

Tree Pruning 修剪樹木

Translated by¹:
翻譯：

Introduction 序文

This pruning guide is designed for beginning tree pruners and is written for the Puget Sound region of the Pacific Northwest (United States). Please use this to help you, your friends and neighbors understand correct pruning techniques. This guide was made possible by funding from the USDA Forest Service and the King County Department of Natural Resources.

這個樹木修剪指南是為初級樹木修剪者和西北太平洋(美國)普捷灣地區而設計。請用這個指南來幫你, 你的朋友, 和鄰居明白正確的樹木修剪技術。這個指南是由美國農業局森林管理和景郡天然資源局贊助而成。

Depending upon where you live, you may be required to get a permit for tree pruning and removal. These requirements vary from city to city, borough, county, state, and country. Please consult your local agriculture or forestry bureau for more information.

根據你住的地方的不同, 你可能需要獲取許可證來修剪和移去樹木。這些規定會因城市, 地區, 郡, 州和國家而異。請詢問你當地的農業或森林管理局去獲取更多的資料。

The City of Seattle requires a permit for removal of street trees or to hire a professional to prune. Permits are also required for pruning and removal of trees in critical areas (wetlands or steep slopes). For information, telephone 206.684.5008 or go to: <http://www.seattle.gov/transportation/forestry.htm>

西雅圖市規定街道上的樹的移去需要許可證或僱用專業人員來修剪樹木。在危險的地段(濕地或斜坡)修剪和移去樹木亦需要許可證。欲知更多資料, 請打電話到 206. 684. 5008 或瀏覽: <http://www.seattle.gov/transportation/forestry.htm>。

Guidelines for when to prune 修剪時的指引

- *Prune to remove broken branches or to get street and sidewalk clearance anytime.*
修剪除去斷了的樹枝或令到街道和人行道在任何時候都沒有障礙物。
- *Prune fruit trees when they are in winter dormancy before the buds swell or, in the summer.*
果樹應在冬天花苞發芽前或在夏天前修剪。
- *Prune willow and poplar trees late in the summer.*
柳樹和楊樹應在夏末時修剪。
- *Prune elm trees in the Pacific Northwest only between October 15th and April 15th (while leaves are off the tree) to minimize damage from the elm leaf borer and Dutch Elm Disease.*
西北太平洋地區的榆樹只能在十月十五日至四月十五日(當樹葉脫落時)期間修剪, 這樣可以將受到害蟲和荷蘭榆樹病的損害減到最低。
- *Prune birch, beech and maple trees after a hard frost to lessen sap flow.*
樺樹, 山毛櫸和楓樹應在結霜之後修剪, 以減少樹液的流失。

Why prune trees? 為何修剪樹木?

- *Prune to increase visibility and provide clearance for pedestrians and vehicles. In Seattle, street tree branches must provide 8 feet over the sidewalk and 14 feet above the street at the curb.*
修剪以提高能見度和提供更多空間給行人和車輛。在西雅圖, 街上的樹枝必須要離開人行道至少 8 英尺和車道邊緣離地 14 英尺以上。
- *Prune to allow for light penetration or to frame a view.*
修剪以獲得充足的光線和令外觀更美。

- Prune to remove broken, diseased, or dead branches and suckers from the roots or root collar.
修剪以除去斷掉，有病或死去的樹枝和根部的寄生蟲。
- Prune to direct growth and improve the structure in young trees.
修剪指引幼樹的成長和改善其造型結構。
- To increase fruit production.
增加果實產量。
- Prune trees to encourage and direct growth and accentuate a tree's beauty, not to inhibit growth.
修剪以促進和指引樹的成長，突出樹的美觀而不阻止樹的成長。

By properly removing branches, we make sure that trees will mature to their natural shapes and preserve their natural beauty, vigor, and health. A little careful pruning early can protect your tree's branches from breaking or becoming too crowded as the tree grows.

