

INSTITUTE OF NOXIOUS PLANTS OFFICERS INC.

CONFERENCE PROCEEDINGS 1987





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**INSTITUTE OF NOXIOUS PLANTS
OFFICERS INC.**

**1987
CONFERENCE PROCEEDINGS**

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27th — 29th APRIL

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by 138 delegates, including 87 Noxious Plants Officers, 19 Councillors and 9 Ministry of Agriculture and Fisheries Representatives. How many elected members are there here today? More and more of you. I hope the ratepayers are not going to complain too much about the money you spend here. I hope you are all staying at the Rutherford, sorry the Quality Inn. And Ministry of Ag. and Fish. Representatives, how many of you here, aha, the changing pattern of times is there for all to see and Graham said that it was pleasing to see again the strong representation of authority members who participate in the proceedings with enthusiasm. Well I can see that there is plenty there to enthuse about, although I'm not sure what because quite frankly it's problems all the way and so I look a little further up the Report in 1981 and David Butcher's not here, it's Ken Shirley and we're old mates, and actually David Butcher I know quite well and I was going to read to him what Graham Strickett reported to us in 1981. He said the address by Mr. Rob Talbot M.P. Parliamentary Under-Secretary for the Ministry of Agriculture and Fisheries, and that's what David's position is on the other side of the fence, in opening the Conference suggested that the emphasis on plant control should be viewed with sound planning and programmes covered financially by the input of the occupiers and not the reliance on Government subsidies. Now I was going to suggest to David, and I don't know what Ken's going to say, that that's probably what he's going to be saying today, not rely on subsidies and I just make this point, I've got a 10 acre block, I know a little bit about the costs of weed control and Graham's just reminded me that Marshmellow Weed, which I think ought to be a noxious plants, it's a terrible weed, especially if you're trying to get rid of any, he tells me that you can use Valpar and that's another story. I've got a property at home that's got a bit of railway line alongside it and 19 neighbours

and every year because, oh and then they gave it to the County Council and said look, if you look after it you can have it for a reserve, but I'd actually grown spuds on it, kept horses on it and one thing and another, and I said to the Council, I said if I keep looking after it and let the public have access to it, how about that and it will save you spending money and staff looking after it and they said fine, so I did and I had an old TA and a big rotary slasher and I used to keep it pretty tidy except around the edges, so I got a professional sprayer come along and he used the wrong stuff, he used Valpar, didn't tell you about that Graham did I, and I had 19 neighbours and nine of them weren't affected and the other ten were and I myself lost a 30 year old Oak tree, I lost my walnut tree, it was a terrible thing and he's telling me to use it and it'll get rid of Marshmellow weed. He said it won't matter the roots aren't too low and I'm just wondering about my neighbours who have all grown apples alongside me. This whole question of the use of sprays and I see you're handling it here Mr. President when you're talking about you're going to look at goats or something. Did you hear about the story about goats, as a matter of fact there's some very funny stories about goats but I want to tell you a very very funny one about goats in Nelson. You've all heard about the Arapawa Goats, anyone know about the Arapawa Goats. Do any of you know where Arapawa Island is, anyone know, very few. When you come in, if you don't fly in, from the North Island, you come across in the ferry and you go down Tory Channel on the right hand side as you come in that's Arapawa Island. They had some goats there, they've also got some modern Marino Sheep and these goats were suddenly thought by a lady to be special. I think Captain Cook was supposed to have landed them there and so they were veryspecial goats and they had particular genes well if you'd seen them, and over the years I've shot a lot of goats and they didn't look any different to me and I know because they came over here, they spent, the Ministry of Ag. and Fish. spent an awful lot of money, or was it Lands Department, and airlifted these goats over to the Lands Department Farm here at Ngawhatu to

keep them because of this public pressure, the people who say don't kill them off, this is before Cashmere was worth about \$90 per kilo, they only have .25 kilogram each but they pay \$2000 for the goats I don't understand that and then you know, before goats became valuable, as a potential use in looking after weeds. So they bought them over here and they were going to keep these special goats, these Arapawa Goats and they were going to determine whether they had these special genes and I know they did because they had a Vet who came over and took blood samples, I don't know what he was going to prove, but they did it very well, they organised it very well, they got these goats and they put the bucks aside and they had the does and they set them up for a breeding programme and they put them out there and a bit later they put these special bucks and they had them all classified to do the tests and would you believe it do you know what the gestation period for goats is? I'm sure some of you know, it's about the same as sheep, do you know what sheep are? No well I'll tell you what, it's 5 months, now 3 months later they started having kids and they were full term kids. Of course they were because the next door had plenty of ordinary goats, they'd hopped over the fence and what I'm trying to say to you, is that all the plans of, something like that anyway, you've got to be careful that you look far enough into the future and you have enough base to ensure that the work that you're doing and the work that is needed in plant control and weed control is so important to this country that it is balanced and I'm concerned to ensure that the Government and local authorities provide that balance to allow the work to go on in a changing world and with changing emphasis but the balance must be there and the message I would have said to Mr. Butcher, Ken would you convey it to him, that if he was going to talk about the fact, look go and do your own thing and make sure the user pays and forget about subsidies, I just say this, that subsidies have now become a dirty word and it's not really, depending on how you look at it and where it's needed. Everyone of us puts money into insurance and everyone of us uses some of our savings on capital development

and I say to you that the sort of money that was provided by way of Government Subsidies for you and your industry is the sort of classification that I in my life and in my view would put into insurance and I would hope that this situation never arises and the look at the control of weeds in this country that you all put on your own metal and there's no community responsibility and no insurance to make sure that the job continues to be done. Thank you very much.

OPENING ADDRESS

by R.M. Borlase, Chairman, Waimea County Council

Mr. President, Mr. Shirley, Your Worship the Mayor, distinguished guests, fellow Councillors, Ladies and Gentlemen.

On behalf of the Waimea County Council I am pleased to welcome delegates and guests to the Nelson Region for the 38th Annual Conference of the Noxious Plants Institute. The Nelson Region comprises Nelson City Council, Richmond and Motueka Borough Councils and Golden Bay and Waimea Counties.

The Waimea County covers a total area of 7544 square kilometres and bounds Marlborough County in the East along the Richmond Ranges, and Golden Bay and Buller Counties in the west. Tasman Bay forms the northern boundary and 180 Kilometres away Inangahua County forms the southern boundary. We also share a small boundary with the Amuri County,

The County is divided into nine Ridings with one member representing each Riding. The total population of the County as at the 1986 Census was 18,471 of which the majority live in the coastal area to the north. Within this area of the County there is a wide range of land uses, including:

1. Forestry - This industry plays an important part in the districts economy with over 75,000 hectares of exotic forest in State and private plantations all being within 50 - 70 kilometres of Nelson City.
2. Tobacco - This industry commenced in 1922 on the Waimea Plains and later developed around the Motueka and Riwaka area where the industry progressed rapidly under more favourable climatic conditions.
3. Hops became a speciality of the Motueka and Riwaka areas between the wars and all of New Zealand's requirements are supplied from this region. This is about 50% of the total crop produced with the balance being exported.

4. Pip Fruit - Between 1200 and 1600 hectares are planted in apple and pear trees with well over two million cartons being exported annually, making Nelson one of the world's top pip fruit suppliers.
5. Kiwifruit is a fast growing industry in the Waimea Plains, Motueka and Riwaka areas with the fruit being equal in quality to that grown in Te Puke.
6. Pastoral Farming still plays an important roll in the agricultural industry with diversification into other farming practices, being more apparent all the time.

The lesser populated southern areas of the County include the townships of Tapawera, Murchison and St Arnaud and include large areas of National Parks and State Forests. The farming in this area is mainly the traditional sheep, dairy and cattle farms with deer and goats becoming more prevalent all the time.

The County has a wide range of climatical conditions from the sun soaked beaches to the well tramped mountain ranges. This region often tops the sunshine hours for New Zealand with an annual average of 2400 sunshine hours in the coastal areas. The rainfall varies from 1000mm in this area to approximately double that in parts of the high country.

Today there are a number of new timber industries in the region, including the ultra modern Baigents timber and chip mill at Eves Valley which delegates will be visiting during the course of this Conference and the newly opened Medium Density Fibreboard plant at Richmond. Other industries in the region include:

1. Fish processing factories
2. The Apple and Pear Board's factory
3. The Freezing Works
4. Transport Firms
5. Vehicle Assembly
6. Box and case manufacturing

The Nelson Province is well known to the estimated one million visitors every year for its sunshine, its golden beaches, its fine mountains, rivers and lake scenery and its attractive farm, horticulture and orchard lands.

The County is involved in forestry with approximately 1700 hectares planted and another 35 hectares currently being prepared for planting. The income from the County's forests have played a significant part in keeping rates down for a number of years and it is hoped that the current poor returns from timber sales is only temporary.

I would now like to give you an outline of the Joint Noxious Plants Authority which consists of the Waimea County, Nelson City and the Motueka and Richmond Boroughs.

Because of the size of the Authority and the wide range of noxious plants throughout the area, four officers are employed full-time.

As a result of the wide ranging climatic conditions in the region we have one of the higher numbers of Class B gazetted plants. There are twelve target plants and 11 widespread plants and the Authority also assists the Ministry of Agriculture and Fisheries with their responsibility for the eradication of Class "A" plants.

The 400 to 500 target plant sites require at least an annual visit with the appropriate programming and recording as required by the Noxious Plants Council's policy.

Some of the more unusual "target plants" recorded in the area are:

1. Phragmites, which is confined to one site of about 10 square metres.
2. Tall Needle Grass of which there are two known sites covering approximately 35 hectares. Our Officers are currently involved in formulating a "Special Project" as part of the eradication programme.
3. White Edged Nightshade is known to exist in eleven sites covering a total area of approximately three hectares.

4. Pampas Grass (Jubata) is located in many sites and now that it has recently been gazetted it will involve considerable amount of the officers time. The Authority recognises the problem of Jubata and will be making every effort to ensure that it is brought under control. Kiwifruit growers are one of the many agricultural based industries severely affected by the seeds from the plant.

Because of the extensive areas of orchards and horticulture in the northern parts of the Authority the application of herbicides has to be done with extreme caution and in many cases is applied during the winter months which increases the costs quite dramatically.

Problems are also associated with noxious plants where forestry land borders onto farm land. As an example the N.Z. Forest Corporation has over 400 kilometres of boundary of which a large proportion bounds onto agricultural land. The clearance of the 10 metre margin along these boundaries requires a large output of both finance and labour by the forest owners as well as considerable officer time.

Special Projects have played a significant part in our officers work over the past two years with two major schemes being carried out. These are:

1. Clematis Vitalba eradication in conjunction with the Buller District Noxious Plants Authority. Approximately 77 hectares of native bush between Westport and Murchison was badly affected by Clematis Vitalba. However it was considered that this area could be controlled which would protect a valuable native resource. The project is now into its second year and the results have been excellent.
2. The other Special Project involves the eradication of Spartina from the Waimea Inlet. Because of the large area concerned and the sensitivity of such an area, the Catchment Board and Harbour Board have been involved with the project and a monitoring programme to assess the environmental impact of the spraying programme was carried out by the Cawthron Institute. This delayed the programme by 12 months,

however the results of the study will be used to assist with the control of Spartina in other parts of New Zealand. The first total spraying of the 16 hectares of Spartina in the Waimea Inlet was completed two or three weeks ago.

I would now like to mention the new direction of Noxious Plants Control. The priority placed on "target plants" involves our Officers for the majority of their time although our Authority still encourages farmers to continue with the control of widespread plants. Most farmers in the area still wish to control the gorse, broom and nodding thistle on their properties and this has involved considerable officer time ensuring that the farmers get the best value for their money. The downturn in the farming economy has been a restricting factor with this work.

Goats have become an important part in weed control, especially in the marginal hill country properties and it is very pleasing to see the control they can achieve in a relatively short period of time.

Biological Control is supported by the Authority and I am pleased to advise that we have agreed to contribute \$2000 per annum to the D.S.I.R. for a period of five years to assist with the distribution phase of the programme. Mr. President, I trust that this brief outline of the County's and the Authority's activities has given delegates to your Conference a better appreciation of the area as a whole and I wish you well in your deliberations over the next three days.

DE PONT AWARD

By Max Lloyd-Jones, Manager of Du Pont N.Z.

Many thanks Kevin for that warm welcome. I appreciate it, it's good to be back. This is the third year I've been here and I enjoy it every year that I'm invited along.

It's a good opportunity to be present and be part of the Official Opening of the Conference, although it is the pre-opening of the Conference.

Du Pont N.Z. welcomed the opportunity to be present to listen to your deliberations to encourage your Institute to improve your skills of your Members. I would like to start by, the last three days I've been actually attending a Conference in Rotorua, and interesting topic we were discussing, looking at New Zealand's future in the year 2000 and beyond. My first reaction was not another meeting but it worked out to be very constructive and I was extremely impressed by the results that we actually came through with late on Sunday, part of the reason for me being quite late down here and somewhat missing the Executive Dinner. But the meeting was looking at the past years exports and I was extremely encouraged to see that when they were tabled, they found that it wasn't the traditional or all we were hearing about, these value added products contributing so much to the economy but it was the so-called agriculture commodity group that really showed the greatest growth over the last year and that group really was led by wool, kiwi fruit and apples. I'm encouraged to see that there is light at the end of the tunnel. We hear so much about the gloom and doom in the economic and in particular, the agriculture sector and I find it particularly encouraging to see that there is some light and the export business is starting to turn up and also to find that apples leads one of the growth exports and us being here in the heart of apple country, I thought that was of particular interest. It is without doubt difficult times in the agriculture sector but we at Du Pont believe the future looks positive. We will continue to strive

to bring new products, technology to help contribute to the industry. No, unlike past years, I don't have a new product to announce to your particular business sector, but we do have a new product to announce to the orchardist of this area, we have a new product that will be coming on the market later this year, called Nustar, that we believe will benefit the orchardists and also help to grow their business. At the same time I would very much like to thank a lot of you for I know the enormous amount of work that you've done on helping us get Escort into the market place and we're extremely encouraged by the results that we're beginning to show with that product and our thanks goes out to you because I know a lot of you have done a lot of work on that particular product. Turning for a moment to the meeting that I have just come from, it was interesting that one of the participants was a fellow called Ernie Knowles, Ernie is the head of the Wool Board and he passed an interesting comment late on Saturday when we were talking about what the future of N.Z. is and I quote from precisely what Ernie says, I think this is particularly relevant as you enter your Conference and think it is something worthwhile bearing in mind as you go through the next few days. He actually said and I quote "if we are not all working on the solution then you are part of the problem". I think that is really worthwhile thinking about for a while. It really sort of gets to the heart as for so long we've talked about the them and the us. It longer is, we are it we're part of it. If you're not a contributor I think we've all got a role to play, everyone can make a contribution and I think that is particularly relevant as you enter a Conference. Enough of that. Now turning to the Du Pont Award. This is the Fifth Du Pont Award and I think it's timely to probably reflect over the past year and what our achievements have been. I guess we started out somewhat tentatively and I guess that is from both sides. I have now been associated with the Award or presented the Award for two years and I'm extremely encouraged by the quality of the work that is coming forward. Keith Crothers, his work in 1985, I was very proud to be associated with that document that was produced.

Ted Gard, I've been through your document that I just recently received and again I think that is an outstanding piece of work, very constructive to the Institute. I think it really adds to the learning. If this can be adopted throughout the industry, it has got to help. At the same time I would like to just focus on the Du Pont Award, I do have one concern that I would like to address at this stage because it is five years into it and my thought is that I would like to see the Award as constructed as it possibly can and that is that there are to a degree, relatively few entries. I would be encouraged if there were many more so over the next few days I would like you to come forward and please to myself or my colleagues, the Du Pont people attending the Conference I would like to hear your suggestions on what we can do to help you more because Yes, I think it comes back to that point, we'd like to be constructive and make it as beneficial to your Organisation as it possibly can so your suggestions please.

I think I'd like to now go ahead and announce the winner of the 1987 Award which I believe will not only benefit the Institute but the public in general, in helping to identify a problem noxious weed and we will soon see the Award winning presentation and I'm not going to go ahead and steal the thunder of the gentleman, and I would like to ask Jack Craw to come forward and accept the 1987 Du Pont Award.

DU PONT AWARD RECIPIENT 1987

Mr. Jack Crow

Thank You

Of course, firstly I would like to thank Du Pont for making the Award possible and I think Max has pretty well encapsulated in a nut shell. They have been more than co-operative in this matter and now they are actually getting to the stage where they are asking us to come forward to give Du Pont sessions on how they can help us, which I think really demonstrates how helpful they are. Of course, I would like to thank Du Pont for the Award, they are the ones that are paying for it and I would particularly like to thank the Selection Committee and David Parkes for his encouragement, I'd like to thank Brett Miller for his invaluable assistance and also my D.N.P.A. and County for giving me the time to do it.

Thank you.

I attended a Training Exercise on Aquatic Weeds at Ruakura. We learned a terrific amount particularly with regard to the class on aquatics limited distribution plants and a lot of information that I felt at the time should have been readily available to all NPO's really wasn't. We never had any of that information, particularly with regard to its botanical aspects. So after I came back, full of enthusiasm, I spoke to David Parkes about a special training project and David quickly educated me in this regard and said it was virtually impossible to make a film for \$400 it really could cost between \$5000 and \$10000 if you really want to do a good job. Anyway undismayed I thought I could always make it myself so a little bit later on a Cape Tulip infestation of ours at Whananaki North, which we thought was virtually at the eradication stage suddenly flared up again on another site about 100 metres away from what we thought was the perimeter and it really was quite a pretty little sight, it had about 50 or 60 plants in an area the size of a table and looked quite pretty and I thought this was a good chance, a lot of our members of our Branch and quite a lot of other NPO's had never seen Cape Tulip, although subsequently quite a few NPO's have discovered Cape Tulip and so I thought now was my chance. I'd forget the \$400 I'd use the MAF gear. I rang David and said well can we get the Noxious Plants Officers video gear, and he said yes but it would be a week or two getting there because someone else was using it and I said forget it, because Cape Tulip only flowers one day and then it's gone the next. I'll use the MAF gear and we got a MAF Field Officer who was trained in use of this gear and Brett Miller and I went out there with this bloke and we shot this film and it turned out to be diabolical. This was absolutely unsuitable so I rang David back and said what's the chances of getting Special Projects money. He had to make an instant decision and I'll always be grateful to David for this. He said yes, go ahead, I'll

take it on my shoulders and you can have the money on a verbal O.K. So I went ahead and I got a young cameraman from Whangarei who was quite good, and we went out there and shot this thing, scripted it up and I intended all the way through to use the Cape Tulip Management Plan and then we came back and after we'd done the sound with another young bloke who worked in an electrical shop and after we'd finished the video I had to sort of reflect that perhaps all along David had been right and you virtually can't make a very high quality video for \$400 but we paid the cameraman \$200 and paid the sound bloke \$200 and added the titles on a little home computer which unfortunately wasn't compatible with the video and so we got a lot of blips and bleeps and what not so we had to change the colours around until it was all black on white because that had less interference. However, we got ourselves a finished product which sticks pretty closely to the Management Plan and I guess we'd better run it so you can make up your own mind.

Cape Tulip, a pretty and innocent looking garden plant is one of the 37 species of the Genus *Homeria* in the Iris family. All *Homeria* species are natives of South Africa and Cape Tulip is so called because of its origins in Cape Province. However, the Cape Tulip is an extremely poisonous plants, all parts from the flower down to the corms are extremely toxic, whether fresh or dried, both to man and stock. In Australia, from where it is believed to have spread to New Zealand it has caused many stock deaths and has been declared a Noxious Plant since the 1890's. In New Zealand there has been one confirmed human fatality and probably stock losses. Back in the 1950's and 60's the then Department of Agriculture conducted an intensive eradication campaign which destroyed many smaller infestations. In 1982 the Noxious Plants Council declared Cape Tulip a Class A Noxious Plant because of its propensity to spread and toxicity. This declaration and the resultant publicity led to many new infestation sites being reported. In 1984 the Noxious Plants Council published its Cape Tulip Management Plan. This sets out the procedure to be followed by Noxious Plants Officers

and the Ministry of Agriculture and Fisheries Field Staff. The plant grows from an underground corm which may reach 25 mm in diameter and be found to a depth of 100 mm in the soil. Corms are spherical in shape and are covered by brown coloured fibres as are seen here. Each corm produces a single strap like leaf and an erect stem in the autumn. The leaf is shiny green, less so on its underside and generally arches over as it matures. Usually it is no longer than 900 mm. The erect stem terminates in the branched flower stalk which exhibits this characteristic zig zag shape and each branch may bear up to four flowers. The flower is the single most distinguishing feature of the plant. It is usually salmon pink like this one here, changing through yellow to yellow-green at the base but may occur in shades of orange, orange-yellow or yellow. Petals number 6 and the three stamens may just be distinguished in this close-up shot. A single plant may produce 40 flowers annually, although each flower lasts only for one day. Flowering begins around September and continues often until November. New corms are also being produced underground. As the flower wilts, the seed capsules develop below it. Here can be seen two capsules in different stages of growth. They are approximately 50 mm in length and split from the top releasing many small dark brown angular shaped seeds. In December the leaves and stems dry off and become detached from the old corms, they are free to blow away, often accumulating in gullies, causing heavier infestations in later seasons when new corms become self supporting at this stage. Corms may remain dormant in the soil and not produce parts for many years, consequently the eradication programme must be organised on a long term basis. Seed production is heavy. Up to 6000 seeds per season may be produced from a single plant. Control methods are laid out in the Cape Tulip Management Plan. All sprayed infestations should be fenced off to prevent animals from eating wilted plants. Here Glyphosate is being applied. 24 D also gives good control. An alternative herbicide is Hexazinone, here being applied to the soil. All aerial parts are being removed. This is useful for scattered plants as fencing is not needed.

DU PONT AWARD RECIPIENT

E.G. Gard

Introduction.

The 1986 Du Pont award was awarded to me in 1985 for a study to be made of Noxious Plants recording systems throughout N.Z., with a view to designing a composite system whereby DNPA's and Noxious Plants Officers could have a developed standardised workable manual record system which would also assist officers who transfer to other Authorities to immediately understand the systems in use.

The Noxious Plants Council in 1985 advised all District Authorities that by the 31 December, 1986, that they must have records and programmed action underway on all sites with "target plant" infestations. Also that District Authority records must be maintained in an easily retrievable form.

The Council also requires Authorities to forward an annual report to the Council through its Field Officers by the 30 April each year, such information to be derived from their record system.

The Noxious Plants Act 1978, and Council Policy makes District Authorities and their Officers accountable, and the sound programming of occupiers is what a Noxious Plants Officers job is all about. To do this, District Authorities and Noxious Plants Officers must ensure that they have records which are well maintained and retrievable. In June 1986 the Noxious Plants Council Field Officers were requested as part of their functions to organise and bring down a system for the programming and recording of "target" and "Hit" plants, so the recommendations embodied in this report have been modified to incorporate proposed requirements of the Field Officers rather than institute two separate systems.

On 11 June, 1986 I sent a letter to 93 District Authorities, together with a questionnaire (refer appendixes 1 and 2) to survey the type of recording systems that were being operated on, and as to whether they could be maintained and that the information was readily retrievable for

report purposes.

I am pleased to report that 87 Authorities completed and returned the survey questionnaire which was 93.5% of those survey's received, which was very encouraging. A number of the Officers made constructive comments but a lot of variance was noted in the different type of Card Systems that are in operation.

SURVEY FACTS

The data submitted on the survey questionnaire was compiled onto evaluation sheets (referred to later in the appendix) detailing all the positive and negative points, which were highlighted showing the areas of concern. On the positive side, the majority of Authorities did have some form of record system in operation, but I do voice concern that there were a number of Authorities who had little or no record system in place.

There were six Authorities who had no system in use at all, and there were a further six Authorities who did not return the questionnaire and I can only presume that they also have no record system in place. This then means that 12.9% of all District Authorities do not keep any form of records and this is a matter which will have to be addressed by the Councils Field Officers.

The facts of the survey are detailed as follows:

1. Type of Systems in Operation.

There are 9 computer based systems in use with 66 authorities using a variety of card index systems.

There are 17 Authorities using only diaries and reports and 6 Authorities who do not keep records at all.

2. Time Involved in Keeping Records

The survey was designed to determine the involvement of Noxious Plants Officers, DNPA Secretaries and other Staff in the keeping and updating of records. The biggest involvements is with the Noxious Plants Officers with 43.7% taking longer than 2 hours of involvement. The Secretaries of DNPA's and other staff to a very much lesser degree.

3. Record System usage:

Retrievable information is the key to a successful record system. Where 57.5% of Authorities surveyed maintained that their records were retrievable,

the balance being 42.5% were not able to retrieve from their records.

The use of maps in conjunction to the keeping of records, showed that 60.9% used maps with their records and 39.1% did not use maps.

The programming of target plants. The survey revealed that 78.2% of Authorities recorded their target plants and 21.8% did not programme target plants.

The questionnaire asked if other officers would readily understand and be able to operate the record system that was in operation. 82.8% replied that their system could be understood and 17.2% said that their system would not be understood.

The facts of the survey are summarised into North Island and South Island areas plus a total summary of all DNPA's. Refer to appendixes 3,4 and 5.

CONCLUSIONS DRAWN FROM SURVEY DATA RECEIVED:

- (a) An excellent response of 93.5% of the District Authorities surveyed, returned the questionnaire.
- (b) That over 80% of District Authorities have record systems in operation from basic card records up to fully computerised systems.
- (c) That records take time to keep and update and that in the main the biggest involvement is with the Noxious Plants Officers.
- (d) That only 57.5% of Authorities maintain that they can easily retrieve information from their records and 42.5% cannot is disturbing.
- (e) That 39.1% of Authorities do not use maps at all in conjunction with keeping their records.
- (f) That 21.8% of Authorities do not programme or record their target plants is disturbing.
- (g) That 17.2% of Authority records could not be understood by a newly appointed officer or officers who transferred is of concern.

RECOMMENDATIONS:

As I pointed out in the introduction, accountability is the name of the game. Noxious Plants Officers are required to report regularly to the District Authority, or in some cases through a controlling officer on all

progress made. To record such information, a record system must be in place and workable. Records form the base from which reports are derived and if sound records are not kept, then an authority is not carrying out its proper functions and is unable to report efficiently.

In arriving at my recommendations, which resulted from the information and examples received from the survey, plus suggestions from the Noxious Plants Councils Field Officers, I then tested the format and ideas with the members of the Wairarapa Branch of the Institute, which assisted me in bringing down the following recommended procedures to implement a practical and standard record system.

- (1) THAT a property or farm inspection report be instituted using Stratford DNPA report as an example.
- (2) THAT a standardised property programme form be implemented for target plants using the programme form designed by the Field Officers as an example.
- (3) THAT an analysis record card of target plants be instituted which will readily give information required.
- (4) THAT a standardised record card system for all properties be used, the example to which is referred to in appendix 12.

In explanation to my recommendations they are as follows:

- (1) The farm or property inspection report as used by the Stratford D.N.P.A. is printed in triplicate book form. The top copy is given or left with the occupier for his information (Refer to appendix 6)

The second copy which has additional sections for comment and recommendations is used by the Officer and or other staff to update the property record card. (Refer to appendix 7).

The third copy which is the same as the second remains in the book for the Officers field record. (Refer to appendix 8).

This form would act as a supplement of the Officers diary and could be altered to local needs.

- (2) As I mentioned early in my report, Noxious Plants

Council requires all target plants to be programmed. Therefore the programme form as designed by the Field Officers is recommended as a minimum standard. (Refer to appendix 9).

On the reverse side of the programme is a sketch grid map to detail noxious plant infestations. (Refer to Appendix 10). Many Authorities do have a more detailed multiple plant programme form in use.

- (3) To extract data from a manual card system can be a laborious task. To expedite data retrieval an analysis sheet has been designed incorporating basic details e.g. Occupiers name, site reference, area infested, area controlled, density code and date entered. This would show an ongoing history of infestation and control being undertaken. (Refer to appendix 11).
- (4) The Property Record card is self explanatory and is adapted from the Field Officers and many other card systems. The front of the card (Refer to appendix 12) details Property description, e.g. name of occupier, address etc. Plus noxious plants data as transcribed from inspections, reports and programmes. On the reverse side of the card (Refer to appendix 13) details of other plants and potential Class B status and general comments. Detailed also is the guide to the coding to property information. This coding information should be used in conjunction with all other forms such as property inspection, programmes etc.

An important suggested change has been made to the "Density Classification" with percentage of ground cover per hectare replacing number of plants per hectare.

This is a far more practical guide to determine the infestations of all noxious plants and would be readily understood by all users.

SUMMARY

Work planning is an essential part of efficient recording, and many officers and their Authorities have accomplished this to great effect.

It is recommended that the Noxious Plants Council adopt the format as detailed in this report as follows:

THAT property or farm inspection reports be implemented.

THAT a standardised property programme form be implemented.

THAT an analysis record card of target plants be implemented

THAT a standardised property record card be implemented.

IN CONCLUSION

I have tried to design a simple system which would be the most compatible for the users yet would embody the requirements of the Noxious Plants Council and hold Officers time servicing this system to a minimum with a view to the future of conversion of the system to computer based.

