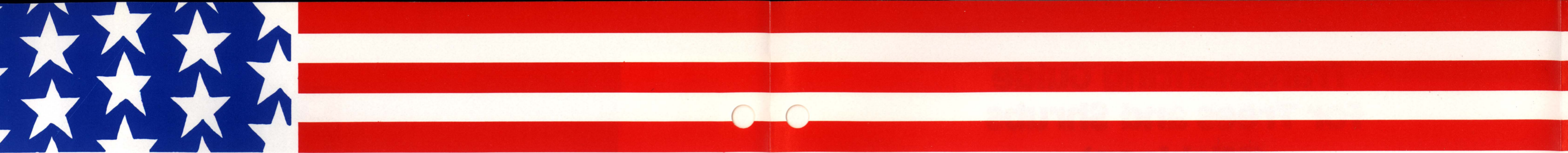


Plant a **TREE** in '76 for Uncle Sam and...



*By Harold Davidson, Department of Horticulture
Extension Bulletin E-914 October 1975
Cooperative Extension Service • Michigan State University
Sponsored in part by a grant from the Michigan Association of Nurseymen.*



... to give BEAUTY to home and community

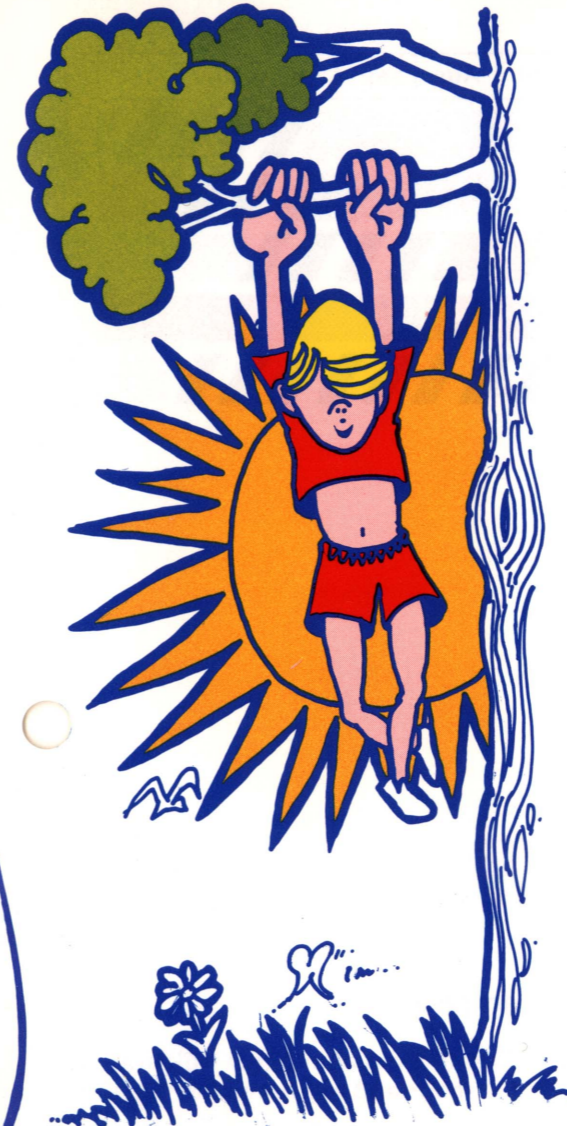
Trees are one of nature's finest gifts to man — beauty for all to see and enjoy.

... to cool the home and yard

Trees properly sited can provide excellent climate control in towns or in the country. In addition to providing shade, trees, shrubs and turf provide a cooling effect through evaporation of moisture. A mature tree has a cooling capacity equivalent to 10 room-size air conditioners.

... to reduce heating costs

Evergreen trees provide excellent windbreaks the year around. Properly located, these plants can reduce the energy consumed in heating an exposed building by as much as 40 per cent.



... for a kid to CLIMB

What fun it is to climb a tree!