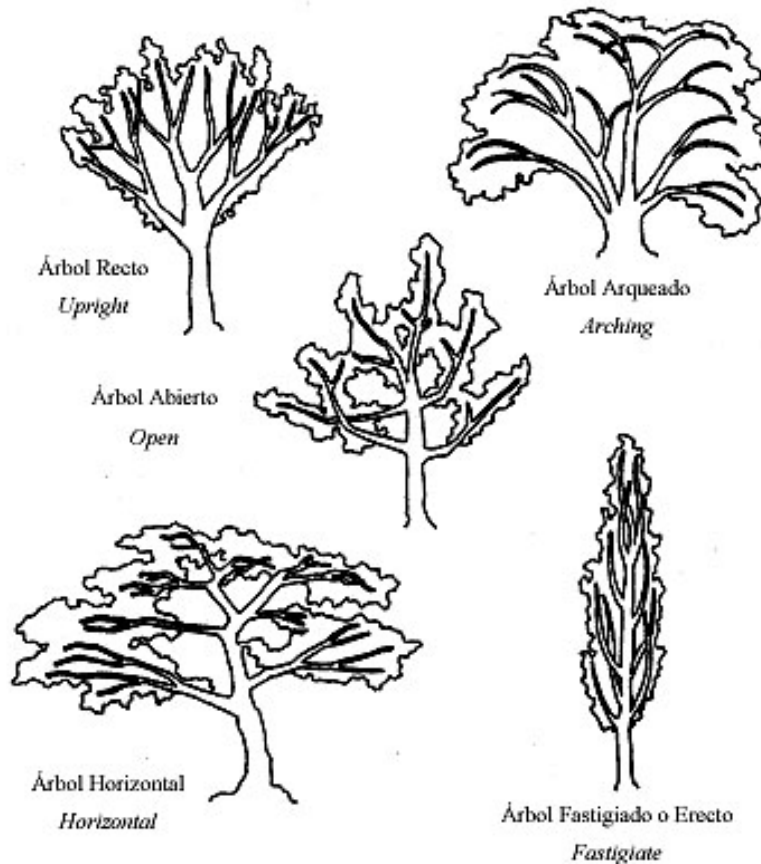
通過正確地剪去樹枝，我們可以確定樹會成長到它們的自然形態和保持它們的自然美，旺盛和健康。早期細心地修剪可避免樹枝斷掉或生長得太密。

Most pruning involves removing a few lower branches and when done correctly, trees require less pruning as they mature. Good pruning never changes the shape of the tree.

大多數的修剪需要剪去一少部分較低的樹枝，如果修剪得正確，在樹成長時就可以少一點修剪。好的修剪是不會改變樹的形態。

Examples of the natural shape and form of trees.

自然外觀及樹的型式個例



Note 註解:

Upright= 直立式

Open= 開放式

Arching=拱門式
Horizontal= 水平式
Fastigate= 上升式

Natural Target Pruning – Learn where and how to make pruning cuts.

自然選擇修剪 – 學習在哪里和怎樣修剪。

By using the three step method when pruning, trees will respond by quickly closing over pruning cuts, remaining healthy, and looking nice. Branches are actually made from their own wood which is held onto the trunk by yearly wrappings of new growth. The branch collar is where the branch wood and the trunk wood meet. Making the pruning cut just outside this collar is important for tree health.

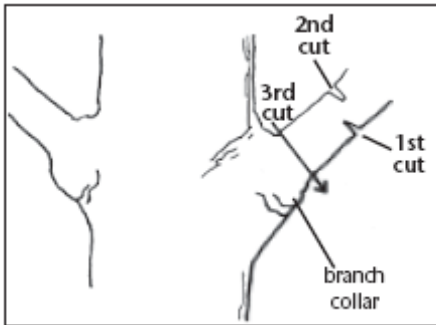
在修剪時，用這三個步驟的方法，樹木就會很快地恢復切口，保持健康和變得好看。樹枝是由樹幹久年生長累積而成的，樹環（結）是樹幹與樹枝的銜接處，為了樹的健康，必須在樹環（結）外作切割。

The angle of your pruning cut should expose the least amount of surface area. Use the three cut method to ensure that the bark does not tear as the branch falls away, causing a bigger injury to the trunk.

修剪的角度應該盡量將表面面積減到最少。用三次剪切的方法來確定當樹枝脫落的時候樹皮不會撕落，避免引起對樹幹更大的損害。

Three-step method for removing large branches

修剪大樹枝時的三個步驟的方法



Note/註解:

- First Cut = 第一剪
- Second cut = 第二剪
- Third cut = 第三剪
- Branch collar = 分枝銜接處

Use the three cut method to remove branches larger than $\frac{3}{4}$ inch or 2 centimeters. On narrow angled branch attachments, you may have to cut entirely from the outside upwards.

