MASTER GARDENER
COLORADO STATE UNIVERSITY
EXTENSION

CMG GardenNotes #617
Pruning Evergreens

Most types of evergreen trees and shrubs need little to no pruning. Pruning may make the new growth bushier but will not effectively control size. Select plants based on mature size to minimize pruning needs. If frequent pruning is necessary to keep plant growth in bounds and prevent interference with a walk, driveway, or view, consider replacing the plant. Evergreen trees and shrubs are pruned according to the species growth characteristics.

Pruning Evergreen Trees

On evergreen trees, avoid pruning the central leader (trunk). This results in the development of multiple leaders that are prone to wind and snow damage. If the central leader is killed back, select one branch to become the new leader and remove potentially competing leaders.

Never allow codominant trunks (trunks of similar size) to develop. If multiple trunks begin to develop, select one and remove the others.

For structural integrity on evergreen trees, all side branches should be less than half the diameter of the adjacent trunk (less than one-third is preferred). If the diameter of a side branch is too large, prune back part of the needled area to slow growth or remove the branch entirely back to the trunk. This is similar to a heading or reduction cut in deciduous trees.

Removing Large Branches on Evergreen Trees

New needles will not grow from branches without needles. When a side branch is removed on an evergreen, cut back to the trunk just outside the ***branch collar*** (the enlarged connecting area on the trunk around the limb).

Do not cut into or otherwise injure the branch collar. Do not make flush cuts; this is removing the collar and cutting flat to the trunk. Remove the branch using a three-cut method. [**Figure 1**]

Cut One. Coming out twelve to fifteen inches from the trunk, make an undercut a third to halfway through the branch.

Cut Two. Moving a couple of inches out past the first cut, make the second cut from the top, removing the branch. This double-cut method prevents the weight of the branch from tearing the branch below the branch collar.

Cut Three. Make the third and final cut just outside the branch bark collar. Take extra caution to not cut into or otherwise injure the branch bark collar. This cut should be perpendicular to the branch that is being removed. A good cut will make a circular shape.

For additional details on pruning cuts, refer to CMG GardenNotes #612, *Pruning Cuts*.
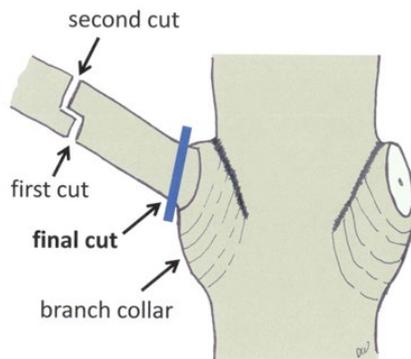
Figure 1. On evergreen trees, remove large branches back to the trunk using a three-cut method. Make the final cut just outside the branch collar. Needles only grow from the growing tips out and will not develop on the interior branch wood without needles.

Pruning Spruce, Fir, and Douglas Fir

Spruce (*Picea* spp.), fir (*Abies* spp.), and Douglas fir (*Pseudotsuga menziesii*) generally need little to no pruning when planted in the right place.

On young trees, pruning is useful in situations where bushier <u>new growth</u> is desired. Because these species produce some side buds, branch tips can be removed encouraging side bud growth. Prune late winter or early spring. [**Figure 2**]

Figure 2. Pruning spruce and fir back to a side bud or side branch will encourage growth of side branches. Line drawing by CSU Extension.
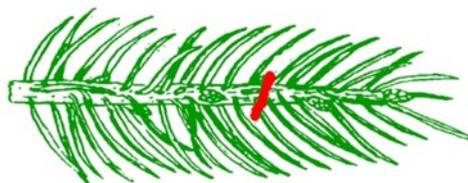
Spruce, fir, and Douglas fir that are over-growing their space are somewhat tolerant of being pruned back if they are not pruned back past the needles. However, with constant pruning the branches may begin to show needle browning and dieback. In situations where the branch must be pruned back past the needles, remove it back to the trunk.

In landscape design, small to midsize evergreen trees, with their pyramidal form, generally look best with their lowest branches allowed to drape to ground level.

On large trees, primary growth occurs at the top with minimal growth at the lower levels. Due to slow growth, pruning of the lower branches may give a "pruned look" for a long time. On large trees, limb up lower branches only if they are in the way.

Very slow-growing species, like the dwarf Alberta spruce (*Picea glauca* var. *albertiana* 'Conica'), blue nest spruce, aka dwarf black spruce (*Picea mariana* 'Nana') and bird's nest spruce (*Picea abies* 'Nidiformis') are rather intolerant of pruning.

Pruning Pine

Pines generally need little to no pruning.

On young plants, if a more compact <u>new growth</u> is desired, "pinching" may be helpful. Using the fingers, snap off one-third of the new growing tips while in the "candle" stage (in the spring, when young needles are in a tight cluster and elongated but needles not expanding). Avoid using pruners or a knife, as it will cut the remaining needles, giving a brown tip appearance. [**Figure 3**]
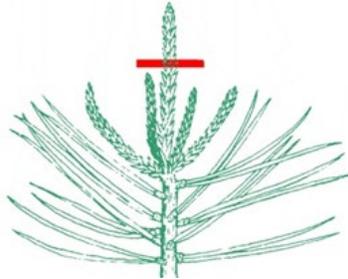

Figure 3. On pines, for bushier new growth "pinch" growing tips by snapping off one-third of the "candle" tips with the fingers. Because pines produce few side buds, they are intolerant of more extensive pruning. Line drawing by CSU Extension.

Because pines produce few side buds, they are intolerant of more extensive pruning. If the terminal bud on a branch is removed, growth on that shoot is stopped, with additional growth occurring only from existing side branches. Do not shear pines. (Cut needles will stay cut and not grow back.)

Like other evergreen trees, small to midsize pine trees look best (from the landscape design perspective) with their lowest branches allowed to drape down near ground level. When a lower branch must be pruned back for space issues, remove it back to the trunk. Mugho pine shrubs are a good candidate for pinching needles to keep them short and bushy.

Pruning Juniper and Arborvitae

Juniper and arborvitae generally need little to no pruning.

They may be pruned at any time except during subzero weather or late summer. Needles form a waxy layer in summer that prevents sunburn of the needles. The best time is early spring, prior to new growth.

The best pruning method is to cut individual branches back to an upward growing side branch. This method of pruning is time-consuming but keeps the plant looking young and natural. [**Figure 4**]

Figure 4. Pruning junipers and arborvitae back to a side shoot hides the pruning cut. Line drawing by CSU Extension.

While shearing is quick and easy, it is not recommended, especially after midsummer. Shearing creates a dense growth of foliage on the plant's exterior. This in turn shades out the interior growth, and the plant becomes a thin shell of foliage. Frequently sheared plants are more prone to show needle browning and dieback from winter cold and drying winds.

Any pruning that tapers in toward the bottom of the plant will lead to thinning of the lower branches due to shading. To keep the bottom full, the base of the shrub needs to be wider than the top portion.

It is common to see junipers and arborvitae that have overgrown their space. Because new growth comes ONLY from the growing tips, branches cannot be pruned back into wood without needles. If the shrub is pruned back to bare wood, it will have a permanent bare spot.

For shrubs that are getting too large, it is better to prune them back as they begin to overgrow the site. Pruning back severely overgrown shrubs generally gets into wood without needles. Consider replacing severely overgrown plants with smaller cultivars or other species.

Junipers and arborvitae growing in the shade are rather intolerant of pruning due to slow growth rates.

Reviewed May 2023