



# A CLOSER LOOK: TREE IDENTIFICATION GUIDE

## TREE IDENTIFICATION FEATURES

- Leaf type
- Leaf arrangement (alternate, opposite, or whorled)
- Twig
- Colour, structure, and pattern of bark
- Size and form (shape)
- Shade tolerance
- Habitat

## LEAF TYPE

### Simple Leaf



Undivided

### Compound Leaf



Divided into leaflets

### Overlapping Scale-like Leaf



### Needle-like Leaf



## LEAF ARRANGEMENT

### Alternate



### Opposite



### Whorled





# A CLOSER LOOK: TREE & SHRUB IDENTIFICATION

## WHITE SPRUCE

*Picea glauca* (scientific name)



### Leaf Type

- **Needle-like leaves** attached directly to the twig
- 4 sided-needles (needles on all sides)
- Sharp, stiff needles
- Blueish-green colour



### Cones

- Pale-brown cones
- Pollen cones are larger than needles
- Cones hang near the ends of branches
- 5-7 cm long

### Twigs

- Smooth
- Hairless branches



### Bark

- Scaly
- Greyish-brown



### Size and Form

- Usually around 24 metres tall
- In ideal conditions, it can grow up to 40 metres
- Tends to grow tall and narrow



## What Conditions and Climates do White Spruces Prefer?

- Can survive a range of soil and moisture conditions
- Prefers well-drained soil
- White spruces grow well with full sun (at least 6 hours of direct sunlight per day)
  - However, they can also tolerate shade
- Can be found in the arctic tree line

Images: Daniel Tigner, Shuk Han (Nancy) Mak, OSU, CYSIP



# A CLOSER LOOK: TREE & SHRUB IDENTIFICATION

## GREYLEAF WILLOW

*Salix glauca* L. (scientific name)

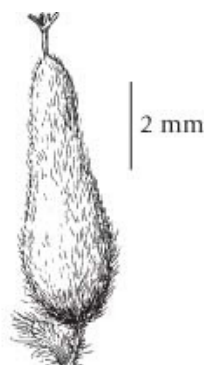
### Leaf Type

- Simple leaves
- Alternate leaf arrangement
- Usually elliptic or obovate (egg-shaped with the narrow end at the base)



### Twigs

- Yellow-brown, reddish-brown, or grey coloured branches
- Hairy twigs



### Catkins

- Catkins appear at the same time as the leaves
- Male and female flowers are on separate plants
- Commonly yellow



### Size and Form

- Shrub stands upright
- Commonly grows 0.5-2 metres tall, but in favourable conditions, it can grow up to 6 metres

### What Conditions and Climates do Greyleaf Willows Prefer?

- Prefers full sun to partial shade
- Grows well in dry areas
- Grows as shrubs in boreal forests, swamps, and along shores
- Can be found growing up to the arctic zone
- Native to North America

Images: Jamie Fenneman, Illustrated Flora of BC, Paul Slichter, Tommi Nyman, Honey Plants



# A CLOSER LOOK: TREE & SHRUB IDENTIFICATION

## WHITE BIRCH

*Betula Papyrifera* (scientific name)



### Leaf Type

- Simple leaves
- Alternate leaf arrangement
- Egg-shaped leaves that are **double toothed**



### Bark

- Thin
- Bark peels off the trunk in large strips or sheets
- Mature trees have white to reddish-brown bark
- Young trees have dark brown coloured bark
- Horizontal slits in the bark



### Twigs

- Slender
- Dark reddish-brown
- Hairless



### Size and Form

- Grows between 25-35 metres in Canada
- 40- 60 centimetres in diameter
- Slender trunk

### What Conditions and Climates do White Birch Prefer?

- Can tolerate a variety of soil types, but prefers well-drained soils
- Prefers cooler regions and non-humid areas
- Has some drought tolerance
- Needs full sun (white birch trees are shade intolerant)
- In Canada and the U.S, they can be found in northern temperate, mixedwood, and boreal forests



Images: Walter Muma, Homer Edward Price, Svetlana Tikhonova, Natural Resources Canada, K. Chayka