

## **Planting Trees Near Power lines**

FortisBC spends money annually to deal with tree problems that cause safety and power line reliability problems. Two solutions are removing weak or hazardous trees and encouraging the regular pruning of trees near power lines. FortisBC also recognizes the practical and aesthetic value of trees in our communities. We encourage the planting and maintaining of trees, provided that the tree is safe and appropriate for that location.

### **The Right Tree in the Right Place**

FortisBC supports trees being planted beside or even directly under power lines, provided that the tree species will not reach a height or width that it will grow into or fall on power lines. This guide is designed to assist you in selecting beautiful trees and shrubs for planting, without creating potential hazards for yourself or your neighbours. Your safety and power line reliability can be improved by following this guide.

There are three safety planting zones of concern near power lines:

#### **Low Zone**

- The area directly under the power lines and extends five metres on either side of the power pole.

Trees planted in this area should have a maximum mature height of six metres or less.

#### **Medium Zone**

- The area that extends from the edge of the low zone to a distance of 20 metres from the power pole.

Trees in this zone cause the majority of outages. Weak or damaged trees in particular create a potential for severe public safety hazards. The maximum height of trees growing in this zone should be 12 metres. This could provide a beautiful landscape without creating safety problems.

#### **Tall Zone**

- The area more than 20 metres from power lines. Virtually any strong healthy tree is safe in this zone.

## **Landscape Planning and Design**

a landscape plan is very helpful for planning a good landscape design. The size, proportions, form and lines of the house should be considered in determining the location, size and type of plants to be used. The main purpose of a planting plan is to provide an attractive setting which compliments the home.

*A scaled plan can include the following:*

1. the location of the house on the property
2. the location of the power lines and poles
3. existing trees, structures and utilities
4. good and bad views on and off the property
5. division of the lot into activity areas, e.g. private outdoor living area (P), front yard (F), service and gardening areas (S)
6. create the necessary division between areas with planting
7. select the best plants to carry out the plan
8. stick to the plan

After you have drawn up a plan of your property, pay particular attention to areas around power lines. Refer to the recommended species list and choose plants that are easily maintained under or near power lines and that will survive in your region.

### **Hedging Note**

Formal or maintained hedges are excellent next to or even immediately under power lines. We encourage you to plant and maintain such hedges as they will eliminate public safety hazards and reduce the incidence of power outages. Hedges must be maintained by the home owner, as annual pruning is required in order to keep hedges healthy and vibrant. A maximum height of four metres should be maintained to keep the trimmers away from power line hazards.

## **Low Growth Trees – For the area directly under the power lines and to five metres on either side of the power line.**

### **Suitable for Cold Winter:**

#### ***Acer griseum*** (Paperbark maple)

Maximum growth six metres. Slow growing tree. Winter bark peeling creates dormant interest. Excellent power line companion.

#### ***Chamaecyparis pisifera*** ‘*Filifera*’ (thread leaf cypress)

Growth to five metres. Evergreen cultivar is columnar in shape and very hardy. Available in light, dark green and gold tips. Used throughout the world as a feature plant, makes an attractive power line tree.

#### ***Cornus sericea*** (golden twig dogwood)

Growth up to three metres. Similar to *baileyi* with brilliant yellow stem varieties.

#### ***Corylus americana*** (filbert)

Growth up to six metres. Attractive multi-stemmed tree. Good shape when it matures and the nuts are edible.

#### ***Crataegus spp.*** (hawthorn)

Growth up to six metres. Beautiful flowers and berries on a thorny tree. Consult with a nursery professional regarding an area adapted variety.

#### ***Euonymus alatus*** (Burning bush)

Great shrub for fall colours. Bright orange-red berries.

#### ***Ilex x meserveae*** (Northern holly)

Growth up to six metres. Hardy holly shrubs available in varieties adapted to local weather conditions.

#### ***Philadelphus x virginalis*** (mock orange)

Growth between 3 - 4 metres. A profusion of creamy white flowers covers this hardy shrub which is a great species for planting in limited space.

#### ***Rhus typhina*** (staghorn sumac)

Sumacs are hardy, prolific and small enough to be under power lines. An attractive tree with bright fall colours.

#### ***Staphylea trifolia*** (bladdernut)

Sometimes hard to find in a nursery, this attractive tree and shrub is a year round delight with foliage, flowers, fruits and nuts.

### **Suitable for Moderate Winter:**

**Acer palmatum** (Japanese maple)

Few trees offer the attractiveness of this fine species. Ideal in either moderate or mild winter areas and available with red or green foliage. A great choice for a power line companion.

**Acer circinatum** (vine maple)

B.C. native vine maple usually grows in clumps and offers an attractive green foliage only outdone by its brilliant fall colour.

**Chaenomeles japonica** (Japanese quince)

Large red, pink or white blossoms announce the spring with this fine shrub. Easily trainable, it makes a thick and attractive shrub.

