

REASONS FOR PRUNING

1. Prune to promote plant health.

Remove dead or dying branches injured by disease, severe insect infestation, animals, storms, or other adverse mechanical damage. Open up the canopy of the plant to improve both air and light penetration Remove branches that rub together.

2. Prune to maintain plants; intended purposes in a landscape

Encouraging flower and fruit development, good examples are Butterfly bush or Landscape Roses or Grapes. Maintaining a dense hedge foliated from top to bottom Maintaining a desired tree form or specimen plant.

3. Prune to improve plant appearance

Appearance in the landscape is an important part to a plant's usefulness. For most landscapes, a plant's natural form is best. Avoid shearing shrubs into Ball shapes or Square shapes. Alter a plant's natural form only if it needs to be confined or trained for a specific purpose. Best pruning jobs are those that go un-noticed! Prune to:

- Control plant size
- Keep plants proportioned to scale of the landscape
- Remove unwanted branches, waterspouts, suckers that detract from the plants appearance.
- For security purposes, prune shrubs or tree branches that obscure the entry to your home.

Pruning should be done from a young age...not as a problem solving dilemma when it's too late....train them young.

Pruning is really the best preventive maintenance a young plant can receive. It is critical for young trees to be trained to encourage them to develop a strong structure. (See Figure 1 on page 2)

Too many young trees are not pruned at all for several years. By then it may become a major operation to remove bigger branches, and trees may become deformed.

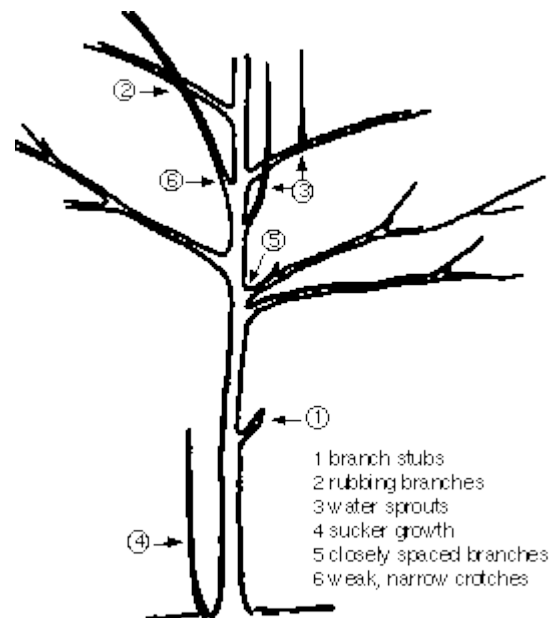
Think about it: If transplanting reduce the size of the top of the plant.....it makes moving easier and is easier on the plant to re-establish itself. Use Master Nursery Root Master with NAA and Vitamin B-1 to aid in re-establishment. Auxin a growth hormone stimulating both root and stem elongation will be enhanced in the plant with this NAA application. Along with proper soil preparation of good soil amendments mixed 50/50 with the parent soil....consider also adding Mycorrhizae, (Mykes) a beneficial fungus, a symbiotic mutual and beneficial

relationship between the plant and the fungus creating establishment that makes the plant more stress and drought resistant with healthy adventitious roots.

At planting, remove only diseased, dead, or broken branches. Begin training a plant during the dormant season following planting.

- Prune to shape young trees, but don't cut back the leader.
- Remove crossing branches and branches that grow back towards the center of the tree.
- As young trees grow, remove lower branches gradually to raise the crown, and remove branches that are too closely spaced on the trunk.
- Remove multiple leaders on evergreens and other trees where a single leader is desirable
- When planting bare root deciduous shrubs, thin out branches for good spacing and prune out any broken, diseased, or crossing/circling roots.

Figure 1. Prune this young tree to remove:



PRUNING LARGE ESTABLISHED TREES

It is recommended to leave the pruning of large older trees to qualified tree care professionals who have the proper equipment.

Crown Thinning-selectively removing branches on young trees throughout the crown. This promotes better form and health by increasing light penetration and air movement. Strong emphasis is on removing weak branches. (Don't overdo it on mature trees.)

Crown Raising — removing lower branches on developing or mature trees to allow more clearance above lawns, sidewalks, streets, etc.

Crown Reduction — removing larger branches at the top of the tree to reduce its height. When done properly, crown reduction pruning is different from topping because branches are removed immediately above lateral branches, leaving no stubs. Crown reduction is the least desirable pruning practice. It should be done only when absolutely necessary.

