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WOUNDED TREES MAR OUR ENVIRONMENT



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Northeastern Area State & Private Forestry
FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE

This booklet is a part of a series of Informational material produced by the Forest Service to provide information on the wise use and care of trees... our most versatile and renewable natural resource.

Others in the booklet series include: "A tree hurts, too!", and "Your tree's trouble may be you."

The information is based on the research work of Dr. Alex L. Shigo, a Forest Service Plant Pathologist. Illustrations are by David M. Carroll.

Cover—Wounded trees are hazards along our beautiful modern highways. Decaying trees also mar the beauty of scenic roadways.

The problem is DECAY associated with wounds!

What can be done?

● PREVENTION

First: Greater care must be taken to prevent wounds. Too many people take trees for granted, and they think that, no matter what they do to a tree, it will continue to grow. Trees, like all living things, will withstand only so much injury before they begin to weaken. Small wounds may not seem serious, but the accumulation of many small wounds over many years may add up to serious trouble.

● HELP

Second: Help the tree help itself after wounding. Remove the obviously injured bark and wood.

Remove dead and dying branches.

Fertilize and water properly.

And remove less valuable trees and shrubs that may be crowding the injured tree.

● REMOVE

Third: When wound diseases progress to the point where the tree, or its limbs may fall, or when the tree becomes unsightly, remove the tree. (A professional arborist can help you make this decision.)

● PLAN

Fourth: When planting new trees, take time and plan ahead so that you will not as likely accidentally wound the growing tree. (For example trees should be planted away from driveways, curbs and walk-ways.)

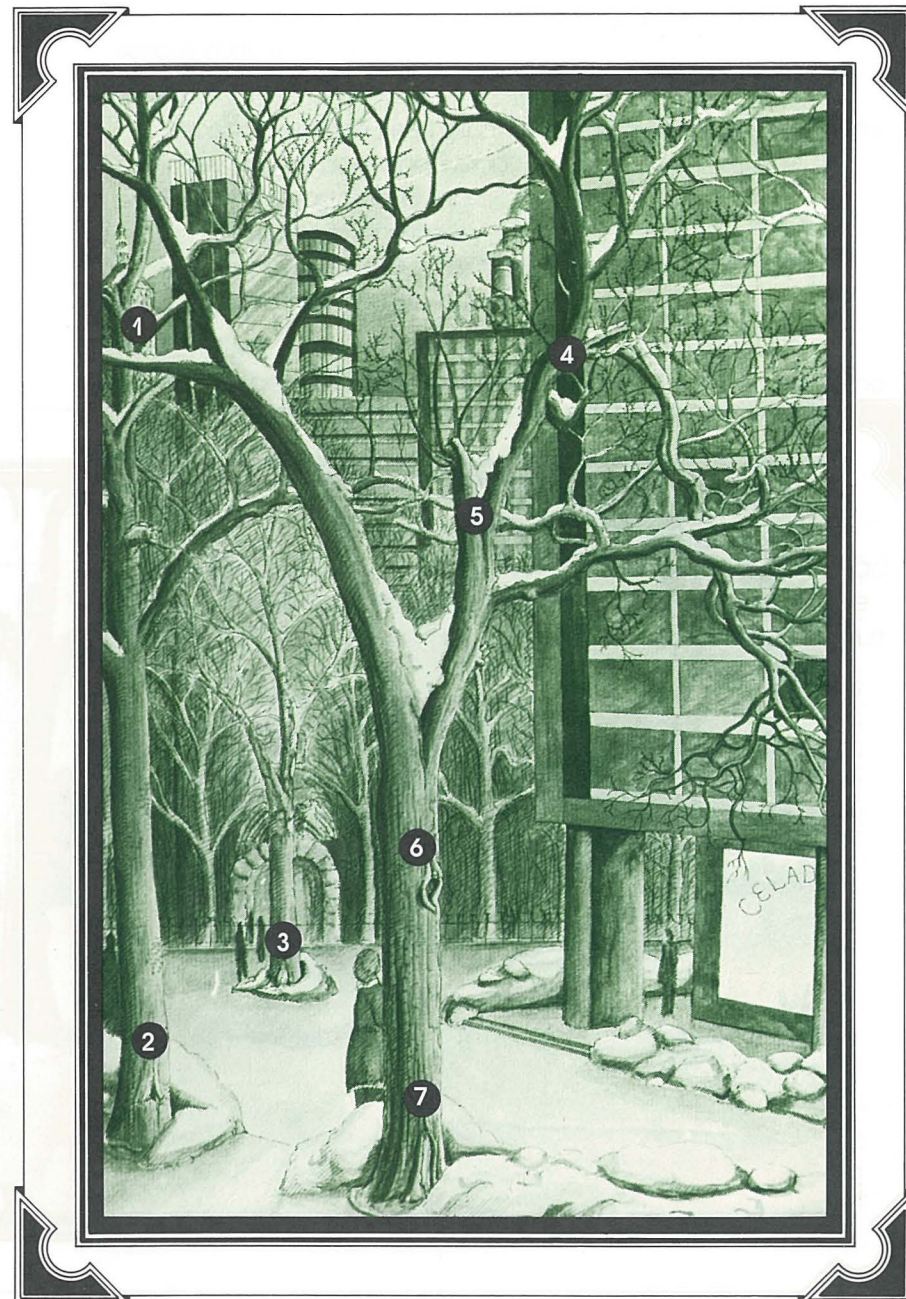
Tree Wounds found near a Rural Home In Early Summer