用三次剪切的方法來修剪比 $\frac{3}{4}$ 寸或 2 厘米大的樹枝。有關角度小的分枝，你必須在外面向上部份作整個切割。

Types of Pruning Cuts

修剪的類型

Thinning Cuts

薄削

Thinning cuts are better for the health of a tree. Remove an entire branch by making a good pruning cut where the branch would have grown from a bud on another branch or the tree trunk. Thinning cuts are used to open or raise the tree canopy and can also be used to remove select branches to improve views.

薄削對一棵樹的健康比較好。做一個好的切割去移動整個分枝，可移植在其它樹枝或樹幹上。削薄可用作展發或提高樹冠同時也可用來移除樹枝以增加美觀。



Note:
註解:

Thinning removes an entire branch back to another branch or to the trunk of the tree
薄削將一整支樹枝剪回到另外的一支樹枝或樹幹上。



Note: Do not remove more than 25% of the canopy of the tree in one growing season or over a five year period otherwise you stimulate sprouts that grow quickly and are unhealthy and unsightly and could be unsafe.

註解：不要在一个生長季節里或在 5 年期間移去多於 25% 的樹冠，不然您就會刺激到樹芽加快生長。這是不健康，不美觀和可能是不安全的。

Heading Cuts
尖剪



Selective heading cuts are used to shorten the branch and change the direction of growth when a thinning cut will remove too much wood. Always cut above a bud facing the direction of the desired new growth or to a side branch that is at least half the diameter of what you are removing. Making a **non selective** heading cut removes a branch that leaves a stub and open end that can either take a long time to cover with bark or be a point of entry for disease. These cuts are hardest on a tree and usually result in a quick regrowth of lots of shoots.

選擇性的尖剪是用來修短樹枝和改變樹枝的生長方向，而薄削則是移去多餘的樹木。切口必須在發芽之上及樹枝成長的方向。做一個**非選擇性**的尖剪會在剪去樹枝時留下殘端和缺口。它將會需要一段長時間去恢復或者成爲一個病害的入口。



Non selective heading cut results in lots of sprouts
非選擇性的尖剪會導致很多新芽

Good Tips to Avoid Bad Pruning

避免不正確修剪的提示

Use the 3 cut method to shorten branches before removal.

在除去樹枝之前，用三次剪切的方法先剪短樹枝。

This will prevent the branch from damaging the trunk as it falls to the ground, as shown in drawings below.

這樣可避免在樹枝斷落到地上時，樹幹所受到的損害，如下圖。



Ripped branch from no undercut

沒有切除下部的斷枝

Do Not Top Trees!

不要剪樹頂!

Topping cuts are a non selective heading cut that causes the branch to dieback or form weak, rapid, bushy sprouts that are unsightly. If these sprouts are allowed to grow, they can become unsafe from being so heavy and yet just attached to the outer bark.

頂剪是一個非選擇性的修剪方法，它會令到樹枝枯萎和長出虛弱，險峻，濃密和不美觀的芽。如果容許這些芽繼續生長，它們可能變得不安全因為它們長得太重和它們只是貼附在外面的樹皮上。



Regrowth of topped small tree with lots of sprouts

剪過頂部的小樹重新長出很多芽

Trees give us so much
Please keep them healthy and safe!
樹木給予我們很多
請保持樹的健康和安全!

Reproduction encouraged! This Tree Pruning Guide was made possible by a grant from the King County Department of Natural Resources and Parks and funds from the USDA Forest Service and Washington Department of Natural Resources, with other assistance from the City of Seattle, awarded through the Natural Resource Stewardship Network. Assistance was also provided from PlantAmnesty, the University of Nevada Cooperative Extension, Forestry students at the University of Washington, and students in the Wilderness Inner-city Leadership Development program.

請隨便複印! 這個樹木修剪指南是由景郡自然資源和公園部門與美國農業局森林管理和華盛頓州自然資源部，連同由自然資源管理組織給予西雅圖市其它的幫助所授權制成。PlantAmnesty, 內華達大學 Cooperative Extension, 華盛頓大學的森林學學生, 和 Wilderness Inner-city Leadership Development 的學生亦提供了幫助。

It is intended to help more people understand how to prune trees. If you have concerns with the translation, please email trees@seattle.gov or telephone 206.684.TREE.

這個指南是用來幫助更多人去明白如何修剪樹木的。如你對這份翻譯有任何意見，請發電子郵件到 trees@seattle.gov 或致電到 206.684.TREE.



City of Seattle



Washington Department of
Natural Resources