The History

of

Weed Control Legislation

in

South Australia 1850 – 1990

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The Australian author, Hal Porter, in his book, 'On the Ridge' describes weeds, "Heavy with seeds the shape of adder-fangs, ferret-teeth, maggots, superstition and despair; they stand on footpaths, under the water tank, at the door step, in the churchyard, ugly and perfidious as people"

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PREFACE

Weeds have shaped South Australia since it's beginning, in many ways, which until recently, few have imagined or cared about.

They did concern some who owned the land and a few hapless inspectors who chased stray dogs and killed weeds for local government authorities.

People who knew weeds by their scientific names were considered a little eccentric. After all, why call a weed *Oxalis pescaprae* when it is only a sour sob? Everyone else just cursed them and in their ignorance called them names to suit a description recognised by family and friends. To some *Echium plantagineum* was a useful drought resistant grazing plant with an attractive blue flower the shape of Salvation Army ladies bonnets. To them it was best named as 'salvation jane', to other it was Paterson's curse.

A weed was a weed, unloved and to most, simply an unfortunate part of the scenery.

In human terms people smoked their 'weed'. Afflicted widows once wore their 'mourning weeds'. Today the lank and delicate are weedy but in the plant kingdom weeds are the vigorous, the entrepreneurs, the first to make a success of whatever offers. Today weeds attract wide community attention and considerable scientific scrutiny. We call them 'pest plants' joining them to the ranks of deadly epidemics. Pests are defined in the dictionary as 'destructive', troublesome' and 'bane'. A curse to the whole community. People who are working closely with weeds and those who study them are kinder. In their judgement they are 'plants out of place'.

The essence of this story is our desire to 'belong' by shaping the unique South Australian environment to our liking and in doing so we have established weeds. We have basic needs for food and fibre, profitability, the preservation of wilderness areas and parks' security and tidiness and our realization that we must sustainably manage our soil and water resources to survive. Weed control is one of the prices we continue to pay.

CHAPTER I –

THE FIRST WEEDS

With axe and fire the first South Australian colonist set about gardening and cropping and grazing their animals in a mind frame which attempted to recreate old England's rolling hills, uncluttered by scrub.

Their activities rapidly changed the sensitive environment of the Adelaide Plains opening this land for infestations of alien plants hidden as seeds in imported fodder, packing materials, ballast and in seed for sowing. This 'take over' process was hastened by frenzied introductions of food and ornamental plants by the Colonists to aid their survival and to make them feel at home.

In varying degrees this process has continued for the 170 years of our history with the result that today there are more than 900 alien species surviving in the State. About 500 of them now appear in the files of the pest plant watchdog (The Animal and Plant Control Commission) as major or minor weeds.

The appearance and spread of weeds has caused amazement and frustration throughout our history. Frequent press records and comments have been published over the years.

The *Farm and Gardener*, a South Australian publication, printed a letter from 'An Enquirer' on the 9th May 1861 who appealed to readers, "to fairly experiment with a view to listing spontaneous generation as the root of our weed troubles". The correspondent was prompted to write to the editor having noticed that when some earth was dug from a cellar, placed in a plot and covered with gauze, a healthy crop of weeds, which he had never seen before, germinated.

The writer claimed that spontaneous generation was common on the American Prairies where plants and even timber trees appeared in places where all the vegetation had been burnt[1].

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[1] This concept of 'spontaneous generation' is not so far removed today when people in suburbia blame the reticulated water supply for the weeds which appear in their manicured lawns..

Dr Peter Kloot, a scientist who worked in the Weeds Research Unit, in the South Australian Department of Agriculture during the 1960s and 1970s, has meticulously researched the introduction of weeds into South Australia and has listed the first to appear (Table 1).

TABLE 1.

Weeds Established within Five Years of South Australian Settlement

	Common Name	Botanical Name
Common in home gardens, vegetable growing areas and waste places	Chick weed	*Stellaria media*
	Couch grass	*Cynodon dactylon*
	Fleabane – Canadian	*Conyza canadensis*
	French catchfly	*Silene gallica*
	Mallow – dwarf	*Malva neglecta*
	Nettle – small	*Urtica urens*
	Nightshade – blackberry	*Solanum nigrum*
	Plantain – greater	*Plantago major*
	Verbena – common	*Verbena officinalis*
	Winter grass	*Poa annua*
Found commonly growing in field crops	Hedge mustard	*Sisymbrium officinalis*
	Rye grass-perennial	*Lolium perene*
	Wild oats	*Avena fatua*
Common in grazing areas and on roadsides	Barley grass	*Hordeum leporinum*
	Cape weed	*Arctotheca calendula*
	Dock	*Rumex spp*
	Thistle – variegated	*Silybum marianum*
	Thorn-apple common	*Datura stramonium*

He found that task extremely difficult despite his Sherlock Holmes tenacity and scientific insight. His task was made difficult, because, by the time the first trained scientist, Hermann Behr; arrived in South Australia, eight years after the Colony was proclaimed, the native vegetation had already succumbed to great changes[2].

Consequently, in some cases, it was difficult for Behr to know which plants were indigenous and which were alien. According to Kloot he was also probably dazzled by the strangeness and uniqueness of the native flora and not unnaturally he concentrated on them and took for granted the introduced species.

Never-the-less, it is certain that within five years of the Proclamation of the Colony, more than 100 alien plants, many well known as weeds today, were established around Adelaide.

In 1879, Dr Richard Schomburgk, who was the Director of the Adelaide Botanic Gardens, published a pamphlet, on the *"Naturalised Weeds and Other Plants in South Australia"*. As Kloot has proven it was a slap-dash record with major omissions and errors, never-the-less his list of the seven most wide spread and serious weeds in he settlement at that time gives an interesting insight.(Table 2) .

TABLE 2.

The Seven Most Serious Weeds in South Australia – 1879*

*This table was originally prepared by Dr Richard Schomburgk. Corrected by PM Kloot, 1980.

Common Name	Botanical Name
Burr – Bathurst	*Xanthium spinosum L.*
Cape Weed	*Arctotheca calendula (L.) Leryns*

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2 The site of the Colony had probably been under minor European influence for more than 30 years before the Colony was established. By 1825 two hundred people were living on Kangaroo Island, which was first settled in 1802. These unofficial colonists made visits to the mainland and no doubt brought weed seeds accidentally with them.

Catchfly	*Silene gallica L.*
Cockspur – Maltese	*Centaurea melitensis L.*
Stinkwort	*Dittrichia graveolens (L.) W Greuter*
Thistle – spear	*Cirsium vulgare (Sari) Ten*
Thistle – variegated	*Silybum marianum (L.) Gaertn.*

While alien plants took advantage of the disturbed environment in the Colony it was not all one way. A number of native plants have become weeds in other countries.

South Africa, for example, has become an unwilling host to at least 13 wattles from South Australia including our floral emblem, the golden wattle (*Acacia pycnantha* Benth). Of these thirteen species, four are 'declared' weeds controlled by legislation.

As 'first weeds' the thistle proved particularly troublesome. By 1850 their quick growing rosettes had smothered extensive areas of grazing lands. Making good use of the soil fertility, released by the clearing operations, they grew tall and strong and their blue flower heads drew attention from afar. This was like nothing on earth. Such enormous invasions, covering acres and acres, were not seen at home in England. There patches of thistle grew in odd places, here in the Colony they quickly filled the fields.

Besides the hoe, there was only one other resource, the law. Frustrated landowners argued that the police should enforce order and make landowners hoe thistles more vigorously.

The following chapters tell of the search for an answer to weed control by law.

CHAPTER II –

LEGISLATIVE CONTROL – THE PRICKLY BEGINNING

INTRODUCTION

On the 2nd July 1851 South Australian Colonists attended gaily decorated polling booths to elect 16 members of a new 24 member Legislative Council. The Governor, Sir Henery Young said, "The Colonists had set about making a nation".

Predictability, males from the elite families in the Colony were elected. Messrs G. F. Angus (Barossa), F. S. Dutton (East Adelaide), A. S. Elder (West Adelaide), R. D. Hanson (Yatala), G. S. Kingston (Kooringa) and G. M. Waterhouse (East Torrens) to name a few.

The Crown appointed six members, four of whom held administrative positions in the Colony. The most prominent was the Colonial Secretary and explorer, Charles Sturt, 'Making the nation' began radically. These colonists hadn't travelled to the other side if the world to escape the cloistered English Society for nothing. At the first Parliamentary Session the 'State Aid to Religion Bill' was soundly defeated while the 'Education Act', which provided teachers' salaries, was soundly supported.

The South Australian Parliament, over the years, continued to pioneer enlightened social legislation introducing franchise for women, compulsory work place arbitration, salaries for parliamentarians and free education.

Almost unnoticed the first elected Parliament in South Australia also proclaimed an Act to control weeds. Those elected members listed above were prominent in its initiation. It was the first legislation of its kind in Australia and probably in the world and the first of many landmark acts introduced over the follow years by the South Australian Parliament to protect the natural resources. Laws were enacted to control the rabbit, protect soil from wind and water erosion, protect water supplies and more recently to preserve native vegetation and control air pollution.