1. Open basal wound and large dead branches above.
2. Large dead branches; one over house roof.
3. Wound at base and large dead branch above.
4. Large open wound and dead branch.
5. Open basal wound.



Tree Wounds found in a City in Winter

1. Broken top.
2. Recently inflicted basal wound.
3. Open basal wound.
4. Broken and dying large branch.
5. Broken branch with new shoots.
6. Open trunk wound.
7. Open basal wound.



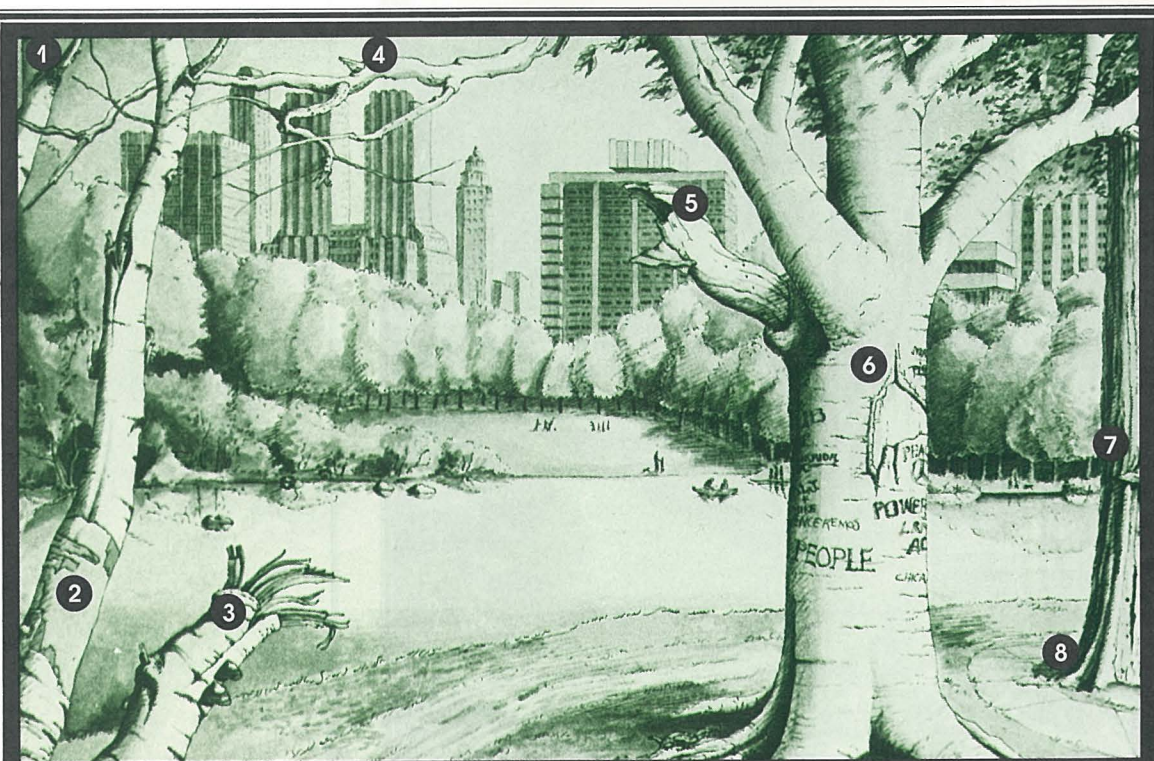
Tree Wounds found in a Recreation Area in Early Spring

1. Dead top.
2. Large broken branch.
3. Open basal wound.
4. Basal wound, dead branches, and poorly healed branch stubs.
5. Dead branches and poorly healed branches.
6. Decayed stump.



