IMPACT OF A SUBSIDISED NOXIOUS WEED CONTROL SCHEME

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Summary

Discussion on subsidies relative to agriculture usually results in a clear cut division of opinion and yet rarely do many people have the opportunity to evaluate fully an existing or proposed subsidy scheme. This paper sets out to illustrate some basic principles involved in the administration of an existing subsidy scheme. The author believes such a scheme can succeed. The alternative appears to be rigid enforcement by legal action.

PREFACE

The author has drawn on his experience and administration of the Australian sedge (*Carex longebrachiata*) subsidy scheme for which special responsibility was delegated to him by Mr B. A. Gunning, Regional Advisory Officer, Ministry of Agriculture and Fisheries, Auckland in order to illustrate the feasibility and practicability of subsidy moneys to aid the control of noxious weeds. Conclusions reached and comment made in a general background paper of this nature cannot and should not be taken as representing the official policy of the Ministry of Agriculture and Fisheries, nor is any criticism of past, present and future policy intended or implied by the author.

HISTORICAL

Compulsion, no! Education, no! Economic pressure and financial inducement, yes. Since the time of European settlement in New Zealand noxious weeds have been rampant. Various aspects of the Noxious Weeds Act have been introduced and amended, followed up by amendments to the amendments, but all to little or no avail with regard to controlling noxious weeds. Countless words have been written and spoken on methods of controlling weeds for the benefit of occupiers of agricultural and other land, but again the words of wisdom appear to have fallen on deaf ears. Even moral obligations of protecting one's own or a neighbour's property from weeds has had little real effect. Whether it is a reflection on our society, our way of life, or our blatant indifference to others, it is a fact of life that seldom do people react on a voluntary basis to take some positive action to control noxious weeds, except where there is the clear cut goal of economic return or other financial reward. This being the case, it may be the only bright light on the horizon in the control and ultimate eradication of some of the noxious weeds that at present flourish in New Zealand.

An example of a subsidy scheme to control weeds that has been highly successful is illustrated by the Australian sedge scheme.

AUSTRALIAN SEDGE SUBSIDY SCHEME

The objectives of the scheme at the present time could be defined as :

- (1) containment
- (2) effective and economic control
- (3) eradication if practical, and
- (4) investigation into control on problem, hard-core areas.

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These objectives were loosely defined from the outset but have become more clearly defined as the scheme has progressed. Although some considerable discussion took place prior to its inception, the scheme became operative early in 1969. Preliminary estimates of areas infested suggested that in the nine Northern counties 31 000 ha on occupied land, with an additional 12 000 ha on unoccupied Crown and Maori land. For the remainder of the North Island the total area estimated to be infested was 2 800 ha. Although such estimates are clearly based on local knowledge and are provided in all good faith, such figures may bear no real relationship to the problem to be solved with regard to weed control. It is also remarkable that once a subsidy scheme is in operation additional areas infested with a particular weed receiving subsidy suddenly come to light! For any future schemes of this nature it would be desirable to carry out a much more detailed fact-finding survey, if necessary using aerial reconnaissance and mapping to define very clearly areas of infestation. The haphazard approach of relying on "guesstimates" can lead to immense administration problems. The degree and description of infestation on such areas should also be more clearly defined as again this will allow the drawing up of a more complete plan for controlling the weed. Important features are the plant population, existing vegetation and description of access and contour. Other vital considerations are location of water supply where chemicals are to be applied as sprays.

Experience has also proved that for ease of day to day administration and to provide reliable information, not only must mapping of the infestation of noxious weeds on a district, regional or national basis be carried out, but also on an individual property basis. Although this aspect caused some consternation when first introduced, all those associated with the scheme now recognise the merit of a good farm plan. These maps detail boundaries within the property and give a clear indication as to whether each area is designated sparse, moderate or heavy infestation. This then allows a long term plan of control and eradication on each property to be drawn up, rather than a haphazard and piecemeal approach. Such case histories, coupled with forward planning, have proved to be much more economical to the farmer and in the expenditure of subsidy money. With such organisation the man hours involved in administration are reduced to a minimum, commensurate with maximum results. There is no doubt that in this way value for money expended is achieved.

As the bulk of the field work is handled by the local authorities, mostly through their Noxious Weeds Inspectors, it became essential to establish a degree of uniformity between counties.

This uniformity was desirable not to regiment the local authorities but to ensure fair and equitable treatment given to all applicants and to remove as far as possible personal factors. Standardised application forms, time-sheets, and other printed material, although appearing on the surface to be very "red-tapish", have in fact tied the whole scheme up in a practical way, that can still be administered with common sense and a degree of flexibility. It must be remembered that the Ministry of Agriculture refund to the local authority 50% of the actual cost of a scheme, or 50% of the estimated cost, whichever is the least. In all cases, prior approval must be received before commencing the project.

