, including product quality assurance and accreditation, changing safety needs in the livestock and food industry, export opportunities and development of a common trading language. Federal Minister for Primary Industries, John Anderson has been invited to open and make a key note address at the conference. The conference will also include an industry dinner with guest speaker review and ratification of the draft Industry Development Plan, and nominations and election of the first board of the Association. Delegates from all sectors of the fodder industry as well as dairy, feedlot and bloodstock industries will attend the Conference.

On completion of the conference the consultant will incorporate the resolutions regarding the Board and funding into the plan, and assist the AFIA to establish a fulltime AFIA secretariat to work with the Board to implement the Development Plan over the next 5 years.”

Source: The AFIA Development Program statement issued April 1996 by AFIA Secretariat.

The AFIA Development Plan as adopted by the July 1996 Conference provided the early directions, policies and strategies on which AFIA focused during the period 1996–2002. Indeed some of these early items still currently require executive consideration.

Refer to the section “The First Conference 1996” for more detail.

From Second National Conference 1997

Some key focus points from the 2nd National Fodder Conference and AFIA AGM held in Albury NSW on 7 August 1997 were:

- Major testing laboratories consultation towards achieving consistent testing methodologies.
- Trend into fodder being traded on a price per unit of metabolisable energy basis with buyers' acceptance to pay a premium for quality fodder.
- The implementation of a Quality Assurance System which was dependant of funding availability.
- The adoption of only one Quality Code for Crop Production at the farm level, SQF 2000 Quality Code, also adopted by the Wheat and Pulse Industries.
- Introduction of the Vendor Fodder Declaration Forms to be used by producers and consumers as a first step towards Industry Quality Assurance.
- Fodder research, development and education was an early priority item. Strategies included formation of an RD&E sub-committee, development of a 5 year RD&E plan and implementation of an industry levy for research funding.
- Addressing the threat of Annual Ryegrass (ARGT) Toxicity to the livestock and fodder export industries. Early advocacy by AFIA resulted in maximizing the trade in ARGT – free fodder and at the same time excluding fodder containing ARGT. New Victoria legislation was affected to fall into line with a successful export testing regime whilst potential ARGT contamination in WA was prevented.
- Attempts to design and implement a simple, national hay grading system based on visual, protein, energy and moisture.
- Encourage hay exporters to join AFIA to bring the fodder industry under one umbrella and strengthen government recognition.

INCORPORATION

David Sexton

The Australian Fodder Industry Association Inc. (AFIA) was officially incorporated on the 9th February 1996. The Certificate of Incorporation was presented to the AFIA Chairman, Colin Simpson of Oaklands NSW by the NSW Minister for Fair Trading, the Hon. Faye Lo Po' at a ceremony at Wagga Wagga NSW. Banking facilities were established in order for AFIA to accept membership, subscriptions, donations and sponsorships.

The steering committee elected at the National Fodder Forum held in Melbourne in October 1995 became the interim committee of the Association, with the exception of Dr Adrian Baker who was unable to continue his involvement.

A new management committee was elected at the inaugural Annual Conference and Annual General Meeting held on 18th–19th July 1996. See previous section for details of committee members.

Other decisions made at the inaugural Annual General Meeting were:

- Conferences and AGM to be held once/year around Australia.
- Initial sub-committees to be formed included: Quality, Language & Testing, Research & Development, Vendor Declaration Form, Membership, Training & Education.
- Annual subscription was set at \$150 per member.

Evolution of the Association

On 18th June 2008 the Australian Fodder Industry Association Limited was registered with the Australian Securities Investments Commission (ASIC) as a public company limited by guarantee. A relevant Board of Management replaced the previous central Committee, whilst retaining the specialist committee structure.

This management structure continues today with the specialist committees being modified in order to reflect changing industry issues.



AFIA Board 2008 (from left to right) Peter Gillett, Murray Smith, Suzanne Dalton (front), Lyall Schulz, Mary-Anne Lattimore (front), Bill Gough, Peter McCormack and Charlie Williams.

THE FIRST CONFERENCE – JULY 1996

David Sexton

The inaugural conference of AFIA was held at the Airport Motel, Attwood (Melbourne) on 18th–19th July 1996.

The two-day event commenced with the seven person interim steering committee meeting in the morning, followed by the formal conference opened by Chairman Peter Peterson, Program Manager, Rural Industries Development Corporation (RIRDC).

The role of a RIRDC representative as the chair of the first AFIA conference was important as RIRDC had continuously supported and recognised the Australian Fodder Industry's potential and was instrumental in the formation of AFIA.

Members of the steering committee who oversaw the establishment of AFIA as the national industry body were:

- Colin Simpson – Chairman – producer, Urana NSW
- Graham Thomson – Deputy Chairman – producer/contractor/merchant, Condah Vic.
- Anne Fleming – Secretary – Melbourne, Vic.
- Peter Flinn – feed analyst, Hamilton Vic.
- Denis Johnson – processor/exporter, Kapunda SA
- Don Law – feed analyst, Toowoomba Qld
- Paul M^cCardell – producer/broker/merchant, Sydney NSW
- Kevin Roberts – feedlotter, Dalby Queensland

This steering committee together with their advisers from RIRDC, Peter Peterson and John M^cQueen organised the inaugural AFIA Conference in July 1996.

One of the four terms of reference given to the interim steering committee, which was elected at the National Fodder Forum held in October 1995, was to:

“Convene a National Conference to report back to industry on the activities of the Steering Committee and to provide a forum for the establishment of a national body to represent and oversee future development.”

This was achieved on the 18–19 July 1996 at the first conference when AFIA was officially launched by the Hon. John Anderson, Federal Minister of Primary Industries.

There were 56 delegates on day 1, 74 on the second day and 38 inaugural members attended the Annual General Meeting.

The Federal Minister, in his address to the conference:

- Endorsed the formation of AFIA by the Federal Government.
- Pledged continuing support from RIRDC to assist a developing industry and achieve Quality Assurance.
- Stated that the Federal Government would match fodder industry sourced R&D funds providing that the general rural industries were supportive.
- Highlighted that it was essential for the industry to have national standards for product sampling, testing and a national fodder language.
- Stated that the government would accepted a nationally agreed protocol for ARGT particularly applying to fodder exports.
- Stated that they would contribute towards the development of an industry strategic business plan.
- Congratulated the industry on achieving a unified approach.

The focus of the first conference was to establish the future national direction of the Fodder Industry.

Under the AusIndustry Agribusiness Program within the Commonwealth Department of Primary Industries and Energy, AFIA had received funding to carry out a Strategic Development Plan. This plan, which mapped the industry vision for the next five years, was drawn up and presented by Macarthur Consulting Pty Ltd of Brisbane and was subsequently ratified by the inaugural conference and the Annual General Meeting.

As a rigorous basis for the development of this strategic plan, the AFIA interim committee decided that an industry issues paper needed to be compiled following extensive consultation across the various industry stakeholders. Macarthur Consulting prepared the issues paper which profiled the fodder industry nationally and presented this to conference. The survey covered industry strengths and weaknesses, roles that the representative body can plan (key issues) and administrative issues from the perspective of the industry stakeholder groups.

The survey highlighted overwhelming support for AFIA and identified the key issues as:

1. Quality Assurance accreditation
2. Fodder specifications
3. Trading language
4. Fodder quality (nutrition/contamination)
5. Industry lobbying
6. Identification of research and development needs

Reports were presented detailing a uniform national Product Description Language and an agreement in principle on common analytical methods to be established by the major feed testing laboratories throughout Australia.

Consistent with the “paddock to plate” approach to quality assurance, development of an industry-wide Quality Assurance (QA) Program was already underway. A

report was presented by Paul Ryan of AgWest Trade and Development with a pilot quality assurance program to be implemented by 1997.

Annual Ryegrass Toxicity incidents in Japan were discussed and the conference resolved that protocols and testing regimes must be developed to prevent any further incidents in order to protect fodder exports and trade. This was referred to the Australian Quarantine Inspection Service (AQIS) for representation. A draft Vendor Declaration Form on fodder quality and composition was presented to and supported by conference to be further developed and adopted.

Guest speakers at the Annual Conference included Bill Hill (Chairman of Directors, Bonlac Foods Limited) and Malcolm Foster (President, Australian Lot Feeders' Association), both of whom publicly endorsed the initiatives and direction of the AFIA and expressed a strong preference, within their respective industries, for the purchase of fodder grown under a QA system.

Chair of the Steering Committee, Colin Simpson reported to the conference on R&D funding. In order to fund a Research and Development Program it was considered that it was essential for the Fodder Industry to provide funds which could then be matched on a dollar for dollar basis by the Federal Government. This R&D Fund would then be administered by the Rural Industries Research and Development Corporation (RIRDC). In order to achieve this, talks were held with the relevant government body, twine manufacturers and importers and other peak industry bodies. Support from all sectors of the industry was imperative. The conference supported the proposed introduction of a 3% levy on baling twine and netwrap to source Industry R&D funds and a case to be prepared to take to agricultural industry sectors and to government.

At the Annual General Meeting following the conference the new AFIA committee was elected comprising:

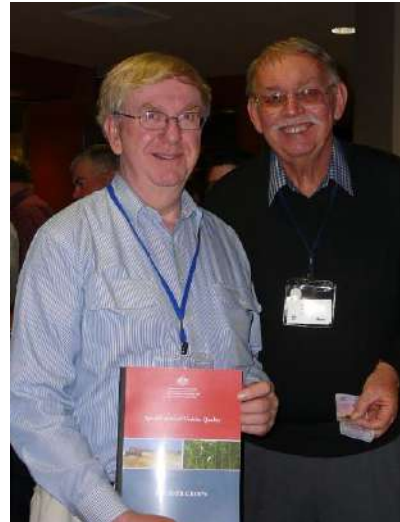
- Colin Simpson, Kakadu Pastoral Co., Oaklands NSW (Chairman)
- Graham Thomson, Condah Hay Supplies, Condah Vic. (Vice-Chairman)
- Don Law, Agritech Laboratory Services, Toowoomba Qld (Hon. Secretary)
- Peter Flinn, Feedtest, Agriculture Victoria, Hamilton Vic. (Treasurer)
- Denis Johnson, J T Johnson & Sons, Kapunda SA
- Tim Dale, Burnewang North Estate, Rochester Vic.
- Barry M^cDonald, Fodder Producers & Exporters Association, WA, Yerecoin WA
- Kevin Roberts, Aust. Lot Feeders Association, Dalby Qld
- Anne Fleming, Vic. (Secretariat)

There were two invited positions on the committee, one for Australian Lot Feeders' Association and one for Australian Dairy Farmers' Federation. Kevin Roberts (immediate past President, ALFA) represented ALFA but the ADFF declined to take up their position.

Colin Simpson, the inaugural chair of AFIA, concluded this historic first conference, commenting that the weaknesses of the fodder industry – fragmentation, restricted language, lack of quality assurance and little coordination – had been addressed by conference. Tribute was paid to the initial steering committee who had laid the foundation of a cohesive fodder industry.



