**Aspen Poplar**

The Aspen Poplar deciduous tree is up to 30 m in height and it has bark that is smooth and greenish-white As the tree ages the bark becomes rough and dark grey.

The Aspen Poplar is widespread throughout Alberta, it is especially important in the northern-central part of the province where it is the dominant species in the "Boreal Mixedwood" forest.

The Aspen Poplar has a simple leaf that has an oval shape with a sharp apex. It margin is a fine-rounded toothed. It’s leaf arrangement is alternate. The leaf is typically 4.0 - 7.5 cm long and has a flattened leaf stem that causes causing fluttering in wind.

The seeds of the Aspen Poplar are small and hairy and are contained in a greenish capsul.

The Apen Poplar wood is whitish to cream and relatively low in strength. It is used mainly for pulp products such as books, newsprint, and fine printing paper. Lumber is light in weight and is used for furniture, boxes and crates.

**Balsam Poplar**

The Balsam Poplar tree prefers wetter areas and in the right environment can grow up 25 m high. The bark is greenish grey at the top becoming more grey at the base. The winter buds are large and curved with a sticky balsam-smelling gum.

The Balsam Poplar is common in forestland, abandoned farmland, burned-over areas, and river banks throughout Alberta.

The Balsam Poplar leaf is simple and oval or hear shaped (chordate), it has a sharp apex and a rounded toothed margin. The leaf arrangement is alternate. The leaf is typically 7.5 - 15.0 cm long and is shiny dark green above and pale green beneath.

The seeds of the Balsam Poplar are rather small and hairy. They are kept in a dry, greenish-brown capsule which opens when it is mature.

The Balsam Poplar wood is light, soft, low in strength, greyish white to light greyish brown in colour. It is primarily used for pulp.

**White Birch**

The White Birch Tree is usually 6 to 20 m in height and has a whitish or silvery grey bark.

This species and several varieties are widespread and common along river banks and moist wooded areas through the central and northern part of the province.

The White Birch’s leaves are simple, oval and tapering to a point. They have a irregular toothed margin and an alternate branching pattern. The leaves are usually 2.5 - 19 cm long and are dark green above, paler and slightly hairy beneath.

The White Birch seeds are very small and hairy and they are found in a dry, greenish-brown capsule, opening when it is mature.

The White Birch wood is moderately heavy, strong, straight-grained and pale brown in colour. It is used for furniture and cabinets and Birch logs also make excellent fire wood.

Wood is moderately heavy, hard, strong, straight-grained and pale brown in colour. It is used for furniture, cabinets, woodenware and veneer. Birch logs also make excellent fire wood.

**Tamarack Larch**

The Tamarack Larch grows slowly and may be only 15 - 18 m in height. On moist, well drained soils however, it can grow to heights of 25 m. The bark is rough and dark grey in colour and there are numerous small rounded reddish winter buds.

The Larch tree occurs throughout central and northern Alberta, usually in muskeg and boggy areas. It will typically not be found in a forest of just this type of tree, it usually can be found mixed with the Black Spruce.

The Larch is coniferous and therefore has Needle-like leaves that are 12 - 20 in feather-like clusters. They are soft and slender, 2 - 4 cm long and light green turning bright yellow in the autumn when they fall from the tree. In fact, larches are the only needle leaved tree to shed needles in the fall.

The Larch has pollen cones (male) which are quite small and yellow. The seed cones (female) are 1 - 2.5 cm . long, reddish when young, becoming brown and almost spherical when mature. The seeds of the Larch are small and winged.

The Tamarack Larch wood is moderately hard and heavy, somewhat oily, is decay resistant and yellowish brown to reddish brown in colour. It is used for lumber for rough construction, fence posts, poles, railway ties and pulpwood.

**Lodge Pole Pine**

The Lodge Pole Pine is a tall, slender pine with little taper and a straight trunk. It can grow to 30 m or more in height. It has a thin bark, which is yellowish-brown and somewhat scaly. It is also Alberta’s Provincial Tree.

The most common and abundant tree in the Rocky Mountains and foothill regions. Occurring on the eastern slopes of the Rocky Mountains where it frequently forms dense even-aged stands as the result of fire. In areas adjacent to jack pine, the two species integrate

The Lodge Pole Pine h as needle-like leaves that are in bundles of two and are produced in dense clusters towards the ends of the branches. The needles are roughly 2.5 - 7.5 cm long and are yellowish-green.

The Lodge Pole Pine has both Male and Female Pollen cones. The male ones are in small clusters while the female ones are much larger and are pointed backwards towards the base of the branches. The scales on the cones are thickened and with a sharp spine at the tip of each scale and the seeds contained in them are winged.

The Lodge Pole Pine wood is moderately light, soft to moderately hard and white to yellowish brown in colour. It is used for lumber and plywood as well as pulp. Lumber is used mainly in general construction; other uses include furniture, siding, flooring and panels. After pressure treatment with preservatives, lodgepole pine makes excellent railway ties, utility poles and mine timbers

**Jack Pine**

The Jack Pine ranges in height from a small scrubby tree up to about 25 m depending upon growing conditions. It has thin bark that is reddish grey on young trees becoming darker grey, rough and scaly on old trunks.

