Recommended varieties for planting/replanting trees in the City of Wahpeton

Large/Medium Sized Species

Prairie Horizon Alder
Autumn Splendor Buckeye
Ohio Buckeye
Prairie Torch Buckeye
Kentucky Coffeetree
Accolade Elm – Japanese Elm
Cathedral Elm – Japanese Elm x Siberian Elm
New Horizon Elm – Japanese Elm x Siberian Elm
Prairie Expedition American Elm
Valley Forge American Elm
Common Hackberry
Northern Acclaim Honey-Locust
Ironwood
American Linden
American Sentry Linden – American Linden Cultivar
Boulevard Linden – American Linden Cultivar
Frontyard Linden – American Linden Cultivar
Greenspire Linden – Littleleaf Linden Cultivar
Harvest Gold Linden – Mongolian Linden
Littleleaf Linden
Norlin Linden – Hybrid
Redmond Linden – American Linden Cultivar
Asian White Birch
Paper Birch
Silver Maple
Autumn Blaze Maple – Hybrid
Emerald Luster Maple – Norway Maple Cultivar
Green Mountain Sugar Maple
Sienna Glen Maple – Hybrid
Bur Oak
Northern Catalpa
Amur Corktree – *Small to medium*

*Alternate with at least 2 different species
*Use different species on front & side(s)

Small Sized Species

Primarily used under power lines and sparingly on other streets

Amur Chokecherry
Centurion Crabapple
Red Splendor Crabapple
Snowdrift Crabapple
Spring Snow Crabapple
Thunderchild Crabapple
Snow Mantle Dogwood
Snowbird Hawthorne
Toba Hawthorne
Japanese Lilac Tree
Ivory Silk Japanese Lilac Tree
Amur Maple
Embers Amur Maple
Tatarian Maple
European Mountain –ash
Showy Mountain-ash
Mountain Frost pear
Prairie Gem Pear
Princess Kay Plum

*Alternate with at least 2 different species
*Use different species on front & side(s)

If you have questions please contact: Dale L. Siebert, NDSU Extension Service, 642-7793, dale.siebert@ndsu.edu or Jim Selken, City Forester, 642-6565.

City of Fargo
Tips for Tree Planting and Tending
April 10, 2010

Trees are a lot like kids. If you start them off right, they're more likely to grow up healthy, resilient and strong.

They'll be better able to survive challenges like a bad crowd (pest infestation) or a bad environment (drought, soil problems).

With that in mind, here are some useful tips on tree planting and care presented by Allen Lee, forester for the city of Fargo, during a recent workshop.

Plant with care

- It's best to plant in the spring or fall.
- Do not let tree roots dry out before, during or after the planting process.
- Holes should be dug at least two to three times wider than the root ball to provide for free growth of the roots. "You want to dig a $200 hole for a $100 tree," Lee says. Breaking up the soil in a large area around the tree – but not under it – allows the newly emerging roots room to expand into the loose soil and establish. Roughen the sides of the planting hole if they appear glossy, especially in heavy, clay soils. This allows adequate movement of water and air to the roots.
- Think shallow. Plant a tree so the root crown is no more than 1 inch below the soil surface after settling.
- Before placing a tree in a hole, direct circling roots away from the root ball. If the circling roots are too large to redirect, cut them off with a sharp blade to prevent girdling of the plant years later.
- Don't pack down soil around tree after planting it.

In general ...

Humans kill more trees than Dutch elm disease. Avoid injuring trees by over- or underwatering, unnecessary fertilization applications, overpruning or "topping" a tree, or lawn-mower blight.

- Young trees can be staked for up to two years but should be secured in such a way that they can still move and develop a healthy root system.
- Don't fertilize trees during the season when they are planted. Woody plants rarely need nutrients beyond those already in the soil. Nitrogen fertilizer shouldn't be applied from July 1 to Sept. 1.
- Mulch is good for several reasons. It helps conserve moisture, moderates soil temperatures and controls weeds. Organic mulch – wood chips, straw, partially decomposed leaves – most closely mimics the natural environment of a tree growing wild in a forest. (Avoid "mulch volcanoes.")

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The moisture balance

- After planting a tree, the site around it should be watered immediately.
- After planting, monitor the soil regularly to prevent drying out. Lee recommends watering it daily for two to three weeks after planting. If rainfall is inadequate, the plant's roots should be watered deeply every 10 to 14 days. Avoid water that is high in salts.
- A tree can be harmed as much by too much water as it can by too little water. If you aren't sure of below-surface moisture, dig down 3 to 4 inches next to the plant. Moist soil at this depth indicates the water level is fine. Wet soil indicates overwatering.
- Once a tree is established, it needs to be watered less often than turf but requires more water in a given area than grass will during each watering. Proper water amounts are important for building food reserves during early and midsummer and for building tissue moisture levels before winter.

Pests, diseases

- **Dutch elm disease** is often spread by the European elm bark beetle, which gets into the water-moving vessels of the tree and spreads from one tree to another when the roots cross. It also can be spread by moving infected elm firewood or by root grafts.

  Symptoms: include "flagging," a yellowing, wilting and dying of certain branches and stems.

  Prevention: Elm firewood from diseased areas should never be moved to areas where healthy elms are present. All elm firewood should be burned or debarked prior to April 1.

  To treat/prevent: Fungicide injections of thiabendazole and propaconizole by a trained professional can reduce probability that trees will be infected. Diseased trees should be cut down promptly and debarked, burned, buried or chipped and composted.

- **Bronze birch borer.** These bullet-shaped beetles lay eggs in bark crevices of weak or dying trees. They infest limbs 1 inch in diameter or less first, larger limbs and trunks later. Larvae hatch and tunnel beneath the bark.

  Symptoms: Infestations start on smaller branches, killing upper branches first. Larval feeding produces meandering tunnels beneath the bark. Infested branches may appear bumpy. The exit hole for adults is D-shaped. Stressed trees are most vulnerable.

  To treat/prevent: Spray the bark surface of the trunk and limbs with permethrin in mid-June and twice more at three-week intervals until August. Insecticidal intervention is best aimed at adults to prevent egg laying. Heavily infested limbs and trees should be destroyed.

- **Emerald ash borer.** This metallic-green, flat-backed insect is highly destructive, and has been inching closer to North Dakota borders. Last year, it appeared in St. Paul. The insect attacks all ash species and its cultivated varieties. The beetle's creamy, legless larvae get under the tree bark and start feeding, making serpentine tunnels. In the process, they destroy the water-delivery vessels in the tree.

  Symptoms: Canopy will gradually die off and some bark-splitting may occur. Tree will attract lots of woodpeckers, which feed on the larvae. Adults leave a D-shaped exit hole.

  Prevention/treatment: Removal of infected trees. Injections by certified arborists should be done annually.

Other sources: "Insect and Disease Management Guide for Woody Plants in North Dakota," by the NDSU Extension Service, Fruit Tree Planting Foundation

Online

- For more information, visit www.cityoffargo.com/cityinfo/departments/forestry/