The Thistle act 1852

The development of the first weed control legislation, the Thistle Act, 1852, followed a recommendation made to the Legislative Council in 1851 by the General Roads Board which had been appointed to maintain the 'lines of roads' in the Colony. The Crown had seen its formation as a fitting precursor for a representative government in the Colony. Captain Charles Sturt, the hardy explorer, was appointed Chairman of the Board. Most members owned considerable tracts of land and were therefore very sympathetic and anxious to address the Parliament when Mr W Giles raised the problem of thistles at a session on October 6th, 1851. By then thistles were rapidly spreading across all the cleared land, taking advantage of the inherent high fertility levels of the soil released once the trees and under-story had been removed for cropping and grazing. Their blue heads dominated the countryside.

Giles wanted 100 men to be employed immediately to eradicate thistles and suggested that the Legislative Council be prevailed upon to proclaim an Act to make all landowners responsible for eradicating thistles on their land and with a penalty for default.

Not all members of the Council agreed. Mr Milne declared that the farmers, "Would think a great deal more of opossum hunting than destroying thistles" and Major Campbell blamed Government land as the sower of the thistle, a cry we hear to this day.

On Friday of the same week, without political minders or research assistants, telephones or photocopiers the Board's recommendations to proclaim an Act to control thistles were presented as a Bill before the Legislative Council. The Hon G Waterhouse, member for East Torrens, led the debate. He advised Council that hundreds of acres in the Colony and thousands in other colonies had been destroyed by the rapid spread of the thistles. Other members of the Parliament elaborated on the rapidity of spread with their personal stories and even the situation in America was quoted to emphasis the seriousness of the problem. There, it was claimed, thistles were spreading 30 miles each year.

Waterhouse also advised that the East Torrens Agricultural Association had offered to supervise field control of the thistles to make the proposed legislation effective. To

this day local communities, through their local councils, have been prepared to be involved with the administration of weed control in their districts. Their inputs over the years have undoubtedly added a practical and economic dimension that has been lacking in other Australian states where central governments have carried the administration alone.

Various motions were debated praying on his Excellency the Governor to give the Roads Board funds to deal with the problem before a Parliamentary Committee was formed to develop the most appropriate form of legislation. In keeping with their ability to act and act quickly, the Committee presented its findings to Council fourteen days later.

During the third reading of the Bill, which commenced on the 3rd December 1851, the Committee's proposals were accepted. But there was a last minute hitch. How should the thistles be named? It was decided that the Act should cover, 'plants commonly know in the Province as Scotch Thistles'.

Finally, an attempt was made at a botanical definition without limiting the powers to control any purple-flowered thistles. The Act therefore stated that 'Scotch Thistle was held to mean and include (in addition to all other plants as commonly known) as variegated thistle and plants commonly known by the botanical names of *Cardaus Marianus* and *Carduus Benedictas. Cardaus Marianies* is today known as variegated thistle (*Silybum marisnum (L.) Gaertn). Cardaus Benedictus* was an error. The other prominent thistle at the time which was meant to be covered by the legislation was spear thistle, (*Cirsium vulgare (Savi) Ten).*

The Bill was passed on Thursday December 18th, 1851 and assented to on the 2nd January 1852.

Meanwhile the General Roads Board had allocated 100 pounds to each of four road surveyors and 50 pounds to the Adelaide City Commissioner to employ men to eradicate the thistles. The press of the day reported little impact.

Indeed, very little impact on the spread of thistles was achieved for more than a century. During the 1960s, for example, a detailed survey of variegated thistle in the Penola District Council area showed that 200 square miles of fertile flats were choked

with this weed. Progress was only made when the hormone herbicides, such as 2,4-D, and MCPA, in combination with the establishment of perennial pastures, made control cost effective.

CHAPTER III –

THE THISTLE AND BURR ACT – 1862.

Occurrite Morbo Legislation

INTRODUCTION

To add to the woes of South Australian graziers in the early 1860s Bathurst Burr (*Xanthium spinosum L)* had appeared from the east and was rapidly spreading.

The Burr had probably been introduced into New South Wales tangled in the tails of horses imported from Chile early in the 19th century. It first became well established near the town of Bathurst, hence its common name.

The Thistle and Burr Act – 1862.

On the 4th June 1862, Mr Magarey, Commissioner for Crown Lands moved in the House of Assembly to amend the Thistle Act of 1852 by extending its powers to include Bathurst Burr.

A letter from the Chief Inspector of Stock, Mr HT Morris, who had also forwarded a specimen of the burr, prompted the Commissioner's amendment. Both the letter and the burr were tabled in Parliament.

Morris had observed traces of the burr while on official duties travelling from the Victorian boarder to the northwest bend of the River Murray and in greater quantities between Smithfield and Kapunda. He warned that it would continue to spread rapidly in the Colony and reduce the value of wool by three pence per pound.

'It is a well know fact', he added, 'That in the districts where the burr grows, that if a shepherd owes his master a grudge for any supposed injury, he seeks satisfaction by driving his flock through a bed of Bathurst burr, knowing by doing so, that he inflicts a very serious injury upon him'.

In opening the debate, Magarey expressed concern that there were 'indolent squatters' in the Colony, such as Mr Grundy, the member for Barossa, 'Who was doing nothing

to control the thistles or the burr'. Magarey eloquently quoted a verse to emphasis that point.

"I passed by his garden and saw the wild briar
The thorns and the thistle grew higher and higher."

Grundy, perhaps because Magarey's allegations were true, ignored him until the question of the correct botanical name for Bathurst burr was raised. He then entered the debate with good humour suggesting it belonged to the class of plants called, *'Nemon me implune lacessit'*. 'No one shall come near me without being the worst for it'.

Parliamentary debates in those days were obviously more forgiving than Hansard now records.

A week after the opening debate a Select Committee was appointed to draw up legislation which was introduced to Parliament on 8th August 1862 as 'The Thistle and Burr Act of 1862'. In essence the legislation was the same as that enacted for thistle eradication, a decade before, except that landowners were given longer to respond (21 days) and eradication notices could be issued in the Government Gazette if the landowner could not easily be found. The Act also authorised Crown Land rangers to be inspectors adding to the efforts of police.

Five members of the House of Assembly opposed the proposed legislation on the grounds that it was too general and inquisitorial. It was claimed that personal interest was sufficient to maintain control where the thistles and burr were economically serious.

One member, with considerable wisdom, opposed the Bill, claiming that the legislation to eradicate thistles that had been in place for 10 years had failed because the thistles, 'had not been told what they were'. A simple statement of fact, that weed control agencies often, still need to learn. Legislation in itself can never eradicate weeds that can usually spread to their ecological limits despite the laws of the land.

A large majority passed the Bill and Bathurst burr became a proclaimed weed on 22nd October 1862. It has remained on the statutes, unbeknown to itself, ever since.

CHAPTER IV –

THE THISTLE AND BURR ACT – 1887

INTRODUCTION

In 1886, during the Downer Administration, the need to include another thistle, called star thistle, was widely debated in both houses of the South Australian Parliament.

Again the politicians were confused about the true identity of the weed they were considering. Eventually the Commissioner of Crown Lands quoted the advice of Dr Schomburgk, the Director of the Botanic Gardens, who defined the star thistle, sometimes called the purple star thistle, a *Centaurea calcitrapa L.*He described it as a dangerous English weed and advised Parliament to place it on the statutes for eradication.

Twenty-eight members in the House of Assembly agreed that star thistle should be added to the 1862 legislation. Eight opposed the proposal. The Upper House, dominated by graziers, was not convinced, fearing that the cost of eradication amounted to confiscation of infested land. The Bill eventually lapsed.

The Thistle and Burr Act - 1887

A year later, on the 10th August 1887, during the Playford Administration, Mr Holder, the member for Burra, decided to try again. He asked leave to introduce the, 'Star Thistle Destruction Bill'.

During the debate that followed, the Commissioner for Crown Lands warned the House that from his experience legislation to eradicate weeds was useless. He drew attention to the huge sums of money spent attempting to eradicate the thistles that had been proclaimed noxious weeds for 35 years with very unsatisfactory results.

Holder conceded that the thistle legislation had failed. He claimed it was faulty legislation because those thistles provided fodder and were 'by no means despised'. He had therefore removed the thistles previously proclaimed from his proposed legislation enabling the law to concentrate on the star thistle. He also proposed in the second clause that the Governor be given the power, by proclamation in the Government Gazette, to declare any weed to be noxious and if the legislation proved

ineffective for particular weeds, to exclude them from the provisions. These proposed measures were welcomed by the members of both Houses but the need to proclaim star thistle continued to be debated with a great deal of flair.

Holder held his ground and maintained that star thistle were like 'British bayonets' in agricultural areas and would soon be as serious as the rabbit and sparrows.

The Honourable West-Erskine, Member for the Southern District, pointed out that it would be impossible to proclaim weeds on the basis of whether they were eaten by stock or not, as Holder had argued. His knowledge of history added colourfully to his point. He claimed it was like asking, 'Do men eat babies?' [8]

'The answer', he said, 'would be 'No' but if one reads history they would find that at the siege of Samaria they were a very common article of diet. It depends on what else the stock had to eat!'.

Mr Caldwell, the Member for Yorke Peninsula, opposed the Bill because he claimed that star thistle had a heavy seed that did not spread in the wind and therefore was not as dangerous as other thistles to which some members of the House interjected with "Oh!" Or at least that was the way Hansard of the day recorded their reaction.

Eventually, Scott in the Legislative Council, suggest a Select Committee be formed to determine if star thistle really warranted proclamation as a noxious weed. His suggestion was adopted and a five-man committee was appointed.

