

Machine/Head	Treatment type	Handles slopes	Handles tree size	Productivity/day	Cost/ha	Quality of end product
Hand crew with saws	Fall and scatter	Up to 70%	< 15cm DBH, unless feller is on crew	Usually .3 to .5 hectare /person day	No piling \$90-750 dependant piece size and density	Clean but stems over 5 c Diameter persist after burning, must slash to lie on ground
Hand crew with saws	Pile and burn	Up to 70%	< 15cm DBH, unless feller is on crew	Usually .25 to .33 hectare /person day	\$1100-1900 to slash and pile Pile burn 200-450/ha Grass seed 75/ha Total \$1375-2425/ha	Clean but burn rings need to be grass seeded, invasives
Hand fall and Chip with Vermeer chipper	Hand fall and Chip with Vermeer chipper	Up to 30%	Chipper handles up to 30cm DBH-	Slow	Up to \$12,000/ ha	Very clean, spread chip piles
Jobkat Cat 262C skid steer	Masticate piles	Up to 20%	Trouble over 20cm DBH	See contractor	\$324-560	Clean, on frozen soil very little disturbance
Jobkat Cat 262C skid steer	Masticate standing trees	Up to 20%	Trouble over 20cm DBH	See Contractor	\$665-950 for small diameter stand \$2174/ha for 20,000 stem/ha	Trouble on slopes and w larger trees
Hydro Axe	Masticate downed debris	Up to 30%	Trouble over 20cm DBH	1 to 2 days/ha	About \$800-1000/ha (follow up treatment to tree cutting)	Trees push over need bucking
LAMTRAC 8290 front mounted Mulching head	Masticate standing trees	No problem to 50%, possibly 70% if there is bench to turn on	No problem to 40cm DBH	See Contractor	\$1560	Trees pushed over need bucking
Cat 320 excavator with 52 inch disk mulcher	Masticate standing trees	No problem to 50%	No problem to 40cm DBH	1.5-2 ha/day (depends upon stem density)	\$1500	Fair to good
John Deere Excavator with 52 inch mulching blade	Masticate standing trees	No problem to 50%	No problem to 40cm DBH	1.5-2 ha/day (depends upon stem density)	\$1500-1800	Fair to good, some trouble in masticating felled tree
Feller Buncher with grinding head and accumulator	Masticate standing trees	No problem to 50%	No problem to 40cm DBH	See contractor	\$1700-2175	Good, clean flat stumps, Can do volume removal ; same time as slashing

Hand crew with saws Log scatter	Reduces ladder fuels, need to add pruning, may not remove enough trees over 15cm	Round wood >10cm diameter under trees & entire stand and is hard on sites
Hand crew with saws pile and Burn	Reduces ladder fuels, need to add pruning, may not remove enough trees over 15cm	Burn rings need to be grass seeded to prevent Usually no hold over fires
Hand fall and Chip with Vermeer chipper	Reduces ladder fuels, need to add pruning, may not remove enough trees over 15cm, needs faller for bigger stems	Chipping trees over 15cm DBH creates large risk of hangover fires. Piled chips over 20cm create spontaneous combustion issue.
Jobkat Cat 262C skid steer, Masticate Piles	Reduces round wood to chips without smoke or venting windows logistics. Chips are usually fine dependant on felled tree size.	Chipping trees over 15cm DBH creates large risk of hangover fires. Hand piles of small trees low risk and hangover risk. Risk of localised
Jobkat Cat 262C skid steer, Masticate standing trees	Does not limb standing trees effectively, cannot remove trees over 20cm DBH. Effectives on smaller trees. Creates rails but usually under 1 metre long.	Depends on size and density of stand. Risk of hot spots in high densities. Can turn a surface ground fire with smaller chips mixing with grass.
Hydro Axe, masticate down debris	May not be necessary after excavator treatment. Can chip longer rail sized trees Usually produces a finer chip about 15cm length.	Depends on size and density of stand. Risk of hot spots in high densities. Can turn a surface ground fire with smaller chips mixing with grasses
LAMTRAC 8290 front mounted Mulching head	Does not limb standing trees effectively. Has difficulty chipping rails on ground; larger fuels created. Does kill trees up to 40cm. Usually produces a finer chip about 15cm length	Depends on size and density of stand. Risk of hot spots in high densities. Can turn a surface ground fire with smaller chips mixing with grasses.
Cat 320 excavator with 52 inch disk mulcher	Does not limb standing trees effectively. Does kill trees up to 40cm. Usually produces a finer chip about 15cm length.	Depends on size and density of stand. Risk of hot spots in high densities. Can turn a surface ground fire with smaller chips mixing with grasses.
John Deere Excavator with 52 inch mulching blade	Does not limb standing trees without damage. Does kill trees up to 40cm. Usually produces a finer chip about 10cm length.	Depends on size and density of stand. Risk of hot spots in high densities. Can turn a surface ground fire with smaller chips mixing with grasses.
Feller Buncher with grinding head and accumulator	Does not limb standing trees without damage. Does kill trees up to 40cm. Usually produces a finer chip about 10cm length	Depends on size and density of stand. Risk of hot spots in high densities. Can turn a surface ground fire with smaller chips mixing with grasses. Can reduce fuel load by stacking large for removal