I would like to thank all Authorities and their Officers who contributed with their ideas and information. I would also like to thank Du Pont (New Zealand) Ltd without whose incentive the project would not have been possible. Finally I would like to thank my Authority who allowed me time to undertake the project.

CHANGES IN AGRICULTURE

B.G. Koller, Business Manager, M.A.F. Tech.

I am going to present this paper in three parts:

- (a) Changes of the past
- (b) Changes of the present.
- (c) Changes for the future.

1. We all realise that changes have always taken place and that change is a normal phenomenon. Pause for a moment to reflect on the changes (good and bad) that have helped develop you personally, into who and what you are today. The truth is for most of us, that it is not change alone that is the issue. It is the "ever increasing speed" of change. That takes a bit of keeping up with.

The truth also is, that there are at least as many positive changes as negative, and that all change presents new opportunities For me that's what keeps the adrenalin flowing.

It is important to acknowledge the large social impact of many changes that take place, but realistically I believe that all change manifest themselves sooner or later as Economic Changes.

In the past 50 years, since the Depression and the Second World War, N.Z. has operated until recently, in a protected economy, with a variety of subsidies, tariffs, and other measures to ensure that the economy moved the way successive Governments wanted. Amongst other things this led to a cost plus attitude within many of our agricultural commodities, services and indeed within ourselves. The changes that took place in this period certainly reflected that.

2. At present we are involved with changes taking place as a result of the "freeing up" of the economy. The removal of protective subsidies and tariffs and exposure to the realities of the international market places and competition. To summarise this present period, I would say that the cost plus mentality in scaling down, and there is a move to greater efficiencies. There is also a strong move to being market led, finding out what our customers want and how they see themselves benefitting from our products and services.

I am not going to get into any protracted discussions on whether the "speed" of the present changes are right or wrong, or whether there would have been less pain in rural communities if handled differently. I do believe though that the changes were necessary, and often if you don't do things quickly they either never happen or the results are so diluted as to be useless.

Your largest client group, and mine, are still the farmers and growers, but we must continually recognise the "whole industry" in a continuum from the "market place" internationally to the "producer" through "added value" to the "market place". There must be feed back at every stage to ensure continual, appropriate changes are taking place. Let's look at a few examples of the "changes in Agriculture at present".

(a) Pastoral farmers producing solely red meats, dairy products, and cereal grains, are having a tough time in an international market place showing a preference for white meats, fish, fresh fruit and vegetables. As we all know the pastoral producers main responses have been firstly to survive the downturn, consolidate their position by careful financial planning and now position themselves to take advantage of the merging, clearer market signals.

(b) At the same time we have seen apples and kiwifruit selling well, wool and particularly fine wool selling extremely well, fish selling well, bloodstock from the racing industry selling well, a venison and live deer industry starting to consolidate, and a good foundation now in place for a future goat industry based on meat, fibre and weed control.

(c) Talk about changes. "How many of you now know a whole lot more than 4 years ago, about goats and their place in farm management and weed control?"

It's quite a good idea reflecting on the changes that have taken place over the past few years.

Deer moving from noxious animal to highly valued animal.

Goats from noxious animal to high value animal. Opossums going the same way.

Beekeepers acknowledging noxious plants such as nodding thistles and gorse as important honey sources.

Gorse being acknowledged for the part it plays in land stabilisation, and as a nitrogen fixing coloniser.

You know if what is "noxious" can change that quickly, then perhaps your designation should be "Noxious Plants (temporary) Officer".

(d) There are some very interesting changes taking place in the Meat Industry at present. In fact this industry is more frequently seeing itself in the "food industry" now days.

The Chief executive of Challenge Meats was quoted recently in the "Meat Producer" magazine as saying ... "our goal is to create food products from 100% of the raw sheep meat".

"...The pork and poultry industries are examples of what we are trying to do."

"....we get people to help us, who understand us and are nationals in the markets we want to trade in"

"...who are we to tell those people what they should eat?"

To a greater or lesser degree many people now support the sentiments expressed.

Because further processing from larger leaner carcasses is more efficient, we are seeing lamb schedules more accurately reflecting demand. There are now substantial premiums paid by Companies to get what they want and when they want it.

M.A.F. Tech. is also contributing in many areas. Our exotic sheep programme for example will revolutionise the capability of producers to produce the larger leaner carcasses being demanded.

(e) In M.A.F. Tech. we are right in the thick of the action with change and opportunities everywhere.

From the 1 April 1987 there are 4 "businesses" in the Ministry of Agriculture and Fisheries, all very much market, and whole industry orientated. Taking the initiative we have re-organised into:

MAF Tech.	working in Science, Technology development, Business services and Policy.
MAF Qual.	working in Quality Management in all agricultural industries.
MAF Fish.	Working in fisheries management, research and development.
MAF Corp.	working to provide corporate services to the other three.

As National Business Manager of MAF Tech. I have a responsibility to ensure that Market Research is carried out, National products are identified, co-ordinated and marketed to achieve an optimal return to the investment.

The requirement of Government is for MAF Tech. to be earning 40% of its requirements by 1991. In 1986/87 figures this is approximately \$8 million, \$16 million and \$30 million over the next three years, which is the kind of challenge I enjoy. The most important lesson I continue to learn is:

"the need to change the "technology push" to a "client pull" approach. To move from describing "services available" to "benefits to customers" from these services and products. We are having to develop and build in the same order and discipline to our commercial affairs, that have characterised our technical and managerial affairs.

(3) Changes for the future evolve from the past, as long as feedback is specific, honest and acted upon.

I'm going to make a few predictions:

- (a) The speed of change in agriculture will not slow down.
- (b) There will be more flexibility built into all parts of the agricultural industry to allow new technologies to be adopted more quickly.
- (c) This will be in response to better International Market Research (short and medium term) better interpreted and more quickly passed through the chain to the appropriate people.

- (d) There will be a greater emphasis on the "whole industry" and how the appropriate parts participate.

There will be increased Industry planning and co-operation, with the present medium term time frame expanding from the present 6-9 months to 3-5 years.

- (e) There will be an increasing awareness and emphasis on client benefit rather than products and services available.

- (f) Agriculture in New Zealand will increasingly identify as part of the international food and fibre industries with the emphasis on quality and servicing of client needs.

PRESIDENT NELSON BRANCH FEDERATED FARMERS

Mr. Gary Thompson

Thank you Mr. Chairman, Bruce Koller, Delegates, Councillors and Invited guests.

Welcome to Nelson. I try and regally improve on Mr. Borlase's description of the area, the weather over the weekend is out of kilter, I confess that, but then again we can't do much about that. I thought I would just mention briefly to Conference, the makeup of the agricultural sector and the value of the produce and its relativity in the area. In dollar terms, horticulture is worth roughly \$133 million to the area, agriculture \$89 million, fishing \$113 million, that is mind you, Nelson is a processing port, and forestry \$21 million. So that's roughly how the area is made up and its components. The horticulture industry of course has blossomed and our kiwi fruit here normally is able to be picked and exported up to a fortnight earlier than say Te Puke. This is to do with the seasonal influences, the winter, it's a little bit colder here. The bricks levels rising a little earlier. My address, the Rural Prospective on Noxious Plants Control. I was just going to commence with a little bit of the national federation's policy and then move into a more local scene. I would like to mention that our federation, the national federation is very interested and wants to be involved in the current review of noxious plants and agricultural pest control activities as these affect agricultural operations, water management and flood control in particular. You've heard a lot about this, I'm just not sure now whether this, one seminar has been held and there is another one coming. We were aware that there was an interdepartmental working party expected to present a report to the Ministers in the near future, to be subsequently circulated, possibly with the input from the centre of resource management as a background paper to interested and particular participating pages in a seminar to be held towards the end of this month by the Ministry of the Environment. It seems over the past two decades

several attempts have been made unsuccessfully to bring together the two organisations involved with noxious plants and agricultural pest control but due to different organisational structures, funding responsibilities and requirements and vocational training needs, these things proved to be insurmountable, preventing integration of the two agencies with the common objection of better land use. But it seems that on this occasion the initiative for an amalgamation appears to have come from the newly formed Commission of the Environment, who appear to have taken a leading role in developments to implement broad government policies. The suggested integration of the Water and Soil Conservation activities administered by the Ministry of Works and Development will place additional demands on the task of balancing and reconciling conflicting interests. The advent and the progressive development of the Governments user pay policies will add sharper focus to the areas of public versus private landowner responsibility and management decisions for control of noxious plants and agricultural pests in this new environment. Now our federation is very interested and awaits the important task that is coming up with the consultations between these bodies. Our federation wants to ensure that its memberships interests are well represented and that a reasonable balance is struck. In Nelson we do not have a separate Agricultural Pest Destruction Board as such but our Senior Noxious Plants Officer, Mr. Eric Eden, whom you all know, oversees the requirements of this work commendably. And to farmers and ratepayers of the Waimea County Council this is acceptable as we by comparison with other Counties have a minimal pest problem. You may think that is quite strange from some of the areas where you have your independant Pest Destruction Boards but really we have a fairly charmed life in this area, a few rabbits, not a problem really, goats of course, they're out catching them with the helicopters etc. now and a big deer capture operation too, but by and large it is not a problem. But if these two functions were to be merged with the local Catchment Authority, Nelson farmers would be concerned that practical onsite work would be replaced with board room bureaucracy.

As Provincial President, I've recently visited most of my branches and in view of this Conference and my address to it, I specifically ask the question, do you think the Noxious Plants Authority performs a vital function in today's economic climate? The majority of my members confirmed the need for the continuance of the Noxious Plants Authority but with some pertinent provisos. 1. They consider that noxious plant control is a collective national problem and that in order to protect past investments made to noxious plants control central Government should maintain its existing funding levels, plus provide a commitment to an ongoing partnership with the Noxious Plants Authority, so ongoing programmes of research and development can be tested and evaluated.

2. My farmer members suggested or advocated that the authority improve its public relations capabilities, especially with regards to its new policy direction and that a comprehensive breakdown be released to occupiers as to their obligations in regarding this new policy, particularly the class A noxious plants, what is the extent of MAF's involvement, and where does the occupier fit in. Relating to target plants, surveillance plants, wide-spread plants and finally monitoring plants. There is an area there that quite a grey area that my members felt that extra or more public relations would be very valuable.

3. That in view of the accelerating rural financial crisis and I note that word, accelerating, interest rates are still rising, you might say wool is marketing quite well, agreed, as regards to mutton, lamb meats, meat value is no better now than what it was 12 months ago. There has been a marked improvement in the hides, Italy and Spain are buying and paying good money for the hides and that is maintaining good prices but actual meat value is still very low. That in view of the accelerating rural financial crisis and farmers being forced to reduce all discretionary spending, I have a copy here of our latest MAF monitoring, they monitor farms, a typical sheep and beef and typical dairy farms in the province here and the sheep and beef farm is in a position according

to M.A.F. that will be \$400 credit this year. The dairy farms started off with a \$2000 deficit and will end up with a \$5000 - \$10000 deficit, on the local dairy scene. Farmers have been forced to reduce all discretionary spending, fertilizer, fertilizer useage is down to half of what it was in the early 1980's, putting on 2 million tonne a year and now it's only 1 million tonne going on nationally. Fertilizer, weed and pest control, capital replacements and that increased finance be allocated for research and development and extension of your biological control programme. You are aware that in the last six years there has been a 100% increase in the price of spray chemicals, example 200 litre drum of Tordon is \$10,144 including GST and a 200 litre drum of 245 T is \$5,900 and they have as I said, doubled in value in the last six years.

4. That the new Access training programmes be involved and used to expand on the valuable work that was done under the PEP scheme, and that more research be directed towards new techniques and methods of achieving economies and efficiencies with regards spray control of noxious plants. This is highlighted by the excellent work done in Wanganui and Nelson with low volume spraying and that this type of research might be further refined and thereby reflect increased economies. That is a very valuable work that is being done and it entails programming with farmers/occupiers instead of putting on the initial heavy application of 245 T there is this 2 litre application put on over a 3 or 4 year period and it works out to a big saving and it is very commendably researched and practically with good practical results.

5. Members raised the question as to what was the current situation with these new Corporations that have recently emerged with regard to the noxious plants control, with the previous Forest Service having a network of expertise and staff available for weed control who were efficient and liaised regularly with the local noxious plants officers. If these personnel have been made redundant as the media suggests, farmers are anxious to know what if any provisions are in place for weed control and who will be performing the practical infield work.

As also farmers are concerned at the same situation applies concerning fire fighting with the new Corporations. They have all the equipment in the world but no fire fighting expertise or man power available. Delegates, today many farmers are desperate they've had large income cuts, and increased inflationary on-farm costs. The fortunate ones have reduced equity in their properties, others have nil equity, no buyers, no capital, nothing to buy a replacement home with, they face mortgagee sales. The Prime Minister two weeks ago said there were 5000 of them and possibly up to 10000. They face mortgagee sales, loss of years of efforts and investment, and the prospect of joining the doles queues. For these particular people noxious plant problems pale into insignificance compared with what they view as the noxious savage financial policies that have ruined them and their families future. What they can't come to grips with is, the apparent attitude of this present administration that the farming industry that has been built up successfully over 100 years and that suddenly the rug's pulled out from under him. They can't understand that the Government would have the mentality to think that farming is like an electric production line that you can turn it off or on at will. It doesn't work that way. In other words what I am saying is some occupiers will be under stress, and as your officers visit them, they may require extra consideration and time when you are discussing problem areas. Now if I remove my Federated Farmers hat I could tell Conference that I have received complaints from the rural Waimea County Council ratepayers complaining about the overgrown state of some County roadsides. To a casual observer it would be correct to assume that some farmers are not maintaining their property frontages as required from road centre line to the property boundary but this is 1987 and times have been changed. Consideration may be necessary for what on the surface may appear to be a conventional problems. Goat farmers whose properties are fronted by dusty gravel roads are protecting their roadside growth as a dust and grit deterrant to avoid contamination of their goat fibre. Pastoral farmers are not prepared to spray gorse within a safe distance of

1 sensitive horticultural crops that are here. Beekeepers and goat farmers are resisting biological control of noxious plants and I've seen goats, I've been on a tour of our western hills recently. We have a range that runs from the sea south, they call it Separation Point Granite, it's very steep and actually the local catchment authority have just proclaimed Section 34 on that area and one particular area there on the steep country we saw goats that were fenced on it, chewing down the weeds, cover that was on it and exposing it actually to run-off and its starting to cause problems for the road beneath. These are real problems that confront real people living and working in a real world. Finally, to your 140 trained noxious plants officers, whose responsibility it is to protect this eden set in the South Pacific from infestation from noxious plant contamination Federated Farmers wish you well and would encourage all of our officers to obtain their Certificate of Proficiency. Farmers do appreciate dedication and certainly in the current economic situation will listen attentively to scientific data and fact presented by credible officers.

Thank you for inviting me to your Conference and I wish you well and no doubt as you go on your tours, you will see some of our good horticultural land and our good pastoral land in close here on the Waimeas. It is true I can say this now, perhaps Nelson hasn't suffered to quite the same extent the ravages that have come apart in the areas that are further remote, I think it's to do with our climate, the long sea coastal strip that we have that goes right from Marlborough right round to Golden Bay, is very attractive for people who want to retire here, a lot of people from down south, a lot of Southland money comes to Nelson and people retire here, they don't want to cross the straits, so that sort of keeps the industry and it keeps the economic climate turning over a little bit, but there has been a big drop in that money that's coming I'm not saying that. Further south 40, 50, 60 miles south up in the real pastoral country there is a real decline in values and people, especially with the advent of the user pay policies farmers and rural people are going to find themselves more ad-

versely affected, e.g. if you take off the Government removed minimum prices of fuel, but you just wait until they remove the maximum price and just see how that affects people that are living long way away from the main distribution points. So with those few remarks, welcome to Nelson, enjoy your stay and the countryside, you'll find Nelson people very hospitable and all the best for your Conference.

COMMUNICATION

M. Turner

"Communication" - "Information or intelligence imparted by word or writing" - The Gresham English Dictionary.

"Communication" - (Noxious Plants Officer)

"One who or that which communicates" - The Gresham English Dictionary.

The following notes are a brief summary of parts of the Communication section of the Noxious Plants Officers' Training Manual and were used as an introduction to the 1987 Conference workshop sessions.

The Personal Approach - Human Relations in Action.

We, as Noxious Plants Officers, rely on the personal approach for the major part of our job, particularly with on farm and small group discussion. We each have our own way of dealing with farmers and their weed related problems but no matter how good your teaching aids or your knowledge of a particular subject is, your usefulness to the industry will be limited unless you are effective as a PERSON in communicating and dealing with people. HUMAN RELATIONS is simply our dealings with other people. Every time we come into contact with other people, without realising it we are putting into practice behaviour that has built up throughout our lives.

Described as "human behaviour patterns" they form the basis of human relations and therefore help us to understand our fellow man effectively. (Refer Vol. 3 N.P.O. Technical Manual).

IMPORTANCE OF HUMAN RELATIONS: Man is a social being: he likes the company of others; he likes to get on well with people; he likes to be liked. Noxious Plants Officers depend on people, decision-making people (employing body), departmental field officers, those involved in the technology of agriculture and related industries and most importantly the occupiers of land (hereafter referred to as farmers). Obviously the better we get on with these people the better we do our job.

FIRST IMPRESSIONS: When you first meet someone you normally experience some strong impressions: some people you feel you would like, others you would prefer to avoid. Remember first impressions are important and can be lasting, the warmth of your personality will influence this to a great extent, smile and give a good strong handshake.

GENUINE INTEREST: Show real interest in those seeking advice; be relaxed in yourself and use questions to understand the other person's point of view, then listen. A major failing of many of us is that we concentrate on what we're thinking and want to say instead of listening.

ACCEPTANCE: Accept the other person for what he is and show respect; do not criticise, but rather analyse the situation and communicate accordingly.

NAMES: Remembering names is important to us; don't be afraid to ask the speaker to repeat his name, then you repeat it to ensure that you have got it right. Use the name during conversation.

IMPORTANCE OF OTHER PERSONS: Make the other person feel important by talking about his/her interests (not your own) and asking for elaboration on ideas put, but above all be your natural self.

GIVING ADVICE: We must realise that we all see situations in different ways; the way a farmer sees a situation may be entirely different to our own view. The skill in the personal approach is being able to get an understanding of how the farmer sees his problem/situation, his views. We can approach giving advice in a number of ways.

A. THE "EXPERT", you know it all, and all you have to do is tell him.

B. The "NOT SURE", you won't commit yourself, you often give advice, but give a distinct impression of being not sure of yourself.

C. THE PARTICIPATIVE APPROACH, where your advice is based on the farmer's ideas and your own. This involves the skills of interviewing, listening, questioning, and the ability to develop a sound rapport with farmers. Personal contact and the participative approach has its advantages in that it allows an expression of feelings; it provides an opportunity for the farmer and the N.P.O.

to gauge performance and behaviour and make corrections if necessary and ask for clarification to seek the relevance of what is being said in order to satisfy his own situation. In conversation there are techniques you can use to assist in the participative approach:

1. QUESTIONS: Use with care and avoid loaded questions that may put the farmer on the defensive. Put questions in such a way to use HOW, WHAT, WHY, WHEN and WHERE.
2. LISTEN carefully and show a genuine interest.
3. COMMENTING - be positive in your comments and support them with facts.
4. ARGUMENT - use with care; some farmers respond to this approach where you each state your case. Always leave yourself with an out.
5. RECOGNISE FEELINGS/EMOTIONS listen carefully and be wary of the non-verbal communication (body language) and don't be afraid to mention that you are aware of some emotional fact that may be affecting his acceptance of happenings.

Above all, accept his point of view.

TELEPHONE COMMUNICATION: Remember whenever you use your business telephone you are acting as the representative of your employer. Without fail - always identify yourself, speak clearly, be polite and brief.

The main use of the telephone should be to make arrangements for on site inspections where verbal communication skills are put into practice.

WRITTEN COMMUNICATION requires simple straightforward sentences that can be read and understood with ease. Writing efficiently means writing so that your reader - understands you - has no doubts - can't get the wrong message.

Plan your writing, never use cliches and check your writing for incomplete sentences, run on sentences, jargon, spelling errors and ambiguity. Don't just write - communicate.

(Efficient and effective writing is covered in T.C.I. assignments Communicative English Units B2 and 3).

ACCIDENT AND COST CONTROL

A.D. McPherson, Senior Safety Consultant

Key safety matters - "Accident and Cost Control" were raised and discussed in open forum.

Subjects ranged from:

Reporting and Recording Accidents

Personal Protective Equipment

Care and Maintenance of Hand Tools

Aircraft Wire Strikes

Safe Storage of Chemicals

Prevention of Back injuries

Availability of Poisonous Plant Information.

Correct Riding Methods for Farm Bikes.

Following this, the group was divided into two syndicates. Two problems on personal protective equipment were given to each group for suitable solutions. The reporting back proved most interesting. The following questions were asked:

1. Why do people have a reluctance to use or wear protective equipment?
 2. How would you encourage staff to wear protective equipment?
 3. Will one type of safety equipment be satisfactory for all people?
 4. What is important when buying protective equipment?
- "Follow-up" action to be taken as a result of an important point raised.

It was brought to the group's attention, that assistance had been sought from the National Poisons and Hazardous Chemicals Information Centre, Dunedin. A child had eaten some plant part and guidance was requested on what action to take. The Centre could not assist with information on possible poisonous plants, flowers etc.

I am to attempt to try and arrange an Accident Compensation involvement, and promotion in this potentially hazardous area of accidental poisoning of children.

ADDRESS BY ELECTED MEMBER

Mr. Grant Moffat

It is a great honour to be here speaking to you this morning and I hope what I have to say stimulates some thought, if not some controversy, I don't intend to be controversial. In many ways the control of noxious plants is the cinderella function of local government so often I've come across situations or heard from officers of situations where noxious plants officers themselves have found it very hard to achieve the necessary skills and will find themselves then rendered virtually impotent in their fight to control target plants by elected people who simply cannot handle their newly acquired authority and then think that by virtue of their election have suddenly acquired an expertise in all things. When we as elected people demand professionalism from our officers we in turn are duty bound to reciprocate with an impeccable and uncompromisingly high standard from ourselves. I think that probably everybody in this room could relate some horror story where that principle has been forgotten or overlooked. I am privileged as Murray said to be the Deputy Chairman of the Wellington District Noxious Plants Authority which takes in 8 local government authorities, 7 of which are municipalities and 1 of which is a county. The size of our operation allows us to employ four full time officers, each of whom is well qualified and very dedicated to their work. We are as a consequence an approved training authority, and we have that status by virtue of the qualifications and dedication. We in the Wellington D.N.P.A. believe that our Authority enjoys a high level of success for a number of reasons, not the least of which is the calibre of our staff. Successful District Noxious Plants Authorities have I believe in common, four characteristics, it says four in my notes, I thought of another one this morning. First of all the one I've already emphasised and that is the dedicated and well trained staff. The second one is an organisational structure that gives the maximum opportunity for initia-

tive, and that can accommodate innovations, thirdly a direct reporting system so that there is a free flow of information. A flow from the officers in the field to the decision makers around the table, diluted data is always inadequate and all officers in the field should be able to report directly to the management committees. The fourth criteria is adequate records and here I am echoing Ted Gard's paper yesterday and I don't think there can be enough emphasis on that. The fifth one that I thought of and should have thought of when I composed this paper was an adequate and full district programme. Record systems that are ad hoc or poorly organised and not kept up to date are not useful and in fact can be distinctly counter-productive.

Staff Training. D.N.P.A.'s that are not large enough to sustain a training programme are simply too small to be effective, but the absence of an officer on a training course can't be accommodated by the authority then I think that the conclusion you must draw is obvious. The structure of that authority must be all wrong, because it is not capable of doing its job. To be effective a DNPA must be able to employ at least one inspector in the field full time. Where an officers time is being shared with other duties, that officer is being prevented from making a full commitment to his calling. DNPA's that are too small to achieve these basic standards should be looking to sharing their functions with their neighbouring authorities either by way of formal arrangement to share the cost and benefits in employing an extra full time staff or as we have done amalgamating our resources so that the noxious plants control is administered on a district or sub-regional scale.

Organisation. Only the officers in the field are in a position to determine their priorities, I might add here that yesterday I took part in a discussion on time sharing and I went through a rather awkward period with that discussion in so far as the people who were drawing the conclusions were effectively writing for me this part of my speech, so I think there are some people in the room who at least are going to agree with me. The ability or lack of ability to set priorities and to work

to them is a matter of training and a matter of professional expertise. I can't emphasis that enough. We have over the years met elected people not I'm glad to say in my own authority, but I have come across them in some of the other DNPA's nearby who are vigorously opposed to training programmes, who have been quite patironic in criticising officers for pursuing excellence in training and at the time I wondered why. The only conclusion I can draw is that they receive a potential loss of control. The more expertise the officer becomes, the more that officer is able to control his or her own work programme and work priorities. I emphasise again it is not the role of the DNPA to take control of priorities of that nature or the day to day running of an officers time. The Management committee of a DNPA should then be concerned with two primary considerations, firstly the provision of resources, basically voting the funds, and secondly to monitor the effectiveness of the operation to ensure that the ratepayer and whoever else is paying the bills, that they are getting value for money in this essential area of work.

Reporting. There is no way that a DNPA can adequately conduct its affairs or measure its effectiveness of the officers in the field if they do not or cannot report their activities, express their thoughts on difficulties encountered and to suggest innovations to improve their operation and I mean direct difficulties. Part of the officers training is effective reporting. DNPA's that prevent direct reporting should look very carefully at the motivation behind that. Inevitably I believe that somebody's little empire is threatened and that is not an adequate reason to stifle the free flow of information. I always believe that to dilute information is really interpreted information and sometimes quite often and this came out in the discussion I took part in yesterday, quite often an officer has something to say, some nuance about his experience in the field and it gets interpreted along the way so that the people around the Council table don't get the message they get somebody else's version of that message and consequently nothing is done to satisfy either the innovative idea or the complaint of inadequacy.

I am very keen on the use of computers in record keeping and I enjoyed immensely reading before we came here Ted Gard's paper and I enjoyed immensely hearing him talk about it yesterday, but I do take it one step further and as Ted told us that the system that he was putting before you yesterday was in fact a very giant step towards computerisation. You know computers are cheap, when you compare the total costs of any local government operation, the cost of a PC computer which is all you need, even for an operation as large as ours, it's all we need, is very cheap. Suitable software is available, I understand that there are at least four programmes around and I would give a plug here for ours, you can get it quite cheaply from us and it is a very very good and effective programme. There is no reason why every DNPA should not have a computerised record. If the authority is too small to acquire one, then that's another reason why that authority should co-ordinate and co-operate with the neighbouring authorities. An adequate computerised record system has several important characters. Each property is listed and every operation on that property is recorded together with whatever financial transactions are involved, the history of each property then can be called up simply by pressing the appropriate buttons. You don't have to go through work diaries or the third copies of field manuals or whatever, you simply have to ask the computer and let it do the searching for you. Data can be called up in a number of pools and for a number of purposes, e.g. the computer can give the current distribution of its targeted plant and if you've got a good programme it will map it for you. It can monitor the cost of an operation over a whole district, it can summarise the activities and prepare updates on the accounts in terms of the budgetary estimates and that is quite a headache for field officers with this estimates preparing part of the operation. A good computer programme will effectively do it for you. You know officers who are bogged down with paper work are really not being effective and I think that you would all agree with that. A computerised

system frees the field staff to do what they're trained to do and it makes the whole operation so much more effective. One of the ironies of noxious plants control in the field of local government is that many rural councillors, perhaps I am unkind saying many, but I can identify some, have no real commitment to the effective administration of their DNPA but prefer to play petty politics and counter-productive politics at that with this essential function. I am always sad when I come across cases of that because this is a terribly important role, not only for your own local authority, but for the whole country. Our pastures and our croplands are not natural ecosystems and I think that every officer in the field knows that. If they're left to their own resources and biological influences are given free play they'll revert through a series of changes back to the virgin forests that perhaps were there when man first stepped on these islands. Energy has to be constantly expended to prevent nature from reclaiming our productive farmlands. Now that's expensive and it is our duty to ensure that we as elected and professional people, dedicated to protecting New Zealand's productive land by the control of noxious plants expend that energy and the funds applied effectively and efficiently. While I admire the work of the M.A.F. in the administration of the Noxious Plants Act, 1978, I have to be perfectly frank, less than impressed with the Department's response to the evergrowing impacts of Clematis Vitalba on our forests. One Senior elected person who thankfully is not in this hall today, offended me a couple of Conferences ago by writing the whole deal off by saying that Clematis Vitalba is just another way of clearing farmland. The resistance of some Department officers and I regret to say some members of the Noxious Plants Council in declaring this plant a Class B noxious plant for the purposes of control ignores or plays down the fact, and it is an inescapable fact that many hectares of irreplaceable forest are lost annually. These are forests that control erosion, provide scenic amenities and are in some cases potentially productive. Our officers in my own authority have devised a method of controlling the plant using the herbicide Escort. Now I admit that

it did depend to some extent on the PEP scheme which regrettably is no longer with us but we could send trained people into the field to locate, identify, to cut the stems of this plant, paint the ends with Escort with very very good results and I've been in the fields and I must say with much discomfort, with one of my officers and have been very impressed with the impact that our people have made in this field. Now this has been reported, it's not news. MAF has known about this for a couple of years but they've not responded in any positive way to our request to have it declared Class B Noxious Plant in our areas. We get fudged off with stories about current research and so on and as it happens year after year, hectare after hectare, of land is lost to this plant. Those of you who are familiar with the centre of the North Island must be as distressed as I am at this particular scourging. Even with this information then, the resistance to effectively combatting the spread of Clematis Vitalba seems to me to be unabated. I was interested to hear reference in David Butcher's speech yesterday, given by Mr. Shirley, to the fact that ambiguities in the noxious plants Act were causing difficulties and I think one of the ambiguities is to the detriment of the MAF field officers and I have to emphasise that I am not really picking on them directly. I recommend to the officers of this Institute then that they work towards an amendment to the Noxious Plants Act or alternatively to alternative legislation to transfer the responsibility for the noxious plants on non-agricultural land to more appropriate departments, and I am suggesting the Department of Conservation on the one hand the Forestry Corporation on the other. This would provide a more logical and more effective mechanism to control such plants as Clematis Vitalba, Pampus Grass and certain other unwelcome plants that cause problem infestations in forestry areas as opposed to farm land. In saying this I am not denegrating MAF officers but rather proposing a means by which they can be freed to get on with their primary task and that is the protection of productive farmlands without the distraction of dealing with non-productive agricultural lands.

