



*“The City of Duncan
will be a community
identified by its trees.”*



Homeowner’s Guide to Urban Forest Management

Introduction

The City of Duncan Urban Forest Strategy puts forward a vision and strategy for longterm sustainable urban forest management. It provides City staff with clear, meaningful, and achievable management goals and operational directives to protect, maintain, and enhance the trees in our city.

The majority of the trees in the City of Duncan are on privately owned land. This Guide is intended to provide you with guidance in properly maintaining the trees on your property, and understanding the importance of the urban forest and the many benefits it provides to our community.

Defining the Urban Forest

The urban forest is more than just the individual trees growing in the urban landscape. It also includes the soil, water, vegetation, microbial communities and the wildlife that together contribute to the health of forested ecosystems. Effective management of the urban forest requires that all of these natural components be considered together as a system.

Urban Forest Strategy

The City of Duncan Urban Forest Strategy (2010) provides a vision and plan for long term sustainable urban forest management. In addition to recommendations for City staff and public land, top priority recommendations include:

- public education on the benefits of the urban forest
- promote proper tree health and care to land owners
- encourage planting and retention of trees on private land to increase the cover canopy.
- adopt a Tree Protection Bylaw to regulate tree removal on private land

In spring of 2014, the City held a series of public presentations to increase awareness in the community and to encourage active participation in protecting and expanding the canopy cover. There is a continued need to raise public awareness of the benefits of our City’s trees, including those on private lands.

The City of Duncan has set the following tree canopy cover target:

- Goal of 40% canopy cover by the year 2050 (Currently 26% of the city has canopy cover)
- This means 3500 new trees need to be planted.

There are numerous social, environmental, and economic benefits attributed to urban forests. Many of these benefits are often overlooked.

Environmental Benefits

Trees provide environmental services to our landscape that we take for granted:

- carbon sequestration, reduced CO₂ emissions and improved air quality (trees absorb particulates in the air)
- improved water quality (root systems filter surface run-off and contaminants)
- flood mitigation and stormwater management (tree roots absorb and store rainwater)
- erosion protection, soil conservation and slope stability
- weather and climate moderation (shading, windbreaks)
- wildlife habitat and increased biodiversity.

Economic Benefits

Large trees play surprising role in cost savings to the City and the homeowner, too:

- by providing shade, trees reduce summer cooling costs by 10-25%.
- In winter trees shelter homes from winter winds, reducing heating costs.
- increased property values
- stormwater management (reduced runoff and infrastructure requirements, natural filtration of contaminants)



Social Benefits

Trees provide a wide range of benefits to our community and social well-being:

- recreation and educational opportunities
- sense of community stewardship
- traffic calming and noise reduction
- health benefits (reduced stress, reduced exposure to UV rays)
- trees improve streetscapes and provide neighbourhood identity.

“Most of Duncan’s canopy cover is located on private land. Historically, this is where the most tree loss within urban areas occurs. Clearing larger lots for new development, in addition to individual tree removals by homeowners, has led to an incremental decline in forest cover which is difficult to offset on a limited amount of public land.”

City of Duncan Urban Forest Strategy

Best Management Practices

Do you want to plant a tree in your yard, but not sure where to start on making that decision? Following are a few points to consider in making the best decision for a tree that will enhance your home and your neighbourhood for many years.

Choosing the right tree

- **Choose a suitable species for your particular site.** Does it need full sun, or can it tolerate considerable shade? How much water does it require?
- **Consider the function you require of the tree.** Are you needing shade, a windbreak, fruit for preserving, or a tree for purely aesthetic values? To help make that decision talk to knowledgeable friends and neighbours, consult with a nursery or arborist, and refer to the Planting List on the City website.
- **Consider the placement of the tree.** What is the ultimate height and spread of the species you have chosen? Is there enough space for the tree to reach it's potential in 20 years? Is it too close to a building, power line, or encroaching on a property line, or another tree's growing area? Look up, look down, and all around.