The Select Committee found that the weed had heavily infested cropping areas from Kapunda to Mt Bryan and that it was also well established around Naracoorte. On that basis they recommended that star thistle be proclaimed and they supported the proposal by Holder that the current Act be amended to enable the Governor to add or delete proclaimed weeds after resolutions carried by both Houses of Parliament.

Reluctantly, Parliament added star thistle as a noxious weed under this new statute. Bathurst burr was retained but the Scotch thistles were removed as they were now regarded as reasonable stock feed.

The thistle and Burr Act – 1887 was assented to on December 9th 1887.

At the time there was an interesting rider. After the debate Mr Murray, who had been a member of the Select Committee, expressed his concern in Parliament about the whole question of noxious weed legislation and its usefulness. Weeds were still spreading despite the laws that had been in place for 35 years and he therefore claimed that the whole matter should be investigated. He was also concerned that the Act still opened possibilities for harassment because it permitted informants of noxious weed infestations to be granted half the resulting fines. His pleas for a complete review were ignored.

CHAPTER V –

THE NOXIOUS WEEDS DESTRUCTION ACT – 1891

Humbug Legislation

INTRODUCTION

While the politicians of the day were considering whether women should be allowed to vote and whether the mineral waters of the Great Artesian Basins could be used to cure gout and obesity , Mr J W White, the member for Light in the House of Assembly, introduced a Noxious Weeds Destruction Bill on August 12th 1891. It was a private members Bill that had the support of the Commissioner of Crown Lands.

Mr White's primary aim was to improve the 1887 Act to ensure more noxious weed destruction. He wanted the Government to step in and control noxious weeds where local government authorities had failed and penalize them by withholding general subsidies to cover the costs.

Secondly, he believed that saffron thistle should be proclaimed as a noxious weed. He correctly identified it as *Kentrophyllum lanatum* (A synonym for *Cathamus lanatus L.*, today's recognised botanical name).

Parliament was advised that the weed had been brought in with packaging around Dutch gin bottles which were discarded at Sod Hut near Burra from where it had rapidly spread.

Not all politicians of the day believed that saffron thistle was a problem which could be dealt with by legislation or that local government bodies should be forced to act. Dr Magarey led the opposition. He dismissed all weed control legislation as 'humbug' and maintained that councils were the best judges whether a weed should be destroyed and he believed, if they neglected to control a weed, it would be for a good reason.

The Honourable John Miller, member for Stanley, claimed that saffron thistle was poorly understood (not readily identified) by landowners. He believed there were many varieties and it was therefore difficult to understand which was the real saffron thistle. To which someone interjected, 'Let some expert sit on it!'

Noxious Weeds Destruction Act 1891

At the end of the debates White's Bill obtained the numbers needed. A minor amendment limited the cost of recovery from councils to a 'reasonable limit'.

The Noxious Weeds Destruction Act was accented to on the 25th November 1891.

This was the fourth Statute introduced within 40 years to eradicate weeds that were threatening the Colony's agricultural productivity. Each step taken had some critics but the majority in the Parliament of the day held to their faith that the law would overcome Nature, despite some frustrations. To reinforce its determination, Parliament had increased its powers to proclaim weeds and decided to take direct action against local communities who failed to do so. Specific funding had been allocated to achieve destruction of the proclaimed weeds and more inspectors had been appointed. Had they taken time to analyse the press reports of the day they would have realised what a failure the law had been. The thistles and the burrs had continued to spread. It is interesting to follow the history of saffron thistle after the law was passed in 1891 requiring its eradication.

Saffron thistle remained an unresolved problem until the hormone herbicides came into general use in 1950s. Improved competition from better managed pastures also enabled landowners to gain an upper hand in the course of their normal operations.

On the 27th March 1986 Ian Black (Senior Agronomist, Weed Control, in the South Australian Department of Agriculture) made a formal submission to the Pest Plants Commission recommending that saffron thistle be removed as a noxious weed. His report stated that only the Meningie, Cowell-Kimba, Eastern Eyre Peninsular and East Torrens Weed Control Boards had programs to control that thistle and those programs were restricted to roadsides.

He advised the Commission that there were 12 herbicides available in South Australia that could control saffron thistle in cereal crops and all were cost effective. Landowners could also control this thistle in pastures using a technique called 'spray topping' with the herbicide, Paraquat.

He believed the financial penalties, imposed when saffron thistle was found in grain at the point of delivery at silos, enforced far greater control than any legislation.

The Pest Plant Commission found Black's recommendations hard to digest and after letting it sit on the table for three months, decided to seek comments from the local government weed control boards. In reply most boards were prepared to support downgrading of saffron thistle to Schedule III in the noxious weed regulations, thereby retaining for themselves control of its destiny. Only two boards were prepared to support Black's recommendations for its complete removal as a pest plant.

Surprisingly most support to retain its status as a weed proclaimed in Schedule II, which required it to be controlled throughout the State, came from boards in the Adelaide Hills and in the South East where the climate, soils and agricultural enterprises generally reduced its weediness.

On the 22nd March 1990 new weed control legislation came into effect, which set enlightened criteria for weeds to be proclaimed. Saffron thistle did not meet those criteria and it lost its status as a noxious weed with only a whimper of protest.

For 99 years it had defied the legislation, firstly, avoiding the eradication planned in the 1891 Statute and eventually spreading to its natural limits. Now it is controlled only when landowners believe it is financially beneficial to do so.

CHAPTER VI –

THE AFRICAN BOXTHORN ACT

INTRODUCTION

African Boxthorn (*Lycium ferocissimum Miers)* was first recorded growing in South Australia at the Botanic Garden in Adelaide in 1858. During the latter part of that century the landowners welcomed it as a cheap form of fencing, producing a dense thicket armed with sharp spines. It grew well on sandy soils with little rainfall and provided an impenetrable barrier to all livestock, including poultry.

Unfortunately, the seed, which was continually produced, even after hedges had been trimmed, was commonly eaten by birds and excreted over wide areas.

By the turn of the century this African plant had become an obvious and threatening weed particularly on undeveloped pastures.

In 1918 boxthorn was proclaimed a noxious weed for the whole of South Australia. It had been added to the Regulations by the consent of the Governor after both Houses of Parliament had debated and approved its proclamation. This procedure had been written into the Thistle and Burr Act 1897. It avoided the previous Parliamentary procedure of passing a new Act each time it was decided that an additional weed should be added to the Statutes. Since 1862 local government authorities had been given a major responsibility for noxious weed control.

The proclamation at the time allowed two exemptions. Boxthorns did not have to be destroyed if kept in trimmed hedges no wider than four feet six inches or higher than ten feet. Secondly, if the boxthorns were providing shelter for livestock, they also need not be destroyed. Naturally many landowners took full advantage of these exemptions enabling boxthorn to continue to spread virtually unchecked.

The Noxious Weeds (African Boxthorn) Act 1925

On Guy Fox Day, 1925, the Minister of Marine, the Honourable A Kirkpatrick, introduced into the Legislative Council the Noxious Weeds (African Boxthorn) Bill to specifically control boxthorns in the metropolitan area where, he contended, it was

such a problem that it required special legislation. Outside urban areas he believed boxthorns had a place protecting the soil from wind erosion.

His Bill proposed that boxthorn be removed from the 1918 Regulations that required eradication across the State and proclaim it only in the metropolitan area unless it was kept in a hedge less than 10 ft. high and four feet six inches wide.

The debate soon convinced the Parliament that there was wide spread concern throughout the State besides just the metropolitan area. The Honourable J Cowan advised that the Robe District Council had urged him to convince the House that boxthorn was an 'absolute curse – a receptacle for all the filth and rubbish of past ages'.

Other members of the Legislative Council had also received many petitions from local government councils leading the Honourable T Pascoe to recommend that district councils be given the responsibility to decide if boxthorns should be destroyed in their particular areas. Parliament decided it would not be wise to allow such diverse decision-making. Indeed, until today local government has never been given the sole right to proclaim a weed in its area without vetting by a state authority.

The members quickly agreed that scattered boxthorns should not be allowed to remain to provide shelter for stock. However, the dimensions to be allowed for remaining hedges caused indecision and protracted debate. Were they to be kept to 10 feet high? Some members thought 14 feet or 16 feet would be acceptable provided the hedges were trimmed. Were they to be four feet six inches or just four feet or three feet wide? Eventually the original hedge dimensions were adopted, four feet six inches wide and ten feet high.

A last minute amendment prevented further hedges from being planted, a significant step forward.

When the Bill was referred to the House of Assembly on the 3rd December 1925 there was little debate, only an informed warning from the Honourable G Luffer, Alexandra, that boxthorn was a propagation medium for fruit fly, by then well established in New South Wales and Western Australia.

In summary, when enacted, this legislation simply amended the 1862 Act to give local government the powers to prevent further hedges of boxthorn from being planted and removed the excuse for keeping scattered boxthorn for stock shelter. Hedges, still a serious source of spread, remained.

Despite this special attention in the Parliament and further debate when noxious weed legislation was reviewed in 1931, African boxthorn continued to spread virtually unchecked. It continued to be a constant subject on the agenda of the Noxious Weeds Advisory Committee during the 1930s. In 1936, for example, the Salisbury District Council asked the Committee to remove the serious infestations of boxthorn at the Parafield Poultry Research Station controlled by the Department of Agriculture. At the request of the Committee the problem was inspected by the Minister of Agriculture and his Director who agreed that it should be eradicated. They asked the Architect-in-Chiefs Department to take action, which was subsequently refused because the boundaries of the Research Station were not defined!