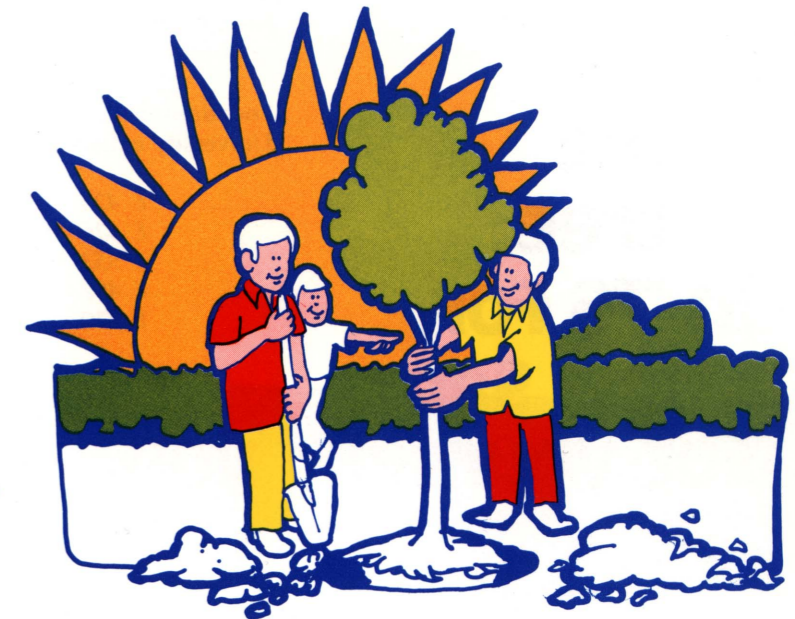
... for REMEMBRANCE

How better to honor the memory of a friend or loved one. Plant a tree.



... to screen a view or for privacy

Trees and shrubs make excellent living screens to hide an eyesore or to give privacy to an area. In addition to providing a visual screen, trees also make an audio screen for buffering noises and sounds.



WHEN YOU PLANT A TREE IN '76, as a Bicentennial birthday gift to Uncle Sam, you are planting one of nature's finest gifts to man. You not only plant for your own enjoyment, but for all mankind. If you plant it properly and provide a little care during the few months following planting, it will grow and develop into a thing of beauty and will positively contribute to the environment in several ways.

SELECTING THE TREE

Select a tree that will satisfy *your* needs. Modern nurseries provide a wide selection of trees to meet your requirements for size, shape, branching habit, color of flowers, fruit and foliage. They can also supply trees that do not produce fruit. But remember, select trees that are hardy in your area, will grow in your soil (texture and pH) and will withstand the micro-climate of a manmade environment.

You should appreciate the size to which the tree will grow at maturity and locate the tree where there will be sufficient room for development. Plant only small-sized trees under power lines.

PLANT TYPE AND PRE-PLANTING CARE

Plants are generally sold in three types of market packs: 1) packaged or bareroot, 2) balled and burlapped or 3) in containers.

PACKAGED OR BAREROOT plants are mostly dormant shrubs, small trees, herbaceous perennials, small-sized evergreens and dormant roses. These plants will generally benefit by soaking their roots in warm water for 15 to 20 minutes prior to planting. If planting must be delayed more than a day or two, remove the plants from the package and "heel" them in — that is, dig a small trench in a shaded location, place the roots in the trench, cover with soil and then water. This procedure will prevent drying of the roots during this period.

Prune shrubs and roses back to induce branching. Prune branches of small trees and evergreens as needed to develop good plant structure. (See Extension Bulletin E-425.)

BALLED AND BURLAPPED (B&B) plants are generally large trees, shrubs and landscape-size evergreens that have been dug with a soil ball and then wrapped in burlap. In recent years, however, some nurseries manufacture "root balls" to look like B&B plants. These artificially produced packs should be handled like package plants. B&B plants are heavy (a cubic foot of soil weighs about 100 pounds) and should be handled with care. The balls should not be broken, as this can injure the roots. If B&B plants must be stored prior to planting, it is desirable to mulch the balls and water them periodically to prevent dehydration.

CONTAINERS are another way of marketing plants. In some cases the plants may have been grown in the container. In other situations they may be bareroot plants recently potted into the container, or they may be field-grown plants dug with a ball of earth and put into a

container for shipping. Water the plants thoroughly in the container prior to planting, and in all cases remove the container at the time of planting. Check plants grown in containers for abnormalities of the roots. If the plants have root curl, do not accept them, or cut the roots prior to planting.

WHEN TO PLANT (TRANSPLANT)

Spring and fall are the best times to plant or transplant most ornamental plants in Michigan. However, container-grown plants can be planted at any time during the growing season and late into the fall. Shade trees moved in B&B may be transplanted at almost any time of the year. Special care is required during the heat of the summer, and it is suggested that transplanting be done only by a professional nurseryman. Transplanting is difficult during the flush of growth and is not recommended then. Also, late fall is not a good time to transplant broadleaved evergreens in Michigan.

Species of trees that transplant best only in the spring include: *Abies* (fir), *Betula* (birch), *Cornus florida* (flowering dogwood), *Fagus* (beech), *Laburnum* (golden chaintree), *Liriodendron tulipifera* (tuliptree), *Magnolia*, *Nyssa sylvatica* (black gum), *Ostrya virginiana* (American hophornbeam), and *Quercus* (oak).

HOW TO PLANT

1. Dig a hole about 12 inches wider than the spread of the roots or the diameter of the pot or the ball. The depth of the hole for the three types of market packs is as follows:

— **POTTED OR BALLED PLANTS** — the same depth as the soil mass plus one inch.

