

Tatum Guide for Hazard Tree Evaluation

Defect	Moderate Hazard Potential	High Hazard Potential
Cracks	Hardwood stem with single crack, with cavity or decay present.	Crack that goes completely through the stem. You may be able to detect movement of a section of the stem.
		Stem with two cracks on the same segment with cavity or decay inside.
		Stem with a crack in contact with another defect or at the base of a leaning tree.
		Branch (4" or larger) with any crack.
		Conifer with a single crack, with inrolled bark or a cavity or decay.
Weak Unions	A weak union with inrolled bark.	A weak union that is also cracked, cankered or decayed.
		A weak union in the tree's hot spot.
Decay	Canker-rot infection.	Canker-rot infection in the tree's hot spot.
		Cavity or decay associated with an open crack or a weak branch union. See table for safe sound wood thicknesses.
Cankers	Canker affects > 1/2 of the trees circumference.	Canker in tree's hot spot affects > 1/2 of tree's circumference.
	Canker at the base of a leaning tree.	Canker-rot infection in tree's hot spot.
		Canker physically connected to crack, decay or weak union.
Dead		Any dead tree.
		Any dead or lodged branch or top.
Root Problems	Root problems associated with stem decay, crack or canker. Exposed major roots.	Freshly leaning tree with recent root-lifting, soil movement or mounding near tree base.
		Inadequate root support. > 1/2 of roots severed inside the dripline.
Poor Tree Architecture	Branch unbalanced with respect to rest of crown mass. Somewhat species-sensitive.	Tree leaning over target at > 15 degrees.
	Branches with sharp bends or twists.	Tree leaning over target with other defects in the hot spot.
	Branches arising from poor pruning or topping, with weak or right-angle attachments to the rest of the crown.	As in moderate column, with associated cankers or decay.
	Branch more than 2/3 dead (remove branch).	Any dead branch or top.

Modified from "How to Detect, Assess and Correct Hazard Trees in Recreational Areas". Minnesota DNR, In press.

NATURAL TARGET PRUNING & TOPPING

PRUNE CORRECTLY. Correct pruning is the best thing you can do for your tree. Here are the guidelines:

NATURAL TARGET PRUNING

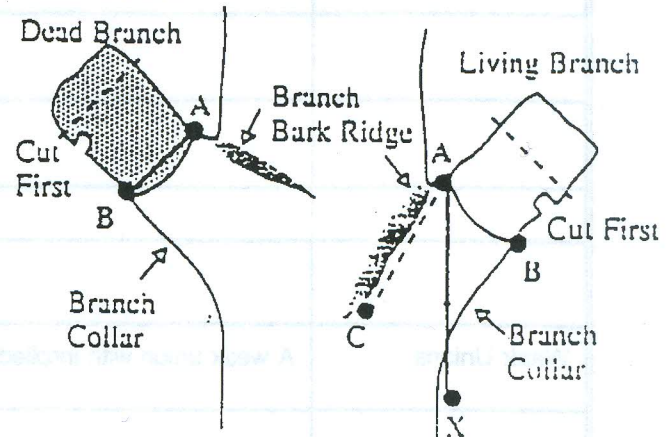
1. Locate the branch bark ridge (BBR).
2. Find target A — outside BBR.
3. Find target B — where branch meets collar.
4. If B cannot be found, drop an imaginary line at AX. Angle XAC equals XAB.
5. Stub cut the branch.
6. Make final cut at line AB (with powersaws make final cut on up stroke.)

Do not:

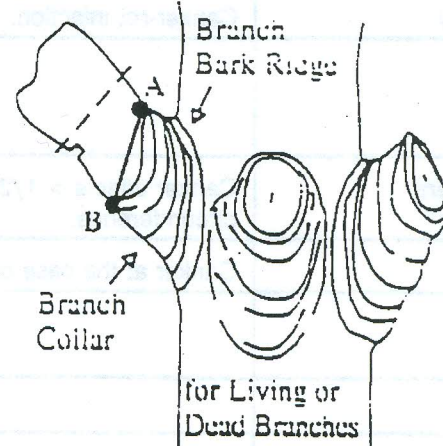
- make flush cuts behind the BBR
- leave living or dead stubs
- injure or remove the branch collar
- paint cuts

The best time to prune living branches is late in the dormant season or very early in spring before leaves form. Dead and dying branches can be pruned anytime. Use sharp tools! Make clean cuts. Be careful with all tools. Safety first.

HARDWOODS



CONIFERS

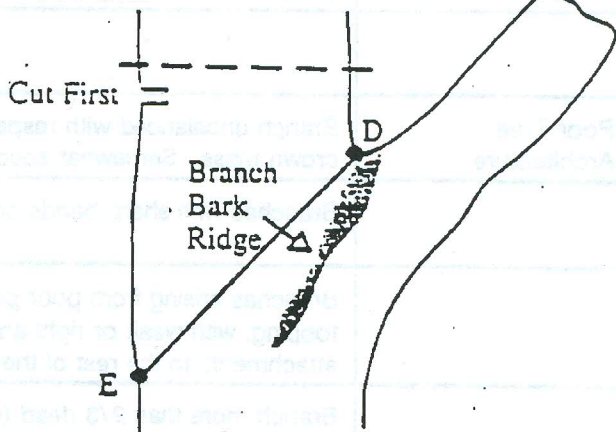


TOPPING

Topping trees is a serious injury regardless how it is done. Avoid it if possible by starting to prune early in the life of the tree to regulate its size and shape. If you must top cut, follow these guidelines:

Cut line DE at an angle approximately the same angle as the angle of the BBR. Do not leave a stem stub. Do not paint the cut. Know your safety limits — call professionals when the job is too big for you.

TOPPING



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