PROPER BRANCH PRUNING

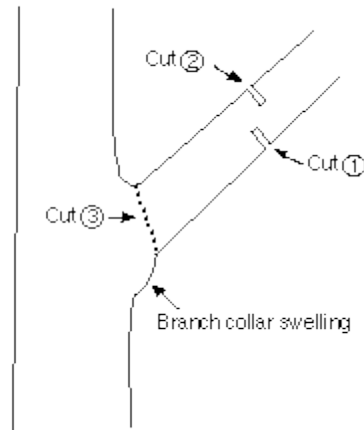
- To shorten a branch or twig, cut it back to a side branch or make the cut about 1/4 inch above the bud.
- Always prune above a bud facing the outside of a plant to force the new branch to grow in that direction.

Figure 2. Pruning small branches



Pruning large branches (Figure 3, below)

- To remove large branches, three or four cuts will be necessary to avoid tearing the bark. Make the first cut on the underside of the branch about 18 inches from the trunk. Undercut one-third to one-half way through the branch. Make the second cut an inch further out on the branch; cut until the branch breaks free.
- **Before making the final cut severing a branch from the main stem, identify the branch collar. The branch collar grows from the stem tissue around the base of the branch. Make pruning cuts so that only branch tissue (wood on the branch side of the collar) is removed. Be careful to prune just beyond the branch collar, but DON'T leave a stub. If the branch collar is left intact after pruning, the wound will seal more effectively and stem tissue probably will not decay.**



- The third cut may be made by cutting down through the branch, severing it. If, during removal, there is a possibility of tearing the bark on the branch underside, make an undercut first and then saw through the branch.
- Research has shown wound dressing is not normally needed on pruning cuts. However, if wounds need to be covered to prevent insect transmission of certain diseases such as oak wilt pruning paints are available.

Timing: The late dormant season is best for most pruning. Pruning in late winter, just before spring growth starts, leaves fresh wounds exposed for only a short length of time before new growth begins the wound sealing process. Another advantage of dormant pruning is that it's easier to make pruning decisions without leaves obscuring plant branch structure...little or no disease or insect issues when dormant. Pruning at the proper time can avoid certain disease and physiological problems:

Think about it.....allow the manufacturing part of the plant, the foliage, to translocate food reserves into the root system for storage in fall and early winter. The next step is dormant pruning. When the plant "wakes up" in spring the stored food reserves sent up the pipeline can be concentrated on less foliage, branches, flowers to enhance their performance.

- To avoid **oak wilt** disease **DO NOT** prune Oak trees during the growing season. If oaks are wounded or must be pruned during these months, apply wound dressing to mask the odor of freshly cut wood so the beetles that spread oak wilt will not be attracted to the trees. Prune Oak trees in winter!
- To avoid disease in general prune when trees are still dormant in late winter. If they must be pruned in summer, avoid rainy or humid weather conditions.
- Prune apple trees, including flowering crabapples, mountain ash, hawthorns and shrub cotoneasters in late winter (February-early April). Spring or summer pruning increases chances for infection and spread of the bacterial disease

fireblight. Again diseases like Apple scab can be lessened by pruning to open up the canopy of the tree and allowing better light penetration and air movement across the foliage.

Trees and shrubs that **bloom early** in the growing season on last year's growth should be pruned immediately after they finish blooming... examples like:

Cherry trees	Flowering Pear	Juneberry
Azalea	Forsythia	Lilac
		Magnolia

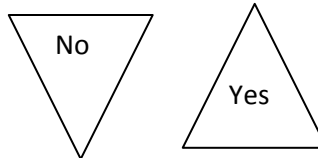
Shrubs grown primarily for their **foliage** rather than showy flowers should be pruned in spring, before growth begins.....examples like:

Nishiki Willow	Dogwood shrubs	Purpleleaf sandcherry
Barberry	Ninebark	Smokebush
Burning bush		Sumac

Think about it.....Shrubs that bloom on new growth may be pruned in spring before growth begins..... an example being *Paniculata Hydrangeas* like 'Limelight'. Plants with notorious die-back such as *Clematis* and *Landscape Shrub Roses* or *Buddleia* should be pruned back to live wood. Shrubs that bloom on the previous year's growth like *Lilacs* or *Macrophylla Hydrangeas* should only be pruned if they need it immediately following their blooming period.