AFIA Chairman Colin Simpson at first AFIA Conference 1996



Founding AFIA Committee members, Peter Flinn and Don Law

SUBSEQUENT CONFERENCES 1997 – 2013

Peter Flinn and Graham Thomson

1997

Theme: Quality in the Fodder Industry
Location: Country Comfort Carlton Hotel, Albury NSW
Dates: 7th–8th August 1997
Keynote Speaker: The Hon. Senator David Brownhill, Parliamentary Secretary to Minister for Primary Industries and Energy
Other Highlights: Address by Peter Core, Managing Director, RIRDC
Address by James Ferguson, Deputy Executive Director, NFF
Review of 5-year Strategic Plan for RIRDC Fodder R&D
Annual Ryegrass Toxicity in Hay

1998

Theme: Quality in the Fodder Industry
Location: Pastoral and Veterinary Institute, Hamilton Victoria
Dates: 6th–7th August 1998
Keynote Speaker: Senator Judith Troeth, Parliamentary Secretary to Minister for Primary Industries and Energy
Other Highlights: Uniform Methods for Fodder Quality Measurement & AFIA Hay Grades, Quality Assurance, Quality Management, Farm Safety
Hydroponic Fodder Production, Silage and Hay - Harvesting, Quality, Storage

1999

Theme: Meeting the Market
Location: SA Research & Development Institute, Adelaide SA
Dates: 11th–12th August 1999
Keynote Speaker: Dr Neal Martin, Director, US Dairy Forage Research Centre, Madison, Wisconsin USA
Other Highlights: Australian Supply and Demand Fodder Atlas
Inaugural Updates on AFIA Activities and New Fodder R&D
Hay and Silage Workshop
Weather Forecasting and the Fodder Industry



AFIA Conference 2003 Canberra

2000

Theme: Fodder – Feed for the Future
Location: Victorian Institute of Animal Science, Attwood Victoria
Dates: 7th–8th September 2000
Keynote Speaker: Dr Padraig O'Kiely, Teagasc, Grange Research Centre, Dunsany, Co. Meath, Ireland
Other Highlights: Guidelines for Transporting Hay and Silage
Fodder Needs in the Dairy Industry, The 2000 AFIA USA Study Tour, Microbial Inoculants for Hay Preservation

2001

Theme: Fodder – Golden Opportunities
Location: SA Research & Development Institute, Adelaide SA
Dates: 22th–23th August 2001
Keynote Speaker: Gary Freeburg, Hay Producer from Gayville, South Dakota USA and President, National Hay Association
Other Highlights: Accuracy of Fodder Testing and Sampling
An Integrated Fodder Quality Research Project
Implementing Quality Assurance for the Fodder Industry
Nutritional Impact of Dairy Deregulation on Fodder Markets

2002

Theme: Meeting Future Demand
Location: Novotel Vines Resort, The Vines WA
Dates: 29th–30th August 2002
Keynote Speaker: John Kellett, Austrade, Osaka Japan - Hay Demand in Japan
Other Highlights: New National Information Package for Lucerne Hay Production
Update on Preference Measurements for Hays across Animal Species, The Dairy Industry in Saudi Arabia, Import Risk Analysis of Heat-Treated Imported Stockfeed

2003

Theme: After the Drought
Location: Hotel Heritage, Narrabundah ACT
Dates: 14th–15th August 2003
Keynote Speaker: Allan Chambers, Timothy Hay Producer and Executive Member of Canadian Hay Association, Arnes, Manitoba Canada
Other Highlights: Presentations on Impact of Drought and Response, TopFodder Silage Project, Cereal Research for the Fodder Industry, The Australian Mushroom Industry

2004

Theme: Success with Nature
Location: Country Club Resort, Launceston Tasmania
Dates: 25th–26th August 2004
Keynote Speaker: Harry Wilson, Principal, Wilson Contracting, Preston, Lancashire UK – Contract Silage Production
Other Highlights: Designer Fodder Crops and the GMO Debate, Climate Services for Agriculture, Spontaneous Combustion of Hay, Weed Hygiene for Agricultural Contractors, Hay Demand for Horses

2005

Theme: Make Hay in the Sunshine
Location: Novotel Twin Waters Resort, Maroochydore Queensland
Dates: 17th–18th August 2005
Keynote Speaker: Stan Steffen, Steffen Systems, Salem, Oregon USA – US Hay and Straw Production
Other Highlights: Succession Planning in Agriculture
Update on AFIA North American Study Tour
Feedlot Fodder Requirements
Markets – NZ Silage, Straw Housing, Prospects in China
Impact of Nitrogen on Growth and Quality of Fodder

2006

Theme: Fodder – Top End Feed
Location: Holiday Inn Esplanade, Darwin NT
Dates: 19th–20th July 2006
Keynote Speaker: Grant Lyons, Lucerne and Commodity Trader, South Africa
Other Highlights: Fodder Production in the Top End
The Impact of Bio-Fuels on the Fodder Industry
Indigenous Agricultural Management, Oaten Hay Book Launch



AFIA Conference 2007 Coffs Harbour

2007

Theme: Restock and Revitalise
Location: Pacific Bay Resort, Coffs Harbour NSW
Dates: 25th–26th July 2007
Keynote Speaker: Peter Andrews, Natural Sequence Farming, Denman NSW – Causes of Fertility Decline
Other Highlights: Biomass Fuel Generation – Threat or Opportunity?
Hay Shed Fires, Hay and Silage Inoculants,
Predictors of Preference between Hays for Dairy Cows and Horses

2008

Theme: Innovate and Rejuvenate
Location: Mecure Hotel, Geelong Victoria
Dates: 6th–7th August 2008
Keynote Speaker: Ray King, Dairy Australia – The Changing Shape of Dairy
Other Highlights: Climate Change, Hay Fires and Radar Imagery
ChemCheck Launch, Lucerne Hay Book Launch

2009

Theme: The Challenges of Change
Location: The Esplanade Hotel, Fremantle WA
Dates: 28th–29th July 2009
Keynote Speaker: Russell Wards, Herd Manager, Al Safi Dairy – Growing Fodder and Dairy in Saudi Arabia
Other Highlights: Farming in a Carbon Market

2010

Theme: Raising the Bar
Location: Adelaide Convention Centre, Adelaide SA
Dates: 10th –11th August 2010
Keynote Speaker: Frank M^cRae, AusWest Seeds – Future of Fibre, New Uses of Biofuel, Paper, Energy, Building, etc.
Other Highlights: Comprehensive Market Reports, Transport Reforms,
David Sexton awarded Life Membership
Board Restructure – Board of 9 Members with rolling terms of 3 years

2011

Theme: Persistence Pays
Location: Novotel Twin Waters Resort, Maroochydore Queensland
Dates: 9th–10th August 2011
Keynote Speaker: Could not attend. Impromptu export hay forum was instead led by Ed Shaw (Canada), Rorey Coffey and Murray Smith
Other Highlights: Lucerne Breeding and Biotech varieties, Fodder Contracting in New Zealand, New Oat Variety Release, Handling High Moisture Hay, Transport with B-Triples.
Addresses by Businessman, Bob Ansett and Cricketer, Kerry O'Keeffe

2012

Theme: Stacks of Opportunities
Location: Hotel Grand Chancellor, Hobart Tasmania
Dates: 7th–8th August 2012
Keynote Speaker: Malcolm Reilly, Bureau of Meteorology
– Climate Change and Weather Tools for Fodder Producers
Other Highlights: Chinese Dairy Market, Keeping Kids in Agriculture, Soil Biology, Biofuels, New Transport Regulations

2013

Theme: Harvesting Opportunities
Location: Novotel Resort, Palm Cove Queensland
Dates: 6th–7th August 2013
Keynote Speaker: Mick Keogh, Executive Director, Australian Farm Institute
– Opportunities for the Fodder Industry in the Asian Century
Other Highlights: 5-Year Outlook for beef and the Australian Fodder Industry, Silage Workshop and Gen Ag Workshop



AFIA Conference 2012 Hobart

AFIA COMMITTEES

QUALITY ASSURANCE AND FODDER CARE

Darren Keating, Mary-Anne Lattimore & Colin Peace

The need for Quality Assurance was always considered important by AFIA to move the fodder industry forward. During the early 2000s the idea of Quality Assurance programs was raised at the annual fodder conferences and seminars, and vendor declaration forms were implemented so that producers could provide buyers with a written record, confirming freedom of weed seed and chemical residues in their product.

The push for a more robust QA system came from the hay exporters. The Japanese market has always been the most fastidious about hay quality. Increased scrutiny was placed on the Australian export sector after six dairy cows died from Annual Ryegrass Toxicity from eating infected Australian oaten hay in 1996. Extensive testing of this new ARGV threat was implemented by the Australian fodder industry to assure Japanese customers that Australian hay exporters were managing the risks to exclude contaminated hay from ever reaching the Japanese market.

Added to this was the increased focus on chemical residues in the Japanese market and the increased scrutiny of imported hay. In 2005 clopyralid, a herbicide not registered for use in Japan, was found to be affecting vegetables grown in the composed manure of feedlots. Although not a human health risk, it raised the issue of how chemical declarations can impact on market access. Around the same time the herbicide bromoxynil was detected in milk and traced back to imported US hay.

This led to increased scrutiny on hay imports to Japan which Australian exporters responded to by adopting the use of an electronic register of chemicals applied to all processed hay. Over the years this system has gone through a number of changes but is still an important tool for exporters with Fodder Safe being the current system supplied by AFIA.

Since 2006 AFIA has run a program focused on quality assurance for domestic hay and silage, called Fodder Care. This has gone through a number of changes, but Fodder Care is still an important part of AFIA today.

The initial AFIA Fodder Care program was developed by a dedicated committee of producer and contractor members during 2006–7. A grant provided through the Australian Government provided resources to extend the export focused system into a broader system, designed for both



hay growers and contractors. Modules covered quality aspects of pre-planting paddock inspection, the spray diary records, and all harvest, feed analysis and inventory records.

The program was designed as a benchmarking program, allowing producers to compare themselves to other producers, their own performance and adopt better management practices. Customers could be assured of buying a quality product across the industry. AFIA's aim was to get as many members as possible to use the standard practices to improve the overall performance of the industry.

Fodder Care was launched at the National Fodder Conference in 2008 at Geelong. The pre-conference workshop was attended by 60 members and contractors, and accredited over 40 businesses. Subsequent workshops were conducted at seminars and conferences, and later a course delivered via teleconference was developed, so that all members had access to the Fodder Care system without having to travel.

In 2013 a new Fodder Care Online system was launched to simplify the system and keep up with new technology. This system has maintained the key focus of Fodder Care but delivers it in a more user friendly format, with online training. The launch of the new system also saw a return to the focus of Fodder Care being AFIA's program for the delivery of information on making quality hay and silage, rather than just being a computer system. This has seen the development of an online Fodder Care resource library and a series of articles in "Focus on Fodder", AFIA's quarterly publication. These are available in the form of Fact Sheets, with content provided by a wide range of industry experts.

To help users communicate this information to their customers Fodder Care provides a tailored vendor declaration. While this can be done in a number of ways, AFIA has developed a Fodder Care online service. This is a web-based tool that lets producers record relevant information about their hay and silage in an easy-to-use internet based system. Fodder Care helps producers to record the important information about their fodder:

- Paddock inspection records – hazards and potential contaminants
- Chemical application records – rates and date of application of chemicals
- Harvest records – information about raking, conditioning, baling and storage location
- Feed analysis – nutritional parameters of the product, if a feed analysis has been carried out.

