

VILLAGE OF TOLONO
CHAMPAIGN COUNTY, ILLINOIS

Ordinance No. 93-2

Adopted by the Board of Trustees
of
The Village of Tolono
This 19th day of JANUARY, 1993

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Tolono, Champaign County, Illinois, this 19th day of JANUARY, 1993.

ORDINANCE NO. 93-
CREATION OF TREE STANDARDS FOR PUBLIC RIGHT OF WAYS
AS ADOPTED UNDER THE MUNICIPAL CODE
OF THE VILLAGE OF TOLONO,
CHAMPAIGN COUNTY, ILLINOIS

WHEREAS:

1. The Village Board for the Village of Tolono is charged with preserving the health, safety and welfare of the public; and
2. It is responsible for safety and welfare issues concerning public right of ways.
3. It has determined that the following ordinance is in the best interest of the public in the preservation of health, safety and welfare.

Be it hereby ordained by the Village Board of Trustees of the Village of Tolono, County of Champaign, State of Illinois that the following standards and ordinance are hereby adopted and shall be commonly known as the "Tolono Tree Ordinance":

STANDARDS FOR PLANTING TREES IN PUBLIC RIGHT-OF-WAYS IN
TOLONO, ILLINOIS

- I. POLICY
- II. PLANTING LOCATIONS.
- III. KINDS OF TREES
- IV. QUALITY OF TREES
- V. PLANTING PROCEDURES

I. POLICY

- (1) These Standards are to be considered as the Standards (And Establishing a Shade Tree Committee) and (An Ordinance Requiring Owners to Maintain Parkways).
- (2) These standards apply to the planting of trees by the Department of Street & Alley individuals, business, or other organizations on right-of-ways owned and maintained by the Village of Tolono.
- (3) Exceptions to these standards can only be made with the ADVANCE approval of the Village Board. Anyone seeking an exception must seek a hearing before the Village of Tolono Shade Tree Committee.

- (4) These standards take effect when approved by the Village Board.

II. PLANTING LOCATIONS

- (1) Species and cultivars that exceed a trunk diameter of 15" at breast height within 40 years are NOT to be planted where the parkway is less than 5 feet wide.
- (2) Trees must be planted at least 10 feet from driveways and alleys, 10 feet from fire hydrants, 10 feet from utility poles, 35 feet from intersections, 35 feet from traffic signals, and 5 feet from a property line.
- (3) Trees planted under utility lines must be of species and cultivars whose height at maturity will not interfere with the lines.
- (4) Trees planted along existing Village streets are to be spaced at 30'-40' intervals for medium to large tree species and 20'-35' for small tree species.
- (5) There should be adequate space allowed for a sidewalk when trees are planted along unpaved streets or along streets without curbing.
- (6) When sufficient space is not available for a public right-of-way as a result of street widening or buried utilities, trees may be planted on private property not more than 10 feet from the public right-of-way if the property owner gives permission by signing a memorandum of understanding with the Village. This ordinance provides that it is the responsibility of the property owner to provide for all maintenance, including pruning, watering, and removal, during the existence of such trees.
- (7) Trees may be planted by the Village along publicly-owned sidewalks that go through subdivisions, not following streets, when the Village Board Shade Tree Committee deems the planting beneficial to the community as a whole. The trees may be planted either on public right-of-ways or on private property subject to the provisions of Section II (6) of this ordinance.

III. KINDS OF TREES

- 91) Appendix A gives a list of trees approved for planting along public right-of-ways in Tolono. Only trees on this list may be used.
- (2) Appendix B gives a list of trees prohibited; these may not be used except when a specific exception has been granted under I (3) above.
- (3) Any tree species not listed on either the Approved, or species noted on the Prohibited list for which consent has been given by the Building Inspector.

IV.

