Tree Risk Awareness Reference Guide

Safety Sub-Committee

Ralph Thurman – Nelson
Jeff Baker – Shade Tree
Phil Heinz – Wright
Tom Beerman – Ameren
Paul Svoboda - Ameren

Desired Outcomes

- **Short term**
  - Awareness of Tree Risk Assessment amongst all field personnel

- **Long Term**
  - Develop a tree risk assessment reference guide for all field personnel
  - Develop a tree risk assessment training program for all field personnel
  - Implement a tree risk assessment training program for all field personnel
  - 0 unsafe acts committed as a result of improper tree risk assessment while trimming or removing trees
  - 0 injuries to trimmers as a result of improper tree risk assessment while trimming or removing trees

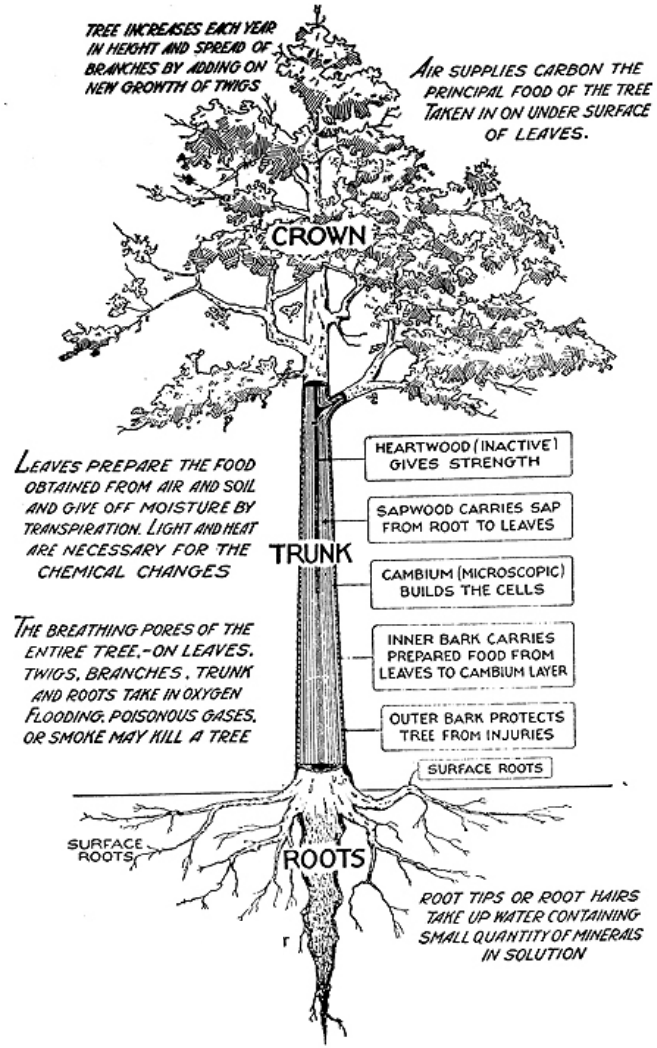
Reference Guide Components

- Introduction
- Tree Anatomy
- TCIA “Identifying Hazard Trees”
- TCIA “Hazard Tree Quick Check” Decal
- Tree Risk Awareness Checklist
- Tree Identification and Common Tree Defects

Introduction

- Tree Risk Awareness Definition
  - Tree risk awareness in this reference guide shall be defined as: “Accurately assessing a trees potential for failure during the course of line clearance activities in regards to the safety of the tree worker”.
- Minimum evaluation characteristics
  - Structural stability of the tree: Roots, Trunk, & Limbs
  - Hazards present in and near the tree
  - Tree species
  - Tree location…creek bank, hillside, street, wetlands, backyard
  - Soil conditions

