

Cherokee NF Management Strategies -- DRAFT

Ecological System	Management Action in Model	Management Action Description	From Class	To Class	Cost/ Acre	Model Notes	Management Comments
Montane Red-Chestnut Oak	RxFire	Prescribed fire to increase open classes	All classes but A	Open and A- Early	\$50	In Closed classes 33% converts to Open, 8% converts to A, and 59% remains Closed; in Open classes 3% to A and 97% stays Open; A remains A	Assumes ~1000 block burn including mosaic of systems. Actual outcomes variable; depends upon prescription and if prescription goals are met
Montane Red-Chestnut Oak	Thinning	Commercial or non-commercial mechanical thinning to create gaps and more open forest (remove ~20% of BA)	E- Late-Closed	D- Late Open	\$50 (commercial) \$150 (non-comm)		Needs continued fire to maintain at D. This is 'low-hanging fruit' and gets lower the closer it is to roads and on slopes < 30% slope (tractor logging); commercial requires at least 2500 board feet
Montane Red-Chestnut Oak	Gap Harvest + Thinning	Group selection harvest <1 to 2 acres (commercial) in size and thinning between gaps, to create gaps and more open forest	E- Late-Closed	D- Late Open	\$60 (commercial) \$250 (non-comm)		Typical harvest constitutes 1/5 to 1/3 of stand; repeated on different % in 10-30 years, depending upon monitoring. These conditions assume fire at the suggested intervals from the BpS models.
Montane Red-Chestnut Oak	Regen Harvest	Shelterwood harvest of majority of overstory, following pre-harvest guidelines from "Loftis publications"	E- Late-Closed	A- Early	\$50 (commercial) \$150 (non-comm)		Typically 10-40 acres in size. Assumes continued fire.
Montane Red-Chestnut Oak	Restoration Harvest (Partial Overstory)	Harvest partial overstory of uncharacteristic white pine, yellow poplar or yellow pine stands; no "oak planting"	WP- White Pine, YP- Yellow Poplar, PD- Pine Dominated	A- Early, C- Late Open, D-Late Closed	\$50 (commercial) \$150 (non-comm)	20% success rate	Success rate dependent upon continued fire
Montane Red-Chestnut Oak	Restoration Harvest + Planting	Harvest entire overstory of uncharacteristic white pine, yellow poplar or yellow pine stands; plant oak seedlings	WP- White Pine, YP- Yellow Poplar, PD- Pine Dominated	A- Early	\$210 (commercial) \$310 (non-comm)	60% success rate	Assumes two years of follow-up herbicide treatments. Planting only @ \$100/acre; w herb @ \$160/acre. Success rate dependent upon continued fire
Montane Pine	RxFire	Prescribed fire to increase open & early succession classes	All classes but A	Open and A- Early	\$ 50	In Closed classes 20% to open and 80% to A; in Open classes 10% to A and 90% stays Open; A remains A	Assumes ~1000 block burn including mosaic of systems. Actual outcomes variable; depends upon prescription and if prescription goals are met
Montane Pine	Restoration Harvest	Harvest / kill uncharacteristic oak stands without re-planting	OD- Oak Dominated	A- Early	\$ 200	40% success rate	Non-commercial. Success rate dependent upon continued fire
Montane Pine	Restoration Harvest + Planting	Harvest / kill uncharacteristic oak stands with re-planting	OD- Oak Dominated	A- Early	\$ 300	85% success rate	Non-commercial. Success rate dependent upon continued fire
All Systems	Fire Suppression	Management of wildfires to protect lives and property at wildland-urban interface	All classes	As per model fire parameters	n/a	Added Transition Multipliers (1-suppl%) for Surface, Mixed & Replacement Fire to reduce fire	Modeled two scenarios. Medium @ 60% suppression Surface; 40% suppression Mixed; 20% suppression Replacement; High @ 90-80-60,

Note: All Systems can be displayed and calculated across the landscape using GIS and our current database