

JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

FACILITIES SERVICES

TREE CLIMBING/TRIMMING

* The fall protection equipment must be inspected and maintained according to Cal/OSHA and the manufacturer's recommendations. A rescue plan and equipment must be in place and operable prior to the beginning of the tree work.

TASK	HAZARDS	CONTROLS
1. Prepare work area.	Injuries to tree workers and bystanders; slips, trips, and falls	<p>Warn people in work area; utilize barricades, signs, cones, or caution tape to keep bystanders a safe distance from job</p> <p>Visually inspect entire tree, including root collar; inspect all ropes, lanyards, saddles, harnesses, belts, ladders, hitches, other equipment.</p>
2. Climbing	Falling, slipping	<p>Always tie in with an approved climbing line and tree climber's saddle when working above ground; work may be performed while standing on a ladder, including top rung, but only when worker is tied in.</p> <p>For all operations above 12 feet, a second person, trained in emergency procedures, must be present within vision or voice.</p> <p>Place hands and feet on separate limbs whenever possible; maintain three points of contact while climbing; have at least two means of attachment.</p>

			<p>When climbing distances >25 feet, or beyond the worker's physical capabilities, worker should not climb, shin, body thrust, or foot lock the line without being tied in or belayed, using a lanyard.</p> <p>The climbing line should be passed around the trunk of the tree as high above the ground as possible using branches with a wide crotch to prevent binding of the climbing line.</p> <p>Select a crotch for tying in that is as close to being directly above the work area as possible, in a position such that a slip or fall would swing the worker away from any electrical conductor.</p> <p>Keep feet, hands, and rope out of tight V-shaped crotches.</p> <p>A false crotch can be used in place of a natural crotch at the discretion of the climber.</p> <p>Tie a figure-eight knot in the end of the rope to prevent it from pulling through the taut-line hitch.</p> <p>Crotch the climbing line as soon as practicable, then tie and check a taut-line hitch.</p> <p>Remain tied in until work is completed and worker is back on the ground. If it is necessary to re-crotch the rope, re-tie in or use personnel lanyard before releasing previous tie.</p> <p>Never leave climbing line in tree overnight.</p> <p>Remove palm frond skirts with >3 years of growth from top down, supported by a climbing line and a false crotch. Never remove skirts >3 years old by positioning worker below the work area supported by a lanyard.</p>
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		Eye and head injuries, scrapes and abrasions	Wear gloves, hard hat, safety glasses, sturdy boots.
		Electrical hazards	Climb on side of tree away from electrical conductors, if possible.
	3. Trimming and pruning	Falling, slipping	<p>Always tie in with an approved climbing line and tree climber's saddle when working above ground; work may be performed while standing on a ladder, including top rung, but only when worker is tied in.</p> <p>For all operations above 12 feet, a second person, trained in emergency procedures, must be present within vision or voice.</p>
		Eye and head injuries; cuts, scrapes, abrasions	<p>Wear gloves, hard hat, safety glasses, sturdy boots.</p> <p>Always hang the sharp edges of pole pruners or pole saws facing away from worker, if possible, and always remove them when worker leaves the tree.</p> <p>Hook a scabbard or sheath to the climbing saddle to carry the handsaw when not in use.</p> <p>Shout a warning from the tree before a limb is dropped.</p> <p>Attach a separate line to limbs that cannot be safely dropped or are too heavy to be controlled by hand. Workers on the ground should hold the ground end of this line. Never use the same crotch for both the climbing line and the</p> <p>Never leave cut branches in trees overnight.</p>
		Electrical hazards	Always hang pole pruners and pole saws in a vertical position to prevent dislodging. Never hang pole pruners or pole saws on utility wires or cables. Never leave them in a tree overnight.

<p>Other Information: Contributors: Created: JSA Library Number:</p>	<p>Required Training:</p> <ol style="list-style-type: none"> 1. Fall protection 2. Electrical safety 	<p>Required Personal Protective Equipment (PPE)</p> <ol style="list-style-type: none"> 1. Hard hat 2. Safety glasses 3. Gloves 4. Work boots 5. Climbing saddle 6. Personnel lanyard 7. Taut-line hitch 8. Approved climbing line
	<p>Senior EH&S Technician Jim Ostdick; Arborist Jason Thurm; Lead Arborist Doug Labat April 2003 FS-GRND-144</p> <p>For more information about this JSA, contact the <i>Office of Environment, Health and Safety</i> at UC Berkeley, 317 University Hall #1150, Berkeley, CA 94720-1150 (510) 642-3073 ● http://www.ehs.berkeley.edu</p> <p><i>The development of Job Safety Analyses is a Balanced Scorecard initiative of the AVC-BAS Safety Committee, sponsored by the Associate Vice Chancellor-Business and Administrative Services (AVC-BAS) and the AVC-BAS Leadership Team ● http://bas.berkeley.edu/balancedscorecard</i></p>	