Tree Anatomy



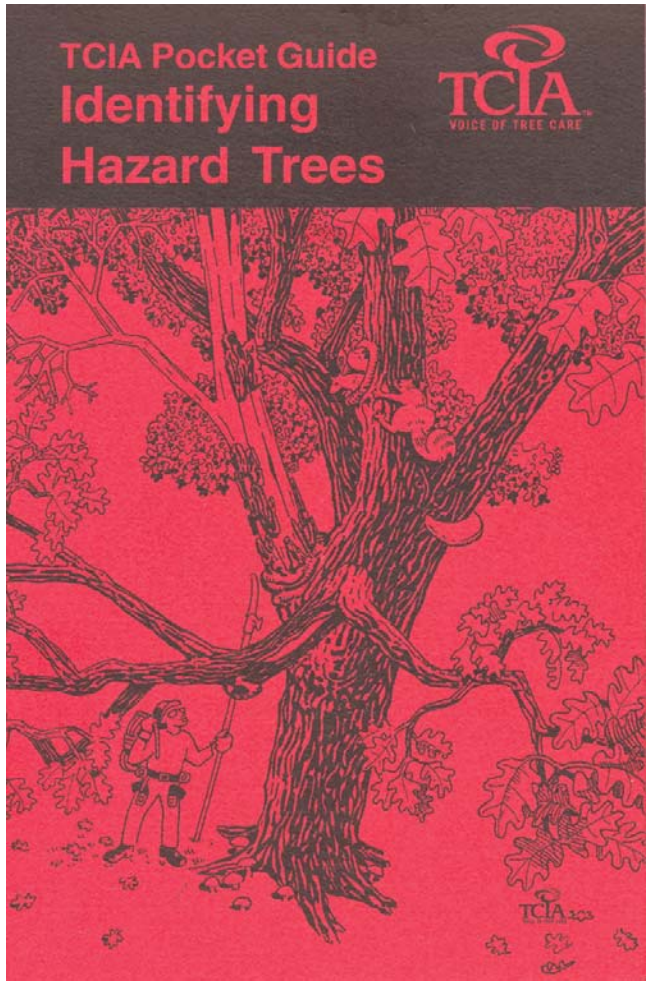
Crown

Trunk

Roots

Ground "Up" Approach

A Climbers Guide to Hazard Trees



Identifying Hazard Trees

A TCIA Pocket Guide

Originally published as ***The Climber's Guide to Hazard Trees*** by the Bartlett Tree Research Laboratories.

Reproduced and distributed by the Tree Care Industry Association by permission of the F.A. Bartlett Tree Expert Company, Dr. Thomas Smiley and Joseph C. Bones, authors.

Revised in 2000 by TCIA Staff.