The minutes of that Weeds Advisory Committee and the subsequent Committee established under the 1939 legislation reveal that the matter was never resolved before it fell off the agenda in 1943, still awaiting action by the Commissioner of Public Works. The hedges were finally removed in the early 1960s when the research station was upgraded and a Plant Introduction Centre established.

When effective control programs eventually commenced in the 1960s dense boxthorn infestations presented untidy sights on the in-between paddocks separating the Adelaide metropolitan area from farmed properties and indeed similar sights surrounded nearly all country towns. Coastal sand dunes, especially around Yorke Peninsula were also seriously infested, as were creek lines and flood out plains in the pastoral areas.

The tide began to turn when substantial grants were made available for weed control on Crown Lands and when the control programs were implemented by well-trained local government officers who had access to effective herbicides The Crown Land coastlines of York Peninsular were some of the first areas to be successfully cleared which enabled pressure to be brought to bear on surrounding negligent landowners.

Although there are still problem areas in pastoral country the situation throughout the State has greatly improved.

While better incentives and control measures for boxthorn were developing it remained a proclaimed weed for the whole of the State, subject to the trimmed hedge exemption, until flexibility was introduced with new legislation in 1956. This simply required boxthorn to be 'destroyed or controlled' depending upon the situation in which it was growing and the local government policy. This did anyway with the dimensions and stock protection arguments that had largely became non-issues because much tidier and more easily manageable fencing was generally available. Also keen interest in planting native trees and shrubs for protection had developed in many communities.

As a measure of the community's confidence, that boxthorn was a declining threat, it was relegated to the third Schedule of the pest plant list, Gazetted in the early 1970s. This required its destruction or control only where local government decided it was necessary. Most councils however were not prepared to leave boxthorn outside the law. It has remained a pest plant throughout the northern cereal belt, northern Eyre Peninsula and Yorke Peninsula and even in the South East and the Adelaide Hills where it had rarely been out of hand. It has continued to be a proclaimed weed throughout the pastoral areas..

Some councils retained boxthorn on their lists in the metropolitan areas but others such as Mitcham and Pt Adelaide relinquished the regulation.

These lengthy debates of 75 years ago, which determined the fate of boxthorns, has now been replaced by the attitudes of local councils and the keenness of the weeds inspector.

CHAPTER VII –

THE NOXIOUS WEEDS ACT, 1931

AFTER SEVENTY-FIVE YEARS

Legislation to eradicate noxious weeds had been on the Statute books for 75 years when, on the 27th October 1927, the Minister of Agriculture, the Honourable John Cowan, who represented the Southern District, introduced into the Legislative Council a new Bill, "to make further and better provisions for the destruction of noxious weeds".

In the second reading speech, Cowan claimed that the current Act of 1862 had simply been dormant particularly following World War I and it was now impossible to comply with its provisions.

"In some districts", he stated, "weeds are supposed to be noxious while they are edible, in other districts they are a source of great inconvenience". (The effects on grazing still dominated Parliament's thinking).

He gave no reasons or examples and his speech still held the belief that if the law just clearly stated who was responsible for what weeds and those who didn't respond were fined, then Nature would be beaten and the weeds destroyed.

He advised the Council that the Bill would enable plants to be proclaimed as the occasion warranted and in such 'portions' of the State as desirable. A measure, he claimed, would be far more elastic than the current legislation allowed. This in later debate received strong support.

The Bill placed responsibility for enforcing the destruction of noxious weeds on district and municipal councils. Landowners were to be responsible, not only on their own land, but on adjoining roadsides as well. This requirement was later withdrawn leaving councils responsible for roadside noxious weeds.

Breaches of the Act would impose a fine of 5 pounds for the first offence and 20 pounds for subsequent offences.

Up until this time Parliament had simply required that proclaimed weeds be eradicated and by whom. The first hint of requiring 'control' of proclaimed weeds came from the Honourable William Mills (Northern).

In responding to Cowan's outline of the proposed legislation he warned that, if Parliament was not careful, it would simply create, 'an army of inspectors'. He advised the members that stinkwort which had become a serious problem in cereal crops because of declining soil fertility, could be controlled if the right methods were adopted, "but not in a few weeks under an inspector".

From his experience he also cited the control of onion weed by the use of heavy dressings of super phosphate. A phenomenon that he claimed needed research to achieve wider application. He therefore advocated that provisions should be made in the Act for research.

The Bill was introduced into the House of Assembly after this brief debate in the Council but it lapsed. The Lower House had more urban issues to consider.

The Two Penny – Half Penny Act – 1931

On the 14th July 1931 the Bill was reintroduced in the Legislative Council by a new Minister for Agriculture, the Honourable S. R. Whitford. He used the same second reading speech presented by his predecessor in 1927. It was immediately attacked by the Honourable A. P. Blesing, who claimed it was the most drastic legislation ever introduced to the Chamber. He claimed that it was grossly unfair to expect landowners to be responsible for noxious weed control on roadsides because they did not put them there and because they were thick in some places and not in others. He would accept a special council rate for weed control on roadsides but nothing more. He went on to put the extreme view that the council, or government, should compensate landowners who had noxious weeds in their crops because he claimed that in carrying out the requirements of the Bill the process would severely damage the crop.

The Honourable W. G. Duncan (Midland) strictly opposed the power to declare a weed noxious by proclamation because he feared the influence of the enthusiastic

experts. He cited a recent example of an expert calling for the proclamation of tobacco bush (*Nicotiana gluaca*) as a noxious weed.

"I know parts of South Australia" he said "where 10 Japanese armies working 24 hours a day for 20 years could not cut down all the tobacco bushes and by the time they cut them down there would be more growing than when they started".

At this point the debate had evidently became boring to those not closely associated with the agricultural scene. To liven proceedings someone interjected, "Does this Bill include only weeds of the vegetable kingdom"? This drew from the floor of the House a reminder that it was not a Bill for the abolition of Legislative Council members.

Duncan's argument that, regulatory powers should be used rather than Parliament amending the Act to remove weeds no longer considered noxious or to include new weeds, carried the day.

When the Bill was referred to the Lower House the boxthorn problem was reopened and a detailed debate followed which, as it had done in the Parliament of 1925 when specific boxthorn legislation was enacted, concentrated on permissible dimensions of hedges. Some thought six feet was high enough, others, that even ten feet was too low. One speaker claimed that the legislation could include dimensions provided the hedge was continuous. Eventually an amendment provided for hedges already established to remain if they were kept trimmed to a width not exceeding four feet six inches wide and a height not exceeding, in any part, seven feet.

Parliament discussed the possibilities of requiring weed control in pastoral areas but failed to reach a conclusion. Finally the Bill was passed, with clauses allowing councils to recover costs but enabling the Minister to fine councils if they failed to enforce the Act.

A final delicate touch ensured that a landowner could be fined 20 pounds for using improper language when confronted by an authorised officer. This worried one member who feared that, if a lady was on the Bench, any language of a scrub holder would be found deadly improper.

Amendments 1938 and 1939

During 1938 and 1939 both Houses of Parliament reviewed the Noxious Weed legislation that had been enacted at the beginning of the decade. Three amendments were introduced.

Powers were given to the Minister of Agriculture to under take simultaneous weed eradication between two or more councils who had defaulted their responsibilities under the Act. This decision was made despite the fact that Ministers of the Crown had been given powers for over 40 years by Parliament to with hold grants or fine councils or do the necessary work and recover the costs if they did not fulfil their responsibilities. There is no evidence that these politically impossible powers were ever used. Unrealistically they continued to be granted for another 35 years, but never used, until replaced in the 1975 legislation by incentives such as subsidies. Such measures removed the impossible threat of taking pecuniary action against communities.

Secondly the legislation covering boxthorn was again amended after long debates. Little progress had been made since it was declared a noxious weed 20 years ago with the expectation that trimmed hedges of regulated dimensions could remain. Even if hedges were trimmed and very few were, they remained a source of seed.

During the debate of the amendment, which sought to remove, hedges (it was eventually carried) the Honourable J Cowan claimed that the metropolitan area of Adelaide was a very poor example. Uncontrolled hedges surrounded the Zoological Gardens and the military parade ground in the centre of the city. Also infestations were uncontrolled along the foreshore from Outer Harbour to Glenelg and beyond. "How could Adelaide claim to be a garden city when boxthorns were allowed to persist ?", he asked. "Parliament had successfully removed gaudy advertisements from the city but had failed to remove boxthorns".

During the debate it was suggested that the Tasmanian noxious weed legislation be adopted which simply required the prevention of seeding.

The third amendment adopted allowed councils to treat areas of weeds across landowner's boundaries in one operation and recover cost proportionally.

While the 1938-1939 amendments had little significance the debate opened the whole legislation for review by both Houses. Its general ineffectiveness was lamented and serious consideration was given to removing the responsibilities of its enforcement from local government. A move opposed by the Minister of Agriculture, Mr Blesing.

A speaker claimed that there was a 'mania for declaring weeds noxious'. Others wrung their hands about the serious infestations of horehound and false caper and the fact that it had taken seven months of 'toing and froing' between Government departments before a recent serious find of water hyacinth at Ramco Lagoon on the Murray River had been tackled.

Despite their concerns no better measures than those enacted in the 1931 legislation were forthcoming which initially left weed control in the too hard basket for another decade during which the neglect of wartime took a serious toll.