TRANSPORT SUB-COMMITTEE

THE ROAD TO UNIFORM NATIONAL TRANSPORT REGULATIONS

Charlie Williams

The AFIA Transport Sub-Committee formed due to the need for uniform regulations for transporting large square hay bales between all states and territories. Large square bales created an 'over-dimension load' of only a few centimetres in some states. The anomalies of different state regulations caused large infringement costs when transporting fodder between Victoria and NSW, particularly during droughts. WA became the first state to ratify over dimensional loads, thanks to the huge effort of a few dedicated exporters and people involved in the industry.

The chairman of the original sub-committee was David Manifold, with Graham Thomson, Alex Peacock, Charlie Williams and Mark Lourey on the sub-committee. It initiated a load restraint guide with the help of many individual members of AFIA who donated their time, equipment, fodder and expertise.

Tilt testing at the Anglesea complex of VicRoads along with on-farm and factory tests, provided the much needed data to enable a loading pattern that ensured the retention of hay loads on trucks under all specified adverse conditions.

In 2007 a new set of performance based standards (PBS) was adopted by the Federal Government for all heavy transport. These standards necessitated a new round of computer modelling and tilt testing to prove that hay loads could meet these standards. These tests included tracking in a straight line, low speed swept path and a static rollover threshold. Colin Peace did a huge amount of work to ensure this work could succeed. In addition many members of AFIA, including exporters, transporters operators and RIRDC provided the necessary funds to complete these tests. This work proved that hay bales could be safely transported at 2.7 metres wide and 4.6 metres high.



Much work has been put into the NSW authorities with high hopes of bringing them into line with Victoria. Sadly all this work was undone by a certain contractor who modified the bale chamber and then informed the NSW RTA that all balers could be modified and there was no need to introduce over dimensional loading as advocated by the hay and straw industry. For many years NSW went along with this advice and it is only recently due to a change of government, that it has embraced the AFIA standards. This was a major breakthrough for the Transport Sub-committee and AFIA.

South Australia is in the process of ratifying hay transport and the National Heavy Vehicle Register (NHVR) has stated its intention to follow the AFIA-Western Australian model as a national regulation for uniform fodder loadings across Australia.

This work could not have been completed without the generous donations of money, time and machinery, etc. by a dedicated group who could see the massive benefit of transport reform.



EXPORTERS' STORY

David Sexton and Darren Keating

Overview

The Exporters have been an active part of AFIA since its formation. Throughout this time they have shared the common goals of expanding market access for Australian hay and continuing to grow the production base for export hay in Australia. This has seen the Australian hay export industry grow over the past 15 years from around 100,000 metric tonnes to over 800,000 exported in 2013.

The work of the Exporters Committee has played a strong role in growing the Australian export hay market including the emergence of new markets such as Korea and China, as well as maintaining a good dialogue with more mature markets such as Japan.

The Committee has also worked closely with Government in setting the regulatory framework under which the industry operates. This has included setting the regulations that guarantee the integrity of Australian hay to customers such as the Annual Ryegrass Toxicity (ARGT) testing legislation, and developing systems to ensure that the product requirements of customers are met.

In recent years the Australian export hay sector has played an increasingly important role in the domestic market by encouraging more production of cereal hay, often under-pinning domestic prices, and increasing both the supply and demand for hay, particularly during drought periods.



The early years

The primary catalyst for the establishment of the Australian export hay industry in the early 1980s was a change in Japanese Government policy. At that time Japanese dairy farmers were being encouraged to produce more milk with high butterfat and better crude protein. Research indicated that to achieve this high quality roughage such as oaten hay was required, instead of the rice straw being used in dairy cattle rations.

At that time companies such as Australian Hay Exports Pty Ltd (Phillip Hanna, Berrigan NSW), Wilson Stockfeeds (Finley NSW) and JT Johnson & Sons (Kapunda SA) were exporting lucerne hay products into south-east Asia.

Japan then started investigating the Southern Hemisphere to source fresh product. Following the discovery of Hessian fly in the USA where Japanese dairy farmers had traditionally sourced their fodder, Japan banned roughage from the USA and investigated alternate fodder sources.

The existing Australian exporters picked up this opportunity and ran with it. New fodder export companies were formed to supply the new market –Mackie Hay, JT Johnson & Sons, Sirius Trading, Bodiam Pty Ltd, Charlick Trading, Mid-West Fodder, Balco Australia, JC Tanloden, Canowindra Produce and Rocco Saccha became involved, and others followed.

Initially, the Australian industry had some teething problems such as the lack of standard export fodder specifications, leading to some issues with the supply of low grade and high moisture hay.

In late 1992 the Australian Hay Association was formed between a number of processors of Australian hay for the Japanese market. Their main objective was to develop, adopt and promote a quality standard for Australian oaten hay and straw. Other industry issues were also on their agenda but the group lacked cohesion.

Australian Hay Association changed its name to Australian Hay Pty Ltd in 1994–95, primarily as a joint exporters' action group, initiated by Austrade, in order to access Federal Government export industry development grant funding. This was successful in promoting the industry into Japan. Denis Johnson was the original chair, followed by Murray Smith (Balco).

AFIA was incorporated in February 1996 with the first national conference held in Melbourne in July 1996.

From the exporters' angle a number of events occurred resulting in the exporters' body, Australian Hay Pty Ltd, joining AFIA. These were:

- Annual ryegrass toxicity (ARGT)
- The Federal Government recognised that AFIA, as the national peak body of the Fodder Industry, represented exporters and not Australian Hay Pty Ltd
- Some exporters joined AFIA
- AFIA was offered and accepted a seat on the AQIS (Australian Quarantine & Inspection Service) Federal committee for export grains and fodder. This seat was made available for an exporter, providing they joined AFIA as a whole group. This was accepted by the exporters and Malcolm May (Balco) accepted this position, taking over from Bob M^cCormack (AFIA Chairman).

Consequently, Australian Hay Pty Ltd was disbanded and the exporters joined AFIA as an export committee in August 1998. The original members on the AFIA Export Committee were Malcolm May (Chairman), Bill Fell, Phillip Hanna, Peter Johnson and Michael Mackie. Murray Smith followed Malcolm May as the next chairman, with Peter Gillett taking over from Murray Smith.



Malcolm May



Murray Smith and Phil Hanna



Peter Gillett

Markets

While Australian hay is exported around the world the majority is exported to Asia, with Japan being the largest importing country. Since 1988 Japan has accounted for approximately 70% of the volume of Australian fodder exports, however in 2013 Japan took approximately 63% of Australia's exports.

Other important export markets for Australian hay include South Korea (19% of 2013 Australian exports), Taiwan and more recently China (both taking 6% of Australian exports in 2013). The growth in these markets points towards a positive outlook for Australian fodder exports, with the growth in demand for fodder from China being of particular interest. In recent years China has become a large consumer of fodder, importing over 600,000 tonnes of lucerne from the US alone. Australian oaten hay has a much more modest share of this market (18,000 tonnes in 2012 and 46,000 tonnes in 2013). However, given the strong demand it is expected that this market will continue to grow in importance for Australian exporters.

Australian export hay production

The majority of hay exported from Australia is compressed and packed in to shipping containers at export accredited facilities. The majority of these facilities are situated in Western Australia, South Australia and Victoria which dominate Australian hay and straw exports but there are also facilities in NSW.

The distribution of export hay facilities is generally dictated by access to the hay production regions and ports and accordingly, these facilities are focused on the Midlands and Upper Great Southern regions of Western Australian, the Yorke and Lower-North region of South Australia and Central Northern Victoria.



Since 1988 Western Australia has accounted for an average of 47% of the volume of fodder exports, South Australia 31%, Victoria 16% and NSW around 4%. In 2013 the export tonnages continued to reflect this pattern, with WA exporting 43% of Australia's hay exports, SA 33%, Vic 21% and NSW 3%.

The majority of hay exported from Australia is oaten hay, however there are often significant volumes of cereal straw exported, depending on demand. Other hay types with growing potential from Australia include lucerne, Rhodes grass, and other cereals such as wheat and barley.

International hay export market

World trade in hay and hay products has been expanding in recent years in both volume and value terms. In 2006 it was valued at US \$1.2 billion. The export market for compressed baled hay in particular has expanded rapidly.

After the USA, Australia is the world's largest exporter of hay and hay products, accounting for 19% of the value of world exports between 2002 and 2006. There is substantial trade between the member nations of the European Union (EU). Excluding this trade, Canada is the world's third-largest exporter of hay and hay products.

Hay products exported by the USA include grass straw (ryegrass and fescue), lucerne (alfalfa), Sudan grass, Bermuda grass, orchard grass and Klein grass. USA exports to Japan were traditionally dominated by cubed lucerne but in recent years, this has declined and exports of compressed hay have increased. Australia exports mostly oaten hay as compressed hay products, together with some cereal straw. Canada exports mainly Timothy hay and lucerne. Timothy grass is a cool season grass that is native to Japan's Hokkaido region and is used as long-straw fibre in the diets of dairy and beef cattle. Timothy is also used in the horse industry in Asian markets.

South Korea's imports of hay products have also increased substantially during the past decade. With the South Korea becoming a more affluent nation, demand for meat products and consequently livestock feed has greatly increased. This has seen Australia's exports to this market grow to over 157,000 tonnes in 2013, making it an

important market. In this time fodder imports from the USA and Canada have also grown.

PBR and R&D

AEXCO (Australian Exporters Company) was established in 2001 and represents the majority of export hay processors located in WA, SA, Victoria & Southern NSW. AEXCO is a gold sponsor of AFIA.

The South Australian Research and Development Institute (SARDI) selected AEXCO to commercialize their new oat hay varieties and since 2001, seven new oat hay varieties have been launched by AEXCO onto the market.

Funds raised by the AEXCO shareholders under Plant Breeders' Rights are returned to SARDI and RIRDC to further fund the National Oat Breeding Program and to meet the desired export hay quality and grower requirements.

Following the refusal of the Federal Government to support a compulsory fodder R&D levy in 1998–99, the AFIA exporters group introduced a voluntary levy on export hay in 2000–01 to fund RIRDC fodder research and development. In 2001–02, the first collection year, \$173,000 was collected from cereal hay exporters and farmers.

Exporters have actively supported R&D with voluntary levies collected both from their own companies and from some farmers.

The growth of the exporters' group and their involvement in and support of AFIA are a major industry success story.

THE QUALITY EVALUATION COMMITTEE (QEC)

Peter Flinn

The idea of forming a sub-committee of AFIA to deal with issues relating to objective quality measurement and laboratory co-ordination was first proposed at one of the early AFIA Committee meetings in 1996. However, it took another three years before the committee was established. This was because quality evaluation of fodder was at the front and centre of all AFIA deliberations in its formative years. Indeed, the very formation of AFIA grew out of this issue.

As the organisation started to mature as a peak industry body, it became evident that various sub-committees were needed to address specific industry concerns, such as transport and hay exports, as well as quality measurement.

The first major achievement in the area of quality evaluation was the decision in March 1996 to adopt the pepsin-cellulase technique to estimate metabolisable energy (ME) of fodder, based on the 16 hay *in vivo* "standards" to be produced as part of RIRDC project DAV-104A. It was proposed that these 16 "standards" would become the property of AFIA, subject to negotiations between RIRDC and Agriculture Victoria.