The Jack Pine is common on sand hills and thin soil in central and northeastern Alberta. It can be distinguished from Lodge Pole Pine mainly by difference in form and shape of the needles and cone characteristics

The Jack pine has needle-like leaves that are, stiff, sharp-pointed and are found in bundles of two. The needles are frequently twisted and are roughly 2 - 4 cm long and a yellowish-green

Pollen cones (male) small in close clusters at the ends of young branches. Seed cones (female) borne in pairs, closed and sealed (serotinous) usually curved and pointing towards the end of the branches, smooth and exceedingly hard, often remaining unopened on the tree for several years, yellowish-grey when mature, 2.5 - 5.0 cm long, scales thickened, without prickles; seeds winged.

Wood in the Jack Pine is moderately heavy, soft and nearly white in colour. It is mainly used for pulp. Lumber is generally knotty and considerably less desirable than lodgepole pine, used primarily for boxes, crates and rough construction.

**Balsam Fir**

The Balsam Fir is usually 15 - 21 m in height. The crown is symmetrical with a narrow pyramidal shape and branches extending nearly to the ground. The bark is smooth, pale-grey with large resin blisters on young trees becoming roughened and reddish-brown on mature trees

The Balsam Fir is found in Central and northern Alberta, where it sometimes forms a scattered understorey in old growth forests.

The Balsam Fir has needle-like leaves which are distinctly flattened and rounded at the tip. The needles are arranged in two, are roughly 2 - 3 cm long and are dark green above, whitish beneath.

Pollen cones (male) of the Balsam Fir are small and yellowish-red. The seed cones (female) are an interesting dark purple and are roughly 5 - 10 cm long.

Wood from the Balsam Fir is light, soft, relatively low in strength, somewhat brittle, and white in colour. It is suitable for pulp and for making boxes and crates. Bark on young trees contains blisters filled with resin (Canada balsam) which can be used in cementing lenses and mounting specimens for observation with a microscope. Balsam fir also makes a good Christmas Tree.

**Douglas Fir**

The Douglas Fir is a large tree up to 25 m high with a massive trunk and somewhat drooping branches; bark on young trees smooth and reddish brown becoming 10 - 15 cm thick and deeply fissured on old trees.

The Douglas Fir is found along the east slopes of the Rocky Mountains from Jasper Park to Waterton and widespread in the Porcupine Hills.

The needles of the Douglas Fir are somewhat flattened and 2 - 3 cm long which taper at the base to a very short stalk and are bright blue green above and pale beneath.

The Pollen cones (male) of the Douglas Fir are bright red while the seed cones (female) tend to droop are reddish brown color. The seeds are broadly winged.

The Douglas Fir wood is moderately heavy, hard and strong with reddish brown colour. Primarily used for lumber for building construction. Other uses may include railway ties, boxes and crates. Douglas-fir also makes good Christmas trees.

**Black Spruce**

With its characteristic "club top", black spruce is a small, slow growing tree, 9 - 15 m high, with the lower branches often draped with "old-man's beard" lichen. On well-drained mineral soils however, it can attain heights of 25 - 30 m. Typically, bark is thin, scaly and greyish with the inner bark, usually olive green.

The Black Spruce occurs throughout central and northern Alberta in wetter areas.

The Needle of the Black Spruce are short, thick, 4 sided, 1 - 2 cm long and blue green.

The Black Spruce pollen cones (male) are small and dark red. The seed cones (female) are semi-closed, purplish-green. The seeds of the Black Spruce are small and winged.

Black spruce is one of the most harvested trees in Canada, however, it is generally not harvested in Alberta. The wood is moderately light, soft, relatively strong, resilient, straight grained and nearly white colour. Therefore, in some provinces, the wood is of great importance to pulp and lumber industry.

**Blue Spruce**

The Black Spruce grows to about 23 m but when planted in parks and gardens it seldom exceeds 15 m. The growth rate is slow for the first three to five years after planting but will increase annually. It has scaly grey bark on the trunk with yellowish-brown branches. It is easily distinguishable due to the blue color of the needles.

Colorado spruce is native to the Rocky Mountains in the Western United States. This is the most widely planted of the spruce.

The Blue Spruce has blue-green needles that are up to 3 cm long. The pale brown cones of the Blue Spruce are up to 10 cm long.

The Blue Spruce cones are from 6 to 10 cm long and are straw coloured with thin scales, found in the upper branches of the tree. The winged seeds are shed in August and the cones drop during fall and winter. Cones require one year to mature. Needles last for three to four years then turn yellow and fall from the inside of the tree.

Blue spruce has been little used for lumber or wood products because it is rarely abundant in nature and the wood is brittle and often full of knots