CHAPTER VIII –

THE ORCHARD BILL – 1948,

Community Managed Board

INTRODUCTION

In 1948 agriculturalists in South Australia had a mandate from the community. Produce as much wheat and wool as possible. It was then a moral duty to feed and cloth the world population emerging with great expectations from a terrible war. New land for agriculture was being developed as quickly as resources could be provided.

Weeds were threatening that ideal, aggressively competing from seed banks increased by years of neglect during the war. Roadsides and paddocks leading north through the State were choked with wild artichoke and saffron thistle. Horehound blocked travelling stock routes infested sale yards. The drainage channels in the South East were blocked with waterweeds and the surrounding flats with thistles. Lincoln weed was gaining hold in marginal wheat growing areas where it had never been seen growing before. Orchards in the Adelaide Hills were swamped with blackberries and horticultural areas along the River Murray with innocent weed.

New weeds seemed to be appearing everywhere. Skeleton weed had been found in the Murray Mallee and African daisy had bought the soldier settlement area at Wanilla to a halt.

Bureaucratic Initiatives

The Director of Agriculture, Mr W J Spafford, recommended that the Government should try again to gain control by upgrading the legislation. This was the first occasion in the history of weed control in South Australia when the bureaucracy took the initiative. Until then politicians had initiated legislation.

A draft Bill was prepared by Mr Hector Orchard, the fighter pilot recently appointed Weeds Adviser. It contained many new and innovations clauses, which proved to be at least 30 years ahead of time.

Central to his proposal was the requirement that the Governor appoint a seven member Advisory Committee for noxious weed control with powers to appoint and develop seven boards, based on counties, throughout the agricultural areas of the State. These boards were to be equipped with vehicles and machinery to carry out weed control with the assistance of authorised officers and the appointment of local landowner committees. The Boards would also be given powers to summons any person to attend before them. The operations were to be funded by Treasury.

Secondly, Orchard proposed an overhaul of the scope of weed proclamations. Widely spread weeds were to be controlled with any treatment that would severely check the growth and prevent spread. More important weeds which were less widely spread should be proclaimed to be destroyed by 'pulling or burning or by any treatment which would bring about decomposition and should include the application of reasonable exertions and appropriate methods to prevent further establishment and spread.'

Orchard's Bill also proposed that weeds, not only be proclaimed for the whole State or particular areas of the State, but for 'particular circumstances' such as in fodder or travelling stock.

These were new and radical proposals in the history of weed control legislation in South Australia so it was probably not surprising that when the Government received this draft Bill from Stafford, the Director of Agriculture, on 2nd February 1949, it was referred to Local Government for comment.

Confronted with this attempt to remove weed control from their direct responsibility by the formation of boards there was a predictable reaction from Local Government although it was not as consistent as one might have expected. Twenty councils rejected the draft Bill, 56 were prepared to support it, 15 did not reply and two didn't mind one way or the other. Interestingly the proposals were strongly rejected by municipal council (Only 10 of the 37 favoured boards) but narrowly supported by district council (46 for, 43 against).

Many district councils at the time openly admitted that they were not financially or technically equipped to mount meaningful weed control programs over the very large areas involved. Municipal Councils on the other hand had more resources and very

small areas over which they needed to apply the proposed legislation. They were in a much better position to argue to maintain their powers.

The Carrieton District Council was one ready to throw in the towel. Most properties within its boundaries were infested with one noxious weed or another such as horehound, boxthorn, onion weed and saffron thistle, but its total rate revenue could do little more than pay the district clerk to administer road grants. When the Council sat down to its monthly meeting, a significant number of the male population was seated around the table. The councillors were concerned but what could they do? A board system with State Government responsibility seemed an attractive alternative.

But it was not to be. Seven years were to elapse before yet another attempt was made to make weed control legislation more workable. Orchard's Bill was too radical. Municipal Councils with little at stake gave the Minster of Agriculture the fickle excuse to shelve the Bill and avoid finding the necessary resources

Had weed control boards been established in parallel with the soil conservation boards then being established it is probable that better integrated land management boards would have followed. Instead, 50 years of separate, costly structures followed Orchard's rejection. Only recently have the statutory authorities responsible for soil conservation and weed control [3] begun to work towards district and property management plans which integrate weed control into the total needs of landcare.

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3 The Soil Conservation Council and the Animal and Plant Control Commission.

CHAPTER IX –

THE NOXIOUS WEEDS ACT 1956

EMBRACING WEED SCIENCE

INTRODUCTION

Dr Allan Callaghan was appointed Director of Agriculture in 1949 having successfully placed Roseworthy Agricultural College on a sure academic footing and widely changed the geography of South Australia through his post war chairmanship of the Lands Development Executive.

He set about dramatically reorganising his department based on tertiary qualified and experienced plant, animal and social scientist. It quickly developed into a highly respected technical Government service.

When he presented his first Departmental report he proudly emphasised the worldwide competitiveness of the State's primary industries. Wheat production had stabilized over 737 000 ha in a sustainable system which was being balanced by legume pastures. The wool, meat and horticultural industries were also flourishing. He openly admitted, however, that farmers and graziers had not thrown off the constraints of weed competition and contamination.

Callaghan realised that a new applied science, weed science, offered hope. Thrust into the farming scene by agricultural chemical research it had already produced the very useful selective herbicides which could remove broad leaved weeds from many crops and even pastures in some circumstances.

With these developments in mind and supported by the Weeds Advisory Committee, operating under the 1931 Act, he convinced his Minister, the Honourable Arthur Christian, that Hector Orchard, the lone Weed Adviser, should have an assistant and four field officers. Only one officer, Mr Max O'Neil, was appointed. He subsequently served the cause for nearly 40 years.

Concurrently, Callaghan enthusiastically took up the cause for new legislation and to obtain direct government resources to support the use of these new technologies. Again, as had been the case in 1948, Hector Orchard was asked to draw up a Bill.

This Bill left the basic responsibilities for noxious weed control firmly in the hands of Local Government. Orchard and all those advising him had learnt from the 1948 – 49 debate. Fortunately modern extension methods had demonstrated that much could be gained from community involvement in such matters as weed control provided technical information could be injected in a socially acceptable manner.

The Bill clearly defined who was responsible for what weeds. Landowners or occupiers were to be responsible for noxious weeds on their properties as had been the case for over 100 years. Local government was given the responsibility for weed control on land under its control as well as unoccupied Crown lands and half of surrounding roadsides for which subsides were to be provided form State revenue. This was a new step.

In a more dramatic move, local government would to be made responsible for weed control on roadsides (in previous legislation adjoining landowners had always been responsible) but could recover cost, one third, from each adjoining landowner, leaving the remaining third to be funded by local government for which a special rate could be struck. Parliament subsequently ruled that this was too complex and decided that costs to the centre of the road reserve should be recovered from adjoining landowners. In turn, landowners could free themselves from the council cost if they controlled the noxious weeds themselves.

This legislation introduced for the first time the concept of 'dangerous weeds' that were to be proclaimed in a separate category from noxious weeds. These were defined as newly introduced weeds, known to be serious to agriculture, but not widely established and which had to be eradicated, at all cost.

A lesser category of noxious weeds was to be created. The Act would require their destruction or control. Control being defined, 'to apply such measures to the weed as will prevent its propagation and spread'.

Notices issued under the Act were to be upgraded ensuring that landowners were given specific instructions covering the action to be taken.

Noxious Weeds Act – 1956

On the 23rd November 1955 the Bill was introduced to the Parliament by the Minister of Agriculture, Arthur Christian. Once received it was tabled and made available for public comment for nearly a year during which time Arthur Christian died.

When his successor, Mr Pearson, reintroduced the Bill to the House of Assembly on 18th October 1956, he went to considerable lengths to emphasise that the primary duty of control would remain with local government, that State Government revenue would be available to support local control work and that technical advice would be provided by a newly appointed team in the Department of Agriculture.

Mr O'Halloran, the Leader of the Opposition, enthusiastically supported the contents of the Bill but doubted the wisdom of giving again the basic responsibility of enforcement to local government, considering its previous poor performances. Members on both sides of the House supported that view including influential names such as Brookman (later to become Minister for Agriculture) Heaslip, Laucke and Stott, an Independent. However when it came to the vote the case for a centralized weed control authority did not eventuate as members realised that very large financial inputs would be needed from the State coffers if local government was excluded.

Overall Parliament was strongly committed to this new legislation which was assented to on the12th November 1956. After regulations were drawn up it became effective on 1st July 1957.

The Great Leap Forward.

The Weeds Advisory Committee established by the 1956 legislation and initially chaired by Dr Allen Callaghan set about increasing the pace for weed control across the State, encouraged by the significant advances in the science of weed control, particularly the development of a wide range of new herbicides.

One of the first formal tasks of the committee was to recommend to the Minister that 80 Government Authorised Officers be gazetted and issued with authority cards. These were all men selected form the Departments of Agriculture and Lands. Very few were ever called upon to exercise the power they were given.

Hector Orchard, leader of the small but growing team of weed control officers, was tragically killed on the road near Morchard. Nine months elapsed before his successor, Arthur Tideman, was appointed in September 1958.

During the following 12 years he held the position as Leader of the team, which at its peak numbered 17 members, reflecting the determination of the Government to make the best use of an emerging science to support effective weed control.

