

CONIFER/ EVERGREEN CARE

Conifer is a term that literally means “cone bearer”. Trees and shrubs that are conifers such as Fir, Pine, Spruce, reproduce by forming a cone or arillate fruit, like Juniper, Yews and Ginkgos, that contain seeds rather than a flower.

Conifer denotes the reproductive methods of trees. Evergreen pertains to the nature of the plant leaves.

WINTER WATERING is needed when precipitation and humidity rates are low. Conifers are particularly sensitive the first 2 winters. On a mild 34+ degree day water plants at least once. Lightly mist needles. Do not overwater. If April is warm and dry, water and wet down leaders of conifers regularly to avoid early desiccation. If humid and rainy, monitor your plants.

Conifers with blue, silver or dark green foliage look best in full sun. They like wind and heat.

Most golden conifers do best when they receive morning sun and afternoon shade. They can ‘burn’ in full sun until they are fully established. This just affects tips and is not detrimental to the health of the plant.

Conifers with white variegation do not like direct sun. They prefer bright light under the shelter of tall trees.

Understory conifers like Chamaecyparis, Taxus, and Tsuga can survive in shaded locations.

It is important to keep young plants evenly moist without waterlogging!

Conifers need good drainage. Even cedar trees, known for living in damp conditions, need their root flares dry most of the year.

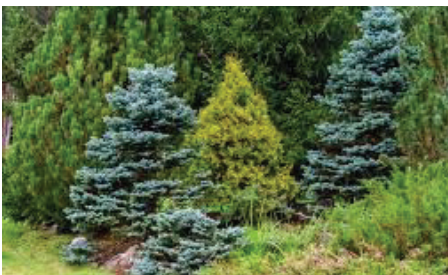
All conifers/evergreens will shed older needles or leaves in spring or fall. This is normal. It is not dying. Just making room for fresh foliage.

Bald Cypress, Dawn Redwoods and Larch are deciduous conifers. In the fall, they turn a golden yellow and drop all their needles. They show off their beautiful structure for winter and reflush in the spring.

Fertilizing is helpful with a slightly acidic organic based product in the spring if color seems pale or yellowed. We recommend HollyTone fertilizer. Easy to use and effective.

Lotus Gardenscapes offers Plant Health Services to maintain trees.

Please contact us for more information.



FRUIT TREE CARE

Fruit tree culture is a truly rewarding endeavor. Like raising children, fruit trees need intense care when young, and continuous training and nurturing for a lifetime to expect a healthy, productive being. Fruit trees require attention. Do not underestimate your role as caregiver. Just as the tree's blossoms in spring are a feast for the human eye, and the later fruit a meal for the human body, EVERYTHING wants to eat every part of the fruit tree. It is your role as orchardist to prevent attacks from fungus, bacteria, insects, birds, and mammals.

This brief guide to fruit tree care is only a starting point. Please read as much as you can to further your knowledge base. Your own observations recorded in an orchard diary can become your best reference.

PREVENTION

is the only approach one can use to maintain healthy trees. Spraying trees is necessary. You can simply use over the counter combination spray for orchards. These products are a mixture of fungicides and insecticides. They are easy to use and effective if you follow label directions. However, since these products carry certain dangers, many people prefer to

use a more involved organic approach to their spray program. Organic culture requires more products to target specific pests and diseases. The following program is the same for both conventional and organic culture. Conventional gardeners can use their combo spray for each treatment. There are now good Organic combo sprays as well to make life easier. Organic reci-

BUD SWELL Spray with lime-sulfur spray or Bio-Safe hydrogen peroxide when buds show.

BUD BURST Spray trees when buds show green tissue with mineral base horticultural oil.

GREEN CLUSTER Spray about one week after BUD BURST when little leaves show but flower buds at center are small and closed with lime-sulfur spray if temps are below 75 degrees, or copper spray or BioSafe hydrogen peroxide if temps are over 75.

PINK/WHITE BUD Spray when flower buds show color, but are not open with a mix of horticultural oil and neem or pyrethrin spray. This is usually two tablespoons of each per gallon of water.

BLOSSOM TIME — DO NOT SPRAY!
Keep pollen clean for the BEES!

PETAL FALL Spray when nearly all flower petals have fallen with the same mix as above. This is a good time to thin fruit to 1-2 fruits per cluster on apple, pear and stone fruit. This will encourage larger fruit. No need to thin cherry trees.

FRUITLET Spray when fruits are appearing with a mix of neem, copper and horticultural oil. You can also start using SURROUND (a wettable clay product) if you do not mind having ghostly white trees all summer.

FRUIT Spray every 7-10 days depending on insect load with a mix of light mineral based hort. oil and neem or pyrethrin until harvest. If using SURROUND, spray after every rain.

POST HARVEST Spray horticultural oil and lime-sulfur after leaf drop. Use deer and rabbit deterrents on a regular basis throughout winter. Trunk guards are important the first few years to prevent mouse and vole damage on young bark. Large cages placed around trees are highly encouraged to deter rabbits and deer.



DEER & RABBIT STRATEGIES

As the natural world becomes encroached upon by human activity, it is becoming increasingly difficult for animals to rely and survive on their traditional food sources.