PRUNING HEDGES:

After the initial pruning at planting, hedges need to be pruned often. Once the hedge reaches the desired height, prune new growth back whenever it grows another 6 to 8 inches. Hedges can be pruned twice a year, in spring and again in mid-summer, to keep them dense and attractive. **Prune hedges so they're wider at the base than at the top, to allow all parts to receive sunlight and prevent that "naked look" at the bottom. Establish an inverted vase shape.**



RENEWAL PRUNING FOR OLDER OR OVERGROWN SHRUBS: The 1/3rd rule to entire "Stumping"

Every year remove up to **one-third** of the oldest, thickest stems or trunks, taking them right down to the ground. This will encourage the growth of new stems from the roots.

Once there are no longer any thick, overgrown trunks left, switch to standard pruning as needed.

Think about it: “Stumping” can be done to flowering shrubs like Lilacs or Rhododendrons or evergreens like Yews for example. In this process overgrown and “woody” plants are cut back severely.....even to a few feet above the ground. This creates an “ugly” plant for a while but the rejuvenated “sticks” quickly become new healthy invigorated growth aggressively foliating and flowering. Stumping is best done right after the plant’s normal bloom period or before a prolonged period of growing season combined with a feeding to stimulate new growth (June is a great month for “stumping”) Examples of plants to “stump” for rejuvenation are: Lilacs, Rhododendrons, Landscape Roses, Burning Bush, Shrub Dogwoods, Wisteria, Rhododendrons, Holly, Privet or hedges, Taxus.

Vines: A “Root” awakening

Many vines like Wisteria, Honeysuckle or Trumpet Vine need to shown who is boss in order to bloom “floriferously”..... Vines will grow and grow in lieu of producing blooms if you let them. A little stress in their lives make them better citizens and they’ll bloom where they stand for everyone’s benefit. Give them a “root” awakening with a root pruning at the base and some heading at the top so the plant blooms in lieu of a focus on producing more growth and foliage. A “tough love” pruning combined with a feeding of a high phosphorus fertilizer will stimulate blooms. Pruning of climbing Roses and feeding will also stimulate bigger and better blooming.

PRUNING EVERGREENS:

With few exceptions, evergreens (conifers) require little pruning. Different types of evergreens should be pruned according to their varied growth habits.

Spruces, firs and douglas-firs don’t grow continuously, but can be pruned any time because they have lateral (side) buds that will sprout if the terminal (tip) buds are removed. It’s probably best to prune them in late winter, before growth begins. Some spring pruning, however, is not harmful.

Pines only put on a single flush of tip growth each spring and then stop growing. Prune before these “candles” of new needles become mature. Pines do not have lateral buds, so removing terminal buds will take away new growing points for that branch. Eventually, this will leave dead stubs. Pines seldom need pruning, but if you want to promote more dense growth, remove up to two-thirds of the length of newly expanded candles. Don’t prune further back than the current year’s growth.

Arborvitae, junipers, yews, and hemlocks grow continuously throughout the growing season. They can be pruned any time through the middle of summer. Even though these plants will tolerate heavy shearing, their natural form is usually most desirable, so prune only to correct growth defects.

Here are some random specific plants with my recommendations for timing based on years of telephone calls and questions for the Flowerland show.....

A general rule of “Green Thumb” is to prune blooming plants right after they are done blooming. Prune spring bloomers right after blooming, pruning summer and fall plants when dormant in winter or early spring. An exception would be summer blooming Macrophylla Hydrangeas (see specifics below) With perennials divide spring bloomers in late summer or fall and summer and fall bloomers like Hosta or Mums in early spring. Here are some specific commonly asked about plants.....

- ***Ornamental Grasses:*** Prune in March or April. Cut to a few inches from the ground. Leaving too much dead stem from the previous year will eventually create the dead “halo” or “hurricane” effect in the center of the clump. Division (which is difficult hard work) should be done every few years to again avoid the dying center look.
- ***Buddleia or Butterfly Bush:*** Some Winters it dies to the ground and acts like a perennial. You can cut all old wood off as it will grow from the base. Other winters some of the woody tissue remains viable and sprouting occurs along the woody stem. Hard pruning is best because the harder it’s pruned the more floriferous it tends to be. Recommend cutting the woody stems to 12 to 24 inches above the ground. Some people like to leave the dead blooms on after the season for winter interest, other people cut them off to avoid volunteer seedlings. Feel free to prune, feel free to prune hard, and do it anytime between late Fall to Early Spring.
- ***Landscape Roses:*** Prune in early Spring. Prune back hard to 12 to 24 inches above the ground and feed the plants. Heavy blooming Landscape Roses are heavy feeders. A hard pruning on old growth combined with a feeding of Rose Tone will encourage healthy aggressive foliage and flowers.
- ***Hydrangeas:*** If you’re confused apply the adage “when in doubt...don’t” Otherwise avoid pruning Macrophylla Hydrangeas except to control height or to nip and deadhead spent blossoms. Avoid the temptation to cut off the “sticks” during Fall cleanup. Macrophylla Hydrangeas bloom on the previous year’s growth. Even the new Macrophyllas that bloom on old and new wood should be pruned sparingly. Prune Oakleaf Hydrangeas only if needed to control size right after blooming. Prune sparingly because the Fall color and Winter interest is as beautiful as the flowers. Feel free to prune Climbing Hydrangeas aggressively (see