A further one-day meeting in June 1996, specifically for representatives of fodder testing laboratories, but chaired by AFIA Chairman Colin Simpson and funded by RIRDC, allowed intense and detailed discussion on testing methodology and the proposed fodder classification system.

The first mention of a "Laboratory Co-ordination Subcommittee" was at the three-day AFIA Committee Meeting held in Melbourne from 16th to 18th February 1998 but this was an informal arrangement. Peter Flinn argued for a viable "lab group" as a sub-committee of AFIA but including representation from producers, end-users, exporters and researchers, as happens in the US National Forage Testing Association. However at this time there were only three major fodder testing laboratories in Australia.

At the 1998 AFIA Conference in Hamilton, Victoria two major decisions were made on quality evaluation. AFIA agreed in principle to make available small quantities of the 16 hay *in vivo* "standards" to interested laboratories at a fee of \$1,600 (\$100 per sample). The new fodder grading system based on ME and protein content was also adopted.

It should be noted that formal agreement by Agriculture Victoria (by then part of the Department of Natural Resources and Environment, DNRE) to transfer the ownership of the standard fodder samples to AFIA was not achieved until January 2002, nearly six years after the plan was first proposed!

Formation of the QEC

A "Fodder Laboratory Meeting" was convened on 10th August 1999, following a RIRDC Fodder Project Meeting and a day prior to the 1999 AFIA Conference in Adelaide.

With 14 attendees including international guest Neal Martin (Director, USDA Dairy Forage Research Centre), the meeting decided to form the Quality Evaluation Committee (QEC) as a sub-committee of AFIA and with a representative on the AFIA Committee.

The first formal meeting of the QEC took place by teleconference on 16th December 1999. The 11 attendees were as follows:

- Brett Thompson Milne Feeds, WA
- John Milton Independent Lab Services, WA
- Don Law Agritech Laboratory Services, Qld
- Jeff Davis RIRDC, ACT
- Peter Flinn FEEDTEST, Agriculture Vic
- Sue Baker CSIRO, WA
- Colin Simpson AFIA Chairman, NSW
- Colin Peace AFIA Executive Officer, Vic
- Pat Guerin Gilmac, SA
- Peter Martin QDPI, Qld
- Gary Thornily George Weston Foods, WA

Peter Flinn was elected as QEC Chairman.

The meeting agreed that QEC membership would comprise:

- All Australian fodder testing laboratories affiliated with AFIA
- An exporter
- A domestic end-user, preferably from the dairy industry
- A producer

The proposed function of the Committee was to:

- Ensure consistency of testing between laboratories
- Adopt an agreed fodder sampling procedure
- Oversee the distribution of the *in vivo* fodder "standards" and, eventually, ring tests
- Review and manage fodder grades

Initial priorities for the QEC were to agree on ME prediction equations, work towards the inclusion of an intake prediction and produce a manual of test methods.

QEC members participated in a major workshop in Melbourne on 22nd March 2000, co-ordinated by RIRDC, to review the current status of objective measurement of fodder quality, evaluate several research proposals and identify the most appropriate

R&D program for future needs of the fodder industry. As a result, RIRDC later commissioned an integrated project to specify and rank fodder quality across animal species, led by Dr John Black.

At the QEC meeting on 6th September 2000, it was decided to recommend to the AFIA Annual General Meeting that animal preference should be added to the list of primary measurements of fodder quality agreed at the 1995 Fodder Forum i.e. dry matter, protein, ME and voluntary intake.

A major achievement of the QEC in 2002 was to oversee the production of the first ever draft of an AFIA Laboratory Methods Manual.

The QEC organised a special technical meeting on fodder testing in Adelaide on 27th February 2003, attended by 30 delegates. The major objectives were to agree on a procedure for the conduct of regular wet chemistry ring tests, to review the current complex and fragmented status of NIR testing methodology for fodder in Australia and the feasibility of using NIR in the ring test procedure.

Unfortunately there was disagreement on whether to confine the proposed ring tests to wet chemistry laboratories until results demonstrated that the agreed methods in the Laboratory Methods Manual were being followed by all concerned or whether those using NIR methods based on a variety of instruments and calibrations should also participate.

At the next QEC meeting in Canberra on 13th August 2003, a resolution was passed that hay exporters with NIR instruments be included in the ring test, but that "caution was required in interpretation due to the different wet chemistry standards used for calibration".

It could be argued that this decision has led to the continuing problems with ring test agreement between fodder testing laboratories that exist today, more than ten years later.

In 2005 considerable effort was put into amending the first edition of the Laboratory Methods Manual. Major issues were the revision of ME prediction equations, with separate equations agreed for hay and silage and the adjustments needed for silage dry matter due to volatile components. The extensive work of the late Alan Kaiser on these topics, and the advice of Mike Freer, formerly of CSIRO, is gratefully acknowledged. This process involved the establishment of a Methods Sub-Committee of the QEC, comprising Peter Flinn, Don Law and Alan Kaiser.

Chairmen of the QEC

1999–2003	Peter Flinn
2003–2004	David Henry
2004–2005	Don Law (Acting)
2005–2006	John Black
2006–2008	John Piltz
2008–2010	Suzanne Dalton
2010–2012	Richard Meyer
2012–2014	Rick Stadler



Peter Flinn, first chairman of the QEC



QEC Chairmen, John Piltz, Suzanne Dalton & Richard Meyer

FODDER RESEARCH AND DEVELOPMENT

David Sexton

The Australian Fodder Industry has received support for research and development (R&D) from the Rural Industries Research and Development Corporation (RIRDC) since the formation of RIRDC in July 1990.

Recognition of the fodder industry's potential followed by seed funding from RIRDC was a major impetus to the formation and incorporation of the Australian Fodder Industry Association (AFIA).

The initial funding from RIRDC was for industry consultation carried out in 1993, 1994 and 1995 for a uniform objective method for quality control of Australian fodder that was needed to facilitate effective marketing.

In 1995 a National Fodder Industry Forum (sponsored by RIRDC, Victorian Farmers Federation and Agriculture Victoria) was held to:

- Form a national industry body
- Develop a national product description and measurement standard
- Survey the industry needs
- Elect a steering committee with terms of reference

Following this forum AFIA, as the single national industry body, was incorporated in NSW in February 1996.

Almost immediately an industry strategic development plan commissioned by AFIA was compiled by Macarthur Consulting from an across the industry survey. This plan was outlined to the Fodder Industry at the first AFIA conference held in July 1996.

The top priority key issues identified in this plan were:

- Quality assurance accreditation
- Fodder specifications
- Trading language
- Fodder quality
- Industry lobbying
- Identifying R & D needs
- Funding the above

The fodder levy

One of the key outcomes of the first AFIA conference held in 1996 in Melbourne was a proposal for a levy on baling twine to fund an R&D program. This was supported in principle by attendees and was to be further developed by the AFIA executive.

During 1996–97 and 1997–98 an R&D Plan for the Australian Fodder Industry was developed in consultation with industry producers, users, consumers and researchers. Three national workshops, an industry-wide survey and numerous discussions formed the basis of this plan.

From this plan a Fodder R&D Strategy for the period 1998–2002 was formed, with the overall objective to ‘further develop a sustainable and profitable Australian Fodder Industry’. Consequently, RIRDC invested around \$150,000 in five key fodder R&D programs commencing in 1998–99. At this stage there was no industry advisory committee, as was the case with other rural industry R&D program funding.

In 1998 RIRDC requested AFIA to nominate members to form a Fodder Crops R&D Advisory Committee which commenced activity in August 1998.

Members of this committee were Bill Gough, Victoria (Chair), Robert Beggs, Victoria, Phillip Hanna, NSW, Jim Hoffman, Victoria, Don Law, Queensland, David Sexton, NSW and Jeff Davis, Program Manager RIRDC, Canberra ACT.

This RIRDC R&D committee (with changed membership) is still active today, providing direction on the use of levies collected from industry and matched by the Federal Government for the RIRDC Fodder Crops Program. Since the establishment of the committee funds allocated to fodder research have increased from \$150,000 in 1998–99 to about \$400,000 in 2012–2013.

In June 1998 a submission to the Federal Minister for Primary Industries in support of a compulsory fodder R&D levy was submitted by AFIA. It recommended:

“The proposed fodder levy would apply by way of a levy on all locally produced and imported twine and wrap sold within Australia from 1 July 1999. It would apply at the rate of 3 per cent of the wholesale value of twine/net wrap – an effective levy rate of between 7 and 12 cents per tonne of fodder, depending on the bale size. It is proposed that the levy be compulsory and legislated for under the PIERD Act.

The proposed levy would raise about \$600,000 per year which, when allowance is made for collection and administration costs, and the Government’s \$ for \$ matching, would enable an annual investment of about \$1.13m. Levy funds would be invested in accord with the Fodder R&D Plan 1998–2002 and the benefits would be accessible to all levy payers in an equitable manner.”

This proposal was not supported at that time by the Australian Government.

In 2000–01 the cereal hay exporters agreed to support a voluntary R&D levy on export cereal hay to demonstrate the industry’s strong commitment to having a R&D program. In the first full year of collection of the levy (2001–02) \$173,000 was contributed.

In 2002–03 there was further support for a voluntary levy, with the domestic producers at the AFIA Annual Conference also supporting a similar voluntary contribution to R&D, despite the difficulty they faced of many collection points and groups.

Fodder R&D

The voluntary levy income funded a range of R&D programs. A major proportion is invested in the plant breeding of improved oaten hay varieties, particularly for the hay export trade. The plant breeding work is carried out by National Oat Breeding Program run by Dr Pamela Zwer and her team at the South Australian Research and Development Institute (SARDI) in South Australia. The first new variety from this program was released in 2004 with rapid uptake by growers.

In May 2004 RIRDC, in conjunction with the industry and AFIA, produced the R&D plan for the Australian Fodder Industry 2004–09. This was the successor to the 1998–2002 R&D plan and detailed the agreed strategic R&D needs of the industry for funding for that period.

Widespread drought from 2002–03 up to 2009–10 was a disincentive to further the case to Government for a compulsory fodder R&D levy.

However, a case was being explored quietly with an Industry RD&E summit of 50 representatives held in June 2008 at Canberra which realised the importance of effective intra-industry communication across those rural industries where fodder was a common denominator. After this summit informal discussions on a compulsory fodder levy were held with the Federal Minister of Primary Industries and Departmental staff.

In March 2009 the Australian Government’s assessment on the need for a fodder levy was not supported on the grounds of:

- Not a majority support for the 1998 twine levy proposal in some sectors of the industry and certain state farming organisations
- Previous levy proposals did not fully meet the requirements of the Australian Governments Levy Revenue Service “Levy Principles and Guidelines”.

Further planning meetings to progress a suitable statutory fodder levy proposal were held in Canberra during March-April 2009 with industry representatives and RIRDC. Similar discussions continue today.

The RIRDC Fodder Crops Program currently invests about \$400,000 annually to research. Funds are derived through a mix of RIRDC funds and a voluntary levy on both domestic and export cereal hays. Research is currently being carried out on:

- Breeding new fodder crop varieties – particularly oaten and vetch hay
- Fodder crop disease, nutrition, weed and pest management
- Fodder harvesting, processing and transport technology and policy
- Improved fodder quality – ensuring Australian fodder meets market expectations
- The impact of climate change and potential biosecurity threats on fodder production.

The largest current area of investment is focused on breeding of new oaten hay varieties.

