Tree Stewardship

For the property of:

_____

Takoma Park, MD 20912

Good Tree Stewardship

New home owners often focus on their house: how to enlarge or furnish it, or what color to paint the outside. When you buy your new home you also "inherit" its garden with the existing trees and shrubs. Your garden has also been entrusted to your care! The life span of a shade tree encompasses generations of home owners. As your shade trees grow larger and more majestic, they provide many benefits:

- They keep your home cool from the hot afternoon sun with their spreading canopy
- They beautify and add value to your property
- They absorb rain water, reducing erosion, storm water run-off and flooding,
- They absorb the greenhouse gas carbon dioxide while providing us with oxygen,
- Their leaves and limbs provide habitat for creatures great and small: a resting place for migrating birds, space for squirrels and song birds to build their nests, and habitats for insects that pollinate our flowers.

In short: when you buy a house you inherit the stewardship of a world of wonder to maintain and protect. Here are some tips for nurturing your shade trees:

- Provide water in severe drought
- Prune out dead branches on large trees using a certified tree care company
- Spread a light layer of composted leaf mulch over the root surface but not against the bark of the tree
- Avoid soil compaction around the roots and protect the trees from damage if you are excavating or building around the tree
- Fertilize the trees on a regular basis
- Don't allow vines such as ivy, kudzu or porcelain berry to grow up the trunk of your tree
- Protect healthy new seedlings since these juvenile trees will be the next generation, keeping our tree canopy in place.

This sample shows you how to keep a record of the trees on your property. On page 5 you need to replace the given sample of a "plat" or house survey with the one of your own property. This has been provided to you when you bought your home. You can also call Permitting services at **240-777-6300** or it can be downloaded www.permittingservices.montgomerycountymd.gov . Mark on your copy the location of your existing trees and their approximate age. Use the same scale as on the survey. See if you can contact any of the former owners, who might be able to tell you when the tree was planted or even have a photograph of it when it was younger. If no pictures are available, create your own record with the name, age and picture of the tree. Include any trees you have planted.
If you have any questions please contact the Takoma Park Tree Commission or visit the website http://takomaparkmd.gov/committees/tree/index.html

How to keep your records?
Use the following pages to keep a record of the trees on your property:

- Measure circumference breast high (4 and ½ feet above the ground)
- Repeat measurement every 5 years to see the growth rate
- Note specifics about the trees: pruning, removal, what wildlife favors that tree
- When you buy a new tree note it on a separate page and save the receipt. (This could save you money if you need to cut down a tree). Add it to the map of the trees on your property.
- Note how you care for your trees: pest treatment, watering when necessary, preserving new seedlings from tree, fertilizing, soil aeration.
- Include your children in these activities, teaching them to become the future stewards of our planet, because they are our future!

Record of existing trees, adding measurements in growth every 5 years

Place location of each tree on a copy of your plat or house survey

Plat no.	Tree species: Common or Latin name	Circumference			Crown spread			Height		
		2011	2016	2021	2011	2016	2021	2011	2016	2021
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Record of newly installed trees

Plat no.	Tree species: Common or Latin name	Circumference			Crown spread			Height		
		2011	2016	2021	2011	2016	2021	2011	2016	2021
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										

List of former Homeowners

See how far back you can find the names of former owners.