Vines previously in this article) Prune Paniculata Hydrangeas like 'Limelight' 'PG' or 'Little Lamb' in Winter or early Spring. They bloom on the same year's wood with beautiful panicles of flowers in summer and early fall. Finally, Hydrangea arborescence or Annabelle Hydrangeas tend to die to the ground each winter in Michigan. Prune the dead stems to 18 to 24 inches in Winter or early spring. Leaving some stem on the plants may help with support of the heavy floppy flowers come Summer.

- **Mandevilla:** Prune the plant back by at least halfway when bringing inside before heavy fall frost.
- **Orchids:** Prune back stems finished blooming to a node or two above the base. The key is healthy foliage and healthy thick fleshy roots that have a firm hold. If the roots are happy and have a grip they'll signal the plant to send up new flowering growth.
- **Mums and Upright Sedum:** Pinch, shear or prune off old dead herbaceous growth on Mums after hard fall frosts or in early spring. Pinch the new growth in spring back to 6 to 8 inches high until late June or early July. Then allow them to grow and set blossoms for sturdy cushioned blooming plants that don't flop over. The same can be done for tall Asters or Upright Sedums. Cut back the original growth in spring a few times and then let them go...they'll set blooms on shorter sturdier stems that don't flop over. You'll help yourself by dividing the plants every few years also in spring.
- **Rudbeckia:** You can leave the dead seed heads on for birds after blooming into fall. If you're into cleanup and like things tidy, prune the dead blooms and stems off and you should see the green foliage growing below the dead stems.
 - **Wisteria, Trumpet Vine:** See vines above

Raspberries: In late winter or early spring before bud break prune all canes that bore fruit last year; they won't fruit again. These will have grayish, peeling bark. Remove any canes that have grown outside the 12 - 18 inch designated row footprint. Remove any spindly or short canes. Thin so that there is about 4-5 of the healthiest, tallest and fattest canes left per foot along the length of the row. Tie remaining canes to your fencing. To force your everbearing raspberries to produce only one crop in the fall, prune back the entire raspberry bush in early spring. As the canes grow back in the summer, remove outside suckers and thin the canes to about 6 inches apart. Keep the sturdiest canes. This technique will give you a larger fall harvest and is good if you also have summer bearing raspberry bushes and you want to stagger the harvests.

- **Peonies (division and pruning):** Divide and replant Peonies in August and September. Prune off blooms when they are done blooming in May/June and leave the foliage on until it yellows later in the season.

- ***Yews or Taxus:*** Prune spring thru August to control growth. This plant responds well to rejuvenation (see stumping note above)
 - ***Clematis:*** Prune spring blooming Clematis right after they are done flowering. Prune Summer and Fall blooming Clematis in Winter or early Spring.
 - ***Lilacs:*** Prune Lilacs right after they are done blooming. Follow 1/3rd of stems guideline noted previously on older plants or consider stumping. Do **not** prune during Fall cleanup.
 - Tomatoes
 - ***Tulips, Daffodils and Spring flowering Bulbs:*** When finished blooming prune off the spent flower heads so they don't go to seed. Keep the green foliage on it yellows, then prune off at the base. Inter-plant annuals between the yellowing foliage. Scratch bulb fertilizer into the soil. Your success with re-blooming may be contingent on the depth you planted the bulbs. Err on the side of planting deep.....shallow planted bulbs won't perform as well if at all from year to year.
 - ***Tomatoes:*** Prune the lower branches off tomato plants so foliage does not touch the ground. Early and late blight usually starts at the base of a tomato plant and works its way up the plant. Prune out aggressive sucker growth also...sucker growth will also cause the plant to sprawl on the ground like a wild bush. That's because when the matured suckers start carrying fruit on them that might not mature before frost, the main stem can no longer bear the weight of the fruits, causing it to hump downward along with all its branches, like a willow tree. The suckers will then continue to grow along the surface of the ground, and the whole thing can turn into a tangled mess...pick your fruiting stems so the plant can concentrate on quality and not necessarily quantity.
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