Regulations covering the three new schedules of proclaimed weeds were gazetted on 3rd October 1957. Nine "dangerous weeds" were listed on Schedule I, 38 "noxious" weeds were listed for the whole State and ten for portions of the State.

Ten amendments to the Schedules were gazetted over the following nine years. This was unprecedented activity compared with the number of weeds gazetted over the previous 100 years.

These amendments were consolidated into a list gazetted in January 1966. In that time poverty weed (*Iva axillaris*), serrated tussock (*Nasella trichotoma*), mesquite (*Prosopis juliflora*) and alkali sida (*Sida leprosa*) had been added as 'dangerous' weeds.

Slender thistle (*Carduus pycnocephalus*), wild artichoke (*Cynara cardunculus*), cut-leaved mignonette (*Reseda lutea*) and gorse (*Ulex europaeus*) had been added to Schedule II, the weeds to be controlled throughout the State. Three had been removed, namely, St Barnaby's thistle (*Centaurea solstitialis*), cotton bushes (*Asclepias spp*) and black-eyed susan (*Ornithogalum thyrsoides*)

Schedule III, the weeds listed for control in particular local government areas, had been extensively amended. Wild artichoke and gorse had been removed and promoted to Schedule II while Lincoln weed (Diplotaxis tenuifolia) and sour-sob (Oxalis pes-caprea) had been added.

Salvation jane, originally proclaimed to be controlled only in the South East, had been extended to the Adelaide Hills, then to Eyre Peninsular and York Peninsular and finally to some areas in the Murray Mallee. Three-cornered jack control had been extended to all horticultural areas and Eyre Peninsula.

These amendments have been laboriously detailed to illustrate that the policies adopted by the Weeds Advisory Committee covering the proclamation of weed under the legislation was still largely ad hoc.

Dangerous weeds were declared on the evidence of experienced advisors backed by documentation in botanical and weed science journals (eg mesquite) but alterations of noxious weeds generally simply followed the wishes of councils and their authorised officers based on their current interests and circumstances. Although members of the Weed Science Team in the Department of Agricultural were often uneasy about the amendments and associated decisions, they were not in a position to assess whether the weed had reached its ecological limit. The level of the risk of a weed and its management was usually not available. However, the local programs needed support and encouragement in the over-all administration of weed control so the wishes of the councils of the day were granted despite the lack of scientific reasoning.

Parliament of-course had the final say when new weeds were put forward for listing by the Weeds Advisory Committee. Each amendment to the regulations was laid before Parliament and subjected to disallowances by resolution of either House. None were ever challenged.

The weed control staff in the Department of Agriculture had wider problems than the proclaimed weeds list to worry about. They hoped that by concentrating on these, overall weed control would improve and with more basics knowledge the reasons to proclaim or not proclaim weeds would become clearer.

The highest priority had to be given to the training of newly appointed Government and Local Government authorised officers who were expected to administer weed control with its rapidly evolving new technology. Even before the Team had gathered resources to face its teaching and research priorities they were stretched to the limit to mount two campaigns. One campaign was to prevent the spread of skeleton weed into the better cereal growing area of the State from the Murray Mallee. The other campaign aimed to protect the pastoral areas from Noogoora Burr. Infested stock were entering the State in great numbers from New South Wales requiring huge consignments to be inspected, a process bitterly opposed by dealers.

The efficacy of a wide range of new herbicides that offered dramatic, selective weed control in cereal crops also had to be researched and assessed for South Australian conditions before their labels were approved.

The newly established pasture seed industry was calling for help. Weed contamination was threatening production and markets.

Weed infestations such as silver-leaved nightshade needed mapping.

Off target damage was emerging which needed extension programs and new legislation.

The coordination of weed research programs across Australia also needed high priority.

As the team entered the decade of the 1970's, they could argue that they had the best weed science group in Australia with its research closely knitted to its extension and regulatory programs.

Salary Subsidies for Authorised Officers –
The 1963 Amendment to the Weeds Act.

In his capacity as Executive Officer of the Weeds Advisory Committee, Tideman convinced members that effective administration of the Weeds Act would not be achieved unless the local government authorised officers (inspectors) were adequately trained, not only in relation to the requirements of the Act but more importantly to new technology integrating competitive, mechanical, chemical and biological weed control.

In the past councils had often given the weed control tasks to the casual responsibility of the dogcatcher, health and building inspector. Even to the district clerk who rarely had time to walk his district inspecting the weeds.

Tideman also argued that field officers would not become trained unless there was adequate incentives which he suggested could best be given by subsidising the salaries of local government employed authorised officers who could demonstrate they held relevant qualification.

The Weeds Advisory Committee and subsequently Parliament, took little convincing. Consequently the Weeds Act, 1956, was amended without opposition during November 1963, enabling half of the salaries of authorised officers employed by local government to be payed from State Revenue, providing they held the Weed Control Certificate. The regulations also required the officers to work for a period of at least 60 days each year or one day each week. District clerks were excluded.

This legislative step changed weed control legislation in South Australia from a century of hopeful wish listing into a significant tool for primary industry productivity and environmental management.

In March 1969 further amendments tightened subsidy payments ensuring that the Minister had control of the numbers of authorised officers employed by a council and that the progress of the work of the authorised officers was adequately assessed each year.

The Weed Control Training Course.

The first Weed Control Training Course commenced in June 1964. It was an immediate success, attracting 61 students who attended the 20 lectures of one and a half hours duration and two field days. Arthur Tideman, Max Ross and Max O'Neil were the initial lectures. The lecture course cost student's £2 and a parallel correspondence course was also made available for £ 12.12.0. To cope with the numbers and give effective tuition, two sessions had to be held each Friday evening. The later sessions was reserved for country students, some of whom came from as far away as Jamestown and Penola.

The course was attended, not only by those administrating the Weeds Act, but also by agricultural chemical salesman, park rangers, landscape gardeners, horticulturalist, graziers, farmers and home gardeners. It became the most popular and successful course offered by the Adult Education Branch of the Education Department.

Of the initial 61 students, 40 gained certificates having passed the two and a half hour examination in November. Seventeen of those who passed were government-authorised officers, an important milestone in the history of weed control in South Australia.

After 10 years, by which time Peter Kloot, Grant Baldwin and Malcolm Catt had become tutors, 370 students had enrolled of which 248 had been granted certificates.

A survey at the time revealed that 93 authorised officers were employed by local government of which 68 worked in rural areas and 25 in city or municipal areas. Of the 96 officers, 66 were qualified and well experienced. The remaining 27 were newly employed offices and 12 of these had commenced training.

In 1976 the course was up-graded requiring 125 hours training offered in two units covering herbicide and their application, regulatory requirements, weed identification, weed control management in various situations and business administration

CHAPTER X –

PEST PLANTS ACT – 1976

LOCAL GOVERNMENT BOARDS FOR WEED CONTROL

INTRODUCTION

During the latter half of the 1960s it became increasing evident that, despite a five fold increase in the resources made available by the State Government in the development of the Weed Science Unit in the Department of Agriculture, there was no possibility of servicing the needs of 130 local government authorities, particularly as the weed control technology was changing so quickly.

Active councils, endeavouring to fulfil their responsibilities, were demanding more and more help leaving no time to encourage work in the inactive councils. Uniformity of weed control methods and standards were virtually non-existent and landowners were confused and frustrated, particularly by boundary issues.

Some enlightened attempts were made to overcome these problems by invoking Part 19 of the Local Government Act 1934/57, which enabled councils to voluntarily share resources for common goals such as weed control. The Mannum, Marne and Sedan District Councils led the way. They shared a full time authorised officer and spraying equipment. Other groups followed in the Mid North and Lower York Peninsula, but despite encouragement from Departmental Officers the results were disappointing. Parochial councils reluctantly accepted their neighbours' policies, Gradually independent decisions, such as the weeds which needed the most emphasis and how they should be treated, over-ruled the day and so the constituent councils, which had come together with good intentions, more often than not, drifted apart.

Tideman and his team gradually realised that the compulsory formation of councils into adequately funded weed control boards which forced consistent policies across whole regions was the only way ahead. They were still convinced that weed control responsibilities had to basically remain in local hands, having seen the difficulties and the enormous expenses associated with centralized state government operations, which was then a feature of weed control in Victoria. It had been proved time and time again that landowners were most influenced by councillors whom they knew,

rather than government officers.. During overseas study leave in 1970, Tideman examined weed central administration around the world and found nothing to offer except in the Province of Manitoba, Canada, where boards under the control of local landowners were proving effective.

As he moved on to take up the appointment of Chief Agronomist for South Australia, he urged the Weed Advisory Committee, to recommend to government that the Act be changed. Fortunately Barrow, then Chairman of the Committee and Tideman had worked in many situation over a period of nearly 20 years with the then Minister of Agriculture, the Honourable Thomas Casey and they were able to gain his complete support despite the fact that it was a move not likely to win votes. Minister Casey had no illusions that there would be a long difficult battle to convince most local government bodies that it was in their best interest to work together in boards which would lessen their direct control. Some councils feared they would face extra costs because of the neglect of weed control in neighbouring councils

At the beginning of 1972 the Weeds Advisory Committee formally asked Minister Casey's permission to prepare new legislation saying, " There is beyond doubt a need for advanced, realistic legislation embracing a weed control board system to protect agricultural operations in South Australia. Individual landowners need the protection of legislation, world markets demand products not contaminated".