Nr.	Years of ownership	Name of Home owner	Current tel. or email address	Pictures provided
1	18.. - 19			
2				
3				
4				
5				
6				
7				
8				
9				
10				
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12				
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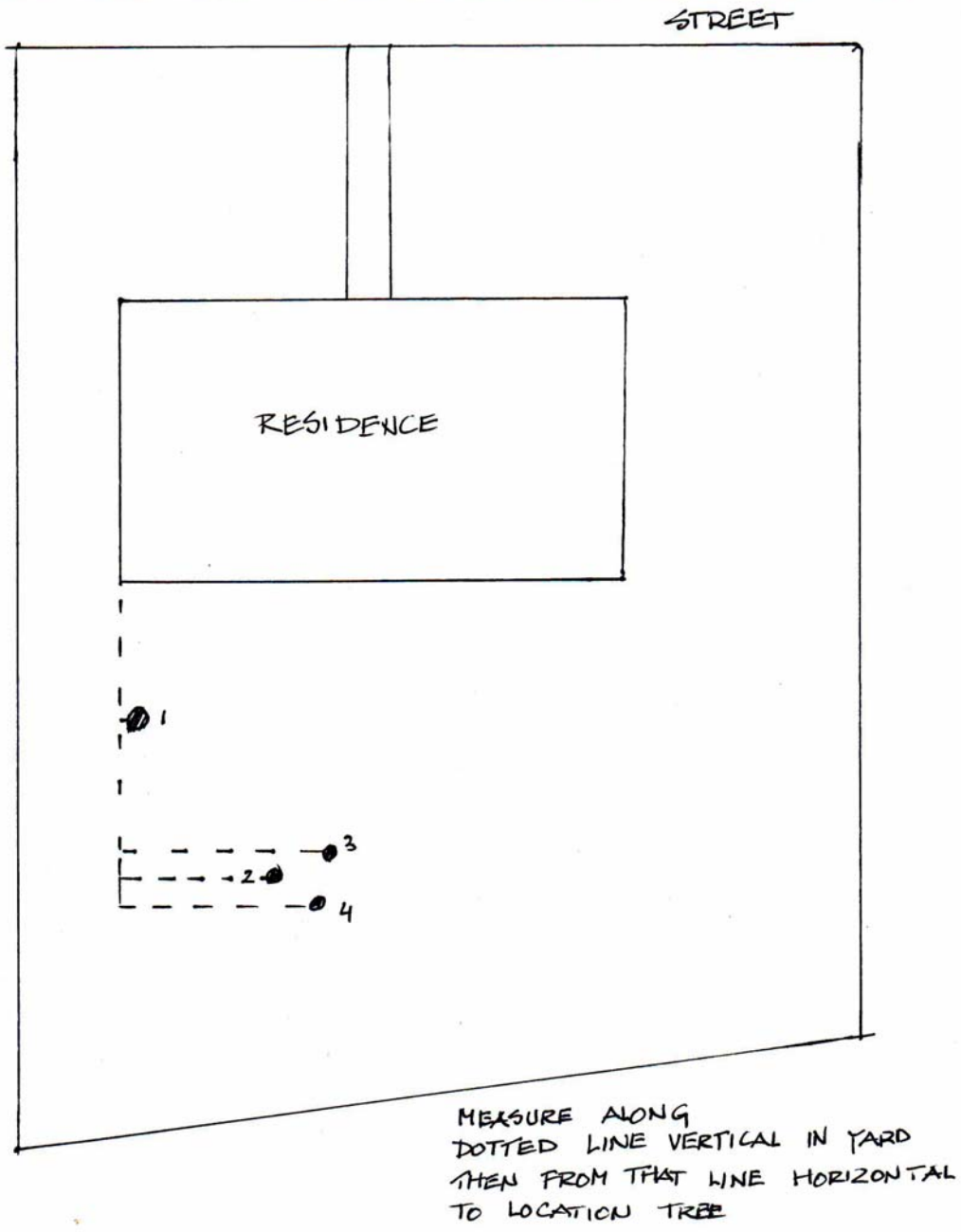
19				
20				
21				