RESTRUCTURING OF NOXIOUS PLANTS OFFICERS TRAINING

Mr. W. Burns

Before I deal with the topic of the restructuring proposals for Noxious Plants Officers Training I want to make a couple of general points that I think are necessary because of the nature of this particular audience and also as a result of the uncertainty, the atmosphere of uncertainty which is prevailing around the future of noxious plants administration. Taking the latter first, changes are going to take place. We are well aware of that we talked about it yesterday. Because nobody knows precisely what the situation is going to be even at the end of this year, let alone next year, generally our reaction towards planning is to chuck our hands up in horror and say well you know we can't plan we don't know what the environment is going to be like. In so far as my Committee is concerned since we are concerned with planning training, we reject that approach. What we have done is to anticipate even the worse possible scenario and have based the plans that we have put into place on a couple of major assumptions and these are quite simple. Whatever the future may hold in terms of administration, operations, subsidies, policies, practices, and the like, local authorities will still have the need to exert some control over some noxious plants. Secondly, if you agree with that first assumption, people will be needed to perform that function. The greater the level of skills, knowledge, performance of those people, the more effective they will be, in fact the tighter the economic circumstances the more important it is to have people who are effective in their operations. So if you put these two assumptions together, we've recognised the need to have a system in place which will have the ability to stand virtually alone, one which draws its major strength from within the sector and one which basically funds itself. Our new system will meet these criteria. The strategic plan which we've defined has anticipated the changing environment and we are geared to achieve within that changing environment whatever it may be. The pace of change may fool us a bit but I

still believe that we can cope very effectively while the sector itself adjusts to whatever circumstances emerge. So that's the first general statement. Secondly, the nature of this audience presents me with a few problems. I would have liked particularly to have dealt with the present and the future but because of the mix of people that are here, perhaps only one third of the people at the meeting have enough basic understanding of what has happened over the last 10 or 12 years to understand or to follow the logic of the changes that we are presenting to you. For the rest of you I think it will be asking a little bit too much of you and your tolerance to let me simply build on a foundation which doesn't exist. So by way of introducing the topic of restructuring, it's appropriate to look back over the events that have occurred over the last 12 - 15 years. To the few of us that have been involved, the latest move we are making is simply another step forward in the evolution of a relevant planning system, a system which is appropriate to the continuing needs of your specific industry group. A brief background of what has happened and why it has happened may provide the rest of you with some perspective. We go right back to the review of noxious weeds administrations, the Fitzharris Report of 1974, that committee saw a new role for noxious weeds inspectors, because predominant among the recommendations which then formed the basis of the Act of which we are talking, was a requirement for Noxious Plants Officers to be trained to a level acceptable to the Noxious Plants Council. It was a requirement to have a formal training programme. For the first time in New Zealand history there was a need to look at the task which was expected of officers to identify the needs, the skills and the knowledge that would be required if these professional people are to do their job properly. Between the publication of the Fitzharris Report and the introduction of the Noxious Plants Act a small interim ad hoc steering committee was established to set up the necessary systems which would allow the Act to operate once it was past the structures, legalities and so on of the Act. This Committee in its wisdom appointed a small group of people who were given the

task of putting together a training programme for noxious plants officers which would meet the statutory requirement which was going to be a mandate of the Council. There is that Statutory Requirement. But more than that, looking at it from a positive sense, the training would give the officers involved the skills which would help them to make an impact in their chosen field. This ad hoc group went to work in a pretty logical and systematic way, its approach was to the task set a precedent which we have diligently followed since those early days and the basic philosophy is that the industry itself should decide what was required, and how it should be done. I think that's a pretty important factor, speaking for yourself is always the best approach for getting things right. If somebody else speaks for you the chances are you get it wrong. So you have to identify, say what you need, and then carry it through. The other important thing I think is that the environment in which you are operating one must always be conscious of that environment, you may get things that are right today and wrong tomorrow because the environment changes. In some ways its a bit like the young noxious plants officer from Wellington who got married and shot away over the sea to Nelson for his holiday and after not being able to find the Rutherford, which seemed to have disappeared from Nelson, he stayed at the Quality Inn with his new bride and being a very sensitive young man, as most noxious plants officers are, having done his communication theory and all this sort of thing, they were a bit embarrassed about being newly weds and they wanted to hide this fact from people at large so the first morning after the first night of the honeymoon, as you know most marriages are fairly hectic as they lead up to the day of the marriage and the day itself there is a lot of stress, they were ambling down to breakfast in the Collingwood Room and the young chap said to his bride, we don't want to be too embarrassed in front of everybody so what we'll do is pretend we know each other so very very well and I'll order the breakfast and you just relax. The waitress came along and sat them down at the table and she said can I get you the menu and he said no it doesn't matter thank you

we've been married quite a long time and we know what each other wants, my wife would like orange juice, stewed fruit and cornflakes, toast, marmalade and coffee, as for me I'll have tomato juice, doesn't matter about cereal, bacon, eggs, sausage and tomato and toast and honey and I would like a cup of tea and she said goodness gracious me are you honeymooners and he said well how on earth do you know that. She said well everybody else here is having lunch, so you might have it right in the wrong place or you might have it wrong in the right place. But anyway with this basic philosophy of the industry itself deciding what's required and how it should be done then the noxious plants officers themselves are the major resource and the committee merely augmented this resource with specialists who were able to harness and direct the activities into the system which grew and intensified as the operation or the pattern of operations emerged. One of the more contentious actions of the Noxious Plants Council in its early days was its negotiations for the retention of a small proportion of the Government Subsidy which Local Authorities were paid to support the operation of their Noxious Plants Officers. This was earmarked to finance the training programme and it put the system on an independant basis and gave it a bit of freedom so that it could implement the plans that it was drawing up for itself. The ready availability of these funds made it possible for the Committee to appoints its own Training Officer, David Parkes and the availability of this qualified professional enabled the emerging system to develop from a part time chore for many of us to an organised ongoing and effective operation. Above all, it gave the Committee a valuable point of contact with the Noxious Plants Officers Group as a whole, through the activities of this training. The essential feed back that had been so capably and willingly provided by your Institutes Executive Officers in those early days the people like the Neville Daniels and the Fred Marsh's of this world and subsequently by Graham Strickett and now Kevin Worsley. The work that people like Kevin Doig did in the early days of drawing up your training manual. The dedication of M.A.F.'s

Robin Plummer, who was I think instrumental in setting the show on the right road way back in the beginning. The negotiations that have been carried through with T.C.I. with course material, all these things came together into an intimate association which David was able to develop with the sections of your Institute with the individual noxious plants officers and equally importantly I think with the elected members and executives of the local authorities. Our principle objective in setting up a training programme was to develop a relevant practical training programme which would allow NPO's to meet the Council's requirements. We have achieved that objective. But this would not have been possible were it not for the continued input from the officers themselves, and what I regard as a remarkable level of support that has been received from the local authorities from the D.N.P.A.'s. Now all this time the training committee was a bit of an orphan. It had the Noxious Plants Council as one parent, now hang on a minute, if you've only got one parent it doesn't make you an orphan does it, it makes you something else, anyhow at that stage I guess it became legitimate when we gained another parent, the Local Government Training Board. Thus began the formal association with the Local Government. Now doubtless you're aware of the Local Government Training Board and doubtless you're aware of the existence of the Noxious Plants Training Committee but you might be interested, no, I'll tell you, you'd be interested who these people are on the Noxious Plants Training Committee. Now you'll note that, look particularly at the titles rather than the people, although there are some fine upstanding people, but on the organisations that they represent I think are pretty important anyway. Right through from the Noxious Plants Council, Local Government Training Board, your own people, local body representatives and the Union representative. Now what sort of a coverage could be achieved without that sort of representation. That's the sort of people that are standing together for you. And that began our association with the Local Government Training Board, the formal body responsible for training Local Body Officers. Under this umbrella the Training Committee can I think properly

claim to have achieved the objective that it set itself when it was first established. A Certificate of Proficiency has been accepted as a basic qualification for Noxious Plants Officers which is recognised by the Council and a pleasing number of Noxious Plants Officers have successfully obtained the qualification. Some of the older guys still need a bit of a tickle along, but the young guys are certainly coming through well. What of the future? Two main considerations temper the consideration of the Training Committee. Firstly, training is an ongoing function. Not only is it necessary to maintain an acceptable standard for entrance into the industry, but the content of training must consistently meet the changing needs of the dynamic sector. Needs must change as the farming environment and the political environment continues to change. It's important that these new requirements are recognised, analysed and translated into relevant training activities. Secondly, in view of the uncertainties that are surrounding the particular sector, desirably training should be self sustaining. The operation should, if at all possible, be able to stand alone, with a minimum of external assistance. Training will be required for as long as people are needed to do the specific job and the need will be independent of the way in which the sector is organised. If the Noxious Plants Council is removed, if the Local Government Training Board changes its functions or its attitude, as far as I'm concerned, it doesn't matter. Because we can cope. For as long as Local Authorities can see the need to keep some control on their Noxious Plants situations, Noxious Plants Officers will be required. So that's where we see our focus at present and this is the environment which we have anticipated in taking the next forward step in our training programme. Our objective at the moment provides self-sustaining, cost effective, relevant training for Noxious Plants Officers. The steps that we've proposed and are now in the process of implementing will enable us to move down the track in the desired direction, fine tuning as we see the need and it is only fine tuning from here on in. Again the

over riding principle that we've adopted reproduces our original concept, leave training in the hands of those who are using the skills and knowledge within the sector itself. The more we can do for ourselves, the greater will be the prospect of our achieving self-sustainment. By managing training on an arbitrary sectoral basis we're moving much of the administration out to where the action is. We've already decentralised training of new noxious plants officers by the establishment of training officers, that's worked and it will work even better as we move control of the operation closer to those officers.

This is how the system looked until the end of this last year. Notice the twin parents up the top, the Training Committee in the middle and then we have that delightful beehive structure that looks like a surrealistic architectural monstrosity, with each training officer was his own training manager, and 27 were reporting to David Parkes who then came back through to the Committee. So we decided we'd modify that a wee bit and get the very much simpler organisation with the Noxious Plants Council Field Officers feeding information to the regional trainers helping them with the assessment of performance and the 24/26 trainers as and when required reporting back through the Training Manager. These five people will, as their title implies, manage the training that is required in the region, they are not supervisors, they have an executive function and they will actually be undertaking the organisation of management. They are the doers, not just the lookers oners. They will be in the front line of the day to day operations that are carried out but more than that they will be responsible for ensuring that the work of the Training Officers is maintained at an acceptable standard. Over time we are going to achieve a better uniform level of performance among trainers within the sectors and ultimately develop I think comparability between sectors. So let's have a look at what they look like. (Five Training Managers). In Rodney we've got Jeff Ward, the boy soprano, his group up in the Northern part of North Auckland. Incidentally, these people have been selected on the basis of their ability as Trainers

and as Managers. It is not a function of the local authority it is a responsibility of which we have identified these people as being the appropriate people to manage our programme. Then we have the venerable Chairman, and his happy lot from Geyserland, and then down at the bottom I really don't want to put this one on because after Mr. Moffat's address this morning you'll all start to think that these guys in Wellington are just something that is absolutely superb, Fred Marsh and his happy band of computer experts.

Sorry, for those of you who can't understand the island piece by piece, that's what it looks like. So you've got three sectors there, the sectors there are logically, I guess grouped on a geographical basis, but that's how it is set up. I think the important thing is as I said the remarkable amount of co-operation that we have had from the Noxious Plants Authorities who have agreed to let their people act as Training Managers. At the top end there is a little place called Waimea which I think is somewhere near Nelson and down the bottom Bob Blick and his happy bands in Waimate, giving you the whole of the South Island which many of you thought was Invercargill, so that's how, those are the people who are going to make this whole outfit work. One of the more significant and in fact the most significant innovation in any local government training indeed in this area is the Committee's proposal to recompense Local Authorities for the services which their officers are providing. This arrangement recognises the fact that the time spent by Training Managers and Training Officers reduces their effectiveness to their own employers. It seemed appropriate to us that this contribution should be acknowledged and that Authorities receive some recompense for the opportunity cost of their services. We are ready to roll the new system. The Training Managers have met and have modified my Committee's Draft Terms of Reference for themselves and for their Training Officers. They've identified the needs of a system of recording which is simple and workable and they've designed that system and are ready to put that into operation. Special training needs will be identified and resources mobilised by the Training Managers

as and when required. The need for specific training to respond to emerging situations will be continuously monitored and met where necessary by modifications to the existing system when these new requirements are identified by your people, by yourselves, by the Noxious Plants Council, by the Local Government Training Board. The new concept has been developed as a result of the perception of your own Training Officers at their 1986 Trainers Meeting. All that we've done as the Training Committee is to pick up the concept, shake it around and develop it into a workable format and facilitate its implementation. You want to do it your way, we believe that your way is the right way and we want you to get on with the job, hence the little song that you'll probably hear again before you depart. As at the beginning of this whole training saga, you individually and collectively, have the future of the Training system in your own hands, now you're even more closely involved than you were then and the future of the system and the effectiveness of the operation is depending more and more on the way individual sections within your organisation, within your industry, perform. It's going to depend on the Training Managers and the way in which they manage their training programmes and their people and the way they co-ordinate the activities of their Trainers. It's going to depend on the Training Officers, on the way they perform, on their quest for higher standards, and the way in which they achieve more uniform standards of performance. It's going to depend on the employing authority, the way they accept the principle that improving the skills and knowledge of their employees can only result in greater efficiency and more cost effectiveness. It's going to depend on the employing authorities to the extent to which they use selection criteria in appointing NPO's which are giving up the sort of raw material that we can develop into effective and competent performers. Above all it depends upon the ordinary Noxious Plants Officer, the way in which they support the system, not only in the training of new entrants but the way they seize opportunities to continue to develop themselves as professionally competent, motivated performers, dedicated to their task. And two

final words, a special word to those Authorities who have gone along with our Training concepts and made their own Officers available as Trainers and Managers. Success depends on the way you continue to provide that support for us. Much of the credit for successful training in fact must be contributed to your ready acceptance of the roles that we have asked of you. Finally, to Noxious Plants Officers. You have got the goodwill of the Local Government Training Board, you've got the support of the Noxious Plants Council, you have from us the assurance of continued assistance when needed by the Training Committee, you have to earn continued support of your employers. That's the individual local authorities. I think that the performance of local authorities to date indicates that you have got their support in principle, but you want more than that and what you have to do, what you want is respect and encouragement from them and the way you are going to get this is to demonstrate that what you are doing makes you more effective, and as a result of your efforts you are giving your employer, better value for the ratepayer's dollar. That's the challenge, your challenge as I see it, now get out and do it.

NOXIOUS PLANTS COUNCIL

Mr. D. McNab

Thank you Mr. Chairman and could I thank the President for allowing me to change the format slightly this year. We did this once before if you recall in Napier and we had the whole of Council up before you so that you could meet them and they could be then familiar to you but in this particular year of course we under some political pressure, political change, which takes some acceptance in the short term as well as perhaps in the longer term and it is pretty important I think on this occasion to allow the people who, Noxious Plants Officers, the same opportunity to perhaps put those sort of questions that they personally feel are very important to Council. We may not be able to provide the answer today, but at least we can in the next months make representations on your behalf to retain the best things of what we've got and that's really part of the theme of my short address to you this morning. Now could I just briefly go along the table and introduce those members of Council who are here. Gentlemen the remarks that I have put together this morning in fact reflect some of the conditions of the day which you people are facing and I have asked these Council members to join with me in this session. We would like to give your members an opportunity to present their views and questions to Councils and as you know the elected members of local government who are present at this Conference also will join with us this afternoon. We recognise that your primary concern will be for your job security, career prospects as Noxious Plants Officers in light of Government's views on the future of weed and pest administration. May I firstly tell you the Noxious Plants Council will continue to carry out their statutory obligation as described under the Act, until such time as amending legislation put something else in its place. We shall continue to meet less frequently than previously, the M.A.F. sub-committee under John Hedley has Council's authority to convene and attend to immediate and urgent considerations between the main Council meeting dates. Their deliberations and

decisions must be in accordance with Noxious Plants Council policy and is approved, questioned or amended at the next Council meeting. In practice their work has been satisfactory, these matters are not unduly delayed, answers are provided as promptly as possible. Any major policy is considered by Council alone. I have made that point to emphasise the actual sequence of responsibility. All elected members of Council intend to preserve the very important principles for their representation on Council, farmers interests, local government experience over many years as an employing authority, your own representative on behalf of the Institute, the Government nominees, Forestry, Land Corporation and M.A.F. one should acknowledge that they have yet to come to grips with their range of responsibilities in this period of change. We in the Noxious Plants Council are not aware of any curtailment in funding for the next year. We can only assume that the money required to honour the commitments already entered into in good faith by Council on behalf of Government, will be honoured. May I again remind you that our funding comes in the main from both agriculture. Therefore unless specifically directed by Government, the status quo would remain. Council met yesterday to deal with the usual agenda and perhaps some of the decisions may be of particular interest to you. Pampus Grass Jubata. Council are aware that some DNPA's are finding the battles of infestation much more extensive than was previously believed to have been the case. If any Officer has strong reasons to believe that effective control is posing an unreasonable and impractical problem he should contact the Council with the facts as is established procedure for all weeds where a classification review is proposed. Forestry have made the N.Z. Noxious weed potential of some species of pampus grass very clear. People have suddenly become aware of its quite frightening potential to spread and to invade good land with commercial potential. The M.A.F. or Forestry will identify all material, free of charge if some need of this service is required. Peter Franks will cover the matter of standardisation of forms and a recording system as Mr. Ted Gard outlined to you in his presentation yesterday and I understand part of

that anticipated question could well be also covered by the Field Officers. May I also remind N.P.O's and D.N.P.A.'s that Council will undertake an annual review of part time officers whose appointments are allowed under its discretion. It is Council's view that the charges made for mileages incurred by Officers in the course of their duties should be reviewed by management and where savings can be effected, steps taken to put this in place. Ladies and Gentlemen, the purpose of my meeting with you today is simply to reiterate to you our commitment for Council, by Council and Council Members that a continuation of the Noxious Plants Act. I was very fortunate to be involved in it from 1972 and I've been part of the other structures that have taken place from 1976 onwards and I firmly believe that the dedication and the commitment of people who are interested and committed to the work of the total N.Z. environment is much too valuable to have thrust into the political arena. It is something that is quite beyond that. In my view it requires people to commit the whole of their working existence and life to this concept and part of your training is to give you a career opportunity that makes that commitment substantial. The Local Government people are skilled and have a long experience of management and employment of these sorts of people. It seems to me quite unreal that we should depart from the very valued principles of looking at weeds where they are, attending to them where they are, with people skilled and dedicated in knowledgeable in the pursuits that they have chosen as a career. Therefore my total commitment to the Noxious Plants Act, the powers and the principles and the policies which it enacts are total and complete and I will defend that concept because I believe it to be right and I believe it to be very worthwhile. So the other members of Council which we have here today may also like to express commitment but my involvement is one where the Minister has to make an appointment for a period of time, my second period was terminated about 12 months ago and the Minister wrote and asked me if I would continue in the meantime so I'm here I suppose until some other political change may

eventuate. Because it's political I think its probably opportune also that I at least compliment the previous Minister of Agriculture, Mr. Duncan McIntyre, who saw value in this concept which came from a meeting of enquiry from the previous Minister of Agriculture, Mr. Doug Carter and which Mr. McIntyre accepted in 1975 as being something which his Government and through his ministry might effectively pursue, and all those years in which it took to in fact put in place the sort of structures which you see today, I believe are owed in a very major part to his foresight and to his commitment to it, to the very valued assistance that he gave but more than all that he was able to allow people to develop these sorts of things without undue government influence and that has been particularly valuable. I know today it has been a hard act to follow W. Burns. Willis has been around this concept for the same length of time that I have but we've kept him around because we value his work and we also value his stories that he tells. If it wasn't for that commitment I don't think we would probably have him here today. But Willis, thank you very much for a splendid presentation and I know the elected people this afternoon are going to have lots of questions on that particular matter. But these sorts of people that come through all sorts of ways through the system, representing all sorts of people within Government, outside Government, we recognise as having a very valuable contribution to make. Again Gentlemen, I think now that I would like to turn the meeting over to questions Mr. Chairman and if anybody has a question to any particular member of Council please feel free to do so. The Council meetings that we have today are quite different now that we have our Field Officers and Myra Hampton here as well. We use both these people and Myra to give us advice which Council values. We find that their contribution is very real. They are able to make that contribution in a free and informal meeting infiguration and we, I think, get the very best value under those circumstances.

Thank you Mr. Chairman.

REPORT OF NOXIOUS PLANTS COUNCIL FIELD OFFICER

G.J. Strickett

My topic today is on special projects and I will address it in five parts, these are:

- (a) Past administration
- (b) Summary of project 1986/87
- (c) Future Projects
- (d) Funding
- (e) Reporting

But first of all let me qualify what we are speaking of when we refer to "Special Projects" and to what it may apply.

The objectives of the scheme are specific and apply to three operations these are:

- (a) Eradication programmes
- (b) Education and or publicity projects
- (c) Research and trial work.

It does not include "Training Special Projects" which is administered by the "Training Committee" (Noxious Plants) for the NPO's development as an Officer.

The Past

To summarise the system, projects were mostly initiated in the field and the Noxious Plants Council received for approval applications for DNPA's direct, or by and with the support of regional committees. For eradication projects such as gorse at Lake Summer Hurunui, Darwins Barberry in Tuapeka.

Projects were also received for Education and Publicity with a small number for research work. Examples would be the nodding thistle pamphlet for Paparua and I believe that other North Island authorities individually did a similar thing. The purchase of slide projector for Lake, DNPA and on the research aspect wild thyme in Strathallan.

Some projects have been very successful in reaching the prescribed objective but unfortunately in hindsight it would appear projects were considered for the day and

tomorrow it will look after itself and not thought through completely. Consequently, I believe many have fallen short of success.

Funding of past projects has been varied in the cost sharing, between NPC and the local input. I for one and as many others have expressed this has not always reflected the priority needed in a desirable programme for the plant. This may have contributed to the inconsistencies of success in the field and administratively.

Be as it may projects have been continuing and in the 1986/87 year no less than thirty six were implemented.

Summary of Projects 1986/87

Plants which have been subject to funding by Council for eradication include parrots feather, Pennisetum macrorum Manchurian wild rice, Nassella, Noogora Bur, Entire Marshwort, Water Poppy, Nodding Thistle, Chilean Needle grass, Goats Rue, Spiny Broom, Exotic Trees, Chinese Pennisetum, Mercer Grass, Clematis Vitalba, Spartina, Sea Aster, Tall Needlegrass, Coltsfoot, Egeria, Darwins Barberry, Sweet Briar, Barberry, Bur Daisy.

Also funds have been allocated for: Chilean Needle Grass Pamphlet, Aquatic Weeds Poster, Biological Control Programme Publicity material for Silver Peaks publicity photos and research to nassella and old mans beard.

The total allocation was \$520,000 with most being expended. Of course, fifteen I believe have been initiated by Council, to the specification of the new policy and directions in future projects.

Future Projects

Special projects of the future to meet today's direction in plant protection.

Apart from Council's policy of receiving applications of projects from DNPA's for eradication of plants it has published in the circular 1986/87 the new project policy.

The initiative for projects will not always come from DNPA's but will namely be from Council itself with the deliberate allocating of special project funds to plants on the list of Class "B" target plants. The Council has identified a number of plants with the intent of eradica-

tion from New Zealand or in some cases from discrete areas within New Zealand. These projects will commit a well co-ordinated programme of both local and national resources to achieve this aim.

Those of you who have been already involved in the recent development of such projects such as "sea aster" in Marlborough will be aware the planning and implementation of the programmes add a further dimension to previous projects. This will be in the additional steps which are to be taken to prevent further seeding or propagation of the plants. More frequent visits to the sites for inspections and treatments at that time to enhance the control will occur.

The Council will be determined that once a project is underway it will meet its objective. Sites of these plants are now being recorded in a form of national coverage and as old sites that have been forgotten, lost in the changes of NPO's who haven't had records of the infestations, sites that were believed to have been eradicated and are now active and of course new sites detected will be inspected with the information on the infestation recorded to bring the coverage up to date in an ongoing and continuing system.

The implementation of the work in the programme may be by one of the following methods or a combination of the same or by any other means by other people as may from time to time be defined necessary.

(a) NPO application.

(b) Occupier application

(c) Contractor or agent application

In all situations the NPO will be required to have an overview of the programme.

The cost sharing basis will continue as it is considered desirable and ensures the local participation is given for the success of the project.

Recent projects started under this policy have had the local contribution in way of NPO's wages and travel which is not funded by Government subsidy on the officers employment expenses. Plus any input of labour and machinery used for the programme by local government, contractor or the occupier.

The full cost of herbicides used is provided by Council from its special project budget. In deciding on future cost sharing all aspects will be considered and judgement made on the merits to the project.

The Field Officers accompanied by the NPO's have been visiting the sites recently of the plants listed for two important reasons.

1. To ensure the information submitted and recorded is accurate, up to date and reflects the true situation of the infestation.
2. To glean any further information that may have been overlooked which would assist or perhaps hinder any future project of eradications.

Personally as my responsibility to the scheme I will have to be satisfied I have a true picture of the infestations, a projection of a programme and I can with confidence advise Council they will have the full support and co-operation of the DNPA, Noxious Plants Officers and occupiers before I will be in a position to recommend the initiations of an eradication programme.

If this was not to happen other ways and means would have to be investigated.

From this I am sure you have assessed that the success of any future project will not be left to chance but be a predetermined aim with systematic applications of objectives.

NPO's will not be alone and carry the can so to speak, but will have frequent visits and inspections of the sites by a Field Officer who ultimately will ensure the project is applied to meet its objective.

History has demonstrated that almost anyone can start a project and make a big hole in an infestation but it takes a certain persistence, ruthless determination and dedication to the cause by those responsible if the last plant is to be eradicated.

Funding

We are at present and if not more so than before reliant on the generosity of Government and the Ministry of Agriculture to provide an allocation to fund the special project scheme.

Because of this it is important to appreciate that any appropriation is for the financial year and that year only. Any approval for funding a project by Council is conditional to the year of approval only.

Let me stress that all claims made by DNPA's must be submitted to a Regional Office of the Ministry in such a time so that the Office has time to:

(a) Assess the validity of the claim; and

(b) To make payment in time for it to be on the treasury runner for that year.

Don't expect to take three months to prepare the claim and then ask the Ministry to process it in five minutes. The continuation of funds cannot be guaranteed but if we work to the criteria and generate more positive gains in the eradication of some plants it will hopefully reflect an honest use of central Government money which after all said and done is the taxpayers, being you and me.

Reporting

Reporting each year of operations is a condition of a project and such a report should be submitted to Council by 30 April.

These reports are to be meaningful and reflect the attainment of objectives and any pertinent aspect which assisted the programme and was not the considered normal. It could also be noted any aspect which hinderd the programme such as weather or poor co-operation of occupier. Field Officers have a work objective in submitting to Council an annual report on special projects and I have developed a format I use to assist me which is not to be confused with the DNPA report to Council.

In conclusion I would say the NPO who has the opportunity to participate in the new policy of special projects should find a lot of job satisfaction in constructive programmes of eradication.