Members of the Weed Advisory Committee Appointed to Draft the 1976 Weed Control Legislation

Chairman: Mr Pertr Barrow, Assistant Director of Agriculture (Later succeeded by Mr Peter Trumble).

Member: Mr Malcolm Groth, Farmer, Cambrai and Keith. Member and ex-chairman of the Marne Council. Chairman of the local weed board for ten years and member of the United Farmers & Graziers.

Member: Mr Reo Humphrys, farmer, Urania. Member of the Central Yorke Peninsula Council and member of the Local Government Association Executive, member of the United farmers & Graziers Governing Council.

Member: Mr. Hught McLachlan, pastoralist. Mr McLachaln resigned through pressure of family business and for the same reason as for Mr. Reid was not replaced.

Member: Mr Colin Oliver, farmer, Wasleys. Member of the Agricultural Bureau, United Farmers & Graziers and Coolibah Club.

Member: Mr Dick Scholz, farmer, Pygery. Member of the United Farmers & Graziers Governing Council, ex-district councillor and Agricultural Bureau president.

Member: Mr Jack Sneyd, grazier, Mt Compass and Yumali. Member of the Veterinary Surgeons Board, the Stockowners Association and ex-member of the Abattoirs Board and Advisory Board of Agriculture.

Member: Mr Steve Reid, Chairman of the Pastoral Board. Mr Reid later retired and was not replaced because negotiations had reached an advanced, difficult stage.

Secretary: Mr Max O'Neil, Agricultural Advisor (Weeds).

The Committee also drew heavily on the experience of Arthur Tideman, Chief Agronomist, Grant Baldwin, Senior Weeds Officer, David Symon, Senior Botanist, Waite Agricultural Research Institute and Ray Alcock, local government Liaison Officer.

On the 26th July 1972 the Minister reappointed his Weed Advisory Committee for a further term and in doing so gave them the specific task of preparing a new Bill in full consultation with all the stakeholders.

In October of that year an outline of a board system was submitted to the Local Government Association for comment. It was flatly rejected. The Association feared their individual councils would lose their powers ignoring the fact that many had failed to use then effectively for a century.

Undeterred, the Weeds Advisory Committee quietly, but firmly continued to work at the issues appointing six sub- committees to help draft the details of the Bill.

Members shared attendance at 18 conferences with local government authorities to discuss each section of the draft Bill. Even mock board meetings were held to enable finance and other issues to be more realistically explained. The process, broadened to include farmers groups and the emerging conservation lobby, took nearly three years.

Eventually, the Dunstan government, renowned for its innovative social legislation, decided to introduce the Bill that confronted the Parliament with the requirement that weed control be conducted through boards formed by grouping councils. The Commission would be responsible for the groupings after consultation with councils.

The Bill also required weeds to be proclaimed which were detrimental to the community or the environment.(A threat to human health or to National Parks.) these were to be called Community Pest Plants adding a new dimension to the legislation (Section 35)

After 120 years the adjective, 'noxious' used to describe weeds listed in the legislation was deleted. Until this time the legislation had been designed to protect agriculture from weeds which traditionally associated them as 'noxious'. And so the 'pest plant' replaced the 'noxious weed' thereby conveying the wider scope of the Bill. Pest plants were accepted by the Parliament without comment when the Bill was debated.

At the same time the term, Primary Pest Plant was introduced to replace the Dangerous Weed, a category introduced in the 1956 legislation for serious weeds which had not become established and for which eradication should be attempted.

On September 30th 1975 the Honourable J L Corcoran, Minister for Works, representing the District of Coles, introduced the Bill in the House of Assembly. Concurrently, The Minister for Agriculture, the Honourable Brian Chatterton, introduced the Bill in the Legislative Council. (Incidentally, the proposed legislation carried the imprint of his wife's thumb. From time to time she had campaigned for its introduction.)

Sections 18-26 of the Bill, which dealt with the formation of boards, dominated he debate. Many members of both parties supported the formation of boards but a number expressed grave concerns that the proposed Pest Plants Commission would

have the power to force councils into boards if reasonable alignments could not be negotiated or if a council refused to participate

Members, Cornwall and Gunn led the opposition. They claimed that forcing councils into boards would take away local government autonomy and would penalize active councils who were grouped with those who had neglected weed control in the past. The government satisfied these concerns by allowing the formation of single council boards provided there was sufficient work for a full time authorised officer.

Further local government concerns surfaced in the debate. A letter from the Snowtown District Council was tabled in which it was claimed that they would still have to maintain their own spray plant, thereby doubling equipment costs. Two other objections were raised. To make control operation timely the board would need to employ a casual authorise officer in autumn and such people were not available. Secondly, the council argued that book-keeping for the weed control operations were best controlled in an established local government office and not in a separate, composite board office.

The Government persisted, pointing out that the Weeds Advisory Committee, during the long period of public consultation of the Bill, had taken negotiations and persuasion to the limit. Most councils were prepared to work through a board system but there was still resistance from the Adelaide Hills and in the South East. The Government argued that if weed control was to be effective across the State then some forced amalgamations would probably be necessary. At the Committee stage, this view was eventually carried. Boards would be created across the State. That proved to be the most important Statutory step in weed control administration of the century.

During this long period of negotiations the untiring efforts of Max O'Neil, a staff member of the Advisory Committee must not be underestimated. Members, Gunn, Goldsworthy and Boundy, in a move unusual in Parliament, praised him for his work with the councils. The honourable Ted Chapman, out of step, rather uncharitably inferred that O'Neil was angling for a position on the Commission.

The debate continued over the next two months. The Honourable Mathwin (Member for Glenelg) admitted he had no knowledge of weeds, but was certain the legislation should bind the Crown. He said he only knew five weeds by sight; dandelion, fat-hen,

three-cornered jack, stinging nettle from which he believed that Gypsies made a potent drink and saffron thistle ,which he had recently been shown on Kangaroo Island, where it was used as fishing bait.

Having had their attention drawn to the Bill's omission, other speakers quickly rallied to the cause. It was claimed that it was simply undemocratic not to require the Crown to face its responsibilities on dedicated and unoccupied Crown lands.

This issue was not new. It had plagued Parliament since weed control legislation had first been introduced. The problem was difficult. After all, who was going to force the Crown to take action and where was the money to come from to control pest plants on the extensive, neglected lands?

Trying to defend the Bill's omission the Honourable J Corcoran, who had introduced the Bill said that the Government opposed binding the Crown because it was already doing as much as it possibly could and to do more was financially and physically impossible.

At the Committee stage a compromise was reached. A clause was introduced which stated that it was the 'duty' of a minister or other instrumentalities of the Crown, in whom ownership of land is invested, to attempt, with due diligence, to achieve so far as is reasonably practical, the destruction of primary pest plants and the control of agricultural and community pest plants.

It is interesting to note that a decade later, when weed control legislation was combined with vertebrate pest control, 'this Act binds the Crown' was accepted without question. Weed control had at last become a serious issue for the whole community.

Formation of the Pest Plant Boards

After the Act was passed in February 1976, the Pest Plants Commission negotiated from strength over a period of four years before the final two councils, Lameroo and Pinnaroo formed a board. No councils were "forced" but "telling" ministerial letters, sent in some instances, helped the outcomes.

It then took another five years of very active support from the Commission and its increased staff before it could be said that the board system had jellied into an effective State-wide weed control service.

The Commission tirelessly followed a policy, which required its individual members and technical staff to support boards in their efforts to solve problems with landowners with all parties present rather than in the boardroom or through correspondence. Each problem was usually followed up within two weeks.

The free time given in these endeavours by Commission members, such as the long serving Roger Brockoff and Des Ross, and the council representatives on their boards, was a public service never adequately recognised.

As a measure of their success, ten years after boards were introduced by legislation, 27 multi-council boards were operating across the agricultural areas of the State together with 31 single-council boards in urban areas. Administrative staff trained and supported authorised officers who had access to four-wheel drive vehicles and control equipment.

At that time, 1985, boards had annual budgets averaging $50000 (excluding recoverable costs). The three largest budgets were expended by the Eastern Eyre Peninsula Board, ($111,576), Mid Hills ($93,310) and Northern ($79,329)

The financial position of the boards system had by then been assured, not only by receiving 50% of the cost from the State Government, but by developing, with the Commission's encouragement control services, mainly herbicide spraying for pest plants on private property. Many landowners had neither the equipment, know- how or time to meet the higher standards of pest plant control introduced and enforced by boards. They were therefore willing to pay the board to do the work. This was particularly the case with "hobby farmers", by then a feature of the Adelaide Hills and the surrounds of most country towns. With this income available to top-up their budgets from their local government constituents and the State Government subsidies, sophisticated spray units built into four-wheel drive vehicles, other mechanical equipment, computers and adequate office space were purchased.

Understandably there was great concern within the Commission and boards when Judge Brebner, ,sitting in the Adelaide District Court, ruled that such activities were outside the powers given to boards under the Act.

The Labour Government of the day acted swiftly to protect what was seen by them as the best system for weed control administration yet devised in Australia. A bill for an Act to amend the 1976 legislation was introduced by the Minister for Agriculture, the Honourable Frank Blevans, in the Legislative Council in September 1985. This provided for a new section (4a) enabling boards to enter into an agreement with the owners of land, or another control board, for the destruction or control of pest plants.

This amendment seemed admirably easy and sensible to members from both parties in the Parliament some of whom spoke in support.

