

The NZ Farm Pole Nursery Guide

Part 3 – Annual Work Plan

Acknowledgments: Colin Stace (HBRC) and Weston Brown (Horizons).
In conjunction with the NZPWRT Technical Advisory Group.



THE NEW ZEALAND
POPLAR & WILLOW RESEARCH TRUST

September, 2024

Appendix I

Annual Calendar of Nursery Works		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
New Plantings & Stool Replacement														
Site preparation	Fencing, clearance/levelling, spray out vegetation, grind old stools if replacing. Rip planting lines				Fence, clear	Spray	Rip, 400mm deep							
Plant Material	Cuttings 500mm long, 25-30mm top end dia. Cut to bud						Buy in or cut, store in fresh water							
Planting	Use stringlines and set out to required spacings								Plant to 300mm depth					
Crop Management														
Thinning	Initial crop thin and 2nd year removal of under sized leaders		Late Dec to early Feb: Cuttings - thin shoots to best leader 1st year regrowth - thin to 2 leaders 2nd year regrowth - remove leaders <25mm at 1m high 3 yr rotation											
Pruning	2nd year side pruning of branches		Side prune to around 1.8 m, or approx. 1/3 height of stems											
Weed control - 50 cm margin along either side of rows	Herbicide - boom/knapsack spray pre-emergent along rows before new growth flush, then use non-sytemic knockdown herbicide such as glufosinate for ongoing spring & summer weed control Mechanical - walk-behind cultivator along rows, hand hoe-ing between plants	Every 4-6 weeks								Before bud break: pre-emergent herbicide, e.g turbuthylazine at 7.5L/ha a.i. ; plus knockdown herbicide where required		Every 4-6 weeks		
Specific problem weeds -hand gun or knapsack	Hemlock, convolvulus, mallows, couch, blackberry, thistles, etc		Monitor and repeat control if required									Monitor and apply suitable control where required		
Grass Control - headlands & between rows	Mow - when length >100mm, around 14 day cycle during peak grass growth Sheep grazing - lambs over summer, 2nd and 3rd year growth	Mow - every two weeks approx.									Mow - every two weeks approx.			
Fertiliser	Base Dressing - per soil / foliar tests pH range 6.0- 6.5, Olsen P 25+, P, K or S if required Applied over cut stools only									Soil test	General application			
	Side Dressing - 25 kg N/ha Applied to 1m band per row, timed for rain or irrigation Based on crop performance, for 2nd or 3rd year growth.											Apply N if needed		
	Optional: Foliar feed -Mag Nitrate and Tech Urea, combined with Rust spray	Every 3 weeks											Every 3 weeks	
Irrigation	Under canopy, sprinkler or dripper	Application timing & volume per water budget or Irrigation Controller			Maintain soil moisture level until leaf fall							Application timing & volume per water budget or Irrigation Controller		
Pest and disease														
Monitoring	Weekly visual inspection - aphid & rusts S Matsudana main rust indicator species	Orange rust spots of foliage; black aphid clusters on stems, plus sooty mould, ants & wasps										Orange rust spots of foliage; black aphid clusters on stems, plus sooty mould, ants & wasps		
Giant Willow Aphid	Willow only - contact insecticide (e.g Marvik) application when first seen and repeat applications at 10-14 day intervals if still present	Spray contact insecticide when present										Spray contact insecticide when present		
Rust - Poplar (especially P euramericana hybrids) and Willows	Apply fungicide at 3 weekly intervals, rotation of 2 systemic and 1 contact	3 week intervals: Pro-P - Taratek - copper oxychloride										3 week intervals: Pro-P - Taratek - copper oxychloride		
Silverleaf	Fungicide spray on fresh cut at stool harvest, within 1 hour of cutting: 3 g a.i Captan + marker dye					Fungicide on fresh cut stools straight after harvest			Infected stools- remove & burn					
Pole Harvest														
Pre-winter Check & Planning	Equipment & machinery, materials and labour; nursery access and pole handling areas; soaking bays or sprinklers for pole storage				Check and repair or replace as required	Confirm & allocate labour								
Harvest	Minimum cut height on stool 400 mm. Do not cut in rain, high risk of Silverleaf fungus infection					After leaf fall, late May to early August Limit daily cut to amount that can be trimmed, bundled and stored								
Post harvest tidy up	Rows, headlands and handling areas cleared of slash Tractor moulder mulching mower, piece size up to 40 mm dia - contractor? Front end loader forks or grapple, move to suitable burn pile area (not in floodway) - burn if compliant				Post thin/ prune				Clean up & stockpile			Burn		

More Information:

NZ Farm Pole Nursery Guide

Part 1 – Planning

NZ Farm Pole Nursery Guide

Part 2 – Management

NZ Farm Pole Nursery Guide

Part 4 – Disease and Pests

Who We Work With...



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Follow us on
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