

MAINTENANCE OF ROAD-VERGE SHRUBBERY

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To study the effect of prunings on native shrubs a pruning trial was laid down in March 1976 in a roadside planting (of about 8 years of age) at Mundaring Weir H.Q.

Planting species with a capacity for regeneration under a certain amount of competition were selected, bearing in mind that little maintenance could ever be applied on such areas.

The original planting included kangaroo paws, which died out after flowering well for 2-3 years. No watering was done after the first year of establishment.

The resultant data sheets show that considerable improvement can be expected from the right type of pruning.

With the careful selection of species known to be adaptable to different soil types and aspects of road-verge environment, it could be expected that such management need not be expensive. Mechanical slashing could quite easily be used in conjunction with rotational prescribed autumn burning to favour these species requiring heavy prunings, and to obtain a recycling from seed of those destroyed by heavy slashing and fire.

Thorough preparation of the planting site is essential for initial establishment. Grouping of species according to their degree of vigour is necessary to reduce the possibility of site domination by a vigorous form.

Such species as Grevillea endlicherana, Grevillea drummondii and Grevillea bipinnatifida, could be included in a group of vigorous growers capable of regeneration after heavy pruning, slashing and burning, either from coppice shoots or seedlings. It may be desirable to develop stretches of monotonous verge of one species to accentuate the effect of a variety of colourful flowering species, e.g. Verticordia or Lechenaultia.

Perpetual maintenance of native flora on median-strip and road-verge environments is something fairly simple to manage, as shown by the data sheets, provided selection of species and soil types are given due consideration.

RESULTS AND COMMENTS ON PRUNING TRIALS
ON 8 YEAR OLD NATIVE SHRUBS AT MUNDARING WEIR 1976

SPECIES	TYPE OF PRUNING	GROWTH RESULTS	FLOWERING RESULTS	COMMENTS
<u>Sollya fusiformis</u>	Very heavy cutting to base stems	Very vigorous growth	Delayed at least 12 months	A regeneration of the complete shrub.
	Moderate clipping to shape	Good uniform growth	Very good	Can be nicely shaped by this method.
	Unpruned	Straggly form	Sparse	Old material shows poor colour etc. from insect attack.
<u>Grevillea drummondii</u>	Moderate clipping to reduce size of shrub	Good uniform growth	Very good	Confined flowering to inner section of the shrub.
	Unpruned	Straggly and untidy with extended time	Very good	Unpruned shrub tends to carry more flowers on the extremities. Regenerates from seed on mineral soil without influence from fire.
<u>Kunzea baxteri</u>	Leaders cut back, laterals thinned	Good vigorous growth	Good	Control by this method is desirable.
	Unpruned	Good	Good	Shrub becomes very woody and straggly form with age.

SPECIES	TYPE OF PRUNING	GROWTH RESULTS	FLOWERING RESULTS	COMMENTS
<u>Verticordia plumosa</u>	Heavy clipping	Moderate growth	Very poor	Late March does not appear to be the time to use this type of pruning on this species. Late December after seeding may be O.K.
	Thinning of leaders	Good growth	Very good	Autumn pruning seems to be the thing for this method of crown reduction and flower heads are improved in form.
	Unpruned	Moderate	Good	Shrub has a long life, approx. 30 years and becomes straggly and extremely woody if left unpruned.
<u>Adenanthos ieges</u>	Unpruned	Good prostrate form	Good	Most of this specimen's growth is made in summer. Apart from control of size no pruning is necessary. Seeds in March.
<u>Adenanthos cygnorum</u>	Moderate pruning of leaders and thinning of laterals	Good	Good	A good method to maintain form and flower production.
	Unpruned	Moderate	Good	Shrub develops a straggly habit and large woody leaders.

SPECIES	TYPE OF PRUNING	GROWTH RESULTS	FLOWERING RESULTS	COMMENTS
<u>Callistemon phoeniceus</u>	Very heavy Leaders cut back, laterals thinned Unpruned	Vigorous lush growth Good overall growth Woody main stems and straggly leaders	Nil Good Good	Flowering set back up 2 years. A good method of control with this shrub. Unpruned specimens become unshapely. This shrub has a very long life approx. 40 years.
<u>Cassia eremophila</u>	Very heavy to base stems Moderate clipping	Vigorous lush growth Good growth	Moderate to light Very heavy	Shrub needs to be well established before very heavy pruning. A good method of pruning for flowers and shape.
<u>Acacia fauntleroyi</u>	Very heavy Moderate cutting of leaders	Nil Very good	Nil Very good	Heavy pruning respons- ible for death of tree. This shrub needs annual shaping and crown reduction for control.

SPECIES	TYPE OF PRUNING	GROWTH RESULTS	FLOWERING RESULTS	COMMENTS
<u>Grevillea bipinnatifida</u>	Heavily pruned to stem base	Very vigorous lush growth	Very poor Retarded for 12 months	Shrub is completely regenerated. Good expectations.
	Heavy thinning of leaders	Good	Very good	A good method to maintain form and flowers.
	Unpruned	Moderate	Good	Very straggly form develops with age and size of shrub.
<u>Darwinia citriodora</u>	Heavy clipping	Good and vigorous growth	Retarded light	Method O.K. for shaping better flowering in 2nd year.
	Leaders and laterals thinned	Good growth	Good	Good number of full coloured bracts
	Unpruned	Straggly and average	Good	Untidy straggly condition develops after 4 years. Pruning <u>is</u> necessary.

SPECIES	TYPE OF PRUNING	GROWTH RESULTS	FLOWERING RESULTS	COMMENTS
<u>Chamelaucium uncinatum</u>	Moderate thinning of leaders	Very good	Good	Plant becomes woody with age. This seems to be the best method on maintenance.
	Heavy cutting of major limbs	Rather vigorous	Rather poor	Better flower could be expected in the second year.
<u>Calytrix angulata</u>	Light cutting of crown, thinning of woody sections	Good	Good	Heavy pruning can kill. Regeneration after burn is good from seed fall.
	Unpruned	Short growth	Good	Eventually becomes straggly.
<u>Grevillea endlicherana</u>	Clipping of extended crown shoots plus thinning of woody sections	Good vigorous growth of flower shoots	Good	Regenerated from seed on mineral soil without influence from fire.
	Unpruned	Straggly, untidy	Good	Becomes tall and less attractive, but can be O.K. for a considerable number of years.