QUALITY OF TREES

- (1) All trees must be true to species, variety, and/or cultivar, and each plant must be labeled when delivered.
- (2) All trees must have normal trunks, leaders, tops, and branches typical of the species, variety, or cultivar, and exhibit evidence of proper nursery pruning practices.
- (3) All trees must be certified free of insect pests and diseases by the Department of Agriculture, Division of Entomology, State of Illinois.
- (4) All trees must be free of mechanical injuries and not show evidence of recent or previous wounds on the trunk.
- (5) All trees must be nursery grown and must have received proper fertilizing, watering, top and root pruning as is normally needed for that particular kind of tree. Plants must have been grown in nursery conditions for the past 2 years under soil and climate conditions similar to that of Tolono, Illinois.
- (6) All plants must be balled-and-burlapped. The twine used to tie the burlap must not be plastic. The balls should be of firm earth from the original soil in which the tree grew in the nursery. No trees with broken, loose, or manufactured balls are acceptable.
- (7) Plants on the list of approved medium to large trees must have trunks at least 1 1/2" in diameter measured 6" above the ground and a soil ball of at least 24" in diameter. Plants on the list of small trees must be at least 1" in diameter measured 6" above the ground and have a soil ball of at least 18" in diameter.

V.

PLANTING PROCEDURES (See Attachment "C")

- (1) The planting hold should be 4 times larger in diameter than the diameter of the root ball and the same depth as the height of the root ball.
- (2) The root ball should be placed in the hole so that the plants are planted with the top of the ball flush with not more than 1" higher than the top of the hole.
- (3) After placing the plant in the hole, the hole should be filled with backfill so that no air pockets are left beneath or around the ball. The backfill should be tamped so that it is packed firmly.
- (4) The twine holding the burlap around the ball must be cut and the burlap loosened from around the top of the ball. Do NOT attempt to remove the burlap from beneath the ball. Any plastic or treated burlap used to protect the ball during shipment must be removed before planting.

- (5) The trunks should be vertical after planting.
- (6) Excess soil should be removed from the site and a layer of mulch placed around the tree.
- (7) Plants should be watered at the time of planting.
- (8) A lawn-mower guard of the type approved by the Shade Tree Committee should be placed around the base of the trunk.
- (9) Staking is not typically recommended; however, when necessary, follow current recommendations.
- (10) Plants should be judiciously pruned after planting to remove broken, weak, and interfering branches and multiple leaders.

VI. ENFORCEMENT

In the event any of the provisions of the above ordinance are violated, the Village shall have the authority to seek any one or any combination of the following remedies:

- A. Injunctive Relief.
- B. A fine for each violation in an amount not to exceed \$100.
- C. Entitlement to have any tree removed which is in violation with the cost of said removal as a lien against the abutting property and judgement against the party responsible for the violation.

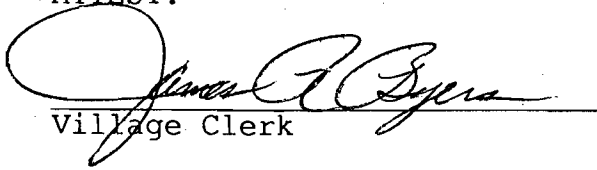
The foregoing remedies shall be available to the Village following a determination by a Village Building Inspector that the ordinance has been violated, and a ten day notice to abate has been served upon the owner of the adjacent property and/or violator, personally or by certified mail addressed to the owner or resident at the abutting property, and/or violator's address with a copy by first class mail. Notwithstanding any notice requirements or any other rights or requirements provided by law, the Village shall be entitled to removal of any violating trees as is deemed appropriate by the tree inspector.

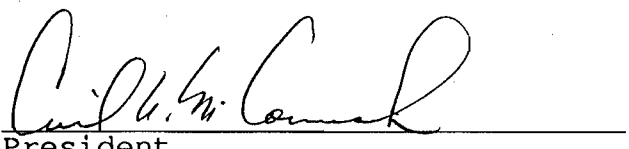
VII. ENFORCEABILITY

In the event that any portion of the foregoing ordinance is deemed invalid, the remaining provisions shall be enforceable to the extent allowed by law.

Passed, approved and adopted by the President of the Board of Trustees of the Village of Tolono, this 19th day of JANUARY, 1993.