NATIONAL POISONS CENTRE

Dr. W. Temple

Thanks to the Executive for inviting me today. I wasn't sure I was going to get here or not, it was a rather tight connection in Wellington, jumping off one plane and having to go from Dunedin to Wellington and back to Nelson, however, it worked out quite well. What I want to do today is talk about the functions of the Poisons Centre, how it operates and then go onto some of the poisonings that we experience in the area of herbicides which will be hopefully of relevance to your Organisation. The Poisons Information Centre and Hazardous Chemical Information Centre is located in Dunedin, the Poisons side of the operation commenced in 1964, Prof. Garth McQueen was the first Director, and in 1979 Hazardous Chemical Information Centre joined it, primarily as a result of the 1973 Parnell incidence in Auckland where a ship with some copper defoliant was leaking put into Auckland Harbour and some drums of leaking defoliant were offloaded in Parnell and that caused a state of civil emergency and there was one or two things that came out of that, that hazardous substances technical liaison committees be set up in each major centre and also an information centre on hazardous chemicals be formed and that was the origin of the hazardous chemical centre. We can be found in most telephone directories, Dunedin Hospital is where we operate a 24 hour service, 740-999. It is as I say a 24 hour operation but to explain it more fully, all calls come into Dunedin Hospital and during the hours of 9 - 5 are transferred across to the Otago University Medical School where our main office is where we prepare all the files and during outside office hours are handled by Accident and Emergency Staff in the Centre and so calls will be taken by either physicians or senior nurses, and during the day would be handled by either physicians or nurses or toxicologists like myself. We are about 50% computerised already but the centre is still operating from an old manual file, this was obtained in 1964 from an Insurance Company. It is a rotary index which contains something like 30,000 -

40,000 synonyms, alphabetically sequenced A - Z where you look up the name of the compound be it a medicine or an agricultural compound or a plant, whatever the enquiry is about. It gives an alphanumeric sequence and we then go to these filing cabinets to look up the hard copy. There are something like 12 - 15,000 data sheets that we have in the Centre for those 30 - 40,000 synonyms. e.g. Diazanone, organic phosphate insecticide has something like 40 - 60 synonyms, trade names that it is known in in this country. So they lead down to these data sheets. What we've decided to do with computerisation is we are using the Health Department's IBM mainframe system throughout the country and there is a mainframe system in Auckland and in Christchurch. At the moment we are linked into the Christchurch centre but I understand that data may be transferred to the Auckland centre and so anybody with a terminal into the Health Department system that will be hospitals, accident and emergency centres, and probably the Fire Service, will have access immediately to our poisons and hazardous chemical data base. As I say, at the moment we are nearly half complete, we hope to have it either finished by the end of the year or certainly by the end of next year, depending on funding, because we are rather short of data entry operators to put all the data in. It also has to be checked but when this is finished as I say District Health Officers and Hospitals will have access to data immediately so that the Poisons Information as far as somebody for example, a child being poisoned goes to the hospital, the doctors at A. & E. can access the computer straight away without having to come through and call us up in Dunedin because the system will be available on line throughout the country. Health Department District Officers of course will have other things that they want to use apart from poisoning, there will be hazardous chemical situations, transport of hazardous chemicals, storage, environmental situations where they go to a spill and they want to know what's happening when it's spilled in a water course, what sort of environmental toxicity if any that we have. So all this data will be available on line and the Fire Service obviously has a special responsibility in the area of

hazardous chemicals. I don't expect you to read it at the back or even at the front perhaps, but it's just a typical datasheet, hard copy datasheet, set out in this case for Diazanon, which tells the Fire Service exposure hazards and the suggested management in fire and spill situations and these are only suggested procedures which are to assist the people on the spot who are the experts, the Hazardous Substances Technical Committees which are established in the major centres. So that when they get out there they can get information readily from our system and probably what will happen in the future is the Health Department, Health Protection Officers will access the data from the terminals in their offices and take the information onsite or the Fire Service may indeed be able to access it themselves. One of our IBM terminals, the thing on the right is the controller, which is hooked into Christchurch and then we've got an old colour terminal. We don't have this gear anymore but this is what we first got about a year or so ago. We're using a bit of advertising for IBM. We're using an IBM software package, called Systems Storage and Information Retrieval and we have something like 15 paragraphs in our database which give us data on obvious poisoning, the signs and symptoms if somebody's poisoned, the clinical management that is appropriate, and this is set up primarily for the Fire Service. These are action codes that the Fire Service may want to know about, e.g. this is a code which is developed by the British Fire Service in London and it is an action code which tells the Fire Service what to do in the event of a spill or a fire with the substance. It is the National Fire Prevention Association code that deals with health, reactivity, inflammability which the Fire Service also know about and then there is the Inter-maritime Dangerous Goods Code, United Nations Hazard Class, United Nations Numbers and Chemical abstract registry numbers. These are all unique identifiers for various chemicals and as I say also tell the Fire Service some sort of action code so these were developed for them and there is provision for putting all sorts of other codes and other information as people require it. So there's an example you've seen

petrol tankers with large signs like this, this is one for molten phosphorus as it turns out 2WE, an action code for the Fire Service, UN No. 2447 and a Dangerous Goods sign, so we can tap in 2447 into our computer and come up with this data sheet for molten phosphorus which will give us more specialist information. So these labels are becoming much more common place on large bulk transporters and smaller packages. I mentioned before some of the other specialist data are aquatic toxicity ratings, especially for spills and things like herbicides into water courses, we have limited data on this but we are putting more and more data on and we can add with specialist groups we can add information if they require it. Also we have things like mutagenicity data, carcinogenicity and teratogenicity. These things are something that you are probably all starting to read about and heard about more latterly certainly carcinogens, you will have heard of more so but there is a lot more information coming through and a lot more subtle effects of pesticides in general, which is in this area. Right, what I want to do now is start talking about some cases and things and also some problems as we see them. This kind of thing, labels coming off is one of our biggest problems. Of course when somebody is poisoned and there is only a fragment of the label we often don't know what we are dealing with and we have to deal with cases symptomatically and supportively as a patient progresses through the poisoning. The computer is quite useful in that we can use it to search endings of words and beginnings of words, right and left hand truncations which can give us an indication, possibly we can put in other things like it may be a pesticide as well to help us identify but without a label we are shooting in the dark very much. These are enquiries to the Centre in 1983 and they certainly reflect the situation as far as percentages go where we have increased our numbers of poisoning enquiries quite substantially with something like 3000 in 1983 and I guess we're up to about 4,500 to 5000 at the moment. But the biggest category are prescription medicines as one might expect and we have about a third of our enquiries are regarding prescription medicines and obviously children

feature quite highly in that area. Household commodities is the second biggest category, 752 in this case and children something like 562 in 1983 and only 131 adults, so children are more frequently poisoned by household commodities than anything else, although the nasty come from prescription medicines. In the area that you people work with, agricultural chemicals, we have a total of 505 so it's the third biggest category after prescription medicines and household commodities and the ratio was 243 adults, 172 children, quite a lot of age unknown and 35 animals. The animals are mainly dogs ingesting things like Daylon, the new generation anti-coagulant, which has an enormous half-life in the body, so it stays around for 6 months that we can detect it. There is a ready antidote of course as you may be aware, Vitamin K but we are getting a lot of poisonings with things like that and also slug baits for animals. Children it's generally people being careless and leaving things around. Adults it is occupational problems which we'll see a few as we move through the slides. The biggest problem is always here. Nobody bothers to read the label, or very few people that have been poisoned with us have ever read the label. Children, the smaller they are, can't read the label anyway so you can't expect them to adhere to it. It's adults carelessness that usually poisons children and when we had a case I was reading on the plane on the way up occurred several years ago in one of our Annual Reports, a chap mixing a carbonate insecticide under the blades of a helicopter and of course it blew up in his face and it was rather unusual I suppose but a silly thing to do. All the warning labels and precautions, if people read the labels there isn't really any problem and that's where nearly all of our problems occur. The manufacturers are required by stringent regulations under the Toxic Substances Regulations to put all the warning labels etc. but if people won't read them well, things will happen. If it says for example that you need full protective clothing and breathing apparatus then it's got to be worn. There's no point in not wearing it because poisoning will ensue. There are obviously as you are aware three ways of poisons entering the body, by inhalation, in

the case of sprays etc, inhaling spray drifts, smoking, through the skin, it can be ingested with a cup of tea or smoke etc. and inhaled. Hand to mouth contact, all the sort of things one shouldn't do in handling poisons. It's all on the label. It's probably one of the routes that's most unrecognised by people is through the skin, particularly organic-phosphorus insecticides. Now I'll go through this for those that can't read it. This is absorption of a compound called Parathion which is an organo-phosphate insecticide from various parts of the body. Now, in forearm we've designated a figure of 1 for the absorption and we're comparing the others with it. The palm of your hand would be 1.3 times as much can be absorbed through the palm of the hand, 2.1 times through the abdomen, 2.4 through the back of the hand, 3.7 through the scalp, 4.2 through the forehead, 5.4 through the ear canal, 7.4 through the axilla, that's under your armpits and 11.8 through your scrotum. Dermal absorption is not very well appreciated and these things can get through the skin very readily. Now this poor individual apart from looking hungover, which indeed he was, you will also notice some red dye stuff over him and I'll just digress for a minute to explain how we got this photograph. About 2 or 3 years ago, we had a letter to the Centre which was from a physician who said that her patient had come in and said that his wife had noticed that his semen was coloured pink, a fairly astute observation we thought for a start, however, the physician also said that, this is not the same person I must say, the patient was a forestry worker who was spraying a lot of herbicide using the pink spray guide, I won't mention the name which one, you may well know, there are several in fact around and he had obviously got covered in it and I've just been explaining how things are readily absorbed through the skin, this obviously went through the skin and actually coloured his semen pink and she was obviously worried was there a problem, this physician and apart from laughing at the letter for a start which was rather humorous, we looked into the literature and indeed found that the dye stuff itself was mutagenic. Now I talked about them before well a

mutagen is obviously something that will obviously mutate shall we just say cells in the body, without going too deeply into it, which may in fact never cause any problems at all but some mutagens are also carsinogens and so we were particularly worried that there may be problems in reproduction etc. And also we don't know about the effects of cancer so there's very limited information so we replied that O.K. we didn't know a lot but we would look into it so we got hold of some rodamine which is the chemical which is contained in this rodamine B pink spray guide and we did some studies on rats and indeed found that it went into the testes very quickly and we could measure it and we did some mutagenicity testing and found that there was some sign of mutagenicity that we could detect and as yet we haven't gone much further we want to look at some reproductive studies. We don't think it's perhaps too bad but we certainly want to have a full screen of it. Now this individual here occurred some two years after this. This is a result of a stag party where this poor gentleman looking a bit washed out was covered from head to toe in red spray guide by his compatriats at the party and after much methanol and swarfega that was the end result. We got hold of some of his urine etc. which indeed was coloured pink and in fact it coloured his urine for about six days afterwards and he was due to get married 2 or 3 days after that. So we more or less had to advise him obviously about having a family and things like that straight away. It certainly clears the body within about a week or so but we don't know about harmful effects. But the main thing is if you are wearing protective clothing, things like that and washing your hands, there shouldn't be any problem. These are the sort of things that happen. We also had a small child ingested some chemical about a month or two back but we got a urine sample and couldn't see any so they may not of taken much. We get a lot of calls from obviously worried parents thinking children have ingested all sorts of compounds but indeed most of them they've only had a taste or nothing really happened. I want to talk briefly about Paraquat and some of the

interesting new developments with it. It has a rather nasty reputation which I think is undeserved, in the sense that it's peoples stupidity that usually results in deaths from paraquat, it's not paraquat's fault to say, in fact paraquat is an extremely good herbicide. I occasionally am asked to dispose of certain amounts of paraquat and I just take it home and use it on the garden. I think its good. It hasn't killed my children or dogs or anything like that yet so perhaps because I know how to handle it and look after it and read the precautions on the label. That's what paraquat looks like as a chemical. Now this is generally how people die from paraquat poisoning. They put it in something like a coke bottle, looks like coke, and its not only a stupid thing to do but it is also illegal under the Toxic Substances Regulations and the Food Regulations, where it is illegal to put non-beverages in beverage bottles so that when I went down to the gas station a couple of weeks back and saw somebody handing out free windscreen washer solution in coke bottles I was a wee bit annoyed but they just told me to bugger off. So I had a chat to the boys down at the Health Department who went and sorted them out. There have been probably 30, maybe more deaths in New Zealand over the last 10 - 15 years and most of them have been through people ingesting out of beverage bottles, beer bottles, coke bottles, things like that. There was one physican that died drinking it out of a Vermouth bottle. So it can happen. Now that's given Paraquat a bad reputation. What sort of things happen with it. O.K. after initial burning in the mouth there is usually a symptomless period of 2 or 3 days. Now there's obviously people who have taken it as a means of suicide because they read about deaths in the paper which is fine and then 2 or 3 days later when they're lying in intensive care unit they say to the physicians well look, I really don't want to die, you know it was just to draw attention to the fact that I was feeling a bit lonely or something like that. Nothing we can do about it. Because it starts attacking the lungs, the lungs pack up and then just about every other organ, the kidneys and liver and people die. It's rather distress-

ing for nursing staff to watch it happen. The management is well, we have tried all sorts of managements but essentially if you can get to somebody within the first couple of hours and give them a dose of Fullers Earth because as you are aware Paraquat when it hits the ground it is effectively bound with the soil and it doesn't cause any further action so we give somebody a suspension of Fullers Earth or Bentonite and it binds the Paraquat in the stomach. If it's left in the stomach and we can eliminate it by giving them a cathetic, something to chase it out the other end, a bit of sodium sulphate. That which is absorbed unfortunately there's nothing that can be done about and so if the blood level is over a known amount the prognosis is usually death. I was in Brussels last year in August and I learnt a couple of interesting things at the Conference I was at. There was a World Federation of Poison Control Centres, there's two things, one is the Japanese have developed a new formulation for Paraquat and what they do is they put it in a sort of gelatine type mixture, where if you try and give yourself a fatal dose of Paraquat, I mean in N.Z. for example the stenching agents and ametics in it that you shouldn't be able to drink it anyway but with young children they don't give a dam that it smells nasty, and the ametics are not that effective so what these Japanese have done is if you pour what would be a fatal amount into a cup and add water to it, it just sets like a jelly and you can't drink it anyway and at normal field strength applications if you drank a little or two it wouldn't kill you so it's quite interesting and has good potential for all sorts of pesticides. The second interesting thing was the Dutch have done some work and studies with rats where they've given rats lethal doses of Paraquat and then they found that if they gave, there is a rationale behind it, which I won't go into, they found if they gave them an antidote which we use for iron poisoning that it actually protected the rat from dying so that also is another great advance so this may see a swing back to the use of Paraquat which means that I won't be able to get anymore the people won't be giving it away. However, if it saves a lot of lives,

then I think it is an excellent thing. This is an individual who covered himself literally with Paraquat while spraying. Fortunately medical science is very good and with treatment of antibiotics this is the photo two weeks later. So you can do something about it if you get it on your skin but not if you ingest it. I just put that up, it's a structure of dioxins and furrans, I just want to briefly go into 245 T, touch on some areas of it. Our feeling with 245 T is that it is quite safe if used in the manufacturers directions, we don't think there is enough evidence around to suggest that there is any problem. The nasty compound in it, Dioxin, which looks like this one on the left, occurs in a very low percentage and the Health Department has in fact made the manufacturer IWD lower it with another order of magnitude and in fact there is more coming out of exhaust emissions in cars and things like that than there certainly is in 245 T which is being spread around the country, but of course it takes the Government appropriate departments a long time to work this out, like the Ministry of the Environment, now they'll be busily looking at motor car emissions and all sorts of other things and probably not worry about 245 T. What I want to do here is just show you a little comparison, the reason why people go on about 245 T is because as I say, it has Dioxin 2378 TCDD which stands for something like Tetrochloridedibenzoparadoxin which you don't need to worry about but to the guinea pig it's the most lethal chemical known to a guinea pig .0006 mg/kg of body weight. You're probably aware of LD 50 studies, where you take some animals and you work out what will kill half of them, LD 50 and its easily expressed in mg than kgs. As I say to the guinea pig its an enormously small amount but look a rat .222 which is thousands of times more and the nearest thing to a monkey is .07. So when you hear a lot of characters going on about the most lethal substance known to man, its the most lethal substance known to a guinea pig but as far as a man is concerned, we know it causes pore acne, and I've got a photograph that shows that. That happened in Italy when you probably

recall they were manufacturing trichlorophenol a few years back, I can't remember which year back in the 70's I guess and this plant exploded and spread Dioxin all around the countryside. That was about the worst thing that happened. A young child in this case had acne all over the face, rather like the Paraquat thing although it did take a lot longer and has totally cleared up so you get transient chloracne, you can get some liver and kidney damage as well plus some immune system problems, which haven't been greatly studied but it certainly is not as nasty as people might make out. It is a very emotional thing and this is why it tends to have been banned around the world. The 245 T, and as I say we have an extra-ordinary low level of Dioxin in our 245 T. Going back again I want to just show you some sources of Dioxins and Furrans which are related, they occur in refuse incinerators, fossil-fuelled power houses, diesel fuelled vehicles, fire places, charcoal grilles, if you smoke they are in cigarettes, chlorine bleaching, pulp and paper and leaded gasoline vehicles which the Ministry of Environment has now found out about. So Dioxins are all over the place. As I say we will probably see a switch away from 245 T to these other things now and scientists will be busy over the country measuring levels of Dioxins in all these other things and find out what sort of risk there is if any. I put this one up to illustrate how we got onto a study on anticoagulant. We, non-target species of course quite often suffer from pesticides that are laid in the community and indeed M.A.F. approached us over a problem where they were using an anticoagulant in a 1000 hectare block and right round it they were using 1080 and they started finding a lot more hawks dead than what should have been. Unfortunately, and they thought that perhaps the hawks were eating on rabbit carcasses that had been poisoned with both 1080 and the anticoagulant and perhaps some interaction and this is not unusual because in medicine if you take something like aspirin and you also have warfarin to thin your blood down as it were for cardiac disorders, then you can get an enormous interaction because warfarin is bound very

tightly to proteins which float around in your blood and when you take aspirin you knock, it's about 99% bound I think, so for 100% dose, 99% of it sits bound to these proteins and doesn't appear in your blood stream and therefore is not used, so that 1% is floating around and you take something like aspirin and you knock an enormous amount off the protein that is floating around which increases the amount of warfarin in your blood to an enormously high level and in fact can be lethal and it is just one of many inter-reactions that did occur where physicians have to be careful in prescribing one or more drugs so it's perhaps we first thought, wouldn't be too surprising and in fact 1080 and coagulant may interact and we've done a little bit of work on it. If it does inter-react it's not as simple as the aspirin situation, but we have found as I said before that things like taylor last in the body for 6 months or so then we are particularly keen to look at the effects on young children who have accidentally ingested it and people who are using it in the field just to see what they do get on board because it can be inhaled very easily as dust or ingested accidentally. If anybody comes to the Poisons Centre and you're most welcome to, don't be surprised if you come into my boss's office and find that sitting on a chair. He's also apart from being Head of our Centre, Prof. Ralph Edwards, he is also a keen falconer and over in Zimbabwe where he came from beforehand, he was originally from Sheffield, he used to fly hawks over there, he used to fly eagles etc. in Zimbabwe, and of course came to N.Z. where it's very hard to get a permit for a falcon but he is flying harrier hawks at the moment with hopefully wanting to get falcons and so it scares the hell out of people when they come into the office and see this thing tethered to a chair. So we did have a good source of birds for doing studies on as well and with him being able to handle them it's quite good, I won't go near the bloody things. As you can imagine he gets his way all the time if he wants me to do something. Well, we've gone over time a bit. I guess what I'll do there is probably best to finish

D.S.I.R., ENTOMOLOGY DIVISION, AUCKLAND

By Dr. O.R.W. Sutherland

I am very grateful for this opportunity to meet members of the Institute again and to report on progress of the 5-year plan proposal for which I presented a case at last year's conference.

Quite simply, we have been very successful. With the lead given by the Noxious Plants Council, who committed \$50,000 annually to the scheme, and with the enthusiastic support and assistance of each NPO, we have reached our revenue targets for this year at least.

For the 1987/88 financial year, we expect to receive:

\$109,700	from DNPA's
\$ 50,000	from the Noxious Plants Council
\$ 10,000	from Railways Corporation
\$ 5,000	from Electricity Corporation

\$174,700	TOTAL
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We also hope that the new Landcorp will contribute \$10,000 and that the Auckland Regional Authority Regional Water Board will make a single contribution of \$5,000 towards the Alligator Weed project.

Of the 91 DNPA's throughout the country 63 or 68% are contributing to the 5 year plan so far. They include 44 in the North Island and 19 in the South Island. We still hope that other DNPA's will decide to support the plan with financial contributions. In addition, farmer groups in at least three areas are contributing to the 5 year plan via their DNPA's. One of these is a group of farmers at Taporā, Northland, who have a co-operative drain-clearing programme. In each of the past two years they have not had to clear alligator weed from their drains because the alligator weed flea beetle, Agasicles, has done it for them. This has resulted in a saving of about \$2000 each year in mechanical and chemical control. The Taporā farmers have contributed \$750 to the alligator weed project.

The revenue which our proposal has generated has not only provided impetus to the biological control of the major pasture weeds throughout New Zealand, it has also played a major part in assisting Entomology Division of D.S.I.R. meet its required revenue targets.

As you know, the income provided by DNPA's, Noxious Plants Council and the land-owning government departments and corporations is for mass-rearing the biocontrol agents. We have now employed one fulltime technician at Lincoln and two part-time technicians at Mt. Albert, Auckland. Ms Judy Grindell is the new Lincoln-based staff member and is Extension Manager for the programme. Besides rearing insects she will look after administrative matters. At Auckland Chris Winks and Bruce Philip are each employed half-time. In the summer we expect to employ further wage workers, in order to rear sufficient insects for releases in all the contributing DNPA's. Other expenditure will be on travel, consumable stores and some equipment.

PROGRESS ON GORSE PROJECT

At this Conference a year ago I discussed the Hill and Sandrey reports with you. In the former, Dr. Richard Hill on Entomology Division reported on the submissions on the project received from 49 of the 60 organisations contacted. Most were in favour of the scheme, but beekeepers in particular, objected to it. The other report was commissioned by Entomology Division from the Agricultural Economic Research Unit (AERU). In it, Dr. Ron Sandrey presented the costs and benefits of the biological control of gorse.

In the past year, further submissions have been sought from the goat industry. At the same time, the Department of Lands and Survey commissioned another report from the AERU, this one entitled "Gorse and Goats: Considerations for Biological Control of Gorse". There has not been strong opposition from the goat industry to our proposed project.

At the moment Richard Hill is completing an Environmental Impact Assessment (EIA) for the project and this, together with all the earlier reports will be considered by the Ministry of Agriculture and Fisheries and the Ministry for the Environment before being passed to a 3-person

panel who will consider all the evidence and make a recommendation to M.A.F. We hope that a decision will be made by late this year. In the meantime, we are embarking on a similar programme of submissions and reports for the new broom project.

INTRODUCTION

As a result of the co-operative programme between D.S.I.R. and District Noxious Plants Authorities (D.N.P.A.'s) our rearing and release programme for biological control insects is expanding rapidly. We shall attempt here to describe the stage we have reached with each of our projects. Both the ragwort and alligator weed projects have been assisted by D.N.P.A. funding under earlier schemes.

RAGWORT

The ragwort flea beetle *Longitarsus jacobaeae* has been reared at Lincoln since 1983 and in Auckland by Chris Winks from 1984. Releases of adult beetles are made in autumn. Initially these were of 500 beetles, but now we find we require only 300. To date releases have been made at 26 sites throughout the country (Figure 1). The bulk of these have been over the past years and in the northern part of the country because Northland and South Auckland D.N.P.A.'s have been funding the Auckland rearing programmes. This autumn we have planned releases at a further ten sites some of which are in D.N.P.A. areas still awaiting releases from the earlier scheme and some who have already paid their first contribution towards the 5 year programme. Beetles are establishing well at most sites, particularly in the north of the country. Out of the 26 release sites, second or later generation beetles have been recovered from 23 of these. We are sufficiently confident to say that so far establishment has occurred at 8 sites.

Cinnabar moth (*Tyria jacobaeae*) has established over a large part of the southern North Island following the original releases made in the 1920's and 30's (Fig 2). There is some evidence that the moth is still spreading if rather slowly, since this summer (1986-7) adults and larvae have been reported from the Bay of Many Coves in Marlborough, and from Ohakea and the Pohangina Valley in the Manawatu area.

Since 1982 we have collected larvae from the Wairarapa and reared them for release on ragwort in other parts of the country. We have made releases at 8 sites and the insects have persisted at four of these (Fig. 2). Noxious Plants Officers from two Counties have undertaken their own rearing programmes and Jack Crow and Brett Miller in Whangarei have cinnabar moth surviving at at least one site. In Buller County, Bernard Menzies has made a number of releases over a couple of years and has insects established at at least four sites on the West Coast. Cinnabar moth is a relatively straightforward insect to rear. We supply pupae in spring from which adults are shortly to emerge. All that is required is a regular supply of healthy ragwort plants. Female moths lay clusters of eggs on the underside of the leaves, which will be fed upon by hatching larvae. Larger caterpillars are often found feeding on the flowers.

Over the next two years we aim to distribute both cinnabar moth and the ragwort flea beetle to all D.N.P.A.'s with a ragwort problem that are contributing to the joint programme.

ALLIGATOR WEED

Following the successful introduction of the alligator weed beetle *Agasicles hygrophila* which is now widely established in Northland, we are attempting to introduce the alligator weed moth *Vogtia molloi* to complement the activity of the beetle. Chris Winks collected the insects in Australia during March and brought them into New Zealand where they are currently in quarantine in Auckland. Bruce Philip is now rearing them so that good numbers will be available for release in the spring. This moth attacks alligator weed growing on land, where the beetle is much less effective, and is also expected to be more successful in flood-prone streams.

GORSE

The gorse mite (*Tetranychus lintearius*) is the first species planned for importation for gorse control and is expected to exert considerable impact on this weed. The host specificity of the mite has been demonstrated satisfactorily, but progress is halted until a final

decision is made by the MAF as to the desirability of applying biological control to gorse. We expect a decision to be made on this by the end of the year at the latest.

BROOM

There is a small white moth, the broom twig miner (*Leucop-
tera spartifoliella*) which is specific to broom and wide-
spread in New Zealand. It is the caterpillar which is
the damaging stage, mining the young twigs. When this
insect builds up to large populations it can be very
damaging to broom bushes causing extensive areas of dead
wood. The broom twigminer is a native European insect
that was first discovered in New Zealand in the 1950's.
It was probably accidentally introduced on ornamental
broom plants. We have not found the broom twigminer in
the far south of the South Island, where broom bushes
look exceptionally green and healthy compared to further
north. It may well be worth attempting to introduce the
twigminer into Southland and Westland - it occurs in
Scotland, so should not be limited from these areas climat-
ically.

We have a seed feeding beetle, also from Europe, which
has been recently released from quarantine at Lincoln.
Bruchidius villosus has been shown by testing carried
out in the U.K. and in New Zealand to feed only on broom
seed (*Cytisus* species) and not to be a threat to seeds
of crop or native plants. We hope to rear a sufficient
number of these beetles to make field releases throughout
the country from spring 1987 or 1988. Several other broom-
feeding species are currently undergoing testing in the
U.K. We hope some of these will be cleared for introduction
into New Zealand by 1988 or 1989.

THISTLES

Nodding Thistle

The receptacle weevil *Rhinocyllus conicus* was imported
into New Zealand from Germany, via Canada. It was field
released in 1974 at Hakataramea, Ashburton, Nelson and
Whakatane.

The weevil is now well established in most of the main nodding thistle areas throughout New Zealand. Adult feeding on the leaves of thistle plants is insignificant, but larval feeding within the flowers can reduce seed production by well over 90%. Although this is a very satisfactory result, plants arising from seed already in the soil continue to present problems.

It was therefore decided that another control agent should be introduced. From eight possibilities, a crown-root weevil *Trichosirocalus horridus*, originally from Germany, was selected and introduced into New Zealand quarantine in 1982. Successful rearing and rephasing to Southern Hemisphere seasons allowed first field releases to be made in 1985. This weevil is now established at one site in Canterbury. Nodding, winged, slender-winged, scotch and marsh thistles are all attacked by this weevil. Adults become active in March and lay eggs on young thistle rosettes. Egg-laying continues throughout the winter. The larvae or grubs feed through the winter and early spring period within the plant crown and can cause severe disruption of plant growth. When fully fed, larvae pupate in the surrounding soil. They emerge as new adults during November and December.

It is anticipated that the summer feeding receptacle weevil and the winter feeding crown-root weevil will form a useful complementary team to exert pressure on nodding thistle plants throughout the year.

An intensive crown-root weevil breeding programme has commenced at Lincoln. Progeny from this rearing plus adults collected from the field site will be used in releases to D.N.P.A.'s through New Zealand.

Californian thistle

Stage three of the thistle programme involves importation of agents for Californian thistle. Information from international sources has indicated that two leaf-feeding beetles and a crown weevil show promise as potential biocontrol candidates. Our intention is that at least one of these species will be introduced to quarantine for further host-specificity testing within twelve months.

CONCLUSION

Between 1987 and 1992 we aim to make releases of 16 or so species of insects to attack six species of noxious plants. Through the co-operative programme we hope to be able to distribute each insect species at an early stage to most areas of New Zealand where the relevant weed is a problem.

CAWTHRON INSTITUTE

Dr. John Stark

A wealthy Nelson business man by the name of Thomas Cawthron died on 8th October, 1915. In his will he bequeathed 231,000 pounds for the "purchase of land and erection and maintenance of an Industrial and Technical School, Institute and Museum to be called the Cawthron Institute".