Major R&D achievements from the past decade include:

- Development and industry-wide adoption of, to date, seven improved oat varieties
- Development of systems to monitor chemical usage and residue in fodder for export
- Development of protocols to manage annual ryegrass toxicity for export markets
- Development of a rapid detection test for annual ryegrass toxicity in hay, resulting in an improved testing turnaround time for exporters, and a reduction in processing costs overall
- Development and testing of microbial inoculants for hay preservation
- Super conditioning - mechanical crushing of cut hay to increase drying rate and improve hay quality
- Release of best management practices guides for oaten and lucerne hay production.

(Source: RIRDC Annual Report and Fodder Fact Sheet)



Peter McCormack and Pamela Zwer from the SARDI oat breeding program inspecting variety trials



RIRDC R&D Committee Chairman, Jeff Hoffman with Mary-Anne Lattimore, NSW DPI, releasing RIRDC funded publication on lucerne hay, 2008.

There is no doubt that there is strong support from fodder producers, users and consumers for investment in research and development and the flow on benefits. This has been indicated by the series of surveys since 1996.

Fodder exporters have shown this by putting their hands in their pockets and implementing a voluntary R&D levy on their cereal products. This section of the industry initiated voluntary contributions for fodder research funding and has been strongly supported by RIRDC.

One constant in AFIA has been the goal of finding a sustainable funding model in order to fund fodder research and development in Australia. While there is agreement in the value and benefits of this work, a solution to the funding model is yet to be found. AFIA must continue to work on this challenge.

CHAIRMEN'S RECOLLECTIONS

COLIN SIMPSON

CHAIRMAN 1996 – 2001

I attended the National Fodder forum held in Melbourne in October 1995 at the request of my brother John, a member of the grains board of the NSW Farmers, to represent NSW. While John was actively involved in the grains industry he was not involved with fodder. At the time I was growing lucerne and oaten hay for both the export and domestic markets, as well as contracting around the southern Riverina.



The Forum set out to define the Fodder Industry and address two key issues: a national system for the measurement and description of fodder, and the formation of a national fodder industry body.

Almost half of the attendees were in the research/ technical analysis field, the remainder being producers, end users and processors/ traders/ exporters.

While considerable progress was made on the need for a national system for the measurement and description of fodder, the election of a steering committee was a great step towards the formation of a national fodder industry body. The steering committee was Peter Flynn, Don Law, Paul M^cCardell, Graham Thomson, Denis Johnson, Adrian Baker and myself, but Adrian withdrew not long afterwards.

The Rural Industries Research and Development Corporation (RIRDC) promised us \$15,000 seed funding to help get the new industry body off the ground. One of the goals set at the forum for the new body was to get 660 members in the first year. This ambitious target has still yet to be achieved. The other major issue was the lack of funding for R&D in the fodder industry.

Paul M^cCardell generously offered his office space in Sydney as the venue for the inaugural meeting of the steering committee in November 1995. It was at this meeting that the Australian Fodder Industry Association was born, with the steering committee resolving to form an incorporated association. Office bearers were also elected: Colin Simpson, Chairman; Graham Thomson, Vice Chairman; Peter Flinn, Treasurer; Don Law, Secretary; Paul M^cCardell and Denis Johnston.

From the beginning we realised that to be fully representative of the fodder industry we needed end user representation. To address this issue we invited the Australian Lot Feeders' Association and the Australian Dairy Farmers' Association to each have a representative on the committee. Kevin Roberts from ALFA joined the committee,

however the Dairy Industry declined our offer. This was the start of a rather testy relationship with the Dairy Industry and I have no doubt that if they had been more supportive of AFIA, we would have been able to achieve much more.

Anne Fleming attended the meeting in Sydney and was appointed as Secretariat. In the ensuing months and years we worked very closely together, running the organisation on a shoestring budget.

Sometime in November I received word that RIRDC was not going to come good with the \$15,000 promised funding. This could have meant the end of AFIA before we even got going but a series of discussions, culminating in a terse phone call over the Christmas break to the RIRDC management, saw them deliver. When the Chairman of RIRDC, Keith Hyde, spoke at the inaugural AFIA conference in July 1996, he mentioned this telephone conversation and concluded that perhaps we would not all have been gathered there in Melbourne, had I not been so insistent.

A subsequent meeting of the steering committee was held in Melbourne in early 1996. The major outcome of this meeting was to commission a strategic plan for the fodder industry. Brisbane-based Macarthur Consulting was appointed to prepare the plan.

In February 1996, AFIA was officially incorporated, and the then Minister for Fair Trading the Hon. Fay Lo Po' presented me with the Certificate of Incorporation at a ceremony in Wagga Wagga NSW. Now that we actually had an association we could set membership subscriptions and solicit sponsorship. These two items were addressed via a teleconference in March 1996.

Sometime in early 1996 I met with the Federal Minister for Agriculture, the Hon. John Anderson in Launceston to introduce AFIA to him and seek more support from the government. It is essential that any national body be recognised as the go to organisation, and AFIA received a big boost when the government handballed to us the responsibility of dealing with an Annual Rye Grass Toxicity incident in oaten hay exported to Japan. The infected hay originated in WA and a quick trip to Perth involving meetings with exporters, the State Minister and some media work was invaluable in promoting our fledgling organisation.

The issue of the funding of Macarthur Consulting's Strategic Plan was resolved when the Department of Primary Industry and Energy put up the required \$34,000 under the AusIndustry Agribusiness Program.

A steering committee meeting in May 1996 discussed the issue of R&D funding. It was agreed that a levy on baling twine was the most cost effective mechanism to secure funds.

Most of my time was taken up with the day to day running of the steering committee affairs, together with Anne Fleming. I left the issues to do with fodder description and testing to those with a much greater knowledge on the subject, but I was delighted when invited to chair a meeting of representatives of fodder testing organisations with the aim of forming some national standards. While the desired outcomes were of great benefit to the fodder industry, I have to say it was the most boring meeting

that I have ever attended, in that I did not really have a clue as to what the delegates were talking about!!

When I met with Minister John Anderson in Tasmania, I invited him to be the keynote speaker at the inaugural Annual Conference. He generously accepted, but the conference had to be organised around his timetable, so it was set for 18–19 July 1996 in Melbourne. This conference represented for me the culmination of eight months of intense work, and I was very proud to present my report as Chairman of the Steering Committee. Much of my report related to the issue of R&D funding, and the meeting subsequently endorsed a 3% levy on baling twine and net wrap. Funds obtained by such a levy were eligible to be matched by the Federal Government, thus doubling our R&D pool.

Macarthur Consulting presented the Fodder Industry Strategic Plan at the conference. We now had a roadmap for next five years! I remember John Anderson being positive about our achievements thus far and he expressed support for AFIA going forward.

Immediately following the conference the first AGM of AFIA was held, attended by 38 inaugural members. At that meeting the following committee was elected: Colin Simpson, Chairman; Graham Thomson, Vice Chairman; Peter Flinn, Treasurer; Don Law, Hon. Secretary; Denis Johnson; Tim Dale; and Barry M^cDonald. Kevin Roberts from ALFA remained on the committee as an invited representative, but the Dairy Industry still declined to participate.

Anne Fleming and I continued to run the day to day affairs of AFIA, but my major focus was to get the R&D levy happening. The government had a 12 point checklist that needed to be followed before they would even look at a proposal for a levy. While we always used the word “levy”, those who were not in favour always referred to it as a “tax”, and of course a new tax is hard to sell.

We had to demonstrate extensive consultation with all stakeholders and this was to be addressed by meetings with all state ministers, farming bodies and industry bodies, all of which would involve considerable travel costs. How to fund this? RIRDC Fodder Industry manager Peter Peterson and I came up with a rather clever plan that saw me put a research proposal to the RIRDC board. The proposal was “Assessment of the extent, nature and support for a R&D levy for the Australian fodder industry.” The research was to be undertaken by my farming company, not by AFIA.

After circulating the concept of a 3% levy on baling twine and net wrap to the stakeholders, an extensive consultation phase throughout 1997 and early 1998 followed. Consultations were scheduled with all of the state-based farmer representative groups, industry peak bodies and state ministers. Less formal discussions were held at grower meetings where possible. The rural media (both print and electronic) was used extensively in the promotion of the proposal in each state.

I particularly remember a meeting in Brisbane where, after the cursory small talk, we got down to discussing the levy. As my host got up from his chair, I thought he was

going to walk out on me, but he closed the door and went back to his seat. “Look, we think what you are proposing is great, but we cannot get it passed by the dairy guys”.

Scheduling a lot of meetings is rather a lengthy process, and all of this took around a year. The 1997 conference in Albury came and went, with Tim Dale stepping down from the committee. Once again Anne Fleming did a great job in organising the conference, and it was pleasing to see that membership had grown, as well as the conference delegate numbers.

Such was the level of support for the proposal, a submission to the Federal Government was prepared and presented to Senator Judith Troeth in July 1998. The submission was prepared in accordance with the Government’s 12 principles for new or varied levies and met all of the requirements of those principles.

Senator Troeth officially opened the third AFIA annual conference in Hamilton in August 1998. While the Federal Government was still considering our submission, Senator Troeth was careful with her words, but from many meetings with her I knew that she was personally supportive of the levy.

Colin Peace was appointed as executive officer at the conference in Hamilton. However, his appointment had a major proviso – he had to find his salary (and more) in sponsorship. Colin achieved this goal easily and he took over from me in running the day to day affairs of AFIA with Anne Fleming.

BOB McCORMACK

CHAIRMAN 2001 – 2004

I remember being at the back of a room, sitting next to a gentleman in a hand-knitted, green jumper and discussing the potential of creating a fodder organisation. The said gentleman was David Sexton. The gathering was the inaugural meeting of the Australian Fodder Industry Association in 1996. Little did I realise I would become chairman some four years later.



I first became a director of AFIA in 1997 and then in 2001, after the retirement of Colin Simpson, I started my term as Chairman. When casting my mind back over names of people who attended that first meeting, I realise many of them are still AFIA members today and most have taken on supportive roles.

I believe the greatest achievement for AFIA whilst I was chairman was the increase in membership, from a little over 80 to roughly 300. Increased sponsorship also put the agenda on a more sustainable path. We should never forget the role sponsorship has played. Our path-setter was New Holland.

Disappointingly the R&D Levy was not achieved. All industries need R&D to progress. But more importantly, industry needs an avenue of research when a problem occurs, especially in matters such as biosecurity.

However, levies have their downside. If a levy had been struck on baling twine, then AFIA, being the peak fodder organisation, would have been asked to be the gatekeeper. It would then risk falling into the same category as other peak agricultural organisations which sometimes become like a glass window – they look squeaky clean but are susceptible to the odd stone when they do not please all. Contributions by a few to a voluntary levy showed what could be achieved if put in the right basket.

The survival of AFIA based on a levy has been proved incorrect. It is the networking that members look forward to. It is the privilege of visiting other AFIA members' properties and the opportunity to view a range of diverse operations enjoyed on AFIA tours, where information and knowledge are freely shared. It is the people you meet on these occasions. Where else, I ask you, can you go where a group of 300 people in the same room are picking each other's pockets in the same currency.

When the work is mounting up and you think you are the only one left to do it, you receive a phone call from a fellow member a couple of states away who in jest tells you – you are just not having a go. This is the camaraderie of AFIA.