ATTEST:


Village Clerk


President

APPENDIX A - TREES APPROVED FOR PLANTING ALONG
PUBLIC RIGHT-OF-WAYS IN TOLONO, ILLINOIS

MEDIUM TO LARGE TREES (HEIGHT 40' AND UP)

Acer nigrum - Black Maple
Acer rubrum - Red Maple
Acer saccharum - Sugar Maple
Alnus cordata - Italian Alder
Alnus glutinosa - European Alder
Celtis laevigata - Sugar Hackberry
Celtis occidentalis - Hackberry
Cercidiphyllum japonicum - Katsura Tree
Cladrastis lutea - Yellowwood
Corylus colurna - Turkish Filbert
Eucommia ulmoides - Hardy Rubber Tree
Fraxinus americana - White Ash
Fraxinus excelsior - "Hessei" - Hesse European Ash
Fraxinus quadrangulata - Blue Ash
Ginkgo biloba - Maidenhair Tree (only male trees approved)
Gymnocladus dioicus - Kentucky Coffee Tree (only male trees approved)
Liquidambar styraciflua - Sweetgum
Liriodendron tulipifera - Tulip Tree
Magnolia acuminata - Cucumber Tree
Nyssa sylvatica - Sour Gum, Black Tupelo
Phellodendron amurense - Amur Corktree
Pyrus calleryana - Any of the cultivars, including "Aristocrat" and "Redspire"
Sassafras albidum - Sassafras
Quercus alba - White Oak
Quercus bicolor - Swamp White Oak
Quercus coccinea - Scarlet Oak
Quercus imbricaria - Shingle Oak
Quercus macrocarpa - Burr Oak
Quercus robur - English Oak
Quercus rubra or borealis - Red Oak
Taxodium distichum - Baldcypress
Tilia americana - American Basswood
Tilia x euchlora - Crimean Linden
Tilia tomentosa - Silver Linden
Ulmus parvifolia - Lacebark Elm
Zelkova serrata - Japanese zelkova

SMALL TREES (LESS THAN 35' TALL)

Acer buergerianum - Trident Maple
Acer campestre - Hedge Maple
Acer ginnala - Amur Maple
Acer griseum - Paperbark Maple
Acer miyabei - Miyabe Maple
Acer tataricum - Tatarian Maple
Amelanchier arborea - Shadbush, Serviceberry
Amelanchier laevis - Shadbush, Serviceberry
Carpinus betulus - European Hornbeam
Carpinus caroliniana - Hornbeam, Ironwood
Cornus alternifolia - Pagoda Dogwood
Cornus florida - Flowering Dogwood
Crataegus species - Hawthorns; only thornless cultivars are approved
Halesia carolina - Carolina Silverbell
Koelreuteria paniculata - Goldenraintree
Magnolia virginiana - Laurel or sweetbay magnolia
Malus species and varieties - Crabapple (only varieties and cultivars resistant to scab disease and fireblight are approved)
Ostrya virginiana - Hophornbeam, Muscledwood
Prunus sargentii - Sargent Cherry
Prunus serrulata - Japanese Flowering cherry
Staphylea trifolia - American Bladdernut
Syringa reticulata - Japanese Tree Lilac

APPENDIX B - TREES PROHIBITED FOR PLANTING ALONG PUBLIC
RIGHT-OF-WAYS IN TOLONO, ILLINOIS

NOTE: There are some trees on this list of prohibited plants that are excellent for use in yards and parks; however, for one reason or another, such as being evergreen or producing an abundance of undesirable fruits, they are not suitable for planting along streets. Species on this list and species not included on the approved lists may, under certain circumstances, be planted along streets if ADVANCE approval is given by the Street and Alley Dept. and the Shade Tree Committee. The reasons for including species on the prohibited list is given below in parentheses.