Tree maintenance

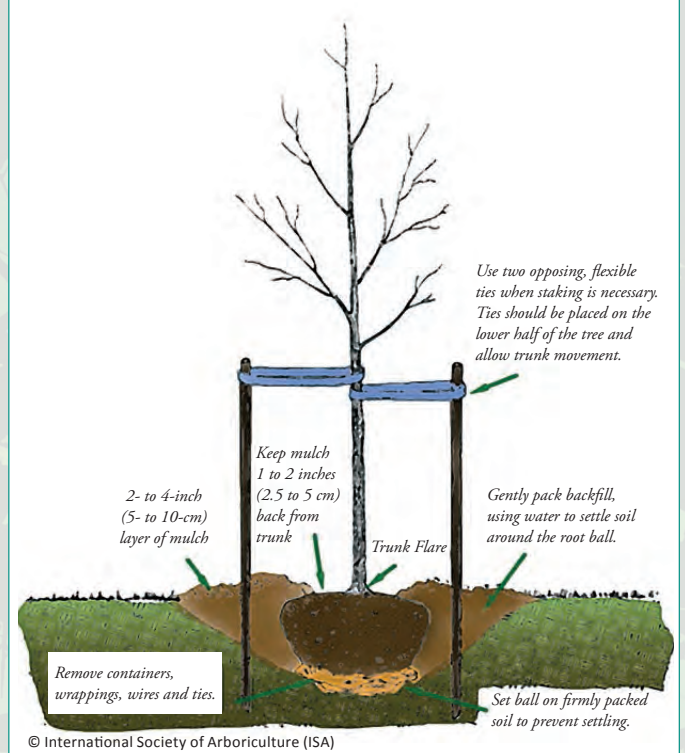
- **Proper planting is critical to ensure your tree has a long and healthy life.** Use good quality soil with lots of organic matter or compost. Plant in late fall or early spring.
- **Proper structural pruning will improve the function and lifespan of a tree.** Pruning is most important when a tree is young, small cuts make a big difference. If you're unsure, consult a certified arborist to assist you or visit www.tree-pruning.com.
- **Never top a tree.** Topping can have negative effects on tree health by creating a wound and entry point for disease. This can also create a dangerous situation in the future with heavy new growth that is not securely part of the main trunk. Topping a tree is also very unattractive.
- **Newly planted trees need summer watering for at least 2 years.** Soak the root zone one or twice weekly during dry periods. One minute of gently running water is sufficient, applying water evenly at the drip line. Be sure to not overwater as this encourages root disease or rot.

Working with an Arborist

If you plan any significant development on your property that may impact trees, or are concerned about the health of any trees, working with an experienced arborist is critical to ensure you're providing the best care for your trees and protecting the value of your property.

ISA certified arborists are highly skilled horticultural professionals who must be trained and knowledgeable in all aspects of arboriculture. Additionally, arborists must pass a certifying exam and sign a code of ethics for professional practice. You may consider working with an arborist if you require information or direction on any of the following; tree risk assessment, tree preservation planning, pruning specification or tree appraisals.

Proper Tree Planting



Tree topping example



Look for this logo when hiring an arborist.



Tree Protection Bylaw

Many municipalities have bylaws to protect the urban forest. The City of Duncan Council has given first and second readings to a Tree Protection Bylaw. The City of Duncan's Urban Forest Strategy, Official Community Plan, and Strategic Plan all support the adoption of a Tree Protection Bylaw.

The Bylaw contains the following regulations:

- A permit will be required to remove Protected Trees (owners of single family dwellings are exempt from the \$25 fee for one tree each year).
- Protected Trees include:
 - a) The following species: Arbutus, Garry Oak, Pacific Dogwood, Pacific Yew, Douglas Fir, Grand Fir, Big Leaf Maple, and Western Red Cedar;
 - b) Any tree with a diameter at 1.4 m (4.6 ft) above grade of 30 cm (12 in) or larger;
 - c) Any tree located within an Environmental or Hazard Development Permit Area (i.e. Steep Slope or Floodplain Areas - tree removal in these DPAs also requires a Development Permit);
 - d) Any Significant Tree (see below); and
 - e) Any tree with evidence of a nest or use by raptors, osprey, or a heron colony.
- Replacement of one tree for each tree removed will be required for single family properties, and two trees for each tree removed for properties other than single family.
- Replacement Trees must have a minimum height of 2 m (6.6 ft) or minimum caliper width of 6 cm (2.3 in). Caliper width is the diameter at 15 cm (6 in) from the ground.
- Pruning in accordance with sound horticultural practice will not require a permit.
- Significant Trees identified in the Bylaw will require Council authorization for removal.

Some Significant Trees were identified in the Urban Forest Strategy. Significant trees may be significant species, large mature trees, or heritage trees. Community members are encouraged to nominate Significant Trees or provide other feedback about the proposed Tree Protection Bylaw. A Significant Tree Nomination Form is available on the City of Duncan website, www.duncan.ca, at City Hall, or you may contact the City Planner at michelle@duncan.ca

The Future of Duncan's Urban Forest

Community involvement and cooperation between citizens and the City is key to ensuring the long-term health of Duncan's urban forest. Tree protection and proper planting and care will ensure the survival of the urban forest for the enjoyment of generations to come.

Resources

- The complete City of Duncan Urban Forest Strategy can be downloaded from the City of Duncan website: www.duncan.ca or viewed at City Hall
- Information on proper pruning practices: www.tree-pruning.com; www.treesaregood.com
- To find a certified arborist in Duncan: www.isa-arbor.com