The Cawthron Institute was established towards the end of 1919 and was given statutory permanence under the Thomas Cawthron Trust Act, 1924.

An initial and severe set-back was the payment in December, 1917 of 40,000 pound stamp duty to the Government. (It seems that some things never change). It wasn't until July 1936, after nearly 20 years of lobbying by the Cawthron Trustees, that the Government finally approved an annual subsidy of 2000 pounds for research work. government grant for research work has continued until the present day (although it has been reduced somewhat in recent years).

The Cawthron Institute is administered by a Trust Board. Most of the Trustees were specified in Thomas Cawthron's Will:

The Anglican Bishop of Nelson, The MP for Nelson, The Mayor of Nelson, The Chairman of the Harbour Board, The Chairman of the Waimea County Council.

Subsequent amendments to the Act have provided for additional appointments to be made by the Governor General (4) and the Minister of Science and Technology (2).

During its first 50 years the Institute was known for its basic and applied scientific research associated with agriculture and horticulture. This pioneering work on soils, plant and animal health and insect pests was supported by bequest funds and the government grant-in-aid and resulted in increased production from the land and the containment and control of troublesome pests.

Sections of the Institute were budded off to become the growing centres for research divisions within DSIR e.g. Soil Bureau, Entomology Division and Fruit Research Division. This fact, plus the physical proximity of DSIR to Cawthron on our Nelson site seems to have perpetuated a great deal of confusion in the minds of many people who still believe that Cawthron is part of the DSIR. In reality, the Cawthron Institute is an independent organisation.

In 1970 a move into new laboratories heralded a period of redevelopment. There was a new emphasis on research into the science of microbes and a new policy of generating income by technical consulting.

More recently in both technical services and research areas, high levels of skill, expertise and understanding have been developed in chemical and biological aspects of marine and freshwater ecosystems. The Marine and Freshwater Consulting Group, which was formed late in 1985, has become the focus for the integration of these services to provide a comprehensive multidisciplinary environmental consultant service to clients.

This year, the internal organisation of the Institute has been streamlined even further with the establishment of three main working groups. The objective has been to concentrate closely allied analytical and consultant skills together.

One group may be termed the Aquatic Resources Group and includes staff with expertise in marine and freshwater ecology, aquaculture and the chemical analysis of water. Staff within this group have undertaken environmental impact assessments on freshwater ecosystems in relation to hydro-electric development, coal mining, geothermal field development, municipal sewage discharges, and water abstraction for salmon farming. Other consultant work has concerned aquaculture (e.g. Salmon farming, cockle harvesting, live crayfish export) and, of course, the work on Spartina eradication programme of which you'll hear more shortly. We also work quite closely with the Nelson Catchment Board and undertake most of their water quality and freshwater biological resource documentation work and some water right investigations and monitoring.

The second group comprises staff with expertise in biotechnology, bacteriology, enzymes, analysis of foodstuffs and organic analyses (such as pesticide residues and formulations). Much of the work done by this group is in the form of confidential contract research in biotechnology (i.e. the industrial application of biological processes).

The third group includes soil and foliage testing providing a service to primary industry and advising on soil fertility and nutrient deficiencies in plant materials.

Other staff in this group test wood chips prior to export to Japan for moisture and dust content. The Japanese use certificates that we issue as the basis for payment to the local wood chip exporting companies.

The testing of solid fuel wood burning fires for compliance with clean air standards is another area of involvement. This work has been undertaken not only for various burner manufacturers, but also the Consumer Institute.

Cawthron also has a contract with the Australian Government to analyse fish for mercury content. The certificates issued by Cawthron, must accompany all fish exported to that country.

I have tried to give you a brief introduction to the wide range of experience and expertise that Cawthron has available within house. There are many areas that I have not mentioned. We also have a group of associates who can assist with aspects of projects where we do not have the expertise ourselves.

The Cawthron Institute is unique in New Zealand. I am not aware of any other organisation of similar size in the country that covers such a broad range of expertise.

Perhaps the best way of gaining some appreciation of what we do is by way of a specific example, so I would like to hand over now to Gail Franko who will discuss work that we have done on the problem of Spartina grass in local estuaries.

SPARTINA GRASS: A N.Z. PROFILE - THE PLANT AND CURRENT RESEARCH

Gail D. Franko, Cawthron Institute

Thank you John. John is now an active member of our Aquatic Resources Group at Cawthron Institute. Some of you may have met him also through his previous work with the Taranaki Catchment Commission.

I'm certain that all of us present here today are well aware of the many exotic species which have been introduced into New Zealand over the years. Whether these species were introduced unintentionally - for example, in ballast from shipping and as contaminants in seed supplies - or intentionally, to modify our surroundings, the fact is that we are now faced with the consequences of these introductions. One consequence is the alteration of native habitats.

In the case of some species which have become "noxious weeds", the need for control and eradication is clear. The question of eradication is less clear-cut, however, in the case of those exotic species originally introduced for their perceived benefits but which later have become associated with a series of problems.

Such is the case with Spartina grass. Since its introduction in the early 1900's, Spartina has been enthusiastically planted, has spread naturally, and now is being considered for eradication in many regions of New Zealand. In the case of Spartina, the question of whether or not to adopt a policy of eradication is made more complex by the potential environmental consequences of the eradication process itself.

Today I would like to talk about Spartina grass in New Zealand: its biological "keys to success", its introductions into New Zealand; and some of the problems associated with its spread in New Zealand. I will then focus on Spartina in the Nelson region and describe both the eradication programme in Waimea Inlet, and the potential environmental impact which is currently being investigated by Cawthron Institute.

Taxonomy and distribution

Spartina, which is also referred to as cord grass or rice grass, is a genus of approximately 14 species worldwide. It occurs mainly in wetlands, and particularly in estuaries. Its natural distribution is centred in Europe and on the east coast of North and South America. Spartina is generally a vigorous grass and can form extensive meadows on estuarine sand and mudflats.

Spartina's morphology

In order to understand why Spartina is so successful in colonising large areas of the intertidal zone, we need to have a closer look at its structural features. One of the biggest problems for a plant in this environment is to get a firm hold on its substrate. Spartina's "two-way" root system copes well: the taproots can reach depths of a metre or more and anchor the plant, while the dense surface roots give the plant lateral stability. Similarly, the leaves and stems form a densely interwoven canopy which further adds to the plant's stability. When seawater carrying fine sediment floods the Spartina marsh during tidal or wave action, this sediment load is "sieved" and stabilized by Spartina's network of stems and leaves. The rate at which Spartina traps sediment can reach over six centimetres depth per year in some locations. It is this ability to trap sediment and promote "reclamation" of tidal flats which has encouraged the planting of Spartina in many parts of the world, including New Zealand.

Spartina in New Zealand

Of the 14 species of Spartina, only 3 have been introduced in the New Zealand coastline. Spartina made its first appearance in 1913 when a farmer from the town of Bulls imported Spartina X townsendii from Southampton, England, and planted it along the Manawatu River, near Foxton. Eleven years later, another introduction of plants with fertile seed from England was made in the Foxton area. This was later identified as a second species, Spartina anglica.

Both of these species were transplanted throughout much of New Zealand. But when neither grew with particular vigour in the warmer climate of the North Island, a third species, *Spartina alterniflora*, was introduced in 1957 from the eastern United State. This tall, stout species has flourished in North Island estuaries, forming more open swards than the other two species.

Spartina's popularity in New Zealand

What were the reasons for *Spartina* popularity during these years? *Spartina* was planted along shorelines and breakwaters to stabilise them against erosion. A second reason for *Spartina*'s widespread planting was to extend saltmarsh habitat for waterfowl - or more precisely, for duck shooting.

But the most popular reason for planting *Spartina* was to attempt to transform areas of saltmarsh and tidal flats adjacent to farms into productive farmland. Two articles printed in the New Zealand Journal of Agriculture in 1949 and 1965 illustrate this view in their titles: "*Spartina townsendii*: A valuable grass on tidal mudflats" and "Tidal flats can be productive". I'd like to read a passage from the introduction of the first article which you might enjoy.

"For thousands of years tidal salt mud flats the world over have made entrances to harbours unsightly and treacherous...Now (this) unsightly, useless, and dangerous mud ... which in many cases appears almost bottomless ... can be conquered and ... reclaimed to form useful and stable farmlands".

For all of these reasons, *Spartina* was transplanted to new locations in both the North and South Island and in most places became well established.

The Spread of *Spartina*

Just how quickly *Spartina* could spread when newly planted is shown by the growth of the plantation at the Waihopai River Estuary near Invercargill. From single plants placed three feet apart, on a grid, the area was colonized and virtually covered within three yeaars, and eventually became a 100 acre plantation. In the same area, the outward expansion of *Spartina* clumps was measured at

up to 5.3 metres per year. Here in the Nelson region, from a dozen single plants established in 1956 at Neiman Creek in Waimea Inlet, an area of approximately 7 hectares is now very densely covered with *Spartina*. In addition to this outward growth of plants, *Spartina* can also spread by the re-establishment of clumps fragmented from a marsh. This aerial view shows circular patches of *Spartina* established along a main channel in Waimea Inlet. These patches would likely have grown from clumps transported during times of flood or high water flow.

Concern about *Spartina* in New Zealand By the 1950's *Spartina* had its roots firmly planted in many regions of coastal New Zealand. While on one hand advocates of *Spartina* were still enthusiastically transplanting, on the other an appreciation of its potential dangers began to develop. This contrast in opinion was partially a difference in perspective - that of transforming tidal flats into farm land, versus conservation of native species and habitats. But also the perception of *Spartina* as a useful plant or a serious threat depended on the growth rate of the three species in New Zealand, with the northern swards showing much less vigour than those of such southern areas as Invercargill. By the 1960's, the planting of *Spartina* was no longer favoured and a 1963 Amendment to the Harbours Act prohibited any further planting of exotic species in coastal areas.

Problems associated with *Spartina*

What are the problems associated with *Spartina* which caused this change in perspective? The growth of *Spartina* in New Zealand's coastal ecosystem can change the natural character of the area in a number of ways.

1. Competition with native vegetation *Spartina*'s ability to grow throughout the entire intertidal zone enables it to compete with many species of native plants. It reaches down to the low intertidal zone where beds of native Eelgrass (*Zostera muelleri*) are out-competed by *Spartina*'s more tall and dense growth.

It covers vast areas of mid intertidal flats, which although sometimes appearing to be bare, normally support seasonal blooms of microalgae (e.g. *Euglena*) and macroalgae such as Sea Lettuce (*Ulva Lactuca*) as well as a variety of invertebrate animals. In the upper intertidal zone *Spartina*'s shoots can emerge through beds of the Austral Glasswort (*Salicornia australis*) and even the taller Sea Rush (*Juncus maritimus* var. *maritimus*) and Jointed Wire Rush (*Leptocarpus similis*) where their growth is not vigorous. This brings me to the second point.

2. Decrease in diversity of native flora and fauna When *Spartina* forms uniform one-species stands across the intertidal zone, the diversity of habitats drastically decreases. Many birds, fish and invertebrate animals normally make use of the variety of habitats in a natural estuarine ecosystem - the dense clumps of rushes, the open gravel flats, the small channels - and not all can adapt to such dramatic changes in their environment.

3. Decrease in scenic and recreational value in the coastal ecosystem? Although small areas of *Spartina* amongst native saltmarsh can certainly have aesthetic appeal, the value and appeal of exclusive stands of *Spartina* are questionable. Intact wetland habitats are now also more fully appreciated than in the past for their high recreational value, for example, for whitebaiting and birdwatching.

4. Sedimentation - the changes in physical parameters of the coastal ecosystem. This last point illustrates the irony of *Spartina*'s presence in New Zealand. For the same reason it was introduced that is, sediment accretion, *Spartina* is now causing problems. Sediment accretion can stop or alter the flow of estuarine streamlets potentially changing local drainage patterns. Fine sediments can be harmful to some plants and to filter-feeding animals.

Spartina management: balancing the options

With these problems so clearly spelled out, one might think that the decision to eradicate *Spartina* from our coastal zone would be straightforward. Well, in a few areas this has been the case. In other areas, however, and the Marlborough Sounds would be a good example here, the advantages of long-established productive *Spartina*

marsh must be carefully weighed against these disadvantages. Furthermore, what would the environmental consequences of Spartina eradication be? While Spartina grass itself is an exotic species and a candidate for eradication, the diverse range of native plants and animals associated with Spartina marsh are not. Spartina has become one component of the coastal wetland habitat and any management decision on Spartina has wider reaching effects on the environment as a whole.

Potential environmental consequences of Spartina eradication with herbicides

With Spartina eradication programmes already underway in several regions and further programmes being considered, the need to assess the potential impact of the eradication was recognised nationally. In 1985, Cawthron Institute was commissioned by the Nelson Catchment Board with support from N.W.A.S.C.A. to assess the potential environmental consequences of the proposed herbicide spraying of Spartina in the Nelson region. Let's have a closer look at some of the major questions and concerns which were identified.

1. What is the fate and persistence of the herbicide mixtures and/or their residues in the environment?

No information was available on how long the herbicides would persist on the vegetation, in the sediment, or in seawater, and whether they could be transported via water movement to non-target areas. Also unknown was whether or not measurable amounts of herbicide could be incorporated in the food chain either through direct spraying of animals or through their ingestion of sprayed standing plant material or detritus.

2. What are the public health considerations of the proposed spray programme?

The two herbicides dalapon and amitrole and an activating ingredient, ammonium thicyanate, are the active ingredients used in the spray mixture for the majority of Spartina eradication programmes at present. One of these, amitrole, was until 1981 listed by the U.S. Environmental Protection Agency as a potential carcinogen. Further tests in the U.S.A. resulted in its removal from the list. Although toxicological studies indicate that these herbicides

are unlikely to create a health hazard if applied correctly, no specific information was available regarding, for instance, the public risk of consuming shellfish from sprayed areas.

3. What are the effects of herbicide sprays on native vegetation?

Many of the areas colonised by *Spartina* are not pure stands, but are interspersed with native species. In these mixed stands and in areas where native species border pure stands of *Spartina*, it is inevitable that native species will be contacted with the herbicide sprays. No information was available as to the susceptibility of these native species to the sprays, what degree of damage they might sustain, whether they would recover and regrow, and if so, how long this might take. Two species of particular concern were the Austral Glasswort (*Salicornia australis*), a relatively slow-growing plant closely associated with *Spartina* in the Nelson region, and Eelgrass (*Zostera muelleri*) with its thin, permeable foliage, potentially susceptible to the herbicide sprays.

4. What are the effects of herbicide sprays on estuarine animal species?

The herbicides could potentially have an effect on not only the more visible animals - the crabs, snails and cockles - directly associated with the *Spartina* marsh, but also on the microscopic fauna and on the fish species (e.g. whitebait, mullet, eels) and bird species (pukeko, mallard ducks and herons) which utilise the marsh. In addition, animal species of other estuarine and marine communities could potentially be at risk from spray drifts, from water-borne herbicides, or through a herbicide-contaminated food source. No information was available to fully assess these potential risks.

5. What would be the consequence of the decomposition of leaf litter after spraying?

A large amount of dead and decaying leaf litter could have a pronounced effect on the environment. In Waimea Inlet over 15 hectares of *Spartina* grass will be sprayed. Dead foliage estimated to weigh in the order of 200 metric tonnes dry weight will be gradually released. A portion

of this material will be washed away and redistributed to other parts of the inlet while the remainder will become incorporated into the sediments within the same area. Because of the nature of *Spartina* litter, it is not likely to decompose rapidly enough to cause oxygen-depleted conditions unless it overlays the sediment in fairly thick mats. Mud-dwelling animals may be affected in such areas.

6. What would be the effects of redistribution of fine sediments after the removal of *Spartina*?

In Neiman Creek (Waimea Inlet, Nelson) for example, an area of approximately 7 hectares is densely covered with *Spartina* grass. If we assume that 10 centimetres of sediment would be released from the surface and root zone of the marsh in the years following *Spartina*'s eradication (and the depth could be several times greater than this), then the volume of released sediment would amount to 7000 cubic metres. This is comparable to the volume of a moderately large house. Since this sediment release would occur over a period of many years, and be redistributed over a wide area of tidal flat, the effect is unlikely to be detrimental. However in localised areas, filter feeding animals (such as cockles and pipis) and plants intolerant of sediment load (such as Eelgrass) could be negatively affected. The removal of *Spartina* marsh in areas where it acts as a buffer zone to foreshore erosion, could also additionally increase sediment deposition rates.

Environmental case study, Waimea Inlet, Nelson

In order to assess these potential environmental consequences of the herbicide-eradication of *Spartina*, the Cawthron Institute is carrying out a major environmental study prior to and during the three-year spray programme underway in Waimea Inlet. The national importance of this assessment as a "case study" for New Zealand is recognised by the support provided by N.W.A.S.C.A. to the Nelson Catchment Board and Cawthron Institute. The environmental impact study consists of three parts, as shown on the slide.

Although it is not possible in the time we have today to fully describe the results of the study to date, I would like to share with you briefly a few of the most interesting finds.

In Part I, the herbicide spray trials, the effects of the herbicide mixture on major intertidal plant and animal species was assessed. A series of plots were set up in each of six major intertidal vegetation types in Waimea Inlet. These were sprayed with half, full and double-strength herbicide mixture and compared with the control plot at regular intervals during the year. *Spartina* foliage, as expected, was killed within six weeks, and during the winter was carried away. Two species which were more severely affected than *Spartina* were Eelgrass and the Glasswort, both of which were killed with the full strength herbicide, and which have shown virtually no recovery after over a year. This rush was also rapidly killed by all three herbicide strengths, but recovered with a great burst of green foliage from its root reserves in the springtime. Repeated spray applications would likely weaken its recovery. The two remaining species, although severely damaged, now appear to be slowly recovering.

The animals species associated with these vegetation types did not show widescale dieoff, although some snail and cockle mortality did occur. Because of the difficulty of assessing animal mortality in the field situation, an additional Laboratory toxicity bioassay was conducted by my colleague, Paul Gillespie. Of the six representative fauna species tested, whitebait was the most susceptible to the sprays, two snail species, the cockles and the estuarine prawn, were less susceptible and the crabs were extremely resistant, with virtually no mortality even at herbicide concentrations much higher than expected in the spray programme. These lab results must be interpreted with caution, however, since experimental conditions are unavoidably different from the natural environment of these animals.

In Part II, the pilot study at Mapua Inlet the short term effects of spraying a 7 hectare area of Spartina within Waimea Inlet were assessed during the year prior to the planned start of the major spray programme. Before the pilot area was sprayed, a series of transects were surveyed for later comparison of sediment height. In April last year, 1986, Mapua Inlet was sprayed with the amitrol/dalapon mixture by handgun. A series of vegetation cores were taken before spraying and again a year later to assess the changes in above and below ground biomass of Spartina and the adjacent native species. Fauna, both "macro" and microscopic, were also intensively sampled; no large scale die-offs were observed.

One of the most interesting results of the herbicide analyses carried out in our laboratories at Cawthron Institute is that the concentration of both amitrols and dalapon had dropped below the limits of detection in sprayed sediments, seawater, and animal tissue within one to five weeks of herbicide spraying.

In Spartina foliage however the herbicides can persist for a period of several months. One year after spraying, Mapua Inlet has a changed appearance, with much dead foliage and sediment already removed by wave and tidal action.

As a result of Parts I and II of the study - the spray trials and pilot study - many of the questions relating to the short term environmental impact had been answered.

Part III, the Environmental Monitoring Programme is now underway in conjunction with the three year spray programme in Waimea Inlet. Biological and physical data gathered regularly from the five main sites and six subsites within Waimea Inlet will be used to assess the longer term environmental impact of Spartina eradication. Results of this study will be available in 1989.

Much of the spraying in April this year (1987) was done by helicopter, with the smaller and more sensitive areas sprayed by handgun. Here the Waimea County Council Noxious Plants Officers, led by Eric Eden, are directing the spray operations. Between spraying flights, I had the opportunity to see and photograph some of the larger stands of Spartina from the air.

I can assure you that ground photography of *Spartina* spraying can be much more problematic. Imagine if you can, the helicopter pilot manoeuvring his machine above a narrow creek, looking down to see me, laden with camera and gasmask, running in soft ankle-deep marsh mud in oversized hip waders and rain parka, trying to avoid the cloud of herbicide droplets. In retrospect these become some of the more amusing aspects of the field studies in which I am involved.

As you will no doubt have gathered, conducting a comprehensive environmental impact assessment is no simple task particularly in an area as complex as the estuarine-intertidal zone. Often extensive work is needed to answer the simplest of questions. Some of these questions are now answered, others await a longer term assessment.

With more awareness now being focussed on coastal wetlands for their fisheries, wildlife, scenic and recreational values, the need for co-operation amongst resource management agencies becomes evident. This study, on *Spartina* in Waimea Inlet, involving N.W.A.S.C.A. Nelson Catchment Board, Noxious Plants Officers, the Wildlife Service, Nelson Harbour Board and the Cawthron Institute, provides one example of how management questions relating to the coastal zone can be answered effectively.

Several years ago a D.S.I.R. botanist addressed this Conference of Noxious Plants Officers. He made comment to the effect that although we in New Zealand had done well in preserving the beauty of our spectacular mountain habitats we had not as yet given the same recognition to less understood habitats such as coastal wetlands. I believe that this recognition is now beginning to happen. Thank you.

CHEMICAL APPLICATOR ADDRESS

G. Hyde

Thank you for the opportunity and privilege of addressing you today, as a representative of the Chemical Applicator Section of the N.Z. Contractors' Federation. I hope that some of my comments may be of some help to you.

The first request of your organisation was a personal history of myself. Contracting was, is, and hopefully always will be, my way of life. Forty-four years ago, I was born into a Spraying Contractors' Family and have been involved with contracting ever since. My own business now Spraying, Sheep Dipping, Drilling, Harvesting, Farming and Stock Carting. The diversifications necessary to be able to keep Specialist Staff employed all year round, so that Farmers and Local Bodies benefit from our knowledge and expertise as Registered Chemical Applicators at all times. I am a man of few words, preferring action in the field or liaising with farmers, contractors, Merchant and Chemical firms and Local Bodies on a more personal level.

Noxious Plants Officers and Chemical Applicators have very similar aims and aspirations. At one of your Conferences, some years ago, it was pointed out that some Noxious Plants Officers 'Had Seen the Light' and smitten by the Commercial Bug, changed their occupation from that of Inspector to Contractor, thinking perhaps our industry was flourishing. Maybe for some, who worked long hours, and were skilled in both application and business management it was. However those days have gone, and it is interesting to note that during the last eighteen months, some of our Chemical Applicators 'Have Seen the Light' and chosen to relinquish the occupation of Contractor and become an Inspector. In Canterbury alone, two of my Ward Members have taken Local Body positions as Noxious Weed Inspectors, saying their families needed job and wage security. Obviously we are all striving for something. Should it not be together?!

The future of Weed control in New Zealand, I feel is going to slow down dramatically, not because the Noxious Plants Officers and Contractors are not doing their jobs properly, but because of several reasons beyond their control.

From all our points of view Government attitude to the Rural Sector is causing many skilled persons to seek more secure employment in other fields. Our own Members, Registered Applicators, will not lower their standards in application or undercut to get work, as some, not so qualified contractors are, so their expertise will be lost forever, if they are forced to seek secure employment in other fields.

It is a battle out there, for any industry. Noxious Plants Officers need employment, so do chemical applicators. An interchange of ideas can only aid this battle.

In the past, our image from Noxious Plants Officers' points of view, was perhaps not good, but this fallacy goes back 10 years or more, mainly due to North Island circumstances, at the time and true or false we should not live in the past, but concentrate on the future. We all have a job to do and the sooner we build on present good relations the better, for our mutual benefit. These relationships in most areas, are now well established, so if we can all quickly forget bringing up old fashioned hornets' nests, both our industries may prosper in many ways.

From a recent South Island Chemical Applicators' meeting, come the following points. Please remember I am the Mediator as I would like to leave Nelson alive tonight!

1. The changing of Laws, in which Chemical Applicators are becoming sitting ducks, for growers with financial problems.
2. Local Body work is often of a high risk factor and low paid.
3. Local Body work always comes in busy farm work load times. Please could we plan together with our local Noxious Plants Officers.
4. Our worst fears, as Chemical Applicators, appears to be emerging from the Ministry of Works being able to tender for work once done by our members.

5. Tenders take considerable time and effort to prepare, only to be turned down, because someone desperate for work has undercut all others. Applicators realise this is due to Council Voting not Noxious Plants Officers' views, but they beg the Officers' understanding.
6. Registered Chemical Applicators would prefer building on a permanent relationship with various Local Bodies, give and take on both sides. If all Local Bodies realised this and councillors did not tend to choose the lowest tender, standards may rise in some areas and better liaison occur. In most areas now Noxious Plants Officers and Chemical Applicators work well together, but the breakdown occurs on a Council Vote and all the Personal liaison is lost.
7. More work is now coming from Local Bodies, a good thing for Chemical Applicators with the farming downturn. However Chemical Applicators now have to build on ensuring it stays this way, so we realise a good relationship must be formed with our Noxious Plants Officers. Please will you meet us half way?

Lastly - The Selection of Contractors for Work:

It has been pointed out to me that some of our trucks are 'dressed up like Christmas trees'. Surely this shows the pride the operator takes in his equipment and this must reflect in the application of the job.

The selection of the right contractor is one of the most important decisions of your programme, as he is the person who can either make a success of your programme or a disaster.

He must have sufficient and suitable equipment to complete your job.

He must be correctly registered for the type of spraying to be done.

He must have proper and sufficient Public Liability Insurance and last but not least, preferably be a member of our New Zealand Contractors' Federation, where we are all justly proud of our expertise.

Once again, thank you for this privilege and please if any of our representatives present or myself can answer any queries in your question time, do not hesitate to ask them.

FORESTRY LAND USE

By Allan Fifiield, Baigents Industries

Thank you Mr. Chairman. Good afternoon everybody. As Kevin mentioned I am employed by Baigent Forest Industries as a Senior Forest Ranger. Very unaccustomed to public speaking so I hope you'll bear with me this afternoon while I speak. Eric Eden, bless him, originally sent me the topic of Forestry as a Land Use and how Noxious Weeds affect that role. However, on the final agenda he subsequently altered it to Forestry as a Land Use and its changing role. So it's good, having both topics has enabled me to prepare an address where I hopefully won't have to repeat myself more than once, to last the allotted 20 minutes. I would like to speak on the second topic first and begin with some broad statements on the place and future of forestry industry in N.Z. having tackled that I'll then with the help of a few slides outline the local forestry scene referring to forestry within the Waimea Basin or the Waimea Division and allude to problems which noxious plants pose to forest owners, developers, with separate references to some costs incurred by our own company in establishing forests in Nelson. I will then attempt to end my address with some sort of summary. To begin with.