**Cotinus coggygria** (smoke tree)

The silk-like thread flowers of this handsome tree appear like smoke hovering over its attractive foliage. Available in green or purple, this will be a conversation piece in your front garden.

**Forsythia x intermedia** (border forsythia)

A hardy plant with reams of bright yellow early-spring blossoms.

**Hamamelis x intermedia** (witchhazel)

Hardy shrub with winter bloom, x intermedia has several varieties and several colours available.

**Hamamelis mollis** (Chinese witchhazel)

Brilliant yellow blooms are featured on this “best of breed”.

**Juniperus spp.** (dwarf junipers)

Many suitable and attractive varieties to choose in this evergreen family.

**Kolkwitzia amabilis** (beauty bush)

Growth up to four metres. The common name is right on for this handsome shrub with pink and white bell-like flowers.

**Magnolia stellata** (star magnolia)

Growth up to 3.5 metres. The small star-like flowers cover this magnolia in early spring. An excellent choice.

**Rhododendron spp.** (rhododendron)

Growth of some varieties up to four metres. Hundreds of varieties to choose from in this popular attractive shrub, large blossoms and a wide variety of colours.

**Spiraea prunifolia ‘Arguta’** (bridal wreath)

A wonderful spring flowering plant with masses of white flowers.

**Thuja orientalis** (oriental arborvitae)

Choose one of the low growing varieties of this fine evergreen for under power line planting, or maintain as a hedge. Lots of variety to choose from.

**Medium Growth Trees – For 6 m to 20 metres away from the power line.**

Suitable for Cold Winter:

**Acer campestre** (Hedge maple)

Growth up to 12 - 16 metres. Attractive round-headed tree.

**Acer tataricum** (Tatarian maple)

Growth up to 10 metres. Small attractive tree, with red fruit in late summer and bright green leaves that turn yellow in fall.

**Amelanchier spp.** (serviceberry)

A number of hardy varieties of the attractive white-flowered serviceberry are available in each hardiness zone.

**Cercis canadensis** (redbud - judas tree)

Growth up to 10 metres. Showy choice in a wonderful flowering tree. Available in purple and white ('Alba') flowers.

**Cornus mas** (Cornelian cherry - dogwood)

This hearty dogwood has clusters of yellow flowers in early spring before leaves are on the tree. Adaptable, hardy and showy.

**Euonymus europaeus** (spindle tree)

This tree changes colour throughout the year and always creates interest.

Suitable for Moderate Winter:

**Cercidiphyllum japonicum** (katsura tree)

The shape and colour of the foliage and the interesting bark effects make the Katsura a beautiful feature tree.

**Cornus "Eddie's White Wonder"** (Eddie's dogwood)

Eddie's dogwood is covered in blooms in the spring and is very resistant to the dogwood leaf-blotch blight which effects the native "nuttallii".

**Cornus florida** (Flowering dogwood)

Cultivars give you some flower colour choices in this attractive tree.

**Cornus kousa 'chinensis'** (Chinese dogwood)

Large creamy white bracts light up this tree which prefers light shade.

**Ilex crenata** (Japanese holly)

More shrub-like holly variety with simple leaves. Fruits black and less obvious than with aquifolium or opaca.

**Koelreutaria paniculata** (goldenrain tree)

Very attractive summer flowering tree with bright yellow flowers. An excellent choice for a feature tree.

**Laburnum watereri 'vossii'** (golden chain)

Wonderful flowering chains of yellow flowers on this fine tree. Very attractive.

CAUTION: Flowers, fruits and seeds are extremely poisonous.

**Magnolia x soulangiana** (saucer magnolia - tulip tree)

Growth up to 10 - 15 metres. Fragrant brilliant flowers fill this tree in May. White tips with pink or purple bottoms.

**Oxydendrum arboreum** (sorrel tree)

Lustrous leaves turn brilliant red in fall. Occasionally hard to find, but an interesting addition to any garden.

**Parrotia persica** (Persian ironwood)

One of the best small specimen trees. Interesting foliage and bark make it a conversation piece. Very problem resistant.

**Prunus x blireana** (Blireana plum)

If you want a fine showy tree, you should consider Prunus. Blireana is just one of the stars in an extremely showy family.

**Sorbus aucuparia** (European mountain ash)

White flowers in spring, red berries in the fall and is a bird feeder in colder winters.

Excellent single tree feature.

**Stewartia sinensis** (Chinese stewartia)

Very handsome large shrub with white flowers and yellow stamens.

**Styrax japonica** (Japanese snowball)

A great June flowering small tree or shrub. Prefers light shade.

**Taxus spp.** (yew)

In evergreen shrubs and small trees, the yews have a lot to offer. CAUTION: Very toxic leaves and berries.

