



Tree Care in the Home Landscape

My business is in part based on assessing woody plant (tree and shrub) problems and providing recommendations for treatment. I take an independent and objective position on what I believe is the right course of action for the care of woody plants. When it comes to looking after these species, most homeowners muddle through the process. Some will definitely consult a suitable book on the topic; however, identifying specific problems even from one or more reliable published sources can be very difficult for the lay person.

In Ontario, woody plants are significantly less diverse in numbers of different species and cultivated varieties as one travels west to east and from south to north. Agriculture Canada's hardiness zone ratings for northern Ontario are 2 and 3 versus 4 to 7 in the southern part of the province. Climate, soils and proximity to bed rock are major factors responsible for woody plant diversity, pests and diseases – especially in residential landscapes.

People will provide daily care to garden vegetable crops like tomatoes and beans but believe that woody plants require nothing more than a periodic pruning.

I started out in the tree and urban forestry consulting business in Ontario in the 1970s. I have since expanded my field of endeavours to all four western provinces. Having talked to thousands of property and business owners over the years, I have come to a conclusion that is valid just about anywhere. People tend not look at trees and shrubs with a critical eye and easily miss early stages of tree and shrub problems. Unless one is trained to look at vegetation,



improperly pruned shrub

john wilson

it all becomes a visual green blur. The mind is absorbed with so many issues of day-to-day life that slowly emerging and visible tree and shrub problems are simply not on people's perceptual radar screens.

When people grow vegetables such as tomatoes or cabbage, they are intent on having an edible crop to harvest as the plants mature. People often provide daily care to edible crops by watering, fertilizing, tilling the soil and weeding. Holes in cabbage head leaves are visible and the gardener is ready to spring into action to deal with them. Fruiting trees such as apples, plums and peaches are given more attention because of harvesting expectations at the end of summer. However, most people will assume that the fruit on these trees will grow by themselves to ripen at maturity generally without their intervention.

Most people believe that woody plants such as silver variegated dogwood or a white ash require nothing more than periodic pruning to either keep them in shape or to deal with dead, damaged or nuisance branches. It has never been demonstrated to most people that these woody plants need regular care as much as a tomato plant does.

Leafy Urban Legends

The property owner's perception of woody plants has developed over a number of years producing a sense of what is the right thing to do and what is not. There are several prominent and recurring myths about woody plants that I have discovered constitute part of the property owner's normal view of these plants. Number one on the list is the idea that branch stubs are desirable and necessary for the health of the tree or woody shrub. There is a notion out there that cutting too close to the branch's point of attachment such as the trunk or a larger branch will in some way harm the tree or shrub. It is no exaggeration that out of 100 yards I visit, I will find one or two where the branches have been properly pruned with no visible stubs. The pruning has either been done by a knowledgeable arborist or by an enlightened property owner who read about the technique in a book or listened to a well informed arborist willing to share his or her information. Branch stubs are one of the most important entry points for woody plant diseases that cause decay and death.

Poor pruning based on misconceptions about branch stubs is largely responsible for the spread of dogwood twig blight,

Schubert choke cherry black knot disease, fire blight disease (especially on crab apple), mountain ash and cotoneaster; spruce tip blight, pine shoot blight, gummosis (*Leucostoma* and *Cytospora* cankers) on Russian olive, plum, cherry, peach and apricot; *Botryosphaeria* canker on apple, and *Hypoxylon* canker on poplars to name a few. As the stub branch dries, the exposed wood checks and cracks create openings into the plant. These openings are prime entry points for the spores of fungal and bacterial diseases. It is very important to prune the branch back to its point of origin at the branch collar.

Another normal view of woody plants property owners hold relates to the over crowding of stems in woody shrubs and trees. Older shrubs of lilac, mock orange, white flowering spirea, honeysuckle, dogwood, elderberry, ninebark, cherry and plum are typically too thick with stems. The shrubs are usually shaped or hedged but rarely thinned out. People like the 'bushiness.' Cluttered stems encourage diseases because of poor ventilation, wood boring insect damage and reduction in the overall health of the plant. The production of showy flowers in ornamental shrubs is drastically reduced as a result of over crowded stems. Older stems and weak shoot suckers should be removed at the base of the shrub every year. A few strong and healthy stems are more preferable and more attractive than a few dozen over crowded ones.

Buying Advice

Carefully choosing deciduous trees in a garden centre is an occasion that can lead to the selection of a tree or shrub that will function well over its life time. Unfortunately, poor selections are often made by the property owner. Young nursery grown trees can have crowded stems arising from a common junction. Often the similar sized or co-dominant stems are located parallel to each other. If unpruned, these co-dominant stems can cause many trunk splitting problems as they grow wider each year.

The same person who hunts for a perfect rose shrub fails to see the problem with a young Manchurian ash tree with crowded co-dominant stems. Everyone knows that a tree generally gets larger with age; however, that understanding does not seem to translate into anticipating and working

with tree problems at an early age. Most people can see a perfectly shaped tree and admire its aesthetics and character, but they fail to understand why that tree appeals to them. The beauty of a tree or a woody shrub usually lies in its physical simplicity: well spaced branches and stems, a balanced crown of branches, free of damage, pests or diseases, and plenty of room above and below the ground to grow.

Site Selection

The poor placement of trees and shrubs in the home landscape is the single most detrimental factor relating to the future health of these plants. This factor relates to the plant's location to other physical components of a yard: buildings, sidewalks, driveways, fences, overhead wires, pools, other trees, and to hard landscaping such as patios, decks and planters. Is very unusual for me to encounter an urban yard among the thousands I have visited with well placed trees and shrubs that are not encroaching or being encroached by other physical features in the landscape mentioned above. I have seen countless numbers of yards that have been professionally designed and planted that have woody plants too close to nearly everything around them.

Again this is a failure to recognize that young trees and shrubs grow in height and in width to their mature size. People accept small woody plants newly planted close together as normal. We do not like to see large gaps in the yard in the early years of landscaping. Most of us at one time or another have encountered yards where the owners complain about having to prune out or remove crowded trees or shrubs. It seems that few people ever make the perceptual connection between potential growth of woody plants and where they are placed.

A Little Bit of Knowledge...

When I visit property owners and their yards, I ask them if they have any self help books on trees, shrubs or landscaping. I also ask them if they consult the internet for advice if they have computers. Most people do not consult tree books or the internet, but many do have books and catalogues that relate to flowering plants and vegetables. Normal public perceptions of home landscapes that are deficient need to be recognized by arborists. Self



Top: "Dog's Breakfast." Severely stressed spruce branch showing *Cytospora* canker disease, tip blight disease and damage done by spider mites, needle miners, spruce bud worms and spruce bud scales.

Above: *Sirococcus* tip blight disease on a Colorado blue spruce.

motivation to become better informed about woody plant issues is simply not a priority in the lives of either very busy people or those who prefer not to work in the yard.

These perceptions of normal are also borne out in some of the questions from those who attend my tree care courses. Most people are willing to listen, receive and use information about how they can take better care of their trees and shrubs, but they need to be led. I always provide examples of excellent book resources at these courses for the lay person on how to become more aware of woody plant issues. These people are the motivated ones. Arborists' training with whole tree care procedures allows them to be in the best position to reach people through patient education and demonstration practices. Never fail to use an opportunity to open people's eyes and increase their understanding of what good tree practices around the home landscape is all about. ♦

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