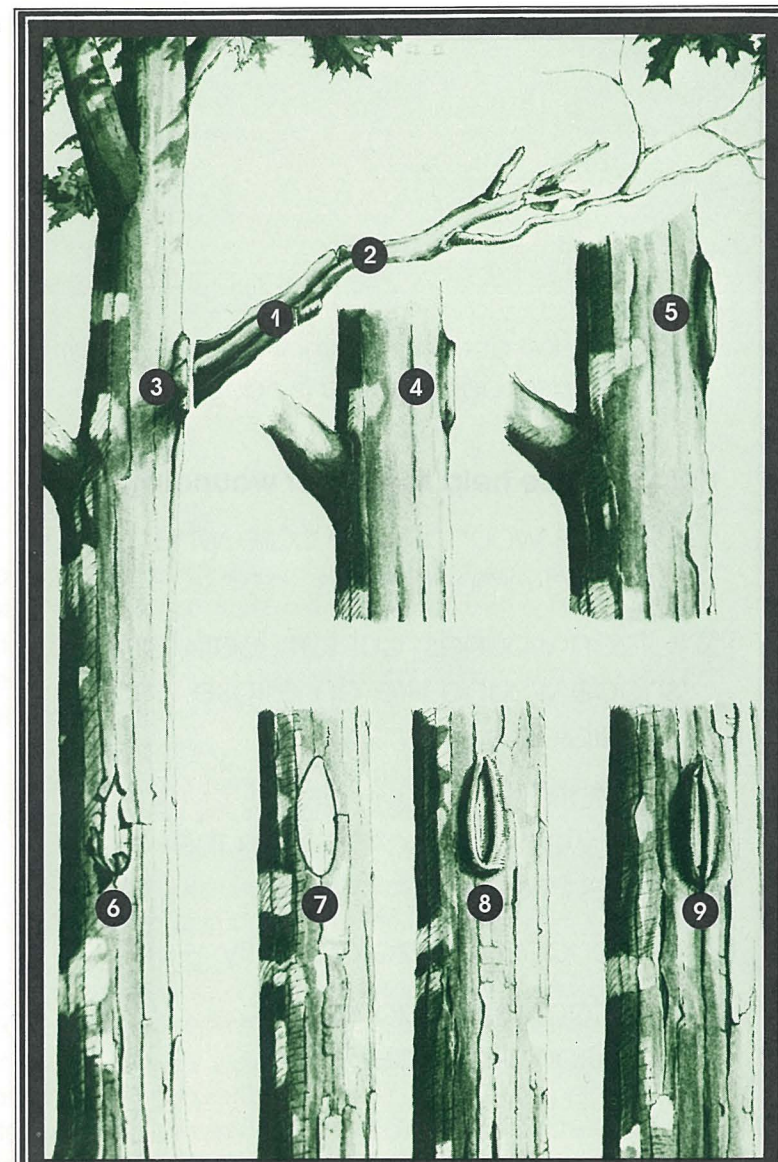
Tree Wounds found in a City Park in Late Summer

1. Dead branch.
2. Torn bark.
3. Broken large branch and fruit bodies of a fungus.
4. Small broken branches on large living branch.
5. Large and old branch stub with fungus fruit body.
6. Large trunk wound and bark wounds.
7. Fruit body of fungus, indicating advanced decay.
8. Root wounds.



Properly prune a large branch and shape a trunk wound

1. Undercut to prevent splitting.
2. Uppercut to remove large branch.
3. Cut remaining branch stub flush with trunk.
4. Trunk after removal of branch.
5. Healed branch wound.
6. Mechanical wound on trunk.
7. Shape wound with a sharp knife.
8. Formation of vigorous callus tissue.
9. Closure of wound with callus tissue.



What can be done to prevent and minimize damage caused by decay?

Help the tree help itself after wounding:

1. Prevent wounds; use care when working around trees.
2. Clean wounds; cut torn bark, and shape wound like an ellipse when possible.
3. Sanitation; remove dead, dying, and weak branches from the injured tree.
4. Water and fertilize properly.
5. Contact professionals for additional advice.

As our Nation grows, people expect and need more from their forests—more wood; more water, fish and wildlife; more recreation and natural beauty; more special forest products and forage. The Forest Service of the U.S. Department of Agriculture helps to fulfill these expectations and needs through three major activities.

1. Conducting forest and range research at over 75 locations ranging from Puerto Rico to Alaska to Hawaii.
2. Participating with all State forestry agencies in cooperative programs to protect, improve, and wisely use our Country's 395 million acres of State, local, and private forest lands.
3. Managing and protecting the 187-million acre National Forest System.

The Forest Service does this by encouraging use of the new knowledge that research scientists develop; by setting an example in managing, under sustained yield, the National Forests and Grasslands for multiple use purposes; and by cooperating with all States and with private citizens in their efforts to achieve better management, protection, and use of forest resources.

For more than 60 years, the Forest Service has been serving the Nation as a leading natural resource conservation agency.

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WOODSY SAYS:
TREES ARE FOR OUR USE—NOT ABUSE.

