Spring

Spring is an awakening time for Minnesota trees. As the air warms, sap rises from the roots, carrying nourishment to the branches.

Coniferous trees develop new shoots. The shoots expand to form new stems and needles. On deciduous trees, buds begin to swell. Then they open into new shoots and leaves.

Blooming Branches

Most deciduous trees reproduce by forming flowers. In some species, each flower has both male and female parts. Others have separate male and female flowers. In yet others, male and female parts develop on separate trees.

A tree that has conspicuous catkins hanging from its branches in the spring probably is wind-pollinated.

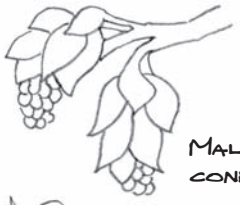
For seeds to form, pollen from the male parts must come into contact with the female parts. In many species, pollen is carried by wind. In species with fragrant or showy flowers, pollen may be carried by insects.

Deciduous tree seeds are distributed in various ways, too. The wind carries seeds with wings, such as maple and aspen. Birds and mammals spread seeds hidden in fruits and nuts. Water and gravity also carry seeds away from their parent tree.

New Cones, New Life

Coniferous trees have two kinds of cones. The male cones produce pollen. The wind carries pollen through the air. Some lands on female cones. The pollen and eggs join to make a new seed. The seeds have tiny wings that help them fly through the air when they fall from the cones.

A new tree develops when pollen from the male cone fertilizes the female cone.



Male cone

Female cone

Red pine cone

Red pine seed

Many trees can grow new trunks without seeds. Aspens send out shoots from their roots. As a result, they can cover a large area soon after trees are harvested. Cottonwoods can sprout from green sticks. Sometimes fence posts made from cottonwood sprout roots and begin to grow! Some trees grow new trunks from stumps.

Maple seeds have "wings" that allow the wind to help disperse them.

Aspen can reproduce by suckering.

Oak can reproduce by stump sprouting.