- Abies species - All species and varieties of firs (evergreen)
Acer negundo - Box elder (weak wood, disease problems)
Acer platanoides - Norway maple (disease problems)
Acer saccharinum - Silver maple (weak wood, disease problems)
Aesculus glabra - Ohio buckeye (messy fruit)
Aesculus hippocastanum - Horsechestnut (messy fruit)
Ailanthus altissima - Tree-of-heaven (weak wood, extremely weedy)
Albizia julibrissis - Mimosa tree, Silk tree (not hardy)
Betula papyrifera - Paper-bark birch, White birch, canoe birch
(disease problems and insect pests)
Betula pendula - European white birch (disease problems, insect pests)
Betula nigra - River birch, red birch (disease problems, insect pests)
Carya species - All species and varieties of hickories and pecans
(messy fruit)
Castanea species - All species and varieties of chestnuts (messy fruit)
Catalpa bignonioides - Catalpa (weak wood, messy fruit)
Catalpa speciosa - Catalpa (weak wood, messy fruit)
Cercis canadensis - Redbud (weak crotching, difficulty in "raising"
for vehicular traffic)
Crataegus species - Hawthorns (thorns), thornless varieties are
acceptable
Elaeagnus angustifolia - Russian olive (disease problems)
Fagus grandiflora - American beech (messy fruit, too large)
Fagus sylvatica - European beech (messy fruit, too large); columnar
forms are acceptable
Fraxinus pennsylvanica - Green ash
Ginkgo biloba - Female ginkgo trees (messy fruit); male trees
acceptable
Gleditsia triacanthos - Honey locust (disease problems, insect pests)
Gymnocladus dioica - Female Kentucky coffee tree (messy fruit); male
trees are acceptable
Ilex opaca - American holly (evergreen, insect pests)
Juriperus species - All species and varieties of junipers and cedars
(evergreen)

- Juglans species - All species and varieties of walnuts, butternuts, and pecans (messy fruit)
- Maclura pomifera - Osage orange, Hedge-apple (thorns, messy fruit); thornless, male varieties are acceptable
- Magnolia x soulargiara - Saucer magnolia (low branching and spread)
- Malus species - All large-fruited apples and apples susceptible to scab disease and fire blight.
- Morus species - All (messy fruit)
- Paulownia tomentosa - Empress Tree, Royal Paulownia (not Hardy)
- Picea species - All species and varieties of spruces (evergreen)
- Pinus species - All species and varieties of pines (evergreen)
- Platanus x acerifolia - London plane tree (disease problems)
- Platanus occidentalis - Sycamore (disease problems)
- Populus species - All (weak wood, messy fruit)
- Prunus species - All cherries and plums, except as on approved lists (disease problems, messy fruit, short-lived)
- Pseudotsuga merziesii - Douglas fir (evergreen)
- Pyrus communis - All large-fruited pears (disease problems, messy fruit)
- Quercus palustris - Pin oak (often has iron chlorosis locally)
- Robinia pseudoacacia - Black locust (messy fruit, disease problems and insect pests)
- Salix species - All willows (weak wood, messy)
- Sophora japonica - Japanese pagoda tree (questionably hardy)
- Sorbus aucuparia - Mountain ash (fire blight)
- Thuja species - All species and varieties of arborvitae (evergreen)
- Tilia cordata - Littleleaf linden (branch angles, difficulty in "raising" for vehicular clearance)
- Tsuga species - All hemlocks (evergreen)
- Ulmus americana - American elm (Dutch elm disease)
- Ulmus pumila - Siberian elm, erroneously called Chinese Elm (weak wood, messy)
- Ulmus rubra or fulva - Red elm, Slippery elm (disease problems)

TREES BY COMMON NAMES

NOTE: The official lists are those above using the more precise scientific names; these lists of trees by common names are unofficial but are provided for the convenience of the lay person.