Introduction - 1950's, 60's through to the 1980's. During the 1950's a major expansion in plantation wood utilisation was initiated in New Zealand with the commissioning of world scale pulp and paper and saw mills. The early 1960's saw revival in the confidence and the involvement of both the state and private industries in plantation establishment which has continued through to the mid 1980's in spite of major opposition to plantation forestry by the farming community and through them local authorities, in the 1970's and early 1980's. Some figures to illustrate this expansion are; in the 1960's forest area was in the vicinity of 358,000 hectares, rising to 483,000 in the 70's, 1980 saw 846,000 hectares established and the figure for 1985 was 1,095,000 hectares. The total harvest in the 60's was 2,900,000 cubic metres, running through to the 1985 figure of 9,000,000 cubic metres. Persons

employed, which is a big factor in the forest industry, in the 1960's there were in the vicinity of 19,800 people employed in forest activities. I haven't any final figures for 1985 but the 1980 figure was 26,100. This, you will be aware would have changed in the last six months with the restructuring of the N.Z. Forest Service. Total export earnings in 1960 were 2.8 million dollars, 70's, \$6.1 million, 1985 figure was \$6.8 million. An interesting point to remember was that the 1981 forestry Conference recommended a continuing expansion in planting at least through the 1990's at about 40,000 hectares per annum. However, during the past two to three years, major changes in Government financial and structural policy, international competitiveness and the move by N.Z. Forest companies to acquire off shore forest assets have heavily impacted on the industry. To expand on some of those more important factors, the exchange rate. The N.Z./U.S. currency, this is prior to the floating of the currency was the equivalent exchange of 44 cents. The current one is 54 cents. N.Z. to Australia, prefloat was 62 cents it is currently in the vicinity of 82 cents. That is a change of 23 and 32% respectively. The second point, inflation. During the last three years, 84 - 86 Japan's inflation has been an average of 1.7%, U.S.A. 3.1%, Australia 6.4%, N.Z. 14.3%. The combination of a constant exchange rate and significant differential inflation rates has had a serious adverse impact on forest products export trade during the past two years. The third point, Taxation review. The Taxation Reform Bill in December, 1986 has had a negative impact on the confidence in the industry by effectively removing cash subsidies from forest establishment intending operations which were previously available to all commercial forest companies. The uncertainty resulting from this Bill has lead to a major down-scaling by the industry of its forward land acquisition programme which will effect future new land establishment levels. A fourth point. N.Z. Forest Service Restructuring. With the state owning 55% of the national plantation resource and controlling 70% of the current harvest the direction of the state sector will have a major influence on private

forest sector. The effects of the Corporatisation of the Forest Service are only beginning to be felt. The fifth and final point is the internationalisation of the industry. Recent moves by N.Z. Forest companies into forest ownership and processing offshore, e.g. Canada, Australia and Chile, has redirected the focus of development somewhat from N.Z. to these countries. Future prospects for N.Z. forest industry in the short to medium term, that is the next 3 to 5 years area; the rate of new forest expansion is expected to fall from 40,000 recommended in 1981 to less than 10,000 hectares. This means that employment will drop significantly by between 5 to 10,000 over a 5 to 8 year period as silviculture work catches up with the newly established forests. It is quite probable that a short term programme of between 15 and 20,000 hectares of planting may occur as forest owners complete existing land bank development to take advantage of the phasing out of the former tax arrangements. Land Use. The downturn in the rural sector has encouraged reviews by both local authorities and forest owners regarding land use and opposition to planting plantation forestry is now significantly less. Undoubtedly forestry has emerged as a real alternative to agriculture on marginal land. Markets. The lack of significant additional volumes of fibre at the moment is limiting current N.Z. contributions to market development of pinus radiata. It is generally accepted that the sawmilling industry will have to upgrade equipment to efficiently convert smaller logs rather than those which have been additionally available. Now the medium to long term future, forest expansion. If the reduction of planting is sustained for the medium to long term much more serious employment implications will develop particularly in the areas where unemployment is already of major concern, e.g. east coast of the North Island and Northland. Markets. Confidence in the medium to long term international demand for forest products manufactured from pinus radiata remains very strong, tempered only by the ability of the industry to be cost competitive, relative to major competitors. N.Z.'s current annual harvest of 9,000,000 cubic metres is expected

dothostromyopini which is a fungal disease found in Nelson actually widespread throughout most of N.Z. The red is actually the healthy part of the tree. It's another factor we've got to contend with. A shot of a helicopter about to go and drop a bit of fertilizer on some of our blocks. It's not a common operation, aerial topdressing as not all soils are inefficient but around Nelson we do have nitrogen and phosphate deficiencies. After getting them up to about 25 years or so we start with the starting, hauling. That's a particular shot of a hauler spa. Our Company has got somewhere in the vicinity of 9 logging gangs of which 7 of them are hauler and 2 skidder. Again the requirements of the Catchment Board, topography, downstream effects, it actually dictates the method of logging. Shot of logs being loaded, off to the mill. That's not the mill you'll be seeing this afternoon, it's an old shot of an old mill that is no longer operational. The Baigent Forest Industries is a Company that now doesn't export sawlogs overseas, they use it all in their Eves Valley Complex which you will see later on but other Companies are still in the sawlog exporting business. We do however, contribute to the export of chip from Nelson, that's a radiata chip on the left and the darker pile is the native beech. The ultimate aim for Baigents is production of high quality, high value, sawn timber from their Eves Valley Mill and that's it for that lot. The approximate area of exotic plantation in the Waimea Division of the Waimea County is 77,000 hectares of which ownership is divided into the Timberlands Forestry Corporation of 44,000 hectares, Baigent Forest Industries 20,000, other forest companies and owners 10,000, local bodies in the vicinity of 3,000 hectares. Our Company forests a wide spread across the entire Waimea Basin from the steep eastern ranges of greywacke soils through the more moderate slope to Moutere clay gravels to the steep western ranges of granite. The Waimea County is reknown for its sunshine and calm weather, although you mightn't believe it over the last few days. Strong winds are less frequent than most parts of the country. Climatic conditions vary across the Waimea Basin but

unfortunately there is not one area of Baigents forests that does not support infestations of noxious plants in varying proportions and vigour. Some of the classified wide spread noxious B plants found in our forests, are gorse, broom, blackberry, hawthorn, ragwort, nodding thistle and barberry. More recently cortaderia species have entered logging areas and logged areas of forests and are seen as a real threat. Bracken fern is always found in association with all of these plants and adds to our problems. Now for the remaining part of my address when I quote costs I will be referring to the gorse bracken fern situation and the costs are historic not on the latest chemicals that are available, so don't take too much notice of the actual costs themselves. Now I'd like to run the last of the slides. With the existing Waimea County rural zoning scheme any future forest expansion is restricted to the steeper weed infested ranges around the Waimea Basin. That is a shot of the eastern ranges. That's a shot of the more moderate what we call the Moutere clays. It's not a very good shot but indicates the prolific weed growth on the western ranges that we're also establishing as forest. Where noxious weeds do not exist establishment is not a problem, but where you do have noxious plants there is a problem. Now the effects noxious plants have on the cost of establishing new forestry areas, dessication on a steep clean site, nil, on a steep, gorse fern site you can expect somewhere around \$380 per hectare for gorse, for fern you can expect somewhere around \$370. Burning costs, steep clean site in vicinity of \$50 per hectare, gorse fern \$100. Line cutting is also essential in gorse areas, usually find somewhere, although you dessicate and burn, you usually find that you've got to hand line cut somewhere around 10% of the area, so you can expect another \$40 for a gorse site. Planting is usually the same although you can see the gorse that they're having to walk through there once it's line cut planting costs are normally the same. Relief spray on a steep clean site, nothing, on a gorse site you can expect around \$150. Spot spraying on a steep clean site \$110, gorse site, we don't have to spend anything there.

to rise to 1,800,000,000 cubic metres by the year 2000. If this eventuates, the forestry contribution to the N.Z. economy will rise from the present 8% to nearer 20%. International Competitiveness. N.Z. plantation forest industry is one of the few if not the only industry which has a major sustainable advantage over most of its international competitors, for instance finance, manufacturing hi-tech in fact N.Z. is one of only 3 or 4 countries where a significant sustained increase in wood fibre production is possible over the next 15 - 30 years. Some important supporting factors to that statement are that radiata plantations grow high value fibre, 5 to 10 times faster than major competitors forests, there will be an inevitable major decline in both the sustained yield and the quality of fibre from many world wood baskets, such as South East Asia, South United States and Canada. The qualities of radiata pine will enable the substitution for a variety of species currently being used. Lastly there will be an increase in the costs of production of fibre from major world resources. Now to try and get back to the Conference theme of noxious plants I'd like to speak about the local plantation forestry scene and our company's experiences in establishing, tending, protecting and harvesting operations. For this I will require some slides. I apologise for the selection of these slides but there weren't many available to me but I hope you find some of them of interest. All commercial forest companies follow the same or very similar sequence of operations as our company, leading to the processing of wood products. It all begins in the nursery and our company currently produces in the vicinity of 2.6 million radiata and .2 million other species of seedlings. Our land preparation varies as the country dictates and as the company always works within the Section 34 of the Soil Conservation Act one of them there shows root raking. Another one is dessication where required over the gorse burning, follows on with the planting of the tree, relief spraying, although that looks very late. Thinning. That's a slide I've tossed in, it's actually an infra red slide, the green indicates the infected area of the tree with

Release cutting. You can also expect some costs in release cutting, of round about \$40 per hectare minimum on a gorse site. Now that's a shot of gorse that's come up in a logged area. So the problems of noxious weeds, although you establish your first plantation and forest, the problems don't disappear there, as soon as you fell it, that's probably gorse of 2 to 3 years germination in Nelson. It's actually in Fletchers block of Nelson Pine Forest. You can expect on a steep clean site to have to spend somewhere round about \$410 per hectare to establish. Steep gorse fern site \$1360 is not uncommon to spend. Now keeping those costs in mind and the knowledge that all establishing assistance has been removed I ask you how much can forest companies afford to pay initially for steep weed infested land. Other factors to consider are the increasing tending costs, increased tending costs when gorse is involved. The cost of a single thinning operation can treble where gorse is prevalent. Luckily our company does not prune, because these operations are also affected directly by the gorse under story. Our company in addition to high expenditure on establishment operations involved in noxious weed control also spend in excess of \$30,000 annually on noxious weed control within forests and on forest boundaries. These costs have to be recovered somewhere so maybe you might be a bit more sympathetic when you have to go and buy timber next time. Forests can be successfully established in competition with noxious weeds if forest companies can afford the high costs of operations required. That's how it should look like. If not done correctly establishment is often poor. Although not common, snow damage in young plantations with a dense under story of gorse is occasionally experienced. The last and probably most devastating effects that noxious weeds have in plantation forestry is their contribution to rapid spread of fire and hindrance to fire fighting operations. Fires in steep gorse covered land are difficult to control, requiring the use of expensive but so very essential helicopters. The final result of any major fire on steep weed infested land are total destruction of an essential resource and the

beginning of another struggle to eradicate noxious weeds. Now to summarise, despite the serious series of changes to the industry during the years 1984-86, which have in the short term reduced confidence in expanding plantation forests the medium to long term outlook remains good. The N.Z. plantation forest industry has a very real potential to become one of the most important sectors of the N.Z. economy during the next 10 - 15 years, with the ability of forest owners to convert the major natural advantages of their plantation resources into a significant profitable industry dependant upon the economic and labour factor I mentioned earlier and a sustained market development effort on an international scale. The first Baigent company was incorporated in Nelson some 54 years ago and will continue as Baigent Forest Industries to play an important role in the Nelson forestry scene, despite noxious weeds. Our Company's relationship with the local noxious plants officers is cordial, most of the time, and I see no reason for that to change unless the cortaderia control question alters this, Finally, I would like to take this opportunity to thank Eric for the invitation to address your Conference, thank you Mr. Chairman, thank you everyone for your attention. I hope that you enjoy your visit to our Eves Valley Saw Milling Complex of which we are all very proud and the drive through some of our forest areas. Thank you.

TRAINING OFFICER'S REPORT

D. Parkes

Training Situation Statement

Total Officers currently employed 132

Analysis:	Trainees studying for COP	-	28	
	Trained Officers with COP	-	43	
	Experienced Officers with COP	-	13	
	Experienced Officers studying	-	1	85
	Experienced Officers not studying/qualified			47

This represents a participation in C.O.P. of 64% of current workforce.

Numbers of Trainees Appointed

1981-13

1982-10

1983-15

1984-11

1985-24

1986-10

Block Course 1987

This year block courses will be held at Flock House from 6 - 10 July and is especially designed for trainee N.P.O.'s

Official Training Projects/Du Pont Award

Applications will be sent out in June 1987 for a 2 October deadline.

- This is intended to encourage Officers to plan their training during the winter months when generally work pressures are not so great.

- It also gives the Selection Committee flexibility to manage deadlines if necessary to facilitate a reasonable level of support.

Support for official training projects and Du Pont award is very much dependent on self motivation.

Motivation can be two kinds:

EXTRINSIC - which is imposed on you from outside.

INTRINSIC - which belongs to you personally.

Self development relies on intrinsic motivation.

The Training Committee can't motivate anybody to benefit from training opportunities offered as official projects, only you can motivate yourselves.

Please get your applications in by the stated deadline date.

If you do not and we have to extend the deadline two undesirable consequences emerge.

1. The image of N.P.O.'s suffers, through connotations of apathy.
2. The self motivated few who do plan and meet deadlines feel disadvantaged through increasing the basis of competition with their projects.

This is a matter for internal resolution between N.P.O.'s rather than a Training Committee problem.

ANNUAL BRANCH REPORT - NORTHLAND BRANCH

C.H. Crow

During 1986/87 Ken Laurie from Hobson DNPA left our ranks, as yet not replaced. The vacancy at Hokianga has not been filled, despite the previous N.P.O. leaving in December 1985. Malcolm Denmead, the part-time N.P.O. from Takapuna City, left as a result of the formation of the North Shore D.N.P.A this body encompasses all of the urban local authorities north of the Auckland Harbour Bridge, and in early 1986 appointed Mr. Rod Smart as the full time N.P.O.

Meetings were held in June at Dargaville, in September at Henderson, in December at Kaeo and in February at Whangarei. Myra Hampton was in attendance at the September meeting and requested group discussion on the future of noxious plants and administration thereof. Our recommendations included retaining Noxious Plants Council, adding more Field Officers, abolishing Regional Committees, amalgamating some D.N.P.A.'s allocating much more funding to bio-control research, stepping up weed publicity action, and placing more emphasis on overall environmental considerations when classifying weed species.

At the December meeting representatives from Ivon-Watkins Dow Ltd outlined the findings of the recent Environmental Council investigation into 245T.

In February our Branch approved Institute expenditure on the National Field Days display. A legal session and Mock Court was held, the latter being extremely informative and humorous.

Special projects continued on Pennisetum macrourum, parrots feather and Manchurian rice grass. Thanks go to Noxious Plants Council. The West Auckland N.P.O.'s carried out successful chemical trials on Wild ginger and produced a pamphlet on the ginger problem for local occupiers.

A great deal of time was spent by our N.P.O.'s in treating Class A plants, especially water hyacinth, Salvinia and Cape Tulip. Some water poppy infestations have also been discovered and treated. One wonders how M.A.F. would cope on their own with these plants especially with the

television campaign unearthing more sites.

The bio-control work on ragwort has paid dividends this year, with the Longitarsus beetle establishing solidly if unspectacularly at all release sites and a Cinnibar population finally overwintered in numbers at Whatitiri. The Branch wrote to all D.N.P.A. Chairmen urging support for the D.S.I.R. research appeal, which was ultimately backed by most of our D.N.P.A.'s.

Work on target plants continued with considerable success, proving the worth of this approach. Infestation levels of broom, nassella, Bathurst bur, nodding thistle, Clematis Vitalba etc. are all dropping.

Two members were awarded a Certificate of Proficiency during the year. Congratulations go to Mark Vincent and Lance Vervoort. Our Branch has now 90% of its officers fully qualified.

The New Zealand Counties Association wrote in October declining our request to host 1990 Conference in Whangarei. Finally, some officers have been informed by their employers that other duties will be added to noxious plants work.

ANNUAL BRANCH REPORT - SOUTH AUCKLAND BRANCH

J. McNaught

It is with pleasure that I present this brief report of Branch activities over the past year.

Bi-monthly meetings have been well supported by our Branch Members throughout the year. Meetings over the past year have been held at Piako, Raglan, Taupo, Whakatane, Thames and Rotorua District Noxious Plant Authorities and the efforts put in by Officers from these Authorities have made for successful meetings followed by a variety of field tours associated with those days.

FIELD DAYS

Without doubt the highlight of the year's activities would be the establishment of a Branch Sub-committee for the creating of a display at the National Field Days held annually at Mystery Creek, Hamilton.

This has been a difficult and trying project to put into place as there has been no precedent. Had it not been for the determination, undivided support and efforts of the Sub-committee, the Institute would not be having the flag flown on behalf of its members nationally.

Without bias, may I suggest to any Member that should they have the time available, or be in the vicinity, they offer their support to the Committee or the project proper at the field days.

Thank you for the time given to present this report.

ANNUAL BRANCH REPORT - HAWKES BAY EAST COAST BRANCH

W.A. Dickin

During the year, this Branch held two meetings. Both meetings were well attended with some members having to travel long distances. The Membership remains the same at 12 Officers. Five members of the Branch have passed Certificates of Proficiency during the year.

Our Branch feels that 1986 was a year of very mixed results. The past year has also seen a decline in Noxious Plant Control because of the downturn in the rural economy. The change in policy as dictated by Noxious Plants Council give Noxious Plants Officers as many teeth as a gummy old ewe. Various Solicitors have told us that we have very little chance of winning a case if taken to Court. Many D.N.P.A.'s in our Branch are now using Section 38 of the Act in serious cases.

Also, the price of chemicals do not help our cause with the likes of Tordon and Garlon increasing in price again. I think they will price themselves off the market.

One point that concerns our Officers greatly is the future of Noxious Plants Control and Noxious Plants Officers themselves. Many stories have been heard over the past 12 months and my fellow Officers feel that this matter should be brought out into the open at this Conference.

CANTERBURY BRANCH REPORT

By. A. Blick

The Canterbury Branch has had six meetings throughout the region in the last twelve months. These were held at Ashburton - February, Waimairi - July, Ashburton - August, Ellesmere Country Club - September, Fairlie - November, and Rangiora - February.

The speakers at these meetings have included Dr. Robert Blackmore, who gave a very interesting and informative talk on M.E., Mr. Bill Sykes from D.S.I.R. Botany Division who showed slides and talked about adventure plants in New Zealand and our off-shore islands, and Mr. Barry Aide from the Health Food Shop in Fairlie, who gave an address on herbs, their origins, cultivations and uses, and gave those present a new insight into plants commonly referred to as weeds.

Mr. Aide showed a very brave front as he entered the room wearing an anti-2,4,5-T badge. However, members respected his views and some may have been tempted to experiment with some of the concoctions.

In the afternoon we visited the site of Diquat-gel trials on Lagarsiphon at Albury. It was very impressive, as, although only a small section of the pond had been treated, there appeared to be good control over the entire area. When the pond was treated, it was found to be full of eels and it has been suggested that the eels may have moved the gel about as they swam amongst the Lagarsiphon.

This was viewed with some scepticism, but as we were inspecting another pond, an eel swam over to a solitary plant of Lagarsiphon and disappeared amongst the foliage, which made everyone think again.

Probably the highlight of the day was, as the N.P.O.'s were walking past the Mackenzie County's shiny new premises, cannabis plants were discovered growing in the new shrubbery. The local N.P.O. and his Chairman received quite a bit of flak, and the above officer's report to Council probably explains their presence.

Two prohibited plants found recently growing in the garden in front of the County Office were not there for display or ornamental purposes. Nor were they planted by Council staff as a cash crop to increase the staff comforts and entertainment funds. These plants were found by members of the Noxious Plants Institute, who were that day holding a meeting in the Council Chambers.

Council can be assured, however, that I am receiving quite a bit of good natured flak from fellow Institute members and the general public.

As a result of investigations, I have come to the conclusion that they were either planted by one of the County's more "way out" ratepayers or residents, or they have grown from one of the many "butts" thrown on the garden - possibly even from the open window of the County Clerk's office.

The Mackenzie County has dominated most of the activity for the Branch over the last 12 months with the discovery of the above plants, and a new first for New Zealand with Gary's diligence in spotting the Taurian thistle which is related to the cotton thistle.

Gary has always said he has every weed bar seaweed, and we are starting to believe him now.

Probably the highlight of the year for the Mackenzie County was Gary being elected to the Fairlie Community Council. Hereafter Gary shall be referred to as Councillor Kerr.

November saw the annual effort by members in manning the display at the Christchurch show.

We have gained two new members in Tony Banks from Waimairi and Russell Green from Malvern.

It is with regret that we have lost our most senior member, Dave Smith, who has retired. Dave has always been a most active member of the Branch and will be missed.

Arthur's health is improving slowly, and in the latter part of the year, we once again have been fortunate to see Arthur at meetings and field days.

ANNUAL BRANCH REPORT - TARANAKI BRANCH

A.M. Kreft

The Institute Branch held three meetings including the Annual General Meeting during the year. Main discussion topics were:

1. The position the Institute was in during the present vacuum concerning the future of the Noxious Plants Council and the amending of the Act.
2. Field day at Mystery Creek and Institute input.
3. Attendance of DNPA Elected Members at our Conference.
4. Resignation of the Editor of "Protect"
5. Various matters raised by the Executive.
6. Forthcoming Conference at New Plymouth in 1988.

Regular meetings of the Branch have been held for this event.

A Committee consisting of Jack Hunter, Arthur Zrinyi (Secretary), and Milton Kreft was set up to seek a satisfactory venue for Conference and liaise with I.W.D. as main collaborator for 1988. A word of thanks to the Southland/Otago Branch for a letter and documents setting out the basis for running a Conference.

The Branch had a display at the A. & P. Show at Stratford in November. This drew numbers of people and Members answered many queries.

Social Side

Messrs. Dan Collins, Arthur Zrinyi, and Hans Burgisser had trips to England and Europe during our last winter. Dan was particularly impressed with the Nodding Thistle and Heath in his native Scotland.

ANNUAL BRANCH REPORT - WAIRARAPA BRANCH

R.S. Morgan

For the 1986/87 year the main concern for the Wairarapa Branch has been, and will be for some time yet, is the future of Noxious Plants in New Zealand.

Obviously there are more changes on the way and along with amalgamation proposals, this gives concern for the stability of our employment, as well as concern as to just what our job will be in 12 months time.

Branch Meetings have been held on an average of every three months and at some of these field trips have been incorporated such as time spent looking at Bathhurst Bur, Saffron Thistle and Pennisetium sites within the Featherston County. This was of prime interest to those of us who have not seen these plants before but, who have them so close to our boundaries.

Our other major event during the year was the arranging and manning of a display at the Masterton Jubilee Show. This was a combined Branch and Wairarapa D.N.P.A.'s activity and ran from the Friday through to Sunday. Our thanks to John Salmon, Manawatu D.N.P.A. for the loan of stands and material to assist us with this display.

Another notable event that occurred during the early stages of 1987 was the retirement of Bert Garrity, Wairarapa South County Council. Bert's special humour and zest for life will be missed by us all, but we wish Bert and his wife a happy retirement.

Consequent to Bert's departure, we welcome Blair Wilmshurst, who has taken up the position of Noxious Plants Officer with the Wairarapa South County Council.

Finally, as the Branch Chairman, I thank the other Branch Members for their assistance and tolerance over the past twelve months.

A two day, overnight, field trip was held on 26-27 February in the Nevis Valley, an area bounded by Lake, Vincent and Southland Counties. This was organised with a view to searching a large expanse of area for Nassella tussock and was well supported by Branch Members. While no Nassella was found the exercise itself was most successful and is intended to be repeated in other areas of Otago and Southland.

Some of the Branch met again in March at Lawrence during the course of the combined Counties Nassella Tussock Annual General Meeting. This Annual Meeting is often used as our opportunity to discuss matters pertaining to the pending Annual Conference.

Finally on 6 April the Branch gathered as a whole in Otautau at a seminar organised by I.W.D. The seminar discussed the Brinkman 245 T Report, a brushweed and total weed control update and in the afternoon we inspected several trial sites evaluating the effectiveness of products for gorse control.

Officers have been busy during the course of the year with their normal round of public relation exercises including A. & P. Shows and talks to interested groups as well as being represented at Cereal '86 in Southland, held for the first time outside of Canterbury.

The Branch has three Training Officers among its membership and all three participated in the Trainers Refresher Workshop in September where together with other trainers from around New Zealand they helped develop a restructuring package that was implemented on 1 April. Arising from the restructuring was the appointment of Bob Blick as this Branch's Training Manager and while Bob happens to live on the wrong side of the Waitaki River we look forward to working with him in the future.

It is apparent that regional training is here to stay and we must accept the challenge of it. We must do our own thing because the time of others doing it for us is over.

The disbanding of Regional Committees and the attempt at disbanding the Noxious Plants Council have been major developments during the year that have affected this

Branch very little at this stage but what the future holds is anyone's guess. Obviously the proposed merger of Pest Authorities, Soil Conservation and Noxious Plants Authorities is the one big issue facing us during the next 12 months but we have already advised our employers of where we stand on the matter, that is vehemently opposed to it.

On top of that is the envisaged 'shake-up' that the Noxious Plants Act is undoubtedly going to receive and we as a Branch look forward to participating in that.

Last year our Branch withdrew two remits pertaining to "Protect" once we had assurances that it was to undergo a facelift but unfortunately the magazine appears to have developed something of a curse in latter years, that we hope to put to rights at this year's Conference by the reintroduction of last year's withdrawn remits.

Probably the most positive aspects of the entire last 12 months has been the one hundred percent support of this Branch to the biological control programme developed by the D.S.I.R. The next five years promise to be exciting ones in this particular field of Noxious Plants control.

On a more personal level I would like to say how thrilled I am at the decision of Du Pont to promote an award scheme in New South Wales with the recipient coming to New Zealand each year, hopefully to our Conference. This was my objective in 1985 when I visited Australia and I look forward to the exchange visits that will take place in the coming years.

We all face challenging times ahead of us not only in our jobs but as individuals, families and in general, so let us work together, not just as a Branch but as an Institute. To do so will undoubtedly result in the betterment of all.

Thank you.

ANNUAL BRANCH REPORT - MANAWATU-WEST COAST BRANCH

E.H. Gard

During this year, the Branch has had a minimum of Meetings, to help officers cut mileage and reduce costs to their constituent authorities. Conference commitments meant many members using their own and their authorities resources to make the Conference a success. I wish to thank all those who gave unstintingly of their time and energy.

Excess funds after Conference were forwarded to the Waikato Branch of the Institute, to promote awareness of Noxious Plants, and alternative methods of control. With an exhibition at the National Field Days at Mystery Creek. Our money is to be used to finance a permanent display which may be rotated for use by the various Branches.

Our Membership has declined by one as an Officer has resigned over uncertainty in his job future, caused by his Councils expressed inability to continue funding with a nil rate increase.

A change of meeting concept has been unanimously agreed upon with our meeting schedule to be one meeting (Annual General Meeting) in February/March and a two day training seminar to be held in September, venue to be set at the Annual General Meeting. This year's seminar will be held in Wellington, date to be advised later, and the Wellington Officers have been able to obtain \$800 sponsorship to assist with the costs of this.

Field Officers. There has been a change of responsibility where this Branch is concerned. Mr. Graham Strickett is now responsible for the following D.N.P.A.'s in our area. Wellington, Horowhenua and Manawatu. Mr. Doug Robinson is responsible for the balance of the area.

There appears to be a new Government concept of reorganisation between Noxious Plants Pest Destruction, and catchment Authorities. In April there is to be a meeting between interested parties to assess the compatibility of functions with a view to amalgamation. Our institute is objecting to this concept along with the Noxious Plants Council as the other organisations mentioned are not conducive to noxious plants control.

With cuts in Government and local body expenditure affecting all departments we must carry on with a positive attitude, and stress our importance as an essential part of the rural and urban communities.

In conclusion I wish all members well in the coming year, which I've no doubt will have more than its fair share of challenges.

ANNUAL BRANCH REPORT - OTAGO/SOUTHLAND BRANCH

K.J. Crothers

The Otago/Southland Branch has completed a relatively quiet year since the Wanganui Conference. However, the first four months of 1987 has seen something of a resurgence of activity among our Members, who currently number fourteen. Once a Conference is over, everything seems to fall somewhat flat for a few months. Like some of the weeds we are constantly battling with, we also have a dormant period as we winter over.

However, here we are in sunny Nelson taking part in a most excellent Conference that I would like to congratulate the Northern South Island Branch on organising. Well done.

The only loss from our Branch during the last 12 months has been Carolyn Cox from Queenstown who married last Easter and then left for the U.S.A.

Athol Feaver was the successful applicant for the vacancy at Queenstown so I lost another of my disciples from Southland having the previous year lost Bob Merrilees to Waiheke Island. It is most pleasing though to see qualified Officers obtain success when they apply for positions with other Authorities.

Murray Turner has had a busy and eventful year with two notable achievements in particular. At the N.Z. Weed and Pest Control Conference in Palmerston North in August of last year, Murray had a paper accepted entitled "The effect of metsulfuron on sweet brier". A rare achievement for a Noxious Plants Officer. More recently Murray was successful in obtaining a Training Project Award to study sweet brier on Molesworth Station.

Other successes for our Branch include Steve Hix winning the "prestigious" Robb McGuinness Award at last year's Block Course, for his paper entitled "Employees of the Otago/Southland District Noxious Plants Authorities". Geoff Davis being successful in obtaining that most prized possession of all Noxious Plants Officers, namely the Certificate of Proficiency and Susanne Lobb for her success with some (if not all), of the Pesticide examinations.

Floods continue to wreak havoc in the deep south which has kept the Branch Secretary, Peter Ayson, pretty much busy in recent times. He assures me that there is no truth in the rumour that the Aquatic Plant Section of Ruakura are contemplating a shift to Otautau because of better water conditions. Peter is having successful time with the biological control of ragwort with cinnabar moth in an area not far from Riverton.

At last year's Conference in Wanganui only 60% of our Branch were able to attend whereas this year we only have one member absent. That Member is Ray Read who is at this moment on his way to Canada to be reunited with his fiancée. Ray is being married in Vancouver on 1 August and will be bringing his wife back to Dunedin to live towards the end of the year.

The Otago/Southland Branch considers itself fortunate to have among its Members Neville Daniel who is often looked upon as our mentor and this past year has seen the advice Neville has given, put to a very good use in a variety of issues that have confronted the branch, and for that matter, the Institute as a whole.

The Branch held its two day Annual General Meeting and Training Seminar in Oamaru on 11-12 September. The programme was mixed and varied but continued with our objective of maximum Noxious Plants Officer participation, very much like our National Conferences are being run now.

At the Annual General Meeting we decided that the Branch should attempt to meet as a Branch on a more regular basis whether it be a field day, or some other suitable activity. To that end the Branch has indeed met as a group on four occasions since that time.

The first occasion was at a Special General Meeting in Dunedin during November where we discussed the then rumoured proposed merger issue. From that meeting we decided to put our case to the Otago/Southland Wards Meeting and leave it at that until something more concrete developed.

NATIONAL SECRETARY'S REPORT

D.J. Brown

The following is my report for the 1986 year.

Membership to the Institute has been fairly static this year as compared to past years. At the time of this report six applications had been received for full membership, two for associate and there have been five resignations.

