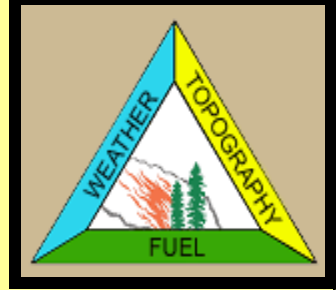




TOPIC 45A

SASK. FUEL TYPES

Tamarack



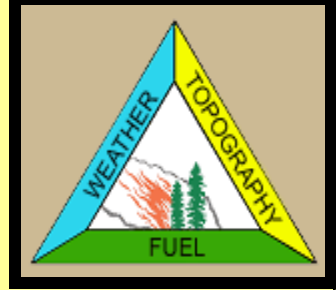
TAMARACK – *Larix laricina*

Appearance	The only native coniferous tree in our region to shed its needles in the fall Good for fence posts and rails Used for ship building in the early days due to its resistance to moisture
Height	Will generally grow 6 to 15 metres in height
Roots	Root system is shallow, but wide spreading, to provide moderate wind firmness Roots are susceptible to intense fires because they are shallow
Stands	Branches are long, slender and pliable
Soils	Found in swamps and wet mineral soils
Needles	Needles grow on small woody projections from the branch and in clusters of 10 to 20 needles per cluster Needles are 1-2cm long and are more or less flat During the summer months the needles are pale green to blue green in color and turn bright yellow in the autumn and then drop off for the winter
Cones	Seed cone is 10 to 20cm long and broadly egg shaped
Reproduction	Tamarack uses layering as its method of vegetative reproduction Common in the northern portion of its range but this method of reproduction is not common in its southern range
Bark	Bark is thin, smooth and grey when young and turn to scaly and reddish brown in color when mature Susceptible to fire damage due to the thin bark





TOPIC 45B
SASK. FUEL
TYPES
Trembling Aspen



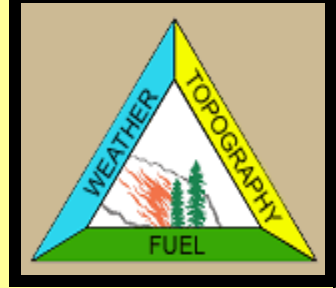
TREMBLING ASPEN (WHITE POPLAR) –
Populus tremuloides

Appearance	Aspen is one of the first species to colonize areas that have been burnt over by fire
Height	Can reach up to 20 metres and have been known to grow up to 30 metres
Roots	Pure aspen stands share the same root system – their leaves will then change color and drop generally at the same time
Stands	Aspen can be found in pure stands but is also commonly mixed with white spruce, black spruce and jack pine Referred to as a nurse tree and is usually succeeded by more shade tolerant trees such as white spruce and balsam fir Genetically identical to parent trees – clones can cover several hectares
Soils	Aspen prefers dry ridges to rich moist soils
Leaves	Trembling aspen is easy to distinguish from its cousin black poplar as the stems of the leaves are flattened (black poplar stem is round) – this is what makes the leaves quiver in the wind
Reproduction	More than one method of reproduction Female aspen produces millions of seeds each year – seed once air-born can carry as far as 30 km in the wind – seldom finds suitable conditions to germinate Most suckers, which in turn grow into a new tree
Bark	Bark is greenish white and smooth in young trees and becomes blackish and rough along the lower trunk and around branch bases with age





TOPIC 45C
SASK. FUEL
TYPES
Black Poplar

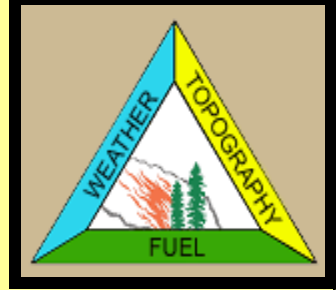


BALSAM (BLACK) POPLAR –
Populus nigra

Appearance	A tall tree native to Europe – found growing in a large range of climates Considered an invasive species in some areas
Height	Can reach up to 190 feet at maturity but usually grows 60 to 90 feet tall
Stands	Has a multiple-stemmed, slender, columnar shape, often leaning to one side Lower branches grow close to the ground and bend upwards
Soils/Climate	This tree can't tolerate sandy soils, drought or salt
Leaves	Foliage is used to identify this poplar – it has dense, coarse-textured foliage comprised of deciduous, medium-green leaves that are alternately arranged on the stems Leaves are triangular and 2-4 inches long with serrated edges Stems are round compared to the flat stems on the leaves of the trembling aspen (white poplar)
Reproduction	Deciduous tree that can spread by seed Catkins are produced by only the male trees – catkins are reddish to yellowish-green and hang 2-3 inches long and emerge in the early spring before the leaves
Bark	Bark should be smooth and greyish-green in young trees, turning in maturity to a greyish-black color, thick and with deep, irregular furrows



TOPIC 45D
SASK. FUEL
TYPES
White Birch



WHITE BIRCH – *Betula papyrifera*

Appearance	White birch is distributed throughout most of Canada
Height	Small to medium sized tree and will grow to a height of 15 metres
Roots	Roots will spread to a distance of at least twice the tree height.
Stands	Shade intolerant so it thrives on burned-over and cut over areas – often mixed with other species Twigs are brown, slender and hairy
Soils	Grows in a wide variety of soil types, but does best on well-drained sandy soil
Leaves	Leaves are deeply cut (doubly serrate) giving the appearance of being lacy.
Reproduction	Birch will reproduce by seed Birch also has a second method of reproduction – after a fire or after a cut over, the tree will begin to develop sprouts around the base of the tree – it is this method of reproduction that has allowed the birch to maintain itself as a prominent occupant of our forests
Bark	Bark peels into papery strips that can be white to yellowish to copper brown in color Bark of the birch is smooth and is marked with brown horizontal lines of raised pores