MEDIUM TO LARGE TREES APPROVED FOR PLANTING IN TOLONO

Ash - Blue
White
Hesse European
Alder - European
Italian
Baldcypress
Basswood - American
Black tupelo
Corktree - Amur
Cucumber Tree
Elm - Lacebark
Filbert - Turkish
Ginkgo - Only male trees
Hackberry
Hardy Rubber Tree
Japanese Zelkova
Katsura Tree
Kentucky Coffee Tree - Only male trees
Linden - American
Crimean
Silver
Maidenhair Tree (Ginkgo) - Only male trees
Maple - Black
Red
Sugar
Oak - Burr
English
Red
Scarlet
Shingle
Swamp white
White
Sassafras
Sour Gum
Sugar Hackberry
Sweetgum
Tuliptree
Yellowwood

SMALL TREES APPROVED FOR PLANTING IN TOLONO

Bladdernut - American
Carolina silverbell
Cherry-Sargent, Japanese flowering
Crabapple (only those resistant to apple scab and fire blight)
Dogwood - Flowering
 Pagoda
European horrbeam
Golderrairtree
Hophorrbeam
Horrbeam
Irorwood
Japanese tree lilac
Magrolia - Laurel or Sweetbay
Maple - Amur
 Hedge
 Miyabe
 Paperbark
 Tatarian
 Trident
Musclewood
Serviceberry - Tree form
Shadbush

TREES PROHIBITED FOR PLANTING ALONG STREETS
IN
TOLONO, ILLINOIS

Apple - All large-fruited apples and apples susceptible to scab
disease and fire blight
Arborvitae - All
Ash - Green
Beech - All except columnar species
Birch - All
Box elder
Buckeye, Ohio
Catalpa
Cedar - All
Cherry - All except on approved lists
Chestrut - All
Cottonwood - All
Crab apple - see restrictions under "Apple"
Douglas fir
Elm - American
 Red or Slippery
 Siberian
Empress tree
Fir - All
Ginkgo - Female trees

Hawthorn - All except thornless varieties
Hedge-apple
Hemlock - All
Hickory - All
Holly, American
Horsechestnut
Japanese pagoda tree
Juniper - All
Kentucky Coffee Tree - Female
Linden - Littleleaf
Locust - Black
 Honey
London Plane Tree
Magnolia - Southern or Evergreen, Saucer
Maple, Norway
Maple, Silver
Mimosa tree
Mourtain Ash
Mulberry - All
Oak - Pin
Osage orange
Pear - All large-fruited pears
Pecan
Pine - All
Plum - All
Poplar - All
Redbud
Royal Paulownia
Russian olive
Silk tree
Spruce - All
Sycamore - All
Tree-of-heaven
Walnut - All
Willow - All

Technical Update

THE BEST WAY TO PLANT TREES

Gary A. Moll

AFA Vice President for Urban Forestry

Phillip Rodbell

AFA Staff Urban Forester

During the 1990s major changes are needed in public policy and personal lifestyle to improve the ecological health of our community forests. Tree planting is one of the simplest ways to start the decade on the right foot.

Planting a tree is an important positive action, but there are right and wrong ways to do things. Before planting, the species and individual specimen must be carefully selected and strategically located on the lot so that it does the most environmental good.

Major changes are needed in both the way we think about trees and the way we plant them. The *American Forestry Association*, in cooperation with the *National Urban Forest Council*, has drawn up new guidelines for how to plant a tree, and unless you've been reading a lot of research information lately, you will find many surprises.

So what do we propose? Plant so that roots have a chance to grow into the surrounding soil and produce healthy, vigorous branches, foliage, and roots. Instead of a planting hole, what's needed is a large planting area that is wide but not deep and where the soil is loose and accommodating for root growth. The larger the area, the better. Here is how it is done (see Figure 1):

After selecting a suitable location, mark out a planting area that is five times the diameter of the planting ball. Use a rototiller or shovels to loosen and mix the soil in this entire area to a depth of about 12 inches. Organic matter can be added to the loosened soil as long as the new material is used uniformly throughout the area.

In the center of the prepared area, dig a shallow hole to set the tree, root ball and all. The hole should allow the root ball to sit on solid ground rather than loose soil. Once the ball is set in the hole, its upper surface should be level with the existing soil.

After the tree is properly situated, cut and remove the rope or wires holding the burlap in place and securing any part of the tree. Position the tree so that it is perpendicular to the ground and the main stem is growing straight up.