CHARLIE WILLIAMS

CHAIRMAN 2004 – 2007

Taking on the Chair of AFIA was a very big challenge for me, but without a doubt a very rewarding and satisfying time in my involvement in the fodder industry.

When I began, it appeared that AFIA was lacking direction and was basically being run by the EO with little direction from the committee, and not necessarily in the direction many members liked.

This was a very frustrating period, with AFIA struggling to survive financially and needing a far greater member base to be a successful organisation.



The support of the Exporters, and the manner in which they seemed to be able to work together for the good of the industry was exceptional.

Sponsor support for AFIA was very good, with many organisations coming on board. New Holland was our major sponsor but disappointingly, they decided to withdraw their sponsorship as they did not feel they were getting good value for money.

The seminars were becoming increasingly popular and locating them in the primary fodder areas of Australia was a very good move.

The major breakthrough of having our annual conference in Darwin was a fantastic success, with a record number of attendees and a well-supported tour of the region and Kununurra.

The work of the transport committee, and of Colin Peace in particular, was one of the major achievements of my period of Chairperson. We managed to get major reforms to carrying of over dimensional loads and a load restraint guide through the Victorian RTA, and along with WA's work this formed the backbone of rules and restraint guidelines that will hopefully be fully implemented in all states by the newly formed NHVR.

The proposed Twine Levy took up a large amount of time and effort. There was a major push by AFIA to bring about the necessary support to be able to go the government to propose legislation for a statutory levy to be used for R&D in the fodder industry. The support of the Dairy Industry and indeed some of the twine manufacturers was not forthcoming and to this day the levy remains unresolved.

Without doubt it was one of the most fulfilling periods of my life, meeting many great people both in Australia and overseas. It is fantastic to think that I can go across

Australia and meet up with many friends in the fodder industry and also many places overseas.

I wish to thank all involved in the industry for their help and understanding during my three years in office. The many friends I have made in the industry make me feel very humble and I will forever be indebted to you all.

Peter Gillett and Bill Gough always proved to be inspirational, especially after a late night sitting with the many good fruits of the Barossa helping such a good cause.

LYALL SCHULZ

CHAIRMAN 2007 – 2010

The year 2002 was the beginning of a journey I could not have imagined. I was asked to make a presentation to the hay exporters at the AFIA National Fodder Conference in Perth. Australian Exporters Company (AEXCO) had just been formed and this was an opportunity to pass on the business plan. I was impressed by this still fairly young organisation promoting the Fodder Industry in Australia. Chairman Bob M^cCormack was at the helm and I was impressed with his leadership.



Not long after, at an AFIA regional workshop at Clare, South Australia, AFIA Executive Officer (EO), Colin Peace suggested that I stand for a position on the AFIA Board. I agreed and was duly elected in 2003. I met the AFIA board members for the first meeting at the Airport Motel at Attwood in Melbourne. Very quickly I was nominated as treasurer and then Vice Chairman as well.

AFIA started to grow with more financial obligations. I recall meeting Colin Peace (EO) and Anne Fleming (Finance and Administration) at their home and putting forward a charter of accounts, to start to better report on and be transparent with AFIA funds. This involved a lot of work by Anne, entering data in much more detail. Members were asking for explanations and costings of time spent on various projects, so we itemised costs of the various AFIA projects in much more detail. Not often did a report of finances at the conference receive applause. Eventually we got it right and it did.

As time passed, AFIA changed its structure from an association to a limited liability company. Financial reporting was now of much greater importance to ensure financial transparency.

It was timely work to organise AFIA's financial reporting, as it served us in good stead when we successfully gained a \$270,000 Federal Government grant under the "Advancing Agricultural Industries" program. Our goal was to find pathways to fund agricultural research projects related to fodder.

A steering committee was formed in 2008 comprising the AFIA executive, Allan Burgess (Chairman Australian Dairy Farmers), Jeff Hoffman (Chairman RIRDC Fodder Committee), Caroline Brown (a farmer from Maitland in South Australia), Duncan Handley (AFIA Project Officer) and Colin Peace (EO, AFIA). Many industry stakeholders came together to workshop ways this could be achieved, with invited

delegates flying in from various parts of Australia to Melbourne. Good discussion occurred and a levy on baling twine was favoured.

Colin, Bill Gough and I spent three days in Sydney, Brisbane and Canberra with a scheduled 14 meetings seeking support for this favoured proposal. Many in the industry supported our efforts. Unfortunately, it seemed that the major stumbling block was the collection of the levy. Although we thought it was straight forward, collecting at the point that twine was imported or distributed was not considered viable by relevant departments. A frustrating conclusion to our efforts.

Around this time trials involving the movement of sugarcane hay from Kununurra WA occurred, due to hay shortages for the Dairy Industry in Victoria. This reinforced the need for a collective approach to fodder production and movement within Australia.

Positive outcomes from all this were the dialogue with Dairy Industry representatives and AFIA being recognised as a peak body of the Australian Fodder Industry. Fodder Care, ChemCheck and website improvements came from this project. Dairy Australia commissioned AFIA to provide Hay and Grain Reports compiled by AFIA staff, with distribution through their website. A side issue was funding for research into the cause of the many hay fires that were occurring. Joint meetings with the RIRDC Board also resulted from this project with good interaction between the boards.

Transport was a major issue, with varied rules for different states. Load restraint had been a major research project and finally, after great input from RIRDC, AFIA members, Charlie Williams and Colin Peace, VicRoads launched the Guidelines at the Geelong conference in 2008. Many states had been working on these issues but at the time NSW regulators were proving to be a stumbling block. Now in 2014, a new National Heavy Vehicle regulator has been introduced, hopefully allowing better uniformity of transport laws across state boundaries.

Tours and conferences became a huge highlight of the AFIA year. As a result of concerns with conferences running to time, I introduced a time management system at the Maroochydore conference in 2005, along with annoying theme music to encourage delegates to move back to the presentation area on time. It was my mission to have conferences run to time. I gained the title of the "Time Police" but was heartened by the response from members and speakers. Presenters had the opportunity to share their topics and members could be assured that finish times were well monitored.

It was a great privilege to be involved with our AFIA staff who had considerable event management skills. Welcome functions and the dinner event received great sponsorship support and our members had an opportunity to dress up, wine, dine and dance the night away with great live bands. Our great sponsors allowed us to enjoy some of Australia's great talent, with entertainment normally reserved for an expensive night out. It was good to see our members who rarely had an opportunity

to experience events like these, enjoy themselves away from the stressful issues that they were able to leave behind for a while.

Timing of events flowed through into our regional seminars, held in many parts of Australia, taking AFIA to the members. Sponsors supported these events with machinery and speakers, as they had done with our National Conferences.

Pre-Conference bus trips became incredibly popular and were often booked out. Trips like these can sometimes be difficult to keep to time, schedules need to be monitored, so we maximised the benefits of meeting those and networking on the trips. Networking of this nature was invaluable and many friendships were made.

I was delighted to be asked to lead the tour to New Zealand in 2009. This tour was a true highlight and many still talk of the time spent in NZ. It was sobering to see the pictures of the collapsed buildings in Christchurch after the recent earthquakes, remembering the hours we had spent sightseeing and shopping in the very area that suffered so much destruction.

As Chairman, one of my missions was to make the board meetings relevant, useful and efficient, since board members gave up time and travelled from all over the country to meet. The Board needed to move away from the day to day running of the organisation and focus on the strategic directions of the Fodder Industry in general. We had a number of strategic planning meetings and exposed ourselves to professional business facilitators who improved and added value to our contributions on the Board. Outcomes from this improved the way we did business and addressed our shortcomings. I believe we developed as a board and had robust and productive discussions, with wide ranging views coming together as one vision, to improve the industry and its value to our members. Our Board had great depth and knowledge and Board members contributed greatly to our meetings.

A very successful project was the AFIA calendar which is still sought after to this day. Mary-Anne Lattimore drove this project together with Peter M^cCormack and myself, in an effort to improve communications and knowledge within AFIA and promote the organisation and its members, with great success. It well demonstrated much of what AFIA was about.

In 2009 an opportunity arose to have our own office space on the same floor as the previous shared office space at St Kilda Road. This allowed three times the space as the previous office. It was cost effective to accept this proposal and moreover allowed AFIA to gain its own identity. We saved money by meeting in our own board room and gave our expanding staff levels a better work environment. It was a place to meet our members, sponsors and stakeholders.

I have had the privilege to work with all of AFIA's Staff. I found their professionalism and work ethic a great inspiration. It was a pleasure to work with Anne Fleming when we rebuilt the financial charter of accounts. Anne's and Pru Edmonds's skills in event

management gave AFIA an edge when it came to organising events and conferences. We were fortunate to have such talented staff. During my time on the board other staff, Kerrin Gleason, Bronwyn Cannon, Duncan Handley and Nick M^cClelland supported AFIA in many ways, each bringing different strengths. All of my time on the Board was spent with our then EO, Colin Peace. I valued the whole of industry knowledge that Colin brought to AFIA. His connections and networking skills gave us great benefits. He had a great passion for AFIA.

I recall opening our conference in Geelong in 2008, with the words “Fellow members of the Dead Grass Society”. Those on the outside still saw hay and silage as dead grass. AFIA was growing, and perceptions and expectations of end users needed to change.

My time with AFIA allowed me to meet many industry people and players. I visited federal and state politicians, met with industry leaders, government departments and sponsors. Most important was meeting and developing friendships with the “grass roots” AFIA members – hearing about “Their Place”, having them share their stories with us from all parts of Australia and overseas. I enjoyed the business and the fun that comes from meeting folk from all over, some doing well, some doing things very tough. Australia does not change –droughts, heatwaves, floods, all in the same week. Today parts of Australia continue to experience these issues, just as we did 10 years ago.

On reflection of my time in office, AFIA grew considerably, much work was done, with some wins, some losses and in some cases, no progress. I believe AFIA matured as an organisation and became of much greater value.

In my final report at the Adelaide conference in 2010 (the best attended conference to that date with over 300 delegates) I acknowledged what a privilege it had been to be the Chairman and on the Board of AFIA. I had just been humbled by the awarding of an OAM earlier in the year, in some part as recognition of my contribution to the Fodder Industry. I was incredibly moved by the generosity and gratitude of those members and delegates present and very humbled that I had been seen to have added value to AFIA.

BILL GOUGH

CHAIRMAN 2010 - 2011

During my tenure of the AFIA Chair there were two outstanding developments.

The first was the extreme climate difficulties experienced in Western Australia with a long, blistering drought and massive floods in Queensland, NSW and Victoria that caused destruction of life, rural infrastructure and fodder. AFIA acted as a national representative body and made submissions to the Federal Government relating to fodder to help it make decisions regarding assistance. In addition, the AFIA networks of fodder producers kicked into gear and were able to assist those affected by the disaster.

The second development was the establishment of the proposal initiated by Jarrod O'Sullivan with the Griffiths-Goodall Insurance Brokers, offering AFIA members a handsome discount on their insurance premiums. This occurred at the same time as my insurance renewals were due and they beat the competition by a good margin. The savings made paid for my AFIA subscription many, many times over. I cannot recommend this benefit highly enough.

Regrettably, ill health forced my retirement from the Chair after five months and Peter M^cCormack assumed the Chair.