Incidentally, during this debate, the Honourable Stan Evans, Member for Fisher took the opportunity, out of order, but tolerated by the Speaker, to argue that the Adelaide Hills Face Zone should be subdivided, allowing housing to control the pest plants!

There was one notable exception to the general support for the Bill. The Honourable Peter Lewis, Liberal Member for the Mallee District, objected, drawing from him one of the longest individual speeches ever presented on weed control legislation in the history of the South Australian Parliament.

Lewis was concerned that the proposed powers would give boards a monopoly on weed control spraying to the exclusion of private contractors. He feared this would give them an easy income from landowner's money. He spoke forcibly in favour of privatisation believing that if private contracts could compete through a tendering process, in 10 years time, boards would not need costly equipment.

Lewis therefore moved an amendment in three parts, which required the Commission to call for tenders in local papers before a Pest Plant Board could carryout fieldwork. Should the board be the successful tender then the Commission would be required to give public reasons for that success and the contract price.

The debate, which followed, emphasised the cost involved in the proposed tendering process and the time delay which would jeopardies field control operations. Lewis' amendment was lost by 20 votes.

Time has proved that boards have not abused the power given to them in 1985. There was generally room for all comers. Boards concentrated their spraying on lands for which they were responsible, leaving the private contractors to concentrate on spraying commercial crops. It would however be interesting to see today if weed control would have been more advanced had boards been forced to concentrate on fields and roadside inspection, as Lewis had argued, rather than being involved in spraying operation.

The First Pest Plant Control Boards

BOARD	MEMBER COUNCILS
Alexandrina	Pt Elliot/Goolwa, Strathalbyn
Barossa Ranges	Angaston, Barossa
Burra, Eudunda, Robertstown	Burra, Edunda, Robertstown
Central Adelaide Plains	Gawler, Light, Mallala, Tanunda
Cowell Kimba	Franklin Harbour, Kimba
Eastern Eyre Peninsula	Cleve, Lincoln, Tumby Bay
Elliston Le Hunte	Elliston, Le Hunte
Kangaroo Island	Dudley, Kingscote
Loxton Waikerie	Loxton, Waikerie
Mid Hills	Happy Valley, Mt Barker, Onkaparinga
Mid North	Kapunda, Riverton, Saddleworth/ Auburn, Wakefield Plains.

Murray Lands	Browns Well, Karoonda-East Murray, Peake
Northern	Gladstone, Georgetown, Hallett, Jamestown, Jamestown Corp. Laura, Spaulding
Riverland	Barmera, Berri, Morgan, Paringa, Renmark CT
Talunga	Gumeracha, Mt Pleasant
Upper North	Carrieton, Peterborough Corp., Hawker, Kanyaka-Quorn, Orroroo, Peterborough
Western	Murat Bay, Streaky Bay
Yankalilla Willunga	Willunga Yankalilla
Lower Flinders	Crystal Brook, Mt Remarkable, Pirie
Broughton Districts	Blyth, Cleve, Pt Broughton, Redhill, Snowtown.
Northern York Peninsula	Bute, Wallaroo, Clinton, Northern York Peninsula.
Southern York Peninsula	Central York Peninsula, Minlaton, Warooka, Yorketown
Beachport Robe	Beachport, Robe
Lucindale Penola	Lucindale, Penola
Mt Gambier and Pt MacDonnell	Mt Gambier, Pt MacDonnell
Naracoorte and Districts	Naracoorte, Naracoorte Corp.
Mid Murray	

SINGLE COUNCIL BOARDS

Brighton
Burnside
Campbelltown
City of Mt Gambier
Payneham
Pt Augusta
Prospect
Prospect
Salisbury
Stirling
St Peters
East Torrens
Enfield
Henley and Grange
Hindmarsh
Marion
Millicent
Mitcham
Munno Para
Murray Bridge

Noarlunga
Tatiara
Tea Tree Gully
Thebarton
Unley
Victor Harbor
Walkerville
West Torrens
Woodville

CHAPTER XI –

THE ANIMAL AND PLANT CONTROL

(AGRICULTURAL PROTECTION AND OTHER PURPOSES) ACT 1986

WEEDS CAPTURE A SHARE OF ENVIRONMENTAL CARE

INTRODUCTION

In September 1986, the Minister for Agriculture, the Honourable Kym Mayes, introduced a Bill with 77 clauses to enable the operations of pest plant and vertebrate pest control to be combined throughout the State. The elements of the legislation had been widely discussed by all interested parties during the previous four years.

The Animal and Plant Control Act

Parliament did not question the proposed merger, which was seen as an excellent step forward, as it would further strengthen the board system, once highly controversial, as the Hon Peter Dunn admitted, when debating the Bill, but now well established across the State..

The financial provisions of the Bill were also accepted without debate. The legislation provided a single finance system based on a payment by councils of up to four percent of rural rate revenue and up to one percent of the urban rate revenue. The Government committed a continuing statutory subsidy of 50 cents to each dollar paid by councils and a support subsidy for those councils with specific disabilities ensuring that over-all both parties shared the costs throughout the State.

Perhaps it was fortunate that this Bill was considered in that heady financial time in the history of the State. Parliament may have thought twice about its annual commitment had the legislation been introduced following the 1987 share market crash, the later collapse of the State Bank and the 'downsizing' and privatisation policies which followed into the 1990s.

During the passage of the Bill the debate fell into two camps. The farmers based representation on the one hand and the new views of conservationists, whose argument was presented by the Hon Dianne Gaylor, the member for Newland. She

was the first woman in the 135-year history of weed control legislation to express a view to Parliament.

Indicative of the changing times was also the fact that the legislation was debated in the Legislative Council with a female President in the Chair. This difference was clearly brought home to the old school when the Hon Peter Dunn, in the heat of the debate sought support from 'Madam Chairman', which brought a quick and unexpected rebuke. "I'm sorry Madam Chairwomen" was Dunn's apology. Hansard stoically referred to, 'The Chairperson'.

Whether to 'bind the Crown' in the legislation was again debated as it had been in 1976. Dunn had received legal advice that when a clause says that an Act binds the Crown it absolutely binds all Ministers of the Crown, all Departments and all Statutory Authorities. Minister Mayes, in another place, had already given a more realistic interpretation. As Minister responsible for the Act he would ask his Ministerial colleagues to make a commitment to weed and vermin control but he would not be holding a legal responsibility over them.

The conservative debate, led by the Hon Graham Gunn, Member for Eyre, had little substance. He wanted assurance that when the two authorities were brought together the new body would not employ more than the sum of the two. In view of the fact that extended responsibilities outlined in the Bill had a quarantine element he queried the ability of a local government based board system to cope. He also wanted the Department of Environment and Planning officers to be excluded from all decision made in relation to the legislation, claiming they lacked knowledge of practical implications associated with farming.

Both Blacker and Baker, speaking in opposition queried the powers that the Bill proposed to be given to authorised officers in relation to entry and the confiscation of documents. It was claimed that officers associated with implementing the requirements of the Native Vegetation Management Act, invested with similar powers, had abused them.

In short the opposition revealed an underlying distrust of those seeking to use pest plant and vertebrate pest control for conservation purposes and not directly for the

interests of agricultural productivity. A new dimension was being added to the weed control legislation and they were suspicious.

Dianne Gaylor, member for Newland, on the other hand, openly encouraged the adoption of the legislation for its positive support for conservation claiming it would help protect national parks and praising those officers working in the parks for the work they were doing towards weed control. Although she didn't say it in so many words she reminded members of Parliament that the time had come to realise that the Bill covered other purposes, clearly stated in its title and not just agricultural protection..

Two amendments were defeated. The Democrat, Mike Elliott, attempted to expand the Commission membership to have a representative for each of five regions of the State and Peter Dunn wanted to restrict the title to read, 'Pest Animal and Plant Control Bill'.

Very minor changes were agreed to before the legislation was passed late in October 1986. While the legislation had extended weed control (and vermin control) to the total environment it had again failed, as the previous nine Acts had done, to stipulate what characteristics warranted a plant to be proclaimed as a weed and given legal attention or how they should be assessed before public money was spent on their control. That was still left to the broad judgement of technical officers, whose advice sometimes lacked substance because they were not backed by adequate research or field assessments resources.

CHAPTER XII –

SUMMARY

ONE HUNDRED AND FIFTY YEARS OF WEED LEGISLATION

When the Australian Agricultural Council formed the Australian Weeds Committee in 1966 some plant biologists of the day were arguing that noxious weed legislation had failed. They pointed to the fact that subsequent legislation over the years throughout the Commonwealth had consistently embraced more and more plant species as legal weeds. The answer to the problem was biological research and farm management. That stand against legislation was never accepted by the Committee but its very formation heralded an attempt to give weed control a scientific basis.

So what did stand-alone weed legislation, within 10 Acts of Parliament, achieve over nearly 150 years for South Australia? It evolved from unrealistic requirements for landowners to eradicate thistles into a legally, well funded, whole community program for the control of weeds, not only affecting agriculturalists but the whole environment including human health.

The legislation over these years graduated from police based punitive action to community programs through local government boards with a self help, self regulatory emphasis, adequately funded and with research inputs.

The legislation largely failed to remove weeds from proclaimed lists prescribed by Acts but it did help keep land productive and protect landowners and the environment. It set the foundations for national resource management involving weed control as a part of land sustainability. The long legislative road paved the way for weed control to be an integrated environmental care. A vision the author had held for nearly 30 years before it all became a reality with the proclamation of National Resource Management Act 2005.