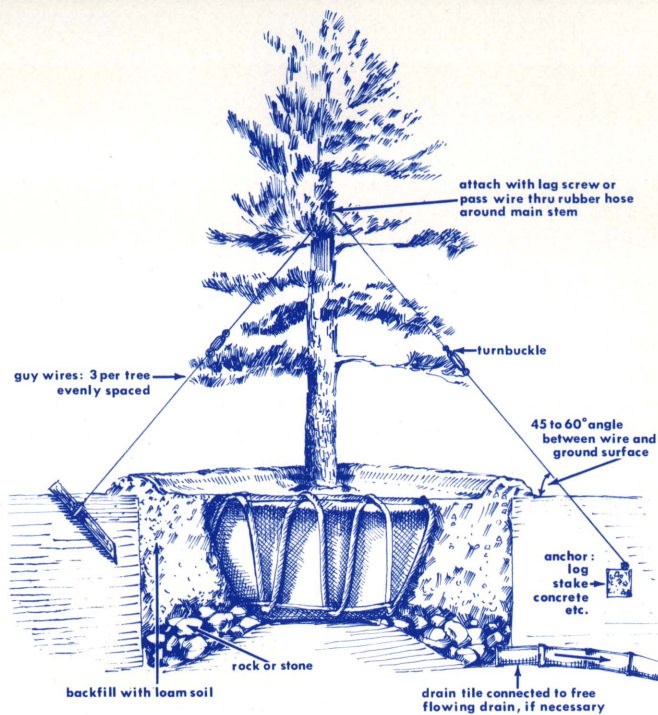
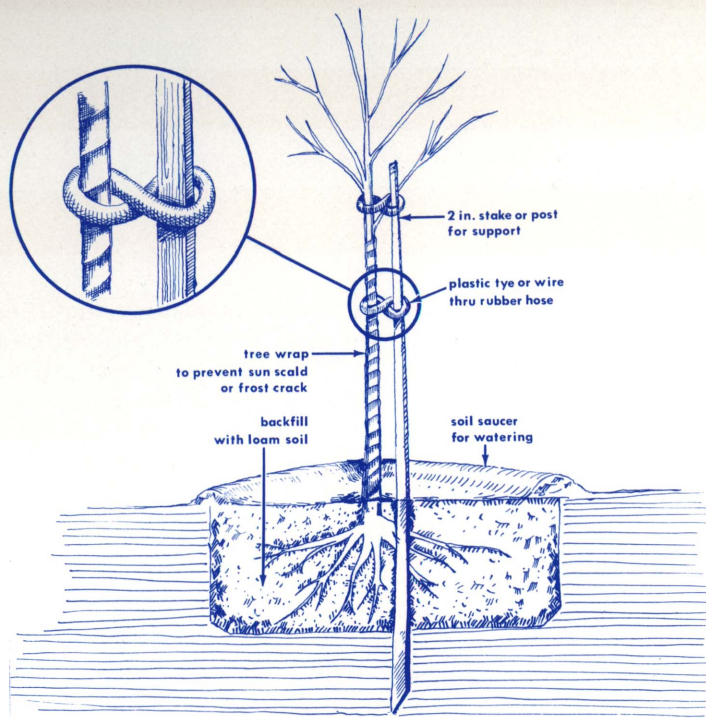
— **FOR BAREROOT PLANTS** — deep enough to contain the roots without crowding and establish the plant at the same level that it was growing previously. (A soil line will be visible on the stem of the plant.)

2. If the planting site is in heavy clay, it will be necessary to provide drainage, since most trees and shrubs do not grow well in clay soils, especially with excess water about their roots.

If the site has a sandy subsoil, this might be used to promote drainage by boring a hole through the clay to the sandy subsoil. Fill this hole with gravel or sand and proceed to the third step.

If the site does not have a sandy subsoil, the hole should be drained with a tile line connected to a free-flowing drain.

3. Place the plant in the hole carefully and position for the best effect. Nondeteriorating pots, such as tarpaper, plastic, etc., should be cut and removed. Lightweight, untreated burlap may be left in place; rot-proof burlap or plastic bags should be removed but avoid breaking the soilball. Plastic rope, if present, should be removed from around the trunk. Sometimes balls of large trees are further secured with wire baskets. This wire can be left on the ball when planting.



4. Backfill the hole with a loam soil, avoiding clay subsoils. If the soil is sandy, add peat moss (1 part peat to 3 parts of soil). Fertilizer should seldom be added at the time of planting. However, if a fertilizer is used, it should be of the slowly soluble type. *Do not use highly soluble fertilizers.* Be sure to follow instructions on the container, since rates of application vary with products.

When the hole is about $\frac{1}{3}$ filled, water thoroughly to settle the soil. Complete the backfilling to ground level and, if desired, form a shallow soil saucer around the perimeter of the hole to serve as a water reservoir.