Hazard Tree Quick Check

Tree Hazard Decal

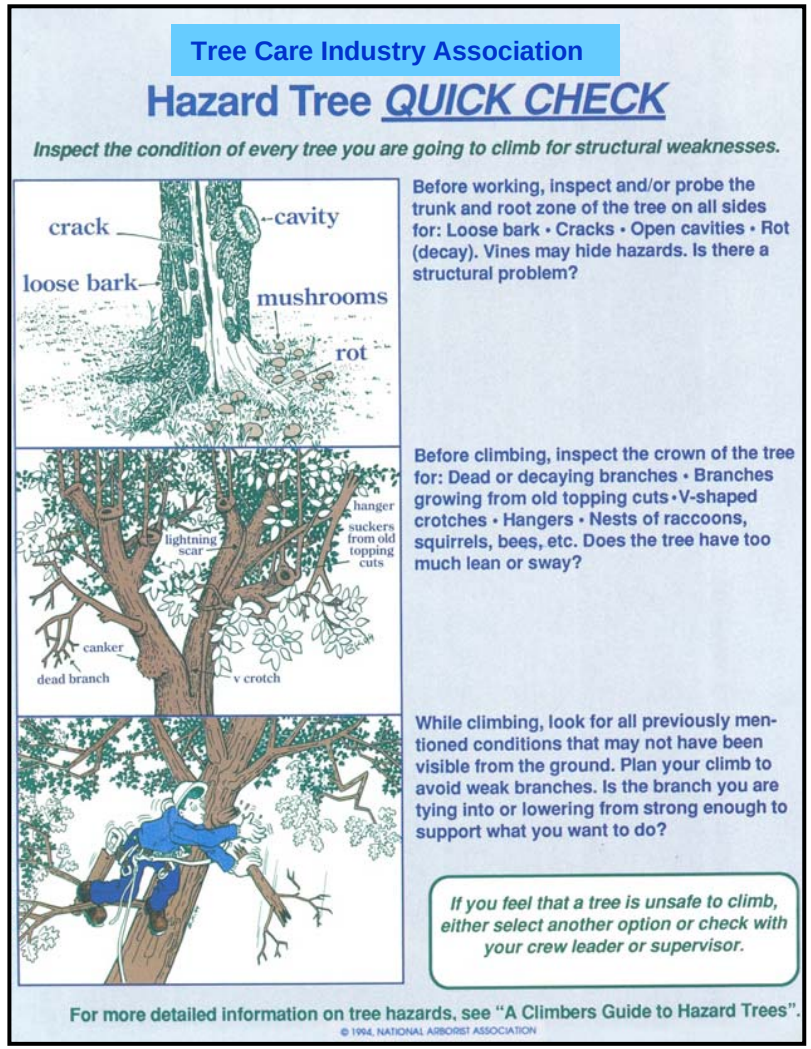
Illustrated self-adhesive color decals for your truck, clipboard, etc.

Available in either vertical (7.5” x 9”) or horizontal (5” x 14”).

The Tree Care Industry Association, Inc.
3 Perimeter Rd. – Unit 1
Manchester, NH 03103

TCIA@treecareindustry.org

www.treecareindustry.org



Nelson TREE SERVICE, INC. · WRIGHT Employee Owned · TOWNSEND Tree · SHADE TREE

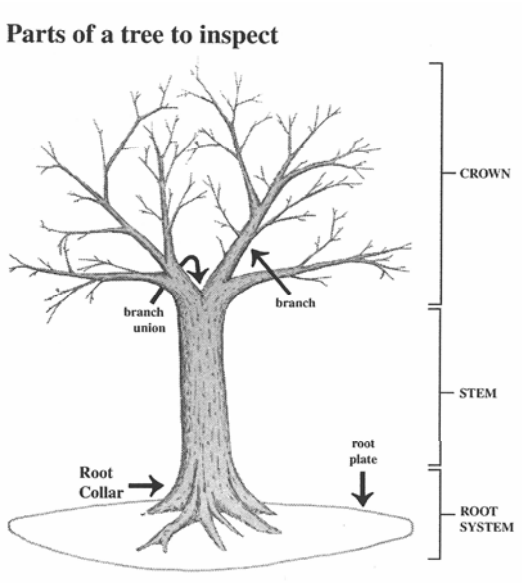
Tree Risk Awareness Checklist

Hazard Tree Awareness
Hazardous Indicators Checklist

Root System
___Decayed roots
___Mushrooms
___No root flare
___Signs of fill (dirt, mulch)
___Ground heave
___Creek bed
___Loose / cracked bark
___Soft or hollow wood
___Mounded soil
___Cut roots
___Girdling roots
___Sap flow / bleeding

Soil
___Compacted
___Flooded
___Drought / dry
___Poor drainage
___Sandy
___Shallow

Stem
___Decayed wood
___Cavities / holes
___Cracks / splits
___Mushrooms / conks
___Loose bark
___Stem bulge / swelling
___Poor architecture
___Insects (borers, ants)
___Woodpecker damage
___Adjacent dead trees
___Multiple stems (trunks)
___Canker
___Too small to climb
___Entirely dead
___Lightning scars
___Lean
___Bent under tension
___Animals
___Vines may hide hazards