The more recent statistical information may be of interest. Table 1 sets out the situation for the year 1 April 1971 to 31 March 1972. The subsidy paid, averaging 45.5% of estimated costs, means that the local authorities were slightly over-estimating costs of applications, although one county achieved a 49.8% figure. All estimates however show extremely accurate forecasting. For the nine northern counties 751 properties were found to be infested with sedge at the beginning of

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the year, but an additional 78 new infestations were discovered. Twenty-two properties were declared as having been cleared of the weed, with a further 118 properties now only requiring limited follow-up action. Additional counties became eligible to operate the Australian sedge subsidy scheme in 1973, and a further new subsidy at a flat rate of \$20 per acre was introduced where cultivation was carried out on dense sedge.

TABLE 1: 1 APRIL 1971 - 31 MARCH 1972

<i>County</i>	<i>No. of applications</i>	<i>Total estimated cost</i>	<i>No. paid</i>	<i>Estimated total cost</i>	<i>Subsidy paid</i>	<i>% of estimate</i>
Mangonui	27	8,283	19	4,982	2,310	46.4
Whangaroa	9	6,482	7	5,258	2,041	38.8
Bay of Islands	20	12,975	7	3,355	1,543	45.7
Hokianga	53	21,043	21	8,328	4,147	49.8
Hobson	29	16,636	24	15,248	6,326	41.5
Whangarei	39	23,202	32	19,209	9,090	47.3
Otamatea	7	4,960	6	2,028	972	47.9
Rodney	45	11,058	23	6,864	3,252	47.4
Waitemata	15	3,917	0	—	—	—
TOTAL	244	\$108,556	139	\$65,272	\$29,681	45.5

Table 2 clearly shows that definite progress is being made in controlling Australian sedge, but a remarkable feature again is the number of new infestations that have been discovered during the period.

TABLE 2: PROGRESS OF SCHEME APRIL 1972 - JUNE 1973

<i>County</i>	<i>Known infestations at beginning of year</i>	<i>New infestations</i>	<i>Properties cleared during year</i>	<i>Properties requiring only limited follow up treatment</i>
Mangonui	73	3	2	6
Whangaroa	40	2	Nil	8
Bay of Islands	44	2	Nil	6
Hokianga	250	2	Nil	4
Hobson	79	17	Nil	24
Whangarei	121	2	Nil	20
Otamatea	52	4	13	9
Rodney	74	16	10	13
Waitemata	22	10	9	9
Waiheke	9	1	Nil	2
TOTAL	764	59	34	101
Raglan	25	5	—	—
Thames	3	1	—	—

Total subsidy money paid out on this scheme since its inception amounts to \$207,207, made up as follows:

	\$
April 69-March 70	18,684
April 70-March 71	49,264
April 71-March 72	43,317
April 72-March 73	34,640
April 73-March 74	52,800
March 74-June 74	8,502
	\$207,207

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The scheme has clearly hastened the identification of areas infested with this noxious weed. It has resulted in considerable areas being cleared and furthermore, initiated a sound policy of containing the weed prior to eventual control. One of the comments most frequently heard from farmers participating in the scheme is that "without this subsidy they would have had to walk off their property." If practical farmers are prepared to freely eulogize in this way, then it is praise indeed for a subsidy scheme. Properties that were previously only capable of being sold for a very low price, often far below Government valuation, have now been transformed into valuable worthwhile economic farm units. This has had a stimulating effect on the entire district rather than the depressing picture presented previously. A concomitant advantage has been the stimulus to other forms of land development in conjunction with the weed control programme, which has included pasture renewal, topdressing and subdivision, all of which have undoubtedly contributed to greater production. On all counts it can be said that this subsidy scheme, rather than punitive measures, has been an outstanding success. This success has also been recognised in the report of the Committee of Inquiry into Noxious Weed Administration and could be the formula for similar essential schemes in the future.

GENERAL

It has to be recognized that where in the national interest a plant is declared noxious, the financial burden of carrying out eradication can hardly rest solely on the shoulders of the occupier of the land at that point in time. Worth while progress is being made and will be made where some financial incentive, based on a sound subsidy scheme, is applied. I have no doubt that such investment will pay handsome dividends, not only in controlling existing areas infested with noxious weeds, but in forestalling massive expenditure in time, capital and chemicals in the future if such infestations were to continue unchecked.

It may well be that such organisations as the New Zealand Weed and Pest Control Society Inc., should play a much more active role, not only in discussing and recording technical information on the control of weeds, but making submissions to the authorities concerned on undesirable plants that could be declared noxious; assisting in recording infestations of such plants and putting forward suggestions on the administration, the control, and ultimate eradication of noxious plants.

In the words of the Maori proverb — "The land is a mother that never dies."

Subsidy schemes to aid the control of noxious weeds will undoubtedly foster this objective and bring forth many bountiful harvests.

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