5. Water the plant thoroughly every 10 to 14 days, provided it hasn't rained heavily in the interim period. **DO NOT OVERWATER**, as this can cause as much trouble as not enough water. Slow watering for 20 to 30 minutes is ideal for deep penetration. Automatic turf sprinklers usually do not apply enough water for deep penetration, and additional watering is often required for new trees.

6. If it is necessary to support a tree, follow these procedures:

- For small-diameter trees — place a sturdy stake in the ground close to the trunk and tie with a plastic "Binder Tye" or a piece of old rubber hose.

- For medium sized trees — support with three guy wires placed evenly around the tree and forming an angle of 45° to 60° at the ground. The wires may be connected to the trunk by lag screws (strong eye hooks) appropriately positioned, or by passing the wire through a small portion of a rubber hose positioned around the stem. The lower end of the wire should be anchored by a stake or a piece of concrete buried in the soil.

- Trees with large-sized balls may be able to support themselves or they may be guyed if desired.

7. Some pruning may be needed to remove broken branches, "V" shaped crotches, branches that are growing into the center, or to reduce the total leaf area to counterbalance the loss of roots. When pruning, enhance the natural beauty of the plant. It is seldom a good practice to headback the central leader (main stem). And don't leave stubs — cut flush with a branch or stem.

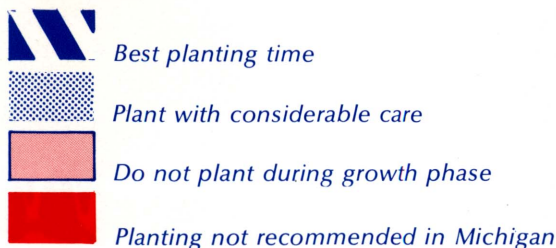
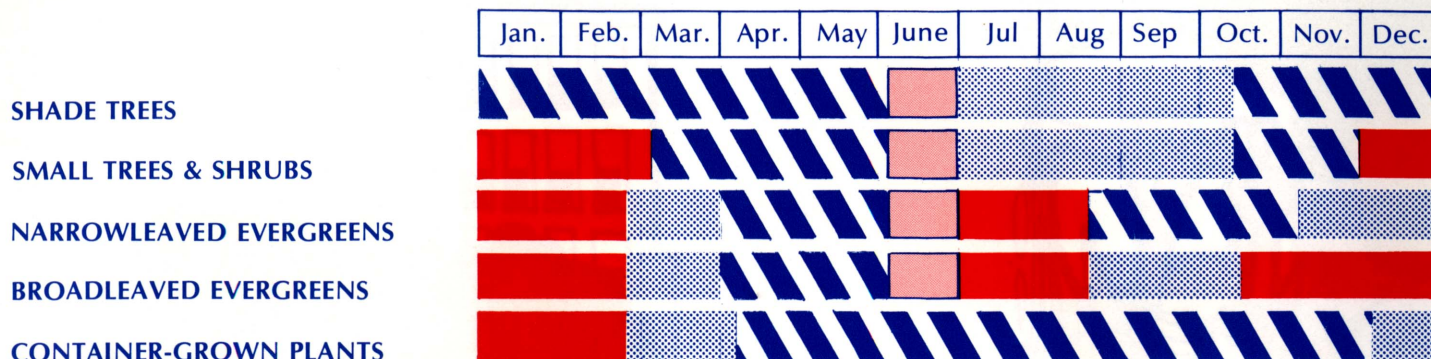
8. Thin-barked trees should have their trunks wrapped with tree-wrap to prevent sunscald or frost crack. Wraps can be removed after the second winter.

9. Plantings on sandy soils may benefit by applying two to three inches of woodchips, ground corncobs, or shredded bark on the soil surface, as a mulch, to reduce loss of moisture by evaporation and the growth of weeds.



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Transplanting Guide for Trees and Shrubs (Michigan)



In Summary

1. Buy the right plant for the right place.
2. Keep roots damp prior to planting.
3. Dig hole big enough for the roots.
4. Provide drainage, if needed.
5. Set at proper depth.
6. Remove container and/or girdling ropes.
7. Refill with good loam soil.
8. Support as necessary.
9. Water thoroughly at planting and during dry periods.

By following these simple instructions, you will assure a planting that will grow and develop into a thing of beauty. It will provide shade and enjoyment for years to come.

For additional information on trees and landscape beautification, See Michigan State University extension bulletins:

- E 425 Beautiful Home Grounds 50¢
- E 616 Familiar Trees of Michigan
- E 552 Ornamental Deciduous Trees for Michigan 15¢
- E 492 Ornamental Vines for Michigan 15¢
- E 710 Selection of Shade and Flowering Trees

**Plant
a tree:
in '76 for
Uncle Sam
for yourself**

**your friends
your community
... and for posterity.**