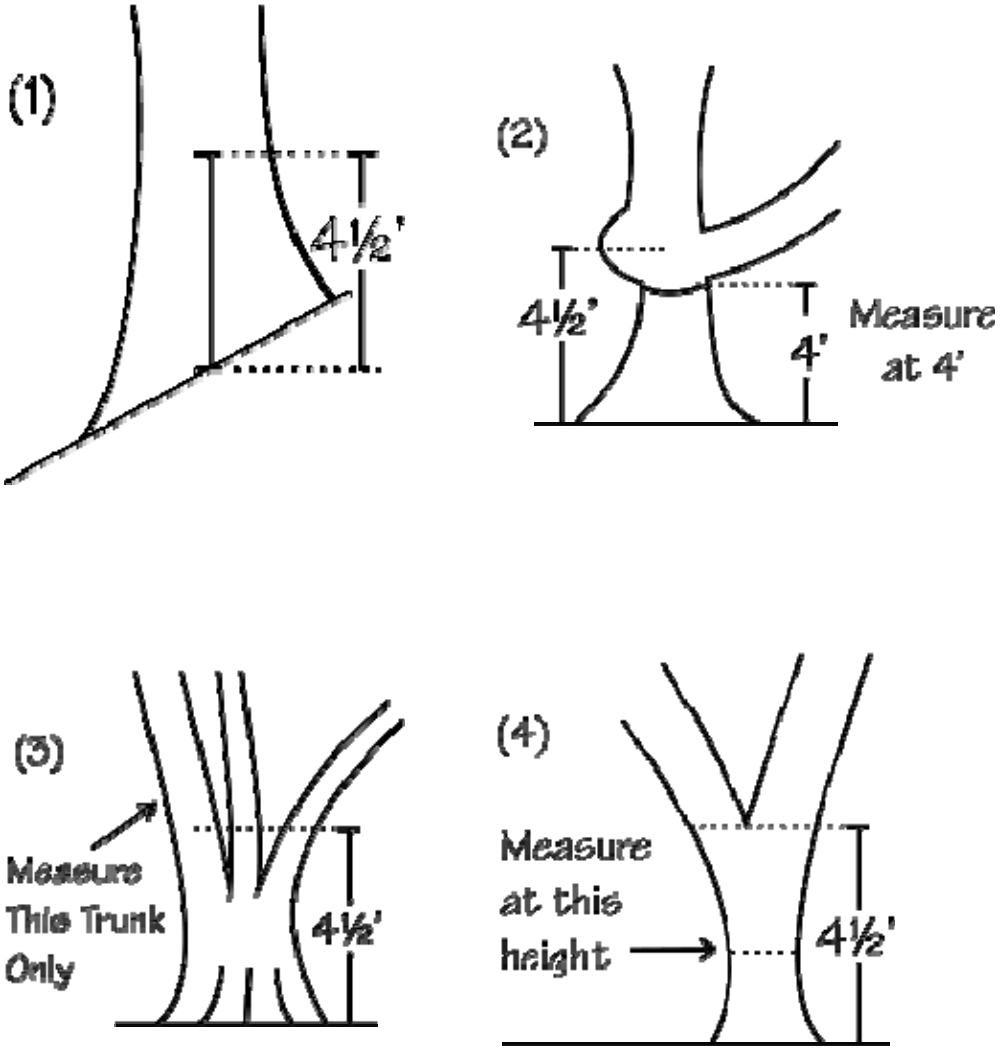
PROPERTY ADDRESS:



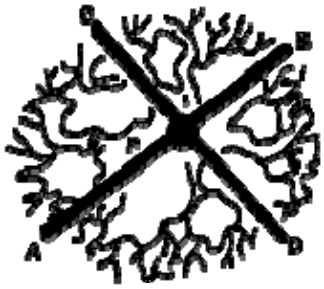
SAMPLE PLAT

CIRCUMFERENCE MEASUREMENT

Using a flexible tape measure, measure the distance around the trunk of the tree to the nearest inch. This measurement should be taken at 4 1/2 feet above ground level. If the tree is on a slope (1), use the mid-point of the tree base to measure 4 1/2 feet above ground level. If there is a branch or growth on the trunk at 4 1/2 feet (2) measure the circumference just below the obstruction and report the height at which the measurement was taken. For multi-trunked trees take the branch below 4 1/2 feet (3) report the circumference of the largest trunk at 4 1/2 feet. If a multi-trunked tree flares out at 4 1/2 feet (4) measure the smallest circumference below 4 1/2 feet and report the height at which the measurement was taken.