During the year the Institute lost two valued members. They were Eric Jackson (Nth/Sth Island Branch) and Stan Anderson (Manawatu/West Coast Branch) both special honorary members. Sympathy was accorded to the families by the Institute.

Late last year the South Auckland Branch decided to organise a display stand at the National Field Days to be held at Mystery Creek this year. The branch is to be commended on this move which can only bring good to the Institute as a whole. Concern has been expressed over the future of the magazine "Protect" in as far as the editorship of it, and hopefully suggestions made at this Conference will overcome difficulties the Institute has experienced over recent years.

This years Conference Organisers have gone to a lot of trouble in an endeavour to overcome problems that were encountered in workshop sessions at last years conference and also in other areas.

The Constitution and Rules of the Institute were reprinted last October which included Amendments passed over the last few years. Regretfully omitted was the reprint date in the book, however it has been re-registered with the Registrar of Incorporated Societies. To avoid reprints in the future that Amendments passed at A.G.M.'s be circulated to members in the form of a strip to be inserted in the book.

Noxious Plants Council circulars have continued to be received by the Institute on a regular basis although the information has not been passed onto Executive Members because of the necessity not to do so.

In conclusion, I would like to thank those who have been associated with me in keeping the affairs of the Institute running smoothly.

Dickin W.A.	Bill	Wairoa C.C.	P.O. Box 13, Wairoa
Dodd R.E.	Bob	Piako C.C.	P.O. Box 266, Te Aroha
Donnelly R.	Robbie	Waimea DNPA	P.O. Box 3050, Richmond Nelson
Doyle J.	James	Marlborough DNPA	Dashwood, R.D. 4, Blenheim (Private)
Drake B.R.	Brian	Kiwitea C.C.	P.O. Box 6, Kimbolton
Duncan P.T.	Jim	Cheviot C.C.	P.O. Box 22, Cheviot
Eden E.J.	Eric	Waimea DNPA	P.O. Box 3050, Richmond Nelson
Edmondson J.	James	Thames/Coromandel D.C.	Private Bag, Thames
English A.	Allan	Patea C.C.	P.O. Box 28, Patea
Farrell P.J.	Peter	Rangitikei C.C.	P.O. Box 22, Marton
Feaver A.	Athol	Lake C.C.	P.O. Box 25, Queenstown
Ferguson M.J.	Michael	Waiapu C.C.	P.O. Box 24, Te Puia Springs
Field K.J.	Kevin	Waipa C.C.	P.O. Box 340, Te Awamutu
Foster G.W.	Gary	Strathallan C.C.	P.O. Box 56, Timaru
Frizzell I.E.	Ian	Amuri C.C.	P.O. Box 14, Culverden
Fullerton D.K.	David	Waikato C.C.	Private Bag, Hamilton
Gard, E.H.	Ted	Wellington Reg/ DNPA	Private Bag, Porirua
Gate A.B.	Austen	Cent. Auckland DNPA	P.O. Box 26013, Epsom, Auckland 3
Gordon D.R.	Doug	Comb. Nasella Com.	P.O. Box 24, Lawrence
Gould C.W.	Colin	Marlb.Nasella Tussock Board	P.O. Box 105, Blenheim
Green R.C.	Russell	Malvern DNPA	P.O. Box 1, Darfield
Hatton P.	Paul	Wanganui DNPA	P.O. Box 7045, Wanganui
Hartley T.	Trevor	Rangitikei C.C.	P.O. Box 22, Marton
Herbert H.J.	Haddyn	Dannevirke C.C.	P.O. Box 71, Dannevirke
Herbert N.K.	Norman	Dannevirke C.C.	P.O. Box 71, Dannevirke
Hill N.J.	Neven	Rotorua D.C.	Private Bag, Rotorua
Hitchcock D.N.	Daniel	Manukau C.C.	Private Bag, Manukau
Hix S.J.	Stephen	Tuapeka C.C.	P.O. Box 24, Lawrence
Hodgson R.D.	Ron	Hawkes Bay C.C.	P.O. Box 342, Napier
Holden J.S.E.	Mick	Raglan C.C.	P.O. Box 1, Ngaruawahia
Hoskin H.P.	Phil	Pahiatua C.C.	P.O. Box 35, Pahiatua
Hough B.	Brian	Opotiki C.C.	P.O. Box 44, Opotiki
Hunter J.S.	John	Inglewood C.C.	P.O. Box 47, Inglewood
Ingram P.	Peter	Tauranga C.C.	Private Bag, Tauranga
Iremonger R.L.	Ray	Matamata C.C.	P.O. Box 13, Tirau

Jane D.	Desmond	Wairoa C.C.	P.O. Box 13, Wairoa
Jeffery C.M.	Clarence	Piako DNPA	P.O. Box 266, Te Aroha
Joynt P.W.	Peter	Hobson C.C.	Private Bag, Dargaville
Julian B.	Bruce	Horowhenua DNPA	P.O. Box 542, Levin
Katterns C.	Christopher	Franklin C.C.	Private Bag, Pukekohe
King A.A.	Anthony	Featherston C.C.	P.O. Box 6, Martinborough
Kreft A.M.	Milton	Stratford C.C.	P.O. Box 98, Stratford
Kennedy P.A.P.	Peter	Hauraki Plains C.C.	P.O. Box 50, Ngatea
Kilkolly P.	Peter	Otorohanga D.C.	P.O. Box 11, Otorohanga
Laurenson L.J.	Lewis	Waitomo C.C.	P.O. Box 505, Te Kuiti
Leighton A.G.	Graham	Wellington DNPA	Private Bag, Porirua
Lobb S.	Suzanne	Southland DNPA	P.O. Box 903, Invercargill
Kennard J.P.	James	Banks Peninsula DNPA	P.O. Box 6, Little River
Kerr G.J.	Garry	McKenzie DNPA	P.O. Box 52, Fairlie
Manson H.R.J.	Harley	Waimairi D.C.	Private Bag, Fendalton, Christchurch
Massey E.M.	Kenneth	Whangarei C.C.	P.O. Box 4102, Kamo
Martin A.J.	Joe	Waimarino C.C.	P.O. Box 20, Raetihi
McCaw R.B.	Robert	Waimate C.C.	P.O. Box 3, Waimate
McDermott L.E.	Lawrence	Manawatu C.C.	P.O. Box 1, Sanson
Menzies B.	Bernard	Buller C.C.	P.O. Box 246, Westport
Merrilees R.J.	Robert	Waiheke Island C.C.	P.O. Box 254, Ostend
Mickleson N.	Neil	Rangitikei DNPA	P.O. Box 22, Marton
Miller B.G.	Brett	Whangarei C.C.	P.O. Box 4102, Kamo
Morgan P.F.	Peter	Hurunui C.C.	Osborne Road, Amberley (Private)
Morgan R.S.	Robert	Eketahuna C.C.	P.O. Box 23, Eketahuna
Murray C.S.	Stuart	Bruce C.C.	P.O. Box 123, Milton
McNaught J.	John	Rotorua D.C.	Private Bag, Rotorua
Neal P.	Philip	Raglan C.C.	P.O. Box 1, Ngaruawahia
Nicholls W.	Wayne	Marlborough C.C.	13 Nursery Lane, Seddon (Private)
Ovenden K.	Ken	Cook C.C.	P.O. Box 2003, Gisborne
Packe R.V.	Robin	Waipukurau DNPA	P.O. Box 46, Waipukurau
Patterson B.P.	Barry	Waimate C.C.	P.O. Box 3, Waimate
Payne T.W.	Trevor	Hamilton City	P.O. Box 937, Hamilton
Proctor N.C.	Noel	Horowhenua C.C.	P.O. Box 258, Levin
Morshead P.	Pamela	Waimate West C.C.	P.O. Box 15, Manaia

VICE-PRESIDENT'S REPORT

K.J. Field

"Protect" magazine.

"Protect's" demise will be viewed by many members as an untimely loss to this Institute.

It provided both a link between members and a source of information which could be utilized effectively by officers.

Following a shakey start after the change of editors, the magazine was improving with every issue, both in format and subject matter. A culmination of events led to the Editor's decision to terminate his position with the magazine; the following being the main points:

1. The withdrawal of advertising by a major contributor. (This was to be a temporary measure while a new format was drawn up).
2. The printing firm contracted went bankrupt.
3. Escalating costs of production, postage and G.S.T. making it harder to remain financially viable.
4. Repetitive subject matter and lack of new articles available.
5. The production of the magazine consumed so much time that the editors regular employment started to suffer.

It is with regret that the Editor made the decision that he did, but I feel now is the time for the Institute to assess its future requirements in relation to formal publications and decide on a viable alternative to "Protect". Government's policy of restructuring departments into cost-efficient units is an across-the-board measure, and rest assured Noxious Plants Officers will come under their scrutiny.

At present, our industry faces indecision and lack of direction, and to achieve any goal, members will have to be united in their stance, to save themselves being swallowed up by some faceless corporation.

Fast, efficient and timely communication will be required to inform members of events immediately, something that "Protect" could not do.

The alternatives to "Protect" are few, but can be shown to be cost-efficient and effective.

Finally, I wish to extend my thanks to the Editor for his efforts over the last 7-8 issues, and to his D.N.P.A. for their tolerant attitude in allowing him to compile "Protect" over the last eighteen months.

INSURANCE:

M. Turner enquired as to whether the insurances were up to date and was informed that they were.

EMERGENCY COMMITTEE:

M. Turner asked if the Committee had met. The reply was no.

J. Craw thanked the three Executive Officers for their work and moved a vote of thanks.

G. Ward spoke on the standard of involvement of officers and commended them.

J. Salter spoke about approaching Ministry of Agriculture and Fisheries over amalgamation.

EXECUTIVE TRAINING OFFICER'S REPORT:

The Executive Training Officer presented his report.

TCI TUTOR'S REPORT:

The TCI Tutor gave his Report.

BRANCH REPORTS:

J. Craw read a Report from Northland Branch.

J. McNaught read a Report from South Auckland Branch.

T. Gard read a report from Manawatu/West Coast Branch.

B. Blick read a Report from the Canterbury Branch.

K. Crothers read a Report from the Otago/Southland Branch.

No reports from Taranaki, Wairarapa, Hawkes Bay or Northern South Island.

The meeting closed at 5.00p.m.

CONFIRMED - CHAIRMAN.

Conference attendance

Members	-	103
North	61	
South	42	
Members/Cirs wives	-	30
Councillors	-	33
N.P. Council Members	-	5
Visitors/Guest Speakers	-	24
Total		<u>195</u>

THE INSTITUTE OF NOXIOUS PLANTS OFFICERS INC.

MEMBERS REGISTERED

FULL MEMBERSHIP

Anstis K.	Keith	Taumaranui C.C.	Private Bag, Taumaranui
Arnold G.R.	Gary	Matamata C.C.	P.O. Box 13, Tirau
Ayson P.L.	Peter	Wallace C.C.	Private Bag, Otatau
Babe D.	Derek	Waimea DNPA	P.O. Box 3050, Richmond Nelson
Banks A.J.	Anthony	Waimairi D.C.	Private Bag, Fendalton, Christchurch
Barlow, J.	Jim	Masterton B.C.	P.O. Box 167, Masterton
Barlow P.	Peter	Cook C.C.	P.O. Box 2003, Gisborne
Bayly D.J.	David	Egmont C.C.	P.O. Box 23, Opunake
Bennie S.K.	Stuart	Waipawa D.C.	P.O. Box 127, Waipawa
Black G.G.	Geoffrey	Ashburton DNPA	P.O. Box 43, Ashburton
Blick, R.W.	Robert	Waimate C.C.	P.O. Box 3, Waimate
Bolton E.	Edward	Rodney C.C.	Private Bag, Orewa
Bolton M.	Melvyn	Thames/Coroman-del D.C.	Private Bag, Thames
Boyce R.L.	Robert	Marlborough Nas-ella Ts. Board	Boyce Street, Renwick (Private)
Bright I.W.	Ian	Franklin C.C.	Private Bag, Pukekohe
Broadhurst R.M.	Roger	Golden Bay C.C.	P.O. Box 74, Takaka
Brown S.K.	Stephen	Paparua C.C.	P.O. Box 11011, Sockburn, Christchurch
Bulman J.A.	John	Banks Pen. DNPA	P.O. Box 6, Little River
Burgisser H.	Hans	Hawera D.C.	P.O. Box 39, Hawera
Burnside G.H.	Geoff	Manakau City	Private Bag, Manurewa, Auckland
Campbell R.J.	Robert	Maniototo C.C.	P.O. Box 47, Ranfurly
Chapman P.	Peter	Kaikoura C.C.	P.O. Box 6, Kaikoura 129A Beach Road (Private)
Clapham J.R.	John	Hurunui C.C. P.O. Box 13, Amberley	Leithfield RD 1, Amberley (Private)
Collins D.	Dan	Eltham C.C.	P.O. Box 40, Eltham
Coster A.T.	Alex	Otorohanga C.C.	P.O. Box 11, Otorohanga
Cowan W.G.	Wayne	Wellington DNPA	Private Bag, Porirua
Craw J.	Jack	Whangarei C.C.	P.O. Box 4102, Kamo
Crothers K.J.	Keith	Southland DNPA	P.O. Box 903, Invercargill
Crotty P.W.	Phillip	Strathallan C.C.	P.O. Box 56, Timaru
Daji M.	Manu	Raglan C.C.	P.O. Box 1, Ngaruawahia
Davidson J.D.	Joy	Manukau C.C.	Private Bag, Manukau Auckland
David G.W.	Geoffrey	Waihemo C.C.	P.O. Box 17, Palmerston, Otago

Institute of Noxious Plants Officers Inc.

P.O. Box 61, Blenheim, New Zealand

<u>EXECUTIVE MEMBERS 1987</u>		<u>Bus.</u>	<u>Private</u>
K. Worsley	Masterton DNPA P.O. Box 39, Masterton	83069	87273
F. Marsh	Wellington DNPA P.O. Box 50447, Porirua	375511	84752
M. Turner	Vincent DNPA, P.O. Box 4, Clyde	807	533
J. McNaught	8 Glenfield Road, Rotorua	84199	59662
D. Brown	Blenheim Borough Council	85249	84267
R. Merrilees	P.O. Box 289, Ostend, Waiheke Island	8660	6338
J. Crow	Whangarei DNPA P.O. Box 4102, Kamo	51733	487854
J. Jeffery	2c Churchill Street, Te Aroha	48179	47920
C. Stark	Hawkes Bay DNPA, P.O. Box 342, Napier	53349	68824
M. Kreft	41 Celia Street, Stratford	7167	5424
J. Salmon	R.D. 5, Palmerston North	85179	76910
R. Morgan	Eketahuna DNPA, P.O. Box 23, Eketahuna	8149	8262
E. Eden	Waimea DNPA, P.O. Box 3050, Richmond	8176	28594
R. Blick	Waimate DNPA, P.O. Box 3, Waimate	8079	8229
K. Crothers	Southland DNPA, P.O. Box 903, Invercargill	187259	73140

BRANCH SECRETARIES

Northland	N. Vervoort	Waitemata DNPA P. Bag, Henderson
South Auckland	M. Bolton	Thames/Coromandel DNPA, P. Bag, Thames
Taranaki	J. Stachurski	Stratford DNPA Box 98, Stratford
Hawkes Bay	C. Stark	Hawkes Bay DNPA Box 342, Napier
Wairarapa	P. Hoskin	Pahiatua DNPA Box 35, Pahiatua
Man/West Coast	F. Marsh	Wellington DNPA, Box 50447, Porirua
Nth South Island	R. Donnelly	Waimea DNPA Box 3050, Richmond
Canterbury	R. McCaw	Waimate DNPA Box 3, Waimate
Otago/Southland	P. Ayson	Wallace DNPA P. Bag, Otautau

SOLICITOR

Mr. J. Wain,
Wain & Naysmith,
125 High Street,
BLENHIM.

REGISTERED OFFICE OF THE INSTITUTE

D.J. Brown,
I.N.P.O.
P.O. Box 61
BLENHIM.

or

C/- Blenheim Borough Council,
Private Bag,
BLENHIM.

INSTITUTE OF NOXIOUS PLANTS OFFICERS

MINUTES OF THE 38TH ANNUAL GENERAL MEETING HELD
AT THE QUALITY INN, TRAFALGAR SQUARE, NELSON ON
TUESDAY 28 APRIL 1987, COMMENCING AT 2.30P.M.

PRESENT: 89 Members in attendance.

APOLOGIES: A. Healy, W. Cowan, A. Coster, P. Kilkolly, L. Menzies,
R. Morgan, A. Roberts, S. Payne, N. Hill,
B. Wilmshurst, J. Stachurski, R. Hodgson, A. Gate,
B. Thomson, D. Trafford, K. Massey, M. Shepard,
M. Vincent, R. Read, C. Katterns, T. Regan, B. Hough,
G. Foster, G. Strickett, D. Robertson, D. Carnegie,
B. Vincent, P. Hatton, D. Finlayson, M. Daji,
M. Holden, I. Robb, B. Patterson.

Moved J. Clapham Seconded B. Menzies

THAT apologies be sustained.

CARRIED

MARK OF RESPECT:

Members stood in silence as a mark of respect for the following members.
E. Jackson, S. Anderson.

CONFIRMATION OF MINUTES:

Moved F. Marsh Seconded P. Morgan

THAT the Minutes of the 37th Annual General Meeting be taken as read
and accepted.

CARRIED

MATTERS ARISING:

B. Menzies asked about remits passed last meeting and the response
back. Secretary replied.

Meeting procedures - re Training package. Secretary replied and
Mr Marsh spoke to the subject.

MEMBERSHIP APPLICATIONS:

Moved J. Craw Seconded R. Morgan

THAT the following applications for full membership be approved.

Banks	A.J.B. (Anthony) -	Waimairi District Council Christchurch
Black	G.G. (Geoffrey) -	Ashburton D.N.P.A. Ashburton
Davidson	J.P. (Joy) -	Manukau City Council Auckland
Kennard	J.P. (James) -	Banks Peninsula D.N.P.A. Little River
Smart	R. (Rod) -	North Shore D.N.P.A. Takapuna
Wilmshurst	B. (Blair) -	Wairarapa South
Mickleson	N. (Neil) -	Rangitikei D.N.P.A.
Green	R.C. (Russell) -	Malvern D.N.P.A. Darfield

CARRIED

Moved J. Craw Seconded D. Rhodes

THAT Remit 2 be carried.

CARRIED

Mr Marsh spoke to these Remits. Mr K. Worsley endorsed F. Marsh's remarks. J. Salter, I. Frizzell, and R. McCaw spoke to these Remits also.

G. Ward spoke on what was happening to the Pest Destruction Board.

NOMINATIONS FOR NATIONAL OFFICE:

NATIONAL PRESIDENT:

Moved J. Craw Seconded R. Morgan

THAT K. Worsley be nominated for National President. CARRIED

Moved F. Marsh Seconded J. Clapham

THAT nominations be closed.

CARRIED

Mr Worsley spoke to his nomination.

NATIONAL SECRETARY:

Moved J. McNaught Seconded K. Field

THAT D. Brown be nominated for National Secretary.

CARRIED

Moved I. Frizzell Seconded J. Clapham

THAT nominations be closed.

CARRIED

Mr Brown spoke to his nomination and said that he was now entering his 11th year as National Secretary.

NATIONAL TREASURER:

Moved K. Crothers Seconded J. McNaught

THAT R. Merrilees be nominated.

CARRIED

Moved J. McNaught Seconded F. Marsh

THAT nominations be closed.

CARRIED

Mr Merrilees spoke to his nomination.

VICE PRESIDENTS:

After a preferential ballot, J. Craw was eliminated. On last ballot Mr Turner was elected Senior Vice-President and J. McNaught Junior Vice-President.

Moved T. Frizzell Seconded K. Field

THAT all ballot papers be destroyed.

CARRIED

GENERAL BUSINESS:

1988 CONFERENCE:

M. Kreft outlined Conference arrangements for 1988 at Bell Block, New Plymouth.

ROB McGUINNESS AWARD:

After a question from the floor, K. Worsley said this award was now part of Block Course held at Flock House.

S. Hix won the award for this year.

NEWSLETTER:

F. Marsh spoke on the newsletter.

D. Brown elaborated on plans for the newsletter. It is to be distributed two-monthly, containing coming events, e.g. Canterbury A & P Show, for others interest, resignations and applications for Membership, articles of interest, Minutes from Branches.

E. Eden has offered to collate and distribute the newsletter. Members to feed information to their Executive Member. K. Crothers said that Protect has been discontinued.

Moved P. Joynt Seconded A. English

THAT a vote of thanks be passed to A. Gate for his efforts with Protect.

CARRIED

B. Menzies enquired as to what had become of the gear, e.g. typewriter. D. Brown answered that the gear would be in Blenheim and it would be held until a decision was made as to whether it was needed or not.

K. Worsley said that in the Institute's Bylaws it stated that free Membership applied to Editor.

Moved F. Marsh Seconded K. Crothers

THAT the Executive be empowered to appoint an Editor for the newsletter.

NATIONAL FIELD DAY:

K. Field spoke on arrangements for display at National Field Day to be held in Hamilton in June. He thanked the other Branches for the input and support for this venture.

K. Worsley thanked the South Auckland Branch for their work in setting up this display.

Moved K. Crothers Seconded M. Turner

THAT the following applications for Associate Membership be approved.

Sutherland	O.R.W. (Oliver)	-	D.S.I.R. Auckland
Grindell	J.M. (Judith)	-	D.S.I.R. Lincoln
Randall	J. (John)	-	N.P.C. Wellington

CARRIED

Moved P. Hoskin Seconded K. Worsley

THAT H.S. Garrity be given Special Honorary Membership.

carried

Mr P. Hoskin spoke in support of this membership.

Mr K. Worsley presented Certificates and badges to those new members who were at Conference.

RESIGNATIONS:

Moved F. Marsh Seconded J. Craw

THAT the following resignations be accepted with regret.

Cox	C.	-	Lake County Council
Garrity	H.S.	-	Wairarapa South D.N.P.A.
Smith	D.C.	-	Malvern County Council
Laurie	K.D.	-	Hobson County Council
Wildbore	O.C.	-	Westland County Council
Sanders	J.	-	Hamilton City Council
Winsley	P.	-	N.P.C. Wellington

ANNUAL REPORTS:

Moved K. Worsley Seconded M. Kreft

THAT the National President's Report be adopted.

CARRIED

Moved D. Brown Seconded J. McNaught

THAT the National Secretary's Report be adopted.

CARRIED

Moved R. Merrilees Seconded R. Campbell

THAT the National Treasurer's Report and Balance Sheet be adopted.

CARRIED

J. Craw asked R. Merrilees to explain about the credit re Protect.

I. Frizzell asked about Deposits. Treasurer replied.

Mr Marsh spoke about Treasurer's Report not being circulated to some Members.

NATIONAL EDITOR'S REPORT:

Moved J. McNaught Seconded R. Morgan

THAT the Editor's Report be adopted.

CARRIED

SUBSCRIPTIONS AND CONFERENCE FEES:

Recommendation came from Executive that subscriptions remain the same as last year and Conference Fee be increased to \$50.

Moved J. Craw Seconded E. Eden

THAT the subscriptions remain the same as last year.

CARRIED

Moved J. McNaught Seconded E. Eden

THAT Conference Fee be increased to \$50.

CARRIED

Mr Frizzell asked why the increase in light of credit balance. Someone asked if it included GST.

Mr Merrilees explained that GST does not apply and those that have already paid including GST will have it credited to their 1987/88 subscriptions. Mr Merrilees to speak to Auditors re GST.

HONORARIUM:

Moved F. Marsh Seconded R. Morgan

THAT the National Secretary's Honorarium be increased by \$100 to \$500 as recommended by the Executive.

CARRIED

Moved C. Stark Seconded H. Herbert

THAT the National Treasurer's Honorarium be increased by \$100 to \$450 as recommended by the Executive.

CARRIED

ELECTION OF OFFICERS:

VICE-PRESIDENT:

Nominations received - J. Craw, M. Turner, J. McNaught.

Each nominee spoke to his nomination.

M. Turner nominated by K. Crothers/D Collins

J. Craw nominated by P. Joynt/R. Merrilees

J. McNaught nominated by K. Field/G. Arnold

Moved K. Crothers Seconded D. Collins

THAT the fifteen proxy votes be accepted.

CARRIED

Moved R. Campbell Seconded R. Morgan

THAT T. Jessop, B. Johnson and R. Green be appointed as Scrutineers.
CARRIED

Preferential voting to be undertaken to determine the Senior and Junior Vice-Presidents.

Moved R. Campbell Seconded E. Gard

THAT D. Parkes be appointed Scrutineer replacing R. Green. CARRIED

VENUE FOR 1990 CONFERENCE:

Two venues were proposed - Hamilton, to be run by Northland Branch and Masterton.

J. Craw spoke to proposal to hold Conference at Hamilton based around Ruakura.

R. Morgan withdrew his nomination for Masterton.

Moved J. Craw Seconded K. Crothers

THAT Hamilton be the location for the 1990 Conference. CARRIED

Mr Dodd spoke against this proposal.

Moved R. Morgan Seconded K. Worsley

THAT the 1990 Conference be held at Masterton.

After a vote was taken, Hamilton was the venue decided upon.

REMITTS AND NOTICES OF MOTION:

REMIT 1 - OTAGO-SOUTHLAND BRANCH:

That at the expiration of the current financial period or termination of committed materials and advertising sponsorship, the publication "Protect" (Official Journal of the Institute of Noxious Plants Officers) be stopped in favour of a loose leaf cyclostyled newsletter or similar. The distribution of said newsletter would be restricted to financial I.N.P.O. Members free of charge and to any other interested party for a nominal fee. A member from each Branch shall be responsible for gathering information and forwarding to the assigned collator.

Moved M. Turner Seconded K. Crothers

THAT Remit 1 be carried. CARRIED

REMIT 2: - Withdrawn

REMIT 3 - OTAGO-SOUTHLAND BRANCH:

That future publications of Conference proceedings be the responsibility of the Conference Organising Committee and that the cost of same be met from the Conference Budget with any shortfall met by the Institute funds.

Moved K. Crothers Seconded M. Turner

THAT Remit 3 be carried.

CARRIED

K. Crothers and F. Marsh both spoke to Remit 3.

REMIT 4 - TARANAKI BRANCH:

That the Institute approach the Department of Agriculture concerning the charge for identifying Noxious Plants, particularly those brought into a Noxious Plants Officer for identification.

Moved - M. Kreft Seconded D. Collins

THAT Remit 4 be carried.

CARRIED

REMIT 5, 6, 7, 8, 9: - Withdrawn

REMIT FROM EXECUTIVE:

That the Institute write to Ministry of Agriculture and Fisheries asking that the public be referred to District Noxious Plants Authorities and also stating that Noxious Plants Officers be included as an authority resource on plant identification in all advertising.

Moved K. Crothers Seconded D. Brown

THAT the Remit from Executive be carried.

CARRIED

There were two late remits sponsored by the Northland Branch.

REMIT 1:

That this Institute write to the Commission for the Environment, Water and Soil Division of the Ministry of Works and Development, Lands and Survey Department, and the Agricultural Pest Destruction Council, seeking an assurance that the Counties and Municipalities Associations and Federated Farmers be represented at the forthcoming seminar to discuss the possible rationalisation of weed and pest control.

REMIT 2:

That this Annual General Meeting of Noxious Plants Officers is firmly of the opinion that the control of noxious plants is properly the responsibility of Territorial Local Government, employing fully trained officers, and that the Executive issue a policy statement to this effect and convey these sentiments to the Minister of Agriculture and Fisheries.

J. Craw spoke to both the late remits.

Moved J. Craw Seconded P. Joynt

THAT Remit 1 be carried.