Other Considerations
___Climber's weight
___Strength and/or overuse of roping point
___Ground workers pulling excessively on ropes
___Shock loading
___Climber or cut limb weight shifts

Crown
___Decayed wood
___Deadwood/stubs
___Weak branch union (crotch)
___Top heavy
___Out of balance
___Branches growing from old cuts
___Support cables installed
___Excessive end weight (Lion's tail)
___Cracks/splits
___Weak branch attachments
___Multiple branch attachments
___Animals
___Sap flow/bleeding
___Abrupt bend in branch (weak)
___Storm damage
___Electrical wires

Tree Identification/Common Tree Defects

Tree Identification and Common Defects Training Module

Silver Maple Tree

- Weak crotches
- Dead limbs throughout the canopy
- The wood is fragile and splits easily

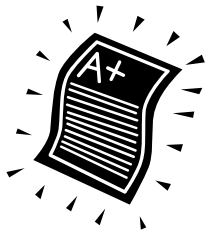
Tree Risk Assessment Training Program

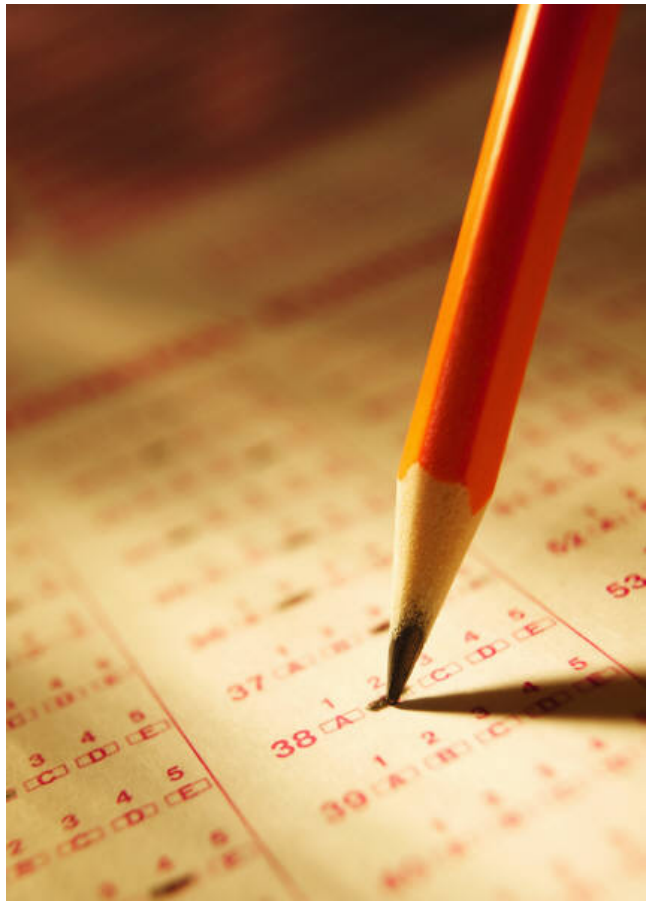
Training program will include the following:

1. Basic tree Biology – Anatomy
2. Tree Care Industry Association “Identifying Hazard Trees”
3. Tree Care Industry Association “Hazard Tree Quick Check” decal
4. Hazardous indicators check list
5. General tree defects
6. Common tree species in Missouri and Illinois and some associated defects
7. Written exam covering the material presented in the tree risk assessment training program and reference guide

Learning Assessment Test

- Multiple Choice and True/False Exam
- 55 Questions
- Covering all Components of the Reference Guide
- Passing Grade of 100%





Implementation

- Reference manual is completed. Will need to be copied and distributed to all crews.
- Draft of Training program is completed. Each contractor will need to develop a training schedule for supervision and field personnel.
- Document comprehension of training material thru exam results and performance in the field.
- Training to be completed by April 1, 2007

Ameren

Questions?

Nelson TREE SERVICE, INC.

WRIGHT Employee Owned

TOWNSEND Tree

SHADE TREE