Backfill around the root area, and gently pack the soil to prevent major air pockets, but it is a mistake to pack the soil too hard. Water can be used instead of your foot to help the soil settle and prevent overpacking. Rake the soil even over the entire area, and cover it with two to four inches of mulch—bark, wood chips, old sawdust, pine needles, leaf mold, or the like. Some mulches decompose quickly and will have to be replenished once or twice a year. Maintaining the mulch layer carefully will improve tree growth substantially.

Some planting recommendations suggest mounding the soil

at the outer edge of the planting ring to form a water-holding berm. The berm will help hold water, but it may also encourage the root growth to remain within the berm, close to the tree. So berms are not recommended here—mulch should hold the water adequately.

It is best not to stake the tree, but if wind is a problem or the tree starts to lean, support it with a flexible stake so that the trunk will sway in the wind. The movement is necessary for building the trunk's strength. Remove the stake and wire after one year since leaving wire or string around the tree can kill it.

Do not wrap the trunk with "protective" tape. It will slow the tree's ability to adapt to the site and provide a cozy home for insects. The tape is often held in place with thin thread at top and bottom, which will strangle a tree just as wire will. Tree bark needs air and sunlight in order to build a healthy protective sheath. A tree shelter (e.g., TUBEX® or some other translucent material) is preferable to tape as it allows oxygen and sunlight to enter while protecting the tree from the assorted nicks of daily life.

We admit that tree planting is a more involved process than was once thought. New information requires more thought and more labor, but the result is also very rewarding. We estimate young trees can grow twice as fast when planted correctly and will live at least twice as long as trees improperly set out.

The old ways suggested digging a hole six inches wider and deeper than the root ball (Figure 2). Up until a couple of years ago, the experts also suggested that community tree planters mix peat moss and other soil amendments with the soil backfill. None of this is recommended today.

Over the last few years we have been searching for clues to the declining health of community trees, and we have discovered that planting methods are a major culprit. Some old-timers wrinkle their foreheads and look skeptical when the old methods are challenged. They can take you out and show you tree after tree that survived and is doing fine, thank you.

So why do we feel so confident that planting techniques need updating? The main reason is that home construction has changed from what it was in the "good old days." Bigger earth-moving equipment is used in today's housing developments and less hand labor. Because of the heavier construction equipment, the soil in the average yard is less fertile and more compacted.

Digging a hole in dense, compacted soil and filling the hole with peat moss and other soil amendments is like creating a pot for the tree that soon becomes a coffin. The roots grow outward in the good soil, and the tree does fine until the roots

Figure 1: The New Way.

The preparation of the planting area is critical to tree survival and vigorous growth. Rather than digging a hole, prepare a planting area five times the diameter of the root ball. Set the tree on undisturbed solid ground in the center of the area so that the upper surface of the root ball is level with the surrounding soil. Cut and remove all wires or rope holding the burlap in place. Preferably, the tree should not be staked and "protective" tape should not be wrapped around the stem. Use water to pack or settle the soil around the root ball, and apply a two- to four-inch layer of mulch over the entire area. Do not create a water-holding berm by mounding the soil at the outer edge of the planting area.