CARRIED

Read R.D.	Ray	Silver Peaks C.C.P.O. Box 5545, Dunedin
Regan T.J.	Terry	Whakatane D.C. Private Bag, Whakatane
Rhodes D.C.	Don	C/- West Auckland Private Bag, Auckland DNPA. Waitemata C.C.
Robb I.	Ian	Tauranga DNPA Private Bag, Tauranga
Roberts A.	Alan	Grey C.C. P.O. Box 39, Greymouth
Rossiter D.	David	Eyre/Rangiora P.O. Box 385, Rangiora DNPA
Salmon R.J.	John	Manawatu DNPA P.O. Box 951, Palmerston North
Salter J.D.	John	Silver Peaks P.O. Box 5545, Dunedin C.C.
Scott L.G.	Lindsay	Ellesmere DNPA P.O. Box 2, Leeston
Shepherd M.B.	Mike	Whangaroa C.C. P.O. Box 69, Kaero
Smart R.	Rod	North Shore DNPA Takapuna City Council Private Bag
Stachurski J.J.	John	Stratford C.C. P.O. Box 98, Stratford
Stark C.D.	Clifford	Hawkes Bay C.C. P.O. Box 342, Napier
Stahel W.	Walter	Waikohu C.C. P.O. Box 17, Te Karaka
Stock P.	Peter	Taupo C.C. Private Bag, Taupo
Teale A.	Alan	Ashburton C.C. P.O. Box 43, Ashburton
Thacker J.	John	Christchurch Private Bag, Christchurch City
Thompson R.E.	Rob	Rodney C.C. 17 Lilburn Street, Warkworth
Thorburn T.B.	Brian	Ohinemuri C.C. P.O. Box 17, Paeroa
Trafford D.H.	Desmond	Rodney DNPA Private Bag, Orewa
Turner M.	Murray	Vincent C.C. P.O. Box 4, Clyde
Van Zoelen R.	Robin	Waimea C.C. P.O. Box 3050, Richmond Nelson
Vervoort N.L.	Nicholas	Waitemata C.C. Private Bag, Henderson
Vincent B.J.	Barrie	Waitotara C.C. P.O. Box 7020, St. Johns Wanganui
Vincent M.	Mark	Otamatea DNPA P.O. Box 1, Paparoa
Wills P.	Phillip	Bay of Islands P.O. Box 11, Kawakawa C.C.
Wilmshurst B.	Blair	Wairarapa South P.O. Box 9, Carterton DNPA
Wilson R.A.	Raymond	Clutha C.C. P.O. Box 39, Masterton
Yates M.	Murray	Mangannui DNPA P.O. Box 57, Kaitaia
Zrinyi A.G.	Arthur	Taranaki C.C. P.O. Box 56, New Plymouth

LIFE MEMBERS OF THE INSTITUTE

Brown D.J.	David	Blenheim B.C. Private Bag, Blenheim
Carter A.T.	Tom	6 Okoroire Road, Tirau
Daniel E.N.	Neville	Waitaki C.C. P.O. Box 108, Oamaru
Healy A.J.	Arthur	98 Ratray Street, Riccarton, Christchurch
Marsh F.J.	Fred	Wellington DNPA, Private Bag, Porirua
Neill S.	Sam	11 Cambridge Terrace, Taradale
Robinson J.	John	85 Alexandra Street, Marton
Sutton W.J.H.	Bill	Armagh Terrace, Marton
Smart F.W.	Frank	2 Opetoru Road, Raglan
Williams I.H.	Ivan	P.O. Box 47, Geraldine

SPECIAL HONORARY MEMBERS OF THE INSTITUTE

Collins T.	Tom	82 Ronaldsay Street, Palmerston, Otago
Crawford J.	Jack	73 Alice Street, Invercargill
Finlayson D.I.	Darby	Waikato C.C., Private Bag, Hamilton
Garrity H.S.	Bert	P.O. Box 9, Carterton
Green H.B.	Bing	R.D. 1, Kaeo, (Northland)
Hoskin E.F.	Ernie	Springston, R.D. 4, Christchurch
Neilson R.	Ray	29 Arthur Street, Pahiatua
Mathews L.J.	Les	Ruakura Research Station, Private Bag, Hamilton
Pearson J.	Jerry	25 Johnston Street, Featherston
Preston E.C.	Eric	Waipatu C.C. P.O. Box 24, Te Puia Springs
Woodley N.	Norm	Main Road, Greytown

HONORARY MEMBERS OF THE INSTITUTE

Bowater C.	Claude	72 Ihaia Road, Opunake
Coupe T.A.	Tom	139 Tasman Street, Opunake
Foster C.	Cedric	Manganui C.C. P.O. Box 57, Kaitaia
Manson G.	George	Ross Street, Frankton, Queenstown
McAllister R.J.	Dick	P.O. Box 1, Sanson
Menzies L.J.	Les	Carters Beach, R.D. 2, Westport
Morris H.	Hunter	Mt. Somers, R.D. 1, Ashburton
Robertson D.S.	Doug	76 Kenwick Street, Te Aroha
Robinson L.J.	Jack	39 Coleman Avenue, Waverley Beach, Waverley
Strickett G.J.	Graham	15 Lowry Street, Richmond, Nelson
Whale R.W.F.	Robert	107 Oxford Street, Ashurst

ASSOCIATE MEMBERS OF THE INSTITUTE

Blight J.D.	John	Lands & Survey Department, Private Bag, Rotorua
Carnegie D.	Don	Christchurch C.C. Private Bag, Christchurch 1/104 Trafalgar Street, St. Albans (Private)
Grindell J.M.	Judith	D.S.I.R. Private Bag, Christchurch
Hampton M.	Myra	Plant Protection Service, Lynfield Ag. Centre, M.A.F., P.O. Box 41, Auckland
Hill R.	Richard	D.S.I.R. Lincoln Research Unit, Private Bag, Lincoln.
Jessip T.	Tom	D.S.I.R., C/- Lincoln Research Centre, Private Bag, Lincoln
Johnson B.L.	Brian	N.Z.T.C.I. Private Bag, Lower Hutt
Langford P.	Peter	N.Z.T.C.I., Private Bag, Lower Hutt
Moore F.	Fred	10A Bloomsbury Grove, Newlands, Wellington
Neale H.	Helen	Aquatic Plants Section, Ruakura Research Station, Private Bag, Hamilton
Parkes D.	David	E.T.O. (Noxious Plants) M.A.F., P.O. Box 2298, Wellington
Popay A.I.	Ian	M.A.F. Private Bag, Palmerston North
Randall J.	John	Noxious Plants Council, Wellington
Sutherland O.R.	Oliver	Ent. Division D.S.I.R. Private Bag, Auckland
Syrret P.	Pauline	D.S.I.R. Lincoln Research Unit, Private Bag, Lincoln
Ward G.	Geoff	Rodney C.C. Private Bag, Orewa

THE INSTITUTE OF NOXIOUS PLANTS OFFICERS, INC.

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st DECEMBER 1986

<u>INCOME</u>	<u>1986</u>	<u>1985</u>	<u>EXPENDITURE</u>	<u>1986</u>	<u>1985</u>
<u>SUBSCRIPTIONS:</u>			<u>HONORARIA:</u>		
Current, paid	3987.50		Secretary	400.00	
Current, arrears	<u>333.00</u>	4320.50	Treasurer	350.00	
		3797.00	Editor	<u>750.00</u>	1500.00
					1550.00
<u>PROTECT</u>			<u>PRINTING AND STATIONERY:</u>		
Advertising	3346.75		Account & Receipt Books	-	
Sales	<u>778.00</u>	4124.75	Letter Heads & Certs.	570.90	
		5601.23	Miscellaneous	<u>-</u>	570.90
<u>CONFERENCE</u>					475.80
1985 Conference		300.00	<u>PROTECT</u>		
<u>BANKING</u>			Cover Printing	-	
Interest	1550.25	1177.21	Printing Charges	831.46	
			Typing Charges	90.00	
<u>SUNDRY</u>			Editors Petty Cash	400.00	
Sundry Items	50.00		Magazine Subscriptions	653.65	
Refund of National			Postage	36.56	
Treasurer's Petty Cash -	50.00	70.00	Sundries	<u>18.95</u>	2030.62
Profit on sale of Typewriter	-	230.00			6570.56
Sale of Weed Books	86.00	227.60	<u>EXECUTIVE EXPENSES</u>		
			Travelling expenses	40.00	
			Sundry	<u>550.00</u>	590.00
					149.00
			<u>OFFICE EXPENSES</u>		
			Legal & Accounting Fees	81.00	
			Petty Cash, Secretary	150.00	
			Petty Cash, Treasurer	50.00	
			Insurance & Mtce Office		
			Equipment	44.62	
			Postages	85.00	
			Private Services & Sundries	<u>91.20</u>	501.82
					450.40
			<u>BANKING</u>		
			Bank Fees & Cheque Duty	-	
			Transfer to Conf. A/C	<u>300.00</u>	12.50
				5493.34	9208.26
			Excess of Income over Expenditure	<u>4638.16</u>	<u>2194.78</u>
				10131.50	11403.04
	<u>10131.50</u>	<u>11403.04</u>			

THE INSTITUTE OF NOXIOUS PLANTS OFFICERS, INC.

BALANCE SHEET AS AT 31st DECEMBER, 1986

<u>LIABILITIES</u>			<u>ASSETS</u>		
<u>SUNDRY CREDITORS:</u>			<u>SUNDRY DEBTORS:</u>		
<u>ACCUMULATED FUNDS:</u>			Subscriptions in arrears:		
Balance at 31st December 1985	12558.41		1985	171.50	
Surplus for year	<u>4638.16</u>	17196.57	1986	<u>333.00</u>	504.50
			Brief Cases		160.00
			Typewriter		1400.00
			Cash in B.N.Z. Current Account		15132.07
			Term Deposits with B.N.Z.		-
		<u>\$17196.57</u>			<u>\$17196.57</u>

AUDITOR'S REPORT:

I certify that I have examined the above Balance Sheet and supporting accounts for the year ended 31st December 1986, together with records produced and explanations given where required, and that I am of the opinion that they are a true and fair statement of the Institute's affairs.

TREASURER'S ANNUAL REPORT FOR 1986

R.J. MERRILEES

Mr. President and Members,

I am again pleased to be able to present to you a satisfactory annual report and balance sheet.

The Institute's finances are still sound in spite of the Goods and Services Tax imposed by the government late in 1986. I propose to address your executive on the matter of GST, in the light of a discussion I have recently held with our auditor, Mr. H.V. Read.

At 31 December 1986 you will see that cash in our current account with BNZ was high at \$15 132.07 and there was no money invested in Term Deposits. This was an oversight on my part, due to work pressure. It has now been rectified and we have \$7 000.00 invested short term at 16.25%.

Income for Protect is down on our last statement and you will see that production costs also appear to have been cut. The lower expenditure is because to date we have not received accounts for the cost of two issues of Protect. Our printer has failed to respond to numerous requests from your editor and myself for these accounts. We can now only wait on developments.

I must address comments to the matter of subscriptions in arrears. These are high at \$502.00 and I would like to call on those members in arrears to please bring your subscriptions up to date. If any member is having difficulty in paying arrears or subscriptions, please contact me because I am certain an arrangement can be made that will cover this.

In closing I would like to thank all who have given me help and support during this past year.

OPENING ADDRESS

Kevin Worsley, President Noxious Plants Officers Institute

This Institute as we all know, without doubt has just come through a year of change and probably the greatest year of uncertainty that we have ever experienced in our 38 years. Some of these changes were implemented the previous year but their application has only fairly recently been hitting home. Here I refer to the new emphasis on Target and the so-called Class A plants. This change of emphasis, I believe generally welcomed and understood by most Noxious Plants Officers but it is still difficult for most of us not to pursue the widespread plants with the vigour of the past and while boundary and scattered infestations are required to be cleared it is reverting blocks of past development that causes most frustration and disappointment to many officers. I think we all realise that there is an absolute emphasis on these Target plants and I think that we all definitely agree with that but it is hard, particularly for some of us older officers that worked hard over the years to see land cleared of things like gorse and so on to see it now starting to revert because of financial restraints on farmers and so on. I'm probably hammering home to something that's not going to do much good but I often wonder when we see it today, for the farmers dollar now spent on gorse control for example, gorse follow up control, he is probably only getting less than a third of the work done that he would have say three or four years ago so consequently with a downturn in the farming sector and the increase in costs and so on, plus the loss of any subsidies and other assistance, there is definitely, and we've got to expect a lot of land to go back. Most of us are only too aware of large areas of land developed out of brushweeds not many years ago that are now reverting. These blocks were cleared and maintained at considerable expense to the landowner and often the taxpayer and are now reverting, not because of a lack of interest on the owners part, but because financial conditions do not allow the degree of work required. I often wonder if the Government is

aware of this and if so cares about the degree of land reversion that is taking place in most of New Zealand. Here I am not only referring just to areas reverting to noxious plants, but also scrub and other inventive weeds which have required constant expensive control measures over many years. There is no doubt about it, a lot of areas are going back into native plants and so on. Not many years ago, farmers in various ways were encouraged to clear land to increase production, now it seems to be the reverse, and I wonder, if in the not too distant future, we will again be reclearing this land that is being neglected today. I think a lot of us again have seen this cycle before, may be the cycle's a little bit more intense at the moment but we've seen it happen before where land has reverted and been cleared, reverted and been cleared. I would suggest that we're probably seeing this again. The only problem here is that over the last ten or so years we saw very very large areas of land cleared, particularly with land schemes and so on, and it just seems ridiculous to me that we've got to sit back and watch a lot of it revert because of a lack of input. Probably the greatest concern to Noxious Plants Officers at the present time however, must be changes proposed or taking place in the administration of noxious plant control. No sooner had we returned home from last year's Conference when we received the shock announcement of a Government decision to disband the Noxious Plants Council. This had quite a great effect on us all I think. We didn't know what was happening. I must remember I was actually on holiday at the time, out at the beach, and I got an urgent phone call from Fred Marsh who managed to track me down but I was unaware that this had actually happened at that time and I met Fred and we certainly didn't know what the end result of all this was going to be. Of course as it has turned out now, we know that Noxious Plants Council is still with us and hopefully will be for some time yet. After we got over that shock then we got advice that the Government was investigating the possibility of combining in

investment of resources sufficiently only to ensure that these responsibilities are discharged?

Despite the somewhat uncertain situation there have been a number of successes in the area of noxious plants. Of noticeable achievement is the work by the Noxious Plants Officers in the field of training. Progress that has been achieved since the introduction of the Act is credible and reflects merit not only on the Training Committee of the Local Government Training Board but also on the way the many local authorities have facilitated the development of that training programme. Of course success could not be claimed without the enthusiastic support of the Noxious Plants Officers themselves. As is the case of Noxious Plants Administration generally, the current environment of uncertainty flows over into the training area.

Can I conclude by saying that there is no future at all for this country if all we have to do is share a shrinking cake. For many years this country put too much of our money, our resources, our people and our skills into areas where there was no possible hope of a productive return and into industries which were poorly managed because they focused on the inputs of production rather than on the objectives of the whole exercise. By your strong emphasis on training and acquiring additional knowledge I encourage to believe that you will be well prepared for the changes that are coming to the area of Noxious Plants Administration and I refer also the Mayor, Peter Malone's comments where he mentioned that we cannot hide and change. We must change. We must adapt and pro-act with change rather than react to it.

Finally I would just like to thank you for this opportunity to be present at your opening and I would like to wish you all a very successful Conference and a safe journey to your homes.

Thank you.

ADDRESS OF WELCOME

by P.H. Malone, Mayor of Nelson

Thank you President Kevin. Mr. Ken Shirley, Mr. Murray Borlase, Mr. Gary Thompson and indeed all the special guests and delegates here to this Conference. Welcome to Nelson. You'll have to forgive me I seem to have a catch in my throat and it is probably associated with Wellington wind that has arrived here over the weekend. How many Wellingtonians here, any? Yes, well I wish you'd left it behind because certainly we have had a rather unusual weekend with the sort of wind that we don't know much about. actually, I don't know whether it's good or bad because I was a veterinary surgeon I had a big veterinary practice here for many years and I had my own radio telephone service and a pretty tall mast, I don't know Gary as you drove past it was certainly about the highest point in Stoke and it was blown over and I'd been worried for quite a long time about how to get it down and so if you did bring it over from Wellington, to make you feel at home, thank you but for the rest of the time I would hope that some of the weather we're famous for or infamous for if you're in Blenheim or Hawkes Bay you like to think that you're better than we are but we don't care what you think, we know that we have more sunshine than anywhere else and actually we're not a bad place to live in. Can I just ask how many have been to Nelson before? How many have not been to Nelson before? There's something wrong, its nice to have you with us, keep coming back, we'd like you all coming back because we like the money you're going to spend while you're here. We need it, it's very important to us, the visitor industry in Nelson. We're a bit out of the main stream of things or some of us think we are. It's not

some way the functions of noxious plants, pests and possibly soil conservation. This is something that of course is still up in the air at the moment and I think it is probably the one point that is causing us the most concern. We don't really know where we're going on this issue. I immediately contacted my local M.P. who arranged a meeting with myself, Fred Marsh and Mr. David Butcher and we saw Mr. Butcher and asked that at least the Institute have some input in these changes or what was being proposed. He gave us a verbal guarantee that we would be involved, or that the Institute would be involved, at a seminar which was being planned to discuss the whole setup of possible changes in that direction. This seminar was originally going to be held sometime in the new year, then it was going to be held in April and I understand just the other day it was cancelled again and I think now they are looking at some time probably in July. We at this point do not know much about what's going on and I had hoped that Mr. Butcher today might have been able to enlighten us. Whether Mr. Shirley can or not I don't know. This is probably the greatest worry that I feel is hanging over our heads at the moment, just what is going on there and what effect it is going to have on our positions. I think the other thing, and I should mention it too now, is the other fear that we do have and that is the uncertainty as to where we are going in relation to MAF input into our jobs. We are all well aware that there is a large amount of money put in by MAF that assists local authorities in noxious plants control particularly towards our salaries and running expenses and there have been rumours I suppose that there could be reductions, cut backs, whatever in that field and I think there is a lot of concern amongst us all of what this may do to us. Is it going to cause redundancies, changes to our jobs in general, or what. Again we don't know this one and maybe someone here today might be able to help us out on that also. That's the main problems as I see it at the moment affecting Noxious Plants Officers. I hope these things can be sorted out in the near future but obviously only time will tell.

We're obviously going through the cuts and changes that this present Government have implemented in many spheres of Government and so on and I suppose we just have to ride the storm and do our best to assist and have our input into these changes.

Without further a do I would like to ask Mr. Peter Malone to come forward and address us and tell us all about his fair City of Nelson, the sunshine capital of New Zealand.

options that will be sufficiently variant to provide meaningful points for discussion and to indicate possible directions of development. The centre for Resource Management are taking note to work towards a separate review on noxious plants policy being carried out by the Ministry of Agriculture and Fisheries. This review developed out of a number of issues such as, the phasing out of the Noxious Plants Council which arose from the Governments review of quangos, the Governments economic policy which entails an even handed approach to various sectors and resources in concentration on Governments role as a rule maker and not so much as a participant in detailed economic decision. Protection of individuals from unnecessary legal impositions on their rights, general dissatisfaction from local government and M.A.F. with the 1978 Noxious Plants Act which suffers from inadequate definition of responsibilities, inconsistencies and ambiguity in the wording and difficulty in practical application and I am sure many of you, as those involved in that field, will be only too aware of those difficulties. Concern over the cost effectiveness of the present noxious plants system, in achieving desired results, the agricultural industry is changing. Agricultural and plant protection systems must change to meet the needs of a new direction. Traditionally agriculture was production led in its planning. Today it must be market led. The system that has operated in the past has achieved some successes. Changes necessitate improvement and a concentration on priority responsibilities. Priorities such as high risk plants, that is plants of very limited distribution with the potential to establish over a wider range of area in New Zealand and the ability to cause serious economic or environmental loss and I notice again the comments that Mr. Borlase made with regard to the spread of Clematis Vitalba, Old Mans Beard, through the indigenous forests that are very important in this region and I would also make the point that some of the indiscriminate and unnecessary clearing of those forests was far more damaging than that of the Old Mans Beard risk.

The disbanding of the Noxious Plants Council means the legislation must change. This change requires substantial review and redrafting of the Act, therefore the Council has been directed to reduce its involvement to oversight only of its current policies and to delegate the operational responsibilities to the Ministry of Agriculture and Fisheries through the M.A.F. representative in the meantime. The Ministry group conducting the review is to produce a discussion document for the Minister of Agriculture's approval and subsequent distribution to all interested and affected organisations for submission and discussion. In light of these developments noxious plants officers may be concerned over their future roles in noxious plants administration. However, since the reviews are still in the process of formulation, it would be inappropriate to pre-empt their conclusion. When both of these documents are available, the resulting consultations, discussions and submissions will be the appropriate forums to express their concerns. This debate of the issue will occur before any of the final decisions are reached.

Whilst I have had the opportunity to discuss the broad drift of their thinking with some of those involved in the policy review, David Butcher unfortunately is not in a position to discuss the sort of recommendations that are likely to come out of the review, nor is he able to reveal to you the likely responses from Government because again that would be pre-empting the consensus and the discussion that is still to take place. Suffice perhaps to say that the direction of Government policy is clear, we are concerned to ensure that all industries produce for identified markets and do so for an environment uncluttered by distortions, tax breaks, subsidies or indeed taxes which conceal the true situation from the decision maker or the potential investor. We aim to ensure that every dollar spent by the Government is a good return for the money that produces a good return for the money that is spent. The sort of question that the Government will be asking the review team when they have finalised their work is: Does the system you are proposing fulfil the Government's responsibility in this area with the

OPENING ADDRESS TO NOXIOUS PLANTS INSTITUTE CONFERENCE

By D. Butcher M.P.

Presented by K. Shirley M.P.

I thank you very much for your kind invitation to be present at the opening address of the 1987 Conference of the Institute of Noxious Plants Officers. For all of us the period since 1984 has been one of rapid adaption to long overdue changes in the way this country is organised. Over the last 20 years New Zealand standard of living has dropped from being the third highest in the world to nearly the 30th. In the quarter of the century from 1960 to 1984 our average annual increase in productivity was 1.2% per annum, the lowest of the 24 OECD countries, actually the lowest equal with Turkey. For many years New Zealand Governments concentrated on protecting the status quo, that is saving existing jobs, propping up existing enterprise and making concessions to established interest groups with political clout to bring pressures to bear on the Government of the day. Whenever any sector or any interest group faced a problem government was called upon to come up with an ad hoc quick fix solution, paid for by the taxpayer to solve the problems of that small group. It didn't seem to matter that frequently by solving the problems of a very small group we greatly complicated the problems for the much larger group. We appear to be unconcerned that important information that is required to keep the economy running properly, that is how much things cost to produce, what things people want to buy and how much people are prepared to pay for them would distort the economy. In fact the reverse was the truth, it was excessive government intervention that distorted the N.Z. economy. In fact we got to a point where everybody and every group in N.Z. was subsidised by another person or another group, a massive cross-subsidisation system. There was a tradition in N.Z. of politically manipulating the economy to achieve that end. In the past virtually every election year we have had a substantial increase in government expenditure to give

the voters a feeling of wellbeing in election year, and of course the debt was blown out and we spent the next three or so years trying to gather it back in, which of course we never did. Unfortunately that procedure not only fuelled inflation to levels averaging one to one and a half and beyond that of our trading partners but the various tax concessions and incentives that were created fatally undermined the integrity and the fairness of the taxation system in this country, but not only were the Governments financial resources strained by an undermined tax base the end product of much of the spending was very questionable. This last year government has had to refinance \$7.5 billion, that is 7.5 thousand million dollars worth of public investment into agriculture subsidies and development and also the think big energy projects.

If all the results of this expenditure would currently be placed on the market we would actually have to pay somebody seven hundred million dollars to take the lot away, so for a nett investment of \$7.5 billion into the energy project, not only are they not earning anything, not one of those projects is breaking even, they are actually costing the country money to the tune of the cost of seven hundred million dollars and as our taxes and our childrens taxes and our grandchildrens taxes that will need to service that debt. Twenty-five cents in every tax dollar you pay is servicing the debt.

For this reason Government has been determined to provide new leadership and a firm direction to bring about a better life for all New Zealanders. The best foundation for a fair society that helps us all is a healthy and growing economy. I could perhaps mention here the LDL lines that were spoken of earlier where we had a lot of land cleared and comment was made that there was a lot of land currently reverting in N.Z. and yes, Government is aware of that and Government acknowledges that, but I would like to say also that an awful lot of that land

should never have been cleared in the first place, certainly in my electorate of Tasman. I'm aware of substantial tracks of land that were in Beech forest that have been cleared under the LDL schemes and they are on skeletal soils and without massive taxpayer input and subsidy and continued propping up, those lands would never be able to break even. They will never be viable and they could never produce the product and there we spent a fortune on developing lands that should have never been developed in the first place. In 1983 there was \$350 million of taxpayers money went into encouraging land or primary producers to produce more product, where in fact what we did, we ended up with 40,000 tonnes of sheep meat surplus, what did that do? It drove the price down to the point where a farmer only got \$10 for a lamb last year, fortunately that has now turned around because we have got rid of the surplus, and what was that product worth? We couldn't sell it, it had to be rendered down for meat meal and bone meal with a nett value of \$1.6 million assuming you could sell which in fact we couldn't, much of it is still in store. So we spent \$350 million of taxpayers money to produce \$1.6 million of product and you don't have to be very bright to realise that that is not any way to carry out sound business.

By facing the realities of our position now, we are planning for New Zealand's future. It is not easy. For some there has been a great deal of change and a great deal of pain. For quite simply there is no other way than to face up to necessary change. These policies have one real goal, they are aimed at creating a healthy and growing economy that will provide real jobs for New Zealanders. We are determined to stick to these policies to bring about a more secure future for the whole nation. As a group who are intimately involved with the rural community, you too will have had a significant number of developments since 1984. These changes have implications for the future administration of animal and plant pest control in New Zealand. They include, the announcement of a phased elimination of all direct Government funding for vertebrate pest control activities, the restructuring

of government agencies with responsibility for land management, regulation and rehabilitation. The decision to disband the Noxious Plants Council and further reductions in subsidies on weed control. Policies relating to local government and associated administrative boundaries and you would appreciate the interaction and the melding of those two structures. The reshuffling of departmental organisations in environmental field and the creation of state corporations. In July 1986 the Agricultural Pest Destruction Council was requested to identify options for the rationalisation of pest control. Also at that time the Ministry of Agriculture and Fisheries were requested to review noxious plants policies and legislation. In October 1986 at the request of David Butcher, the Acting Commissioner for the Environment, convened an inter-agency meeting to examine ways of achieving a consensus on the approach to rationalisation of pest control and administration and your Chairman referred to that in his opening comments. In light of discussion at this meeting there was a consensus that there was merit in an independent body to carry out a review of administration. The centre for Resource Management at Lincoln was commissioned to prepare an issues and options discussion paper with the aim of stimulating constructive discussion about current arrangements and options for the future administration of pest control. There are three specific objectives for this review.

Firstly, to examine existing legislation, policy, operations, administration and funding for control of animal and plant pests and to identify the main advantages and disadvantages associated with these arrangements.

Secondly, to examine the appropriate roles of landholders, occupiers, local government and central government and pest management and administration.

Thirdly, to identify future needs and options for pest control and administration and enhanced effectiveness via such arrangements as a rationalisation of boundaries, greater co-operation between agencies and the integration within and between animal and plant control activities. An integral part of the review will be a number of proposed

too bad to be out of the main stream it gives us an opportunity to get on and do our own thing and really Nelson has been very fortunate in terms of the difficulties that the whole economy has been having for the last two or three years, we've been pretty well cocooned from from the main stream effects of the changing economy, there are a few signs in the wind at the moment but having said that I think that we in Nelson can continue to consider those of us that live here that we live in about the best place in New Zealand in which to live, work and play. I see some ladies here and I'm sure there are spouses ladies who are not in the hall at the moment, there's much to see in Nelson, in Nelson City the Suter Art Gallery is a bit different, you've got to pay to go in and have a look at the pictures, but it's worth paying and it's a pretty good cafeteria there. There are lots of interesting things in the City, if you take a drive over the Port reclamation area. I came to Nelson in 1952 and the water went around the edges of the hill edge along there and on Haven Road there wasn't a bit of reclamation and there was just a small old port area around on the point, not far from the entrance to the harbour. That reclamation has made Nelson, it was made as a result of the foresight of people who looked into the future, saw what might be needed and went about and did it. I was at the opening of a Conference last week, it was the Sign Writers, or Sign and Display Industry Conference and they'd given me their last newsletter and it had an excerpt from the guy from Waikato and he finished it and said there are three groups of people in Society, there are those people who make things happen, there are those who watch it happen and then finally, there is the group of people who are amazed at things that do happen and I had to tell him I'm sorry, in today's world there are four groups of people, there are the groups of people who make things happen, there's a few that do that and there are lots that watch and there are certainly an amount that are amazed at what happened but regrettably, there is a small group who have far too much influence in the community in which we live

who try to stop things happening and those are the people who are of most concern to me and I've seen more than enough evidence of it when I've been in Local Government. When I look at general affairs of Government and I think well my goodness me, I wish people would realise that things have got to happen, that we live in a changing world and we must adapt and prepare and react to that changing world but we must certainly not stop things from happening and I'm pleased to see Mr. President that in your remarks you're commenting on your industry that is looking at change and accepting the realities of that change. I've been as I said a Veterinary Surgeon, a rural practitioner, went from French Pass to Lewis Pass and to Westport and Karamea, had a pretty big practice and I guess when I got on the City Council, they used to call me the County Councillor. I don't know if they'd accept me now, the County seem to think that I'm far too much of a City Councillor as we talk reorganisation, but we've always had a pretty good relationship and I've seen and been aware and impressed by the work that the Institute has done in looking after the land and its use and landuse in New Zealand, attempting to ensure that productivity is maintained. I'm aware of the changes that you've talked about. I guess some of those have got to be faced up to, the reality of reversion, as the result of economic pressures, that the work that you do doesn't only have economic pressures it has also environmental pressures and I see this very interesting programme that you've got and I'm very pleased to see the wide ranging programme that you've got and looking at so many things. I do see one thing in there, elected members, Mr. Grant Moffatt, Functions and Responsibilities of Authorities and their relationship with Noxious Plants Officers. I happen to have here the report to the Waimea District Noxious Plants Authority, of which Nelson City is a Member, pays its dues, not very much because we apparently haven't done very much but it's an agreed amount in any event and I've got the report to that Authority by would you believe, Graham Strickett in 1981 and he says the Conference was attended



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