



Green Side Up

A GUIDE TO
TREE PLANTING



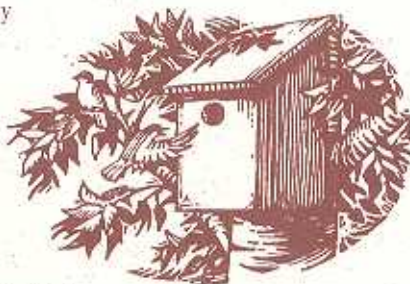


GREEN SIDE UP

Trees make our world beautiful and provide us with many obvious benefits—shade, privacy, increased property values, shelter and food for birds and other small creatures, and even a place for childhood tree houses.

Besides these obvious benefits, trees also contribute to the health of our planet. They clean the air by giving off oxygen, storing carbon, and recycling moisture into the atmosphere. Trees help prevent soil erosion, help modify temperatures, and act as windbreaks.

Planting trees is not only a nice thing to do—it's one way each of us can help improve the environment. Tree planting is not difficult if you remember to follow these simple steps and "keep the green side up!"



PLAN AHEAD

A tree's biological needs, its shape and size at maturity, and its function in your landscape help determine the best tree to plant in a particular location. Select trees that grow well in your local climate and soil. Each species has a different tolerance to late spring or early fall frosts, flooding or drying, to high winds or low light levels, and to compacted, heavy, acidic or alkaline soils.

Think about what the trees will look like at maturity. How tall will they grow? What shape will they be? Are coniferous (evergreen) or deciduous species preferable? Be conscious of scale; very large trees or shrubs can be overpowering on a small property. Trees should enhance the look of a building and not overshadow it or block windows. Do not plant tall trees close to overhead utility lines.



Large deciduous trees on the southeast, southwest, and west provide cooling shade in summer without obstructing the low winter sun.

An evergreen windbreak along the north side of a property blocks cold winter winds. Remember, the roots of

willows and poplars spread to seek water and are likely to plug water and sewer pipes, so don't plant them near underground piping.



WHEN TO PLANT

Deciduous trees can be planted in the spring, as soon as the frost is out of the ground or in the fall, from leaf-fall until freeze-up. Poplars, willows, ash, elms, and birches tend to overwinter better if planted in the spring.

Evergreens can be planted early in the spring until four weeks after deciduous trees have opened their leaves or in the fall, from about the first week of August to the end of October.

PLANTING STEPS

I. MINIMIZE STRESS TO YOUR TREES

Protect your tree well during transport to avoid bruising the bark and breaking twigs, branches, and buds. Pad the tree trunk and branches with burlap and tie all loose ends with soft rope or twine. Keep the root ball moist and cover exposed bare roots with wet burlap or moss.

Cover tree crowns with wet burlap to prevent drying of the tops, especially evergreens.

Keep the tree in a shady location until it is time to plant.



2. PREPARE THE PLANTING SPOT

Remove grass, weeds, and ground cover (turf) within a 50-cm radius of the planting hole. These plants compete with the tree for water and nutrients.

Dig the hole at least twice as wide as the container or root ball (to accommodate the entire root system),

and to the depth of the root ball. Roughen the sides and bottom of the hole to allow root

penetration. If good quality soil is not available, break up the turf taken from the top and put it in the hole around the root ball, where it

will break down into good-rooting soil. Peat or loam, if added,

would improve this mixture. Soil in the hole should be moist, not too wet or too dry. A cone-shaped mound of soil at the bottom of the hole is advised for bare-root trees. This will allow the roots to develop downward and outward into the surrounding soil.



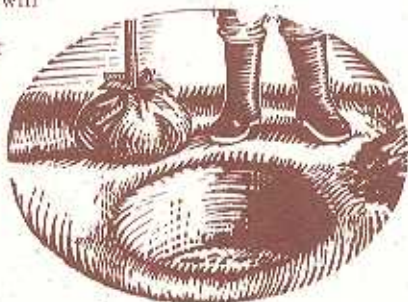
3. PREPARE YOUR TREES FOR ROOT GROWTH

Bare-root: Loosen the roots with a spray of water and straighten them to prevent doubling-under, crowding, and crossing. Do not expose the roots to direct sunlight or drying winds for more than a minute to avoid damaging the fine root hairs.