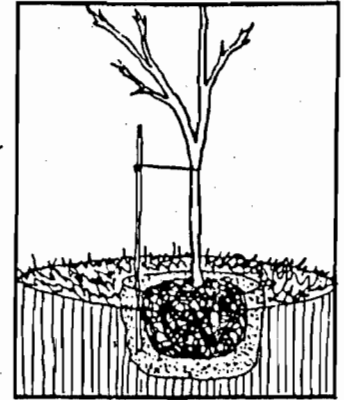
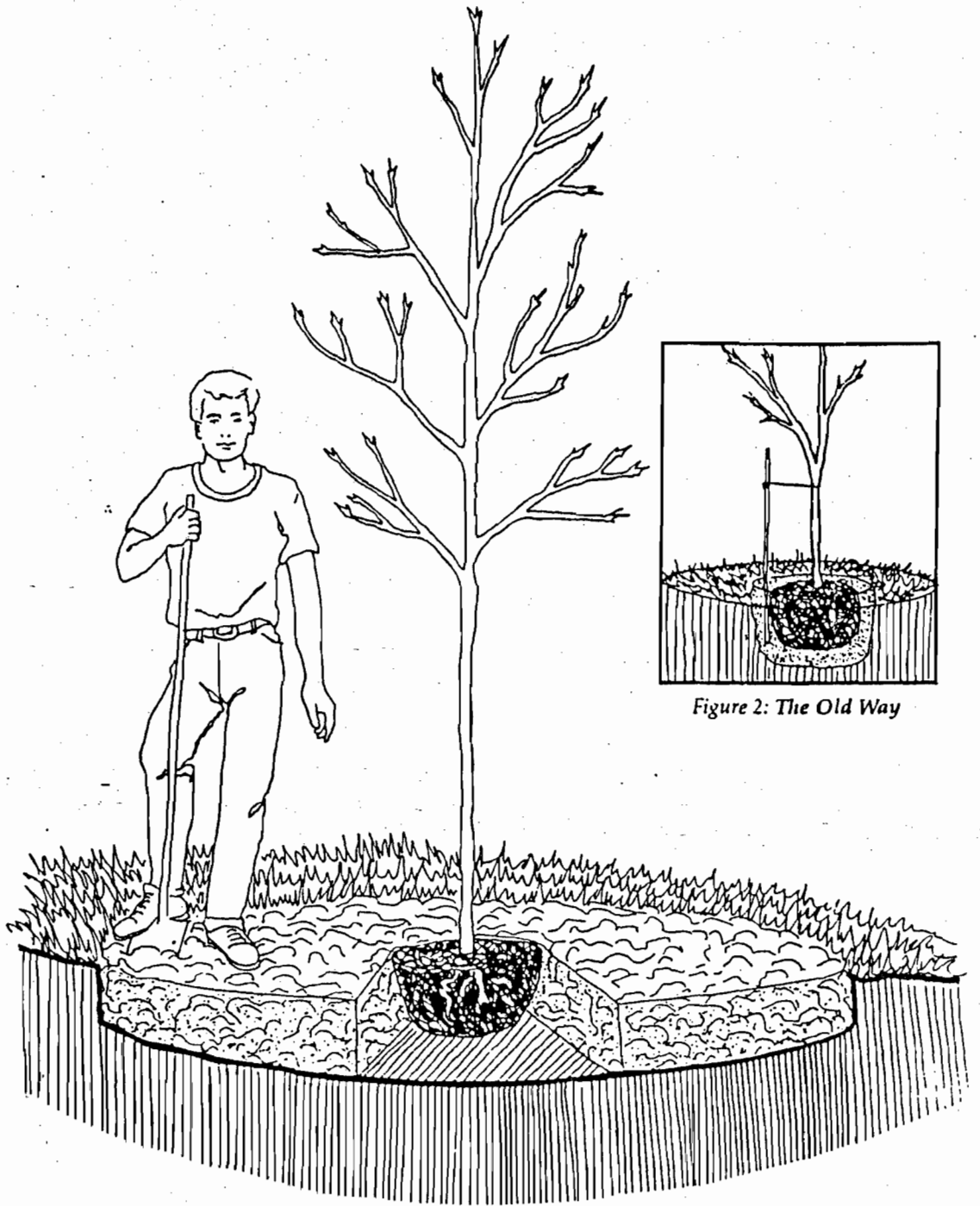


Figure 2: The Old Way

reach the original soil and the outward growth stops. Instead of spreading into the yard, the roots encircle the planting pit. The "pot" soon fills with roots, and the health of the tree declines.

The crown continues to grow, but the roots do not. Once the tree becomes root bound, its ability to maintain itself during a drought or survive a flood is limited—leading to decline that is often terminal.

We hope to have spurred your interest in planting trees the right way. Part of that planting job is selecting a suitable

planting location. That first step in the process is not covered here. Please check the March 1990 issue of *AMERICAN FORESTS* for details.

The tree-planting checklist includes asking if the tree is grown to nursery standards, carefully selecting the species, properly locating it on your lot, and then following our new planting recommendations. In addition to watering it when necessary and standing guard against errant vehicles, it might not hurt to talk to the tree occasionally. A kind word never hurt anyone.