PETER M^cCORMACK

CHAIRMAN 2010 – 11

Peter M^cCormack was seconded to the AFIA board at the conference held at Maroochydore in 2005. In 2006 at the Darwin conference he was nominated and elected to the board. Then in 2007 he was elected as the Vice Chairman under Lyall Schulz. Peter remained as Vice Chair until the conference in 2010 but was unable to take on the role of Chair due to work commitments.



Bill Gough was elected Chairman at the 2010 Adelaide Conference and Peter agreed to continue as Vice Chairman until one of the newly elected board members served the qualifying period to be elected to office. Unfortunately Bill took ill late in 2010 as was no longer able to continue as the AFIA chair and Peter acted as Chairman for the remainder of the year until Jarrod O'Sullivan was elected Chairman at the 2011 conference. Peter has remained on the AFIA board and was elected Treasurer in 2013.

From May 2012 to August 2012 Peter acted in the role of AFIA Executive Officer and during this time oversaw the appointment of Caitlin Scholfield as the Industry Development Officer and the recruitment and appointment of Darren Keating as the Executive Officer and the development of the Hobart conference program.

JARROD O'SULLIVAN

CHAIRMAN 2011 - 2013

I joined the board at the 2009 Annual General Meeting. It was an honour to have been elected first as Treasurer and then as Chairman in 2011.

My personal highlight of being part of the AFIA Board and the AFIA Chairman has been the chance to work with the dedicated, passionate and talented people in the Fodder Industry.

During my period as chairman AFIA went through a period of change and renewal. During this time Colin Peace ended his term as AFIA executive office and Darren Keating took on the role. Nick McClelland moved back to managing his farm full time and Caitlin Scholfield assumed the role as Industry Development Officer.



As part of the period of renewal the AFIA board turned its focus to developing and release of a "Five Year Strategic Plan". In my view this process allowed a chance for the organisation to work towards common goals to advance the industry. The strategic plan was launched early in 2013.

The Fodder Care and ChemCheck programs received an upgrade with the release of a new online spray diary. This program has been important for both the export and domestic hay sectors. In 2012 I was honoured to represent AFIA as part of a delegation to China promoting Australian oaten hay.

It was my absolute pleasure to be part of the AFIA Board and I am honoured to have served as the Chairman of the Board.

COLIN PEACE

EXECUTIVE OFFICER 1998 – 2012

Members are AFIA's biggest asset. Thanks to the enthusiasm and commitment of AFIA members, the organisation has grown from very humble beginnings and remains a valuable vehicle for members to drive reform of key industry issues.

With its annual production value around \$2 billion and export volumes between 500,000 and 750,000 tonnes, the fodder industry was not fully acknowledged by government and the broader farming sector until AFIA came on the scene. Representing a broad profile of businesses but with a modest membership base compared to state farming organisations, it is inspiring to see AFIA punching above its weight and achieve success.



Starting out

From its incorporation in February 1996 until September 1998, the Committee as it was then, managed the organisation. Anne Fleming was paid as a part time secretariat and Colin Simpson filled the role of Executive Officer on an honorary basis. In order to deliver member benefit and drive industry issues, funding was essential. The Committee realised that a dedicated person should be employed to drive membership and activities of the organisation.

As an agricultural consultant interested in commodities, I joined my wife Anne Fleming at the 1998 AFIA Conference at Hamilton in Victoria. On expressing an interest in the organisation, the committee offered me the role of Executive Officer in October 1998.

When I was contracted to work for AFIA, I was told that although AFIA did not have funds to pay a full time wage, there was an opportunity to boost revenue through membership and sponsorship to cover my part time consultancy fee, as well as move the organisation forward. This principle of employing skilled staff on a part-time basis was to become critical to retaining staff with a limited revenue base.

Building a profile

In other peak industry organisations, the industry research and development funds can be used to underpin key staff costs with project-based work. This has never been an option for AFIA.

In starting out, AFIA established some fodder trials. Varietal yield and quality comparisons were common in the grains industry but lacking in the fodder sector. In the late 1990s dedicated annual hay crops were on the rise, with the activity of exporters driving interest in oaten hay, and an increasingly sophisticated dairy industry showing interest in vetch as a dryland option to irrigated lucerne hay.

The Elmore district in Northern Victoria was an ideal launching place for this concept. AFIA accepted the invitation of Darryl Jensen and Charlie Williams to undertake some vetch, clover and oat trials on their Diggora property. The spring field day of these trials presented some valuable results, gaining more memberships, sponsors and an invitation to conduct the trials at the Elmore Field Day site. We were told at the time that while the Diggora results were useful, it was long-term results averaged over a number of years that were most useful for growers.

For the next five years, AFIA ran the fodder trials at Elmore with the cost of staff time and travel covered by sponsorship of seed companies. Specialized small plot seeders were borrowed from Crop Care. The Vic DPI joined AFIA for two years, sowing trials with AFIA. Assessments of varieties, time of planting, fertilizer response and blends of oats and vetch were undertaken.

While the local growers showed great interest in the results, they were also willing to help their local field day and fledgling industry association. Members helped with the harvest, weighing and recording of plot samples.

Controlling costs was always challenging and AFIA needed to utilise a broad range of skills to undertake roles in-house. AFIA compiled all articles and completed the layout for printing of the AFIA Newsletter (later known as Focus on Fodder) till 2008 when Di Holding was contracted to provide her layout skills.

In order to get the word out about AFIA and to provide a valuable promotional platform for our growing list of sponsors, AFIA established a series of regional seminars to complement the annual conference. There are always growers who will attend a local one-day event, rather than a two-day event interstate.

The first seminar was in Wagga Wagga NSW in February 1999 with around 80 delegates, similar to an annual conference at the time. It was very heartening to be at the bar of the venue with members after the seminar to watch the reporting of the seminar on the local TV news. In the same year we also ran seminars in Gatton and Biloela, Qld and Perth, WA.

Following the success of the Wagga Wagga seminar, we repeated the same concept a year later but delegate numbers were under 25. Clearly, we needed to be more strategic with seminars.

Over the years, AFIA often partnered with local like-minded organisations to boost interest in seminars and ensure success for sponsors. Staff from the State-based Departments of Agriculture were enthusiastic supporters of these seminars, particularly NSW DPI. Attendance at these seminars was between 70 and 120 people and they proved to be a great tool to generate new membership.

Extending the reach

Rather than being a drain on membership and resources, droughts from 2003 to 2008 provided AFIA more opportunities to provide value to industry and generate revenue. The national drought of 2002 was crippling for many dairy farmers, although some in the eastern states with access to irrigation managed to skate through.

By the time the drought of 2006 came along the dairy industry was well aware of how dependent their cows were on roughage supplies. While grain could be purchased at

a price, fodder proved to be a rate-limiting commodity, particularly in south-eastern Australia.

From late 2006, we began negotiating with Dairy Australia to provide dairy farmers with more information on price and availability of hay. Through my fellow grain consultants a joint consultancy was established. This service of around 36 reports per year turned out to be enduring and a valuable revenue stream.

This revenue in combination with other consultancies provided profit that was able to offset the costs of other industry programs such as the ring test system for determining laboratory proficiency and the AFIA newsletters.

Industry sponsorships

The AFIA story would be incomplete without mentioning the sponsors who showed faith in AFIA by supporting the organisation financially. Through established sponsorship packages partnerships were established with manufacturers and retailers of fodder products including machinery, crop packaging, fertilizer, seed, testing, hay covers, additives and financial products.

AFIA has been rightly recognised as offering national events where fodder producers and contractors meet and share their views for common good. It's a rare combination in agriculture.

By 2000, nine sponsors supported AFIA. New Holland was the first and remains an active sponsor today. Those following were Case IH, Pioneer Seeds, Kinnears, Kubota Tractor Corp, Incitec, SeedCo, Donaghys and HiFert.

Over the next 10 years, the revenue from sponsorship grew by a factor of six which kept pace with a similar increase in membership revenue. As well as the sponsorship payments, often a much larger cost for sponsors was their cost of staff time and transporting machinery to AFIA events.

AFIA's leadership

From 1998 to 2012, I worked with many talented members. The three founding pillars, which crystallised the formation of AFIA, were the need to invest in fodder R&D, improved fodder testing and the need for industry cohesion. Colin Simpson was Founding Chairman and undertook the role of Executive Officer on an honorary basis till 1998.

With RIRDC support, Colin travelled the country to determine the level of support for a mandatory R&D levy on fodder production. Enthusiasm from the livestock sector was mixed and the lack of support from the Victorian dairy industry meant that a poll was never put to industry.

Export oaten hay has always been an important part of AFIA and Malcolm May of Balco was the first Exporters' Committee Chairman. This committee evolved from an earlier group called Australian Hay. Through the talented staff of the Department of Agriculture, Forestry and Fisheries (DAFF), this committee managed the many biosecurity issues which complicate market access. Malcolm used his drive and whole-of-industry approach to establish a unified committee from competing businessmen.

In late 1999, Peter Flinn became the first Chairman of the newly formed Quality Evaluation Committee, another group of competing private operators. Peter and fellow Life Member, Don Law and other scientists spent many meetings discussing the reform of fodder testing. Testing proficiency remains scientifically challenging. AFIA took ownership of this issue for the industry by delivering between three and four ring tests each year to ensure laboratory results were within a reasonable margin of error.

When Colin Simpson stepped down as Chairman, another New South Welshman, Bob M^cCormack took on the Chair of AFIA from 2001 to 2004. Bob was able to sum up a complex situation into one of his many witticisms. He is renowned for his quick wit and sayings such as “You can always tell a Victorian but you can’t tell him much”.

In 2002, the incoming Export Committee Chairman, Michael Mackie of Gilmac, used his insight to establish an export membership fee based on an equitable funding mechanism which boosted funding for AFIA and its export activities.

Charlie Williams who served as Chairman from 2004–2007 was a strong believer in the need for transport reform and championed this issue throughout his term.

Lyall Schulz (OAM) used his many leadership and financial management talents in his role as Treasurer and then Chairman of AFIA from 2007 to 2010. His well-respected reputation was also valuable when walking the corridors of Parliament House, Canberra during our lobbying phase for a fodder levy. In January 2010 Lyall was awarded an Order of Australia Medal for service to the community and to the fodder industry through his executive roles.

The “Queen of Lucerne,” Mary-Anne Lattimore from NSW DPI used her many contacts through the USA alfalfa industry for our USA tours of 2000, 2005 and 2012. Founding and Life member Bill Gough used his passion for the industry through many years as Treasurer and then Chairman of AFIA.

As AFIA’s youngest Chairman, Jarrod O’Sullivan took on the role in 2011 until his expanding family and business demanded more of his time.

As is typical of most organisations, those members who took positions on the Board held strong and sometimes differing views about the issues facing the industry. It is a mark of their strength that personal agendas were set aside for the common goal.

Driving member issues

In my time as Executive Officer industry challenges included road transport, laboratory proficiency, research, development and extension (RD&E) funding, hay tags, drought, establishing new export markets and hay fires.

AFIA membership began at around 50 in 1998, reaching 100 in 2001, 200 in 2003, 300 in 2008 and 350 in 2011. We thought the drought of 2002–03 would lead to a fall in membership but AFIA became more relevant to the industry at the time and many members often saw their businesses perform well during droughts. The rise in membership through the years came about for many reasons but our proactive approach to hay transport was a key factor.