Container: Trees should be kept in the container until the last possible moment before planting.



Burlapped: Trees wrapped in burlap should not be soaked prior to planting. There is no need to remove the burlap; just loosen it and it will soon rot away. In cool and dry soil conditions, it may be preferable to remove the burlap rather than leaving it to slowly decompose. Roots circling the outside of the root ball should be clipped, and roots matted on the bottom should be cut off.



4. PLANT YOUR TREE WITH CARE

Bare-root: The root crown is set on the mound and the roots spread over and down the sides of the mound. Refill the hole with good quality soil, gently raising and lowering the tree while filling to eliminate air pockets.



Burlapped/container: Plant the tree so that the top of the root ball is flush with the top of the

hole. Fill the hole in and around the root ball with good quality soil or soil removed from the hole. Tamp the soil



around the root ball until the hole is two-thirds full. Fill the remaining space with water to settle the soil and allow the hole to drain. Finish filling the hole with soil and make a ridge of soil around the root ball to direct water towards the roots. Water applied beyond the root ball is not available to the tree

until roots grow into the native soil. If soil settles after a few days of watering, additional soil may be required to refill the planting hole.

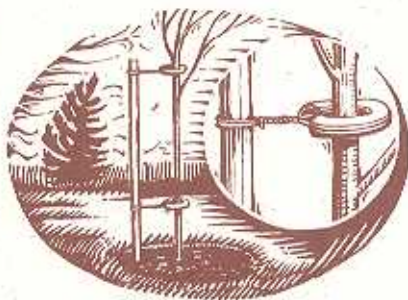


TAKING CARE OF YOUR TREES

WATERING: If your soil allows water to drain easily (i.e., sandy), soak the trees two to four hours twice a week for the first two to three months and weekly thereafter for the first year. The roots must not be allowed to dry out. Peat moss mixed with sandy soils at the time of planting will improve water retention capacity. During the second year, water twice a month during late spring and summer. If your soil contains a lot of clay and water tends to puddle around the tree, lighter watering is recommended to prevent flooding and to ensure that the roots receive enough oxygen to permit growth. Additional watering of evergreens, prior to freeze-up will minimize the detrimental effects of winter drying.

FERTILIZING: Fertilizer helps trees thrive and resist drought, disease, and insects. High phosphorus fertilizers are recommended at planting time to promote root growth. Later on, higher nitrogen fertilizers can be applied for greening and top growth. Slow-acting fertilizer can be applied anytime, but mineral uptake is greatest from May through July. Fast-acting fertilizer is best applied in spring so that the new growth it stimulates has time to mature by winter.

STAKING: Staking trees larger than one metre is recommended as it prevents dislodging by wind, people, and animals. Make sure the stake ties do not cause damage to the bark. The stakes should be removed after two or three growing seasons.



HOW TO PLANT A TREE

PRUNING: Prune at planting simply to improve branch spacing and promote a strong structure in the tree. Annual pruning should be started when the trees are young in order to train them to the desired shape.



Deciduous trees should be pruned while dormant—in late fall or early spring. Exceptions are birch and maple, which must be pruned when the leaves are fully grown or they will bleed. Remove dead, damaged, diseased, weak and thin, or rubbing branches. Remove water sprouts from the trunk and main branches and suckers from the trunk base or roots. Thin the young branches to maintain the desired crown shape and size. Cut just outside the branch collar (the swollen area at the branch base), and do not make flush cuts or leave stubs.

Conifers are pruned to direct new growth, and increase density. Entire branches are not usually removed, since unsightly gaps will result. Spruce and fir must be pruned in late spring after new growth has started but not yet matured. New pine buds should be pinched back in early June when the new growth (candle) has reached full length.



These are general guiding principles for tree planting and care.

For more specific information, please consult your local garden center, district agriculturalist, forester or forest technician, library, or tree nursery staff on proper planting procedures for individual species.



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