CROWN SPREAD MEASUREMENTPLACE A MARKER UNDER THE OUTSIDE EDGE OF THE CROWN THAT IS FARTHEST FROM THE TRUNK (A) AND ANOTHER DIRECTLY OPPOSITE IT AT THE OUTER EDGE OF THE CROWN (B). NEXT, SET A MARKER AT THE EDGE OF THE CROWN THAT IS CLOSEST TO THE TRUNK (C) AND ANOTHER AT THE OUTER EDGE OF THE CROWN DIRECTLY OPPOSITE IT



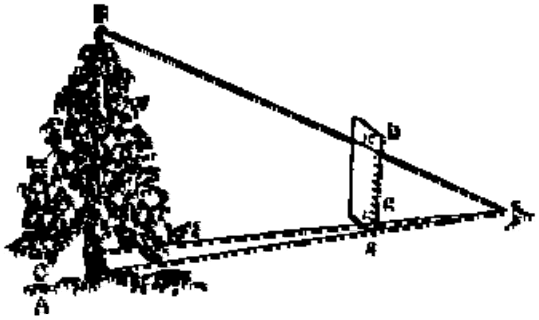
(D).

Using a tape measure, measure both the distance from A to B and the distance from C to D to the nearest foot. Add the two measurements together and divide the sum by two to obtain the average crown spread.

HEIGHT MEASUREMENT

Take a 12-inch ruler and hold it vertically at eye level, in an outstretched arm. Stand far enough away from the tree so that you can roughly see both the base and the top of the tree between the top and bottom of the ruler. Move forward or backward until the eye sights the base of the tree (A) across the 0-inch gradation (a) and the tip of the crown (B) across the 10-inch gradation (b). Then a sight is taken across the one inch (c) gradation and the corresponding point (C) is marked on the tree by a companion. Using a tape measure, measure the distance from the base of the tree to this point (AC) to the nearest foot and multiply by ten. This is the height of the tree (AB). If a height measuring instrument is available, its use is preferred. Be sure to report your method of measurement and have someone else verify your results.

If it’s not possible to measure this way, try and put a yard stick (or other long stick of a specific length) against the base of the tree. Take a picture of the entire tree, and then using the photograph; see how many times you could fit that stick into the height of the tree, thus giving you the estimated height of the tree.



Age of trees

To calculate how old your tree roughly might be do the following:

The Tree Aging Formula

Begin by determining the tree species and taking a diameter measurement (or circumference measurement) using a tape measure at Diameter Breast Height or 4.5 feet above stump level. If you are using circumference, you will need to make this calculation to determine the tree diameter: *Diameter = Circumference divided by 3.14 (pi)*

Then calculate the age of the tree by multiplying the tree's diameter by its growth factor (see below): *Diameter X Growth Factor = Approximate Tree Age*. Let's use the hickory above to calculate age. A shagbark hickory's growth factor has been determined to be 7.5 and its diameter is 10 inches: *10 inch diameter X 7.5 growth factor = 75 years*. Remember that the growth factors I provide are more accurate when taken for forest grown trees.

Growth Factors by Tree Species Red Maple Species - 4.5 Growth Factor
Silver Maple Species - 3.0 Growth Factor
Sugar Maple Species - 5.0 Growth Factor
River Birch Species - 3.5 Growth Factor
White Birch Species - 5.0 Growth Factor
Shagbark Hickory Species - 7.5 Growth Factor
Green Ash Species - 4.0 Growth Factor
Black Walnut Species - 4.5 Growth Factor
Black Cherry Species - 5.0 Growth Factor
Red Oak Species - 4.0 Growth Factor
White Oak Species - 5.0 Growth Factor
Pin Oak Species - 3.0 Growth Factor
Basswood Species - 3.0 Growth Factor
American Elm Species - 4.0 Growth Factor
Ironwood Species - 7.0 Growth Factor
Cottonwood Species - 2.0 Growth Factor
Redbud Species - 7.0 Growth Factor
Dogwood Species - 7.0 Growth Factor
Aspen Species - 2.0 Growth Factor

Using a Rule of Thumb When Aging Street and Landscape Trees
Because trees in a landscape or park are often pampered, protected and sometimes older than forest grown trees, it is more of an art to aging these trees without significant error. There are foresters and arborists with enough tree core and stump evaluations under their belts that can age a tree with significant accuracy. It is still impossible to do anything but estimate a tree age under these conditions. I would suggest in younger trees in the landscape, you pick a genus or species from above and slightly reduce the Growth Rate Factor. For old to ancient trees I would significantly increase the Growth Rate Factor.

Photos of trees over the years

Take pictures of the existing trees and any new trees that are added. You can continue to photograph your trees each time you re-measure them as well as an additional way to document their growth.