In 2004 AFIA took on the issue of hay tags. As a commodity hay has the rare feature that its identity is retained from the grower’s property through the supply chain to the end user’s property. The initial demand hatched from the need for growers to have a

labour saving, industry standard tag applied during baling with the capability of being recognised by any exporter for the traceability of ARGV. All three levels of Government could also see that hay tags offered an ability to better manage the spread of weed seeds in hay.

Noel Payne was instrumental in engineering some options for the baler-mounted tag applicator. An AFIA member from Lara in Victoria, Noel had retired from New Holland as a test engineer. A small grant from the Victorian DPI was provided to assist in development but the version designed failed to fit the key balers in the market. Three prototype applicators were designed and built to fit a plastic tag modified from sheep ear tags. Noel's final prototype worked but the project was abandoned in 2009 due to a lack of scale up funding.

Ultimately the concept was commercialised by engineers in the USA who acknowledged the idea came from Australia.

A lack of funds was one of the most frustrating aspects of my time at AFIA. . In 2006–2008 a generous \$300,000 Action Grant from the Australian Government enabled:

- extensive dialogue on the need for sustainable RD&E funding for hay and silage
- an on-line platform for the FodderCare QA program and the performance tracking of fodder laboratories
- governance training for the AFIA Board and
- a re-launch of a new AFIA website with “member only” features and member listings.

We were fortunate to have the very capable and unflappable Duncan Handley manage this program for AFIA.

Despite these extra resources and our willingness, a shortfall of money in 2008 meant we were not able to fund a ballot with the Electoral Commission to finally put a funding proposition for a mandatory levy on fodder production.

In order to implement an R&D levy and gain support from producers, all hay and silage producers need to readily identify with an industry problem or enemy that if addressed, would improve their businesses. Within Australia there is a vast diversity of fodder production regions and markets. In the ideal circumstances, producers would identify with a common industry problem, which could be resolved through levy-funded RD&E. An ongoing challenge for AFIA is to identify this common industry “enemy” to galvanise support from producers for a fodder levy.

The bureaucrats of Canberra have been great supporters of the AFIA cause over the years. The RIRDC Fodder Crops Program Managers, Peter Peterson, Jeff Davis, Annette Sugden and now John de Majnik, as well as the members who have served on the RIRDC Fodder Crops Committees, have shown faith in the urgent “out of session” R&D needs, particularly hay transport.

The three different R&D transport projects including those undertaken by Peter Sweatman's Road User Systems and Rob Di Christoforo of ARRB, culminated in a comprehensive report. As large bulky vehicles, road regulators feared these loads of hay and needed evidence to alleviate their concerns. The final RIRDC report with its scientific credibility and endorsement by the Australian Government logo was critical in AFIA's successful lobbying of State-based road regulators.

These successful changes to the Australian road regulations for hay trucks best illustrates AFIA's role in coordinating industry effort. Due to the location of testing facilities, the Victorian members were heavily involved. Charlie Williams and other members including Ray Donnan, Darryl Jensen, Alex Peacock, Glenn Logan, Michael Mackie of Gilmac and David Manifold, showed unrelenting commitment through spending their own time, money, machinery and diesel to test loads under four different restraint programs.

The issue was so significant that members contributed as much as \$1,000 each to pay AFIA for these tests.

The precarious tilt testing of Alex's loaded trailer anchored with Darryl's new John Deere tractor together with the sudden brake testing of Ray's fully loaded semi-trailer of hay are noteworthy memories.

Under Charlie's leadership and supported by one of RIRDC's most successful research projects, AFIA increased the permitted dimensions of hay trucks in eastern Australia to allow drop deck trailers to carry hay bales 2.7 m wide and 4.6 m high without the unnecessary steel edge protectors required in NSW. WA members were able to lobby for their reforms independently of AFIA. AFIA's on-going challenge is to maintain these negotiated productivity gains within the new National Heavy Vehicle Regulator framework.

Other valuable Canberra bureaucrats are those who work for DAFF (Department of Agriculture, Fisheries and Forestry). The acronyms were always challenging but the ACACA (Australia China Agricultural Cooperation Agreement) provided an opportunity for AFIA to send export hay trade missions to China in 2002 and 2012 with the aim of opening markets for export oaten hay.

One of my personal highlights was representing the industry at a presentation to a business forum in the Australia Pavilion during the World Expo of 2010 in Shanghai. Subsequent to this, AFIA hosted a tour of Australia for the Shanghai Dairy Group who milked 70,000 dairy cows in China at the time.

Getting together

Some of the most gratifying moments for AFIA staff are seeing members at the annual conference and seminars. Although many operate businesses at different corners of the country and only see each other once a year, the mateship and "sense of family" (as Lyall calls it) is evident.

Conference delegate numbers built over the years from around 80 in the early years to around 290 attending at Adelaide in 2010.

AFIA was fortunate to gain sufficient sponsorship and delegate numbers to fund some inspiring international conference speakers to conferences including:

- Perth – Des Crinion the witty Irishman who grew 10,000 ha of Rhodes grass and lucerne hay in the desert of Saudi Arabia
- Launceston – Harry Wilson a Lancastrian and one of the UK's largest silage contractors operating 21 self-propelled forage harvesters and who toured Australia with Dairy Australia speaking to dairy farmers
- Maroochydore – Stan and Ruth Steffan from Oregon USA – Stan is a master of hay machinery

- Adelaide – Garry and Amy Freeburg the successful hay growers and marketers from South Dakota
- Echuca and Perth – Mark Anderson the Principal of Anderson Hay, Washington State, one of the world's largest hay exporters.

After the Conference Dinners there were often some impressive dance moves. I remember one unnamed member dancing with a yellow boa borrowed from the evening's entertainer at the Adelaide conference in 2010, followed by an illusionary chain sawing of a chairman at Palm Cove in 2013.

As the premier event in the AFIA calendar, the annual conference requires an enormous commitment from AFIA staff to ensure it delivers a strong technical and social program for members and their partners.

AFIA Event Program 1996 – 2012

Year	Seminars	Conferences
1996		Albury
1997		Melbourne
1998		Hamilton
1999	Wagga NSW, Gatton Qld, Biloela Qld, Perth WA	Adelaide
2000	Wagga NSW	Melbourne
2001		Adelaide
2002	Echuca Vic., Perth WA, Deloraine Tas, Tamworth NSW	Perth
2003	Clare SA, Toowoomba Qld	Canberra
2004	Forbes NSW, Horsham Vic.	Launceston
2005	Naracoorte SA, Perth WA	Maroochydore
2006	Moama NSW, York WA	Darwin
2007	Northam WA, Warragul Vic.	Coffs Harbour
2008	Shepparton Vic.	Geelong
2009	Glenormiston Vic.	Fremantle
2010	Condobolin NSW, Moama NSW	Adelaide
2011	Boort Vic.	Maroochydore
2012	Northam WA	Hobart

Staff loyalty and longevity

AFIA staff have been few in number with all exhibiting extraordinary loyalty and commitment to members and the Board.

- Anne Fleming – Secretariat and Conference Manager, 1996–2011
- Colin Peace – Executive Officer, 1998–2012
- Duncan Handley – Project Manager, 2005–2009
- Nick M^cClelland – Industry Development Manager, 2009–2013
- Pru Edmonds – Office & Events Manager, 2009+
- Caitlin Scholfield – Industry Development Manager, 2012+
- Darren Keating – Executive Officer, 2012+



Duncan Handley, Anne Fleming and Colin Peace 2007



Pru Edmonds and Nick McClelland 2009

From a modest part-time staff resource of 0.15 full time equivalents (FTE) in 1996 when Anne Fleming began with AFIA, staff resources built over the years. Anne Fleming established the annual conference and co-ordinated conferences and regional meetings for the fodder industry and AFIA from 1994 to 2009. In 1998 when I joined, AFIA staff numbers moved to 0.4 FTEs and by 2006 built to 1.6 FTEs when Duncan Handley joined us.

Through reducing my other consulting work as AFIA could afford to pay for more of my time, the staffing resources built to 2.8 FTEs in 2009.

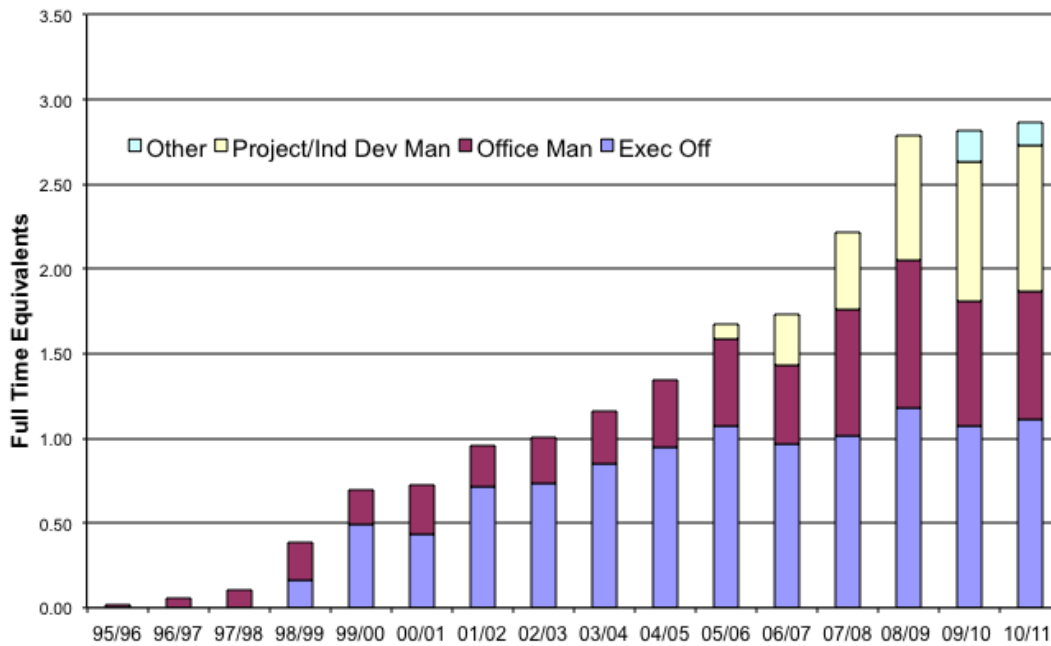
From 2009 Pru Edmonds took on the conference management and continues to run the conference, as well as the office and administration of AFIA with military precision.

Bronwyn Cannon and Kerrin Gleason also worked for AFIA for short periods during 2008 as Office Manager and Industry Development Officer, respectively. After establishing the Fodder Care program, Duncan Handley left AFIA in 2009 to take on a teaching role in Newcastle. Nick M^cClelland was appointed Project Officer and provided the considered input from a practical farmer's perspective until 2013. These staff and the AFIA Board supported the retention of members with the manner in which all members were correctly treated as valuable participants and contributors. This was critical in ensuring the ongoing growth and sustainability of an organisation which could very easily have floundered through lack of funds.



Darren Keating and Caitlin Scholfield 2014

Staffing Levels of the AFIA



The bottom line

The transport lobbying undertaken by AFIA is an example of what is achievable by peak industry organisations. As long as the organisation is grounded, representative of its industry and presents a considered and practical proposal, Governments will take suggestions seriously. While lobbying is not the only member benefit of AFIA, the hay and silage sector needs its peak body as a credible voice.