Deer and rabbits are particularly adept at finding plants for food and pharmaceutical purposes. They are curious creatures who will 'test' any plant they come across. Even though there are plants that are

less desirable, deer and rabbits will eat anything if they are starving.

It is important to protect your plants from deer browse, especially the first days and months after initial installation. Maintaining a year long deer deterrent program will keep your yard looking great. **Consistency is the key!**

SO WHAT WORKS BEST TO DETER DEER AND RABBITS?

A well-constructed fence or cage around the garden can be made 100 percent deer-proof. Fences top the list. Individual plant cages work well to prevent deer scrapes at rut time.

Outdoor dogs are extremely effective at keeping deer out of the yard but they may have a bad day, need a trip to the vet, or need to travel. They're not 100 percent effective, but close. Even indoor dogs, let outside early in the morning and later in the evening can help prevent deer from bedding down on your property.

Repellent sprays and granules, scent stations, motion detecting sprinklers, and noisemakers are very effective, but a starving deer or rabbit may bypass those deterrents to eat your garden. I'm grouping these deterrents together because they all work well for a given time. It is important to change brands of topical spray every once in a while so deer or rabbits don't become used to a particular product. We recommend Deer and rabbit Scram, Liquid Fence and I Must Garden brands. Products **MUST** be used every few weeks to ensure success. There is a systemic product called Repellex which lasts a year when appropriately treated. This must be combined with a spray during initial treatment. Always read and follow the product label.

Homemade sprays with eggs, garlic and cayenne pepper are almost as effective as commercial sprays, but they need to be reapplied more often since they wash off with rain more easily.

Ribbons and reflectors are effective until a deer or rabbit works up the courage to approach and feed. Once they learn there is no real threat, your garden becomes their salad bar. Moving the ribbons and reflectors every week keeps deer and rabbits nervous.

Scattering fragrant soap, human hair and urine near plants can help scare deer. Must be re-freshed weekly.

Installing a garden with the least relished plants is also a good plan. If a plant has very fragrant leaves like Geranium, or stems filled with milky latex like Baptisia or just plain toxic like Boxwood, deer will tend to avoid it.

Do not feed the deer or rabbits! Many people will try to feed deer and rabbits thinking that will deter them from eating landscape plants. You have only added an appetizer to their menu.

Young trees are most at risk before mature bark develops. Cage them for at least 3 years or longer. Cage can be removed from trees in spring and re-installed in September when most deer scraping on bark occurs.

Please remember that most plant damage will recover in time.



FERTILIZATION: ANNUALS, PERENNIALS, SHRUBS AND TREES

GENERAL INSTRUCTIONS FOR HOMEOWNERS

All plants rely on a steady nutrient source throughout their lives. Landscape plants need annual/monthly applications of fertilizer to keep them growing strong and healthy.

This is especially important when plants have just been transplanted into their new home.

It takes 3-5 years for most long lived plantings to become established.

It is crucial they are well cared for during this time frame. They need supplemental nitrogen, phosphorus and potassium to allow for steady growth. Water well after applying.

This handout is divided into plant categories with recommendations for each group.

ANNUALS: These plants live fast, and die young in their one year life cycles. This term is also used to describe plants that in their native heat zones can survive for years, but in cold zones, are used for just a short time to enhance summer decoration.

Annuals grow quickly and need lots of energy. They should be fed once per month using a dry organic fertilizer that encourages blooms.

Look for a 5-10-5 ratio or close listed on the bag.

If using any brand liquid fertilizer to encourage blooms, use bi-weekly for best results.

If using a time release product like Osmocote, use seasonally. You may need to supplement with liquid fertilizers as well if blooms seem sparse.

PERENNIALS: These are plants that emerge every spring and then go dormant for the winter.

They enjoy a balanced diet. Look for organic dry fertilizers with a 5-5-5 ratio.

Fertilizer is best applied mid April to be sure fertilizer is available to plants when they wake up later in the month.

4th of July is a good time to give plants a snack if they have been in the ground for 3 years or less and seem to need a boost. Use a 5-10-5

food to encourage more blooms.

Mid-late October is a great time to give plants something to eat all winter while developing larger root systems. 5-5-5 is good at this time.

We do not recommend liquid fertilizers for perennials as a main source of food. They can be used if plants seem weak for a quick resolution during the season.

Once they are established, a spring feeding is all that is needed for healthy plants. If overfed, perennials become lanky and prone to diseases and insects.

SHRUBS: Woody Stem plants that add structure to our landscapes, need food too.

For non-flowering and evergreen shrubs, use a balanced organic fertilizer with a 5-5-5 ratio.

Fertilizer is best applied mid April to be sure fertilizer is available to plants when they wake up later in the month.

The 4th of July is a great time to give plants something to eat while developing larger root systems.

For flowering shrubs, use a 5-10-5 ratio fertilizer. These shrubs also like an additional feeding right after blooms fade in June.

We do not recommend liquid fertilizers for shrubs as a main food source. They can be used



if plants seem weak for a quick resolution before July 4th. After that date, new growth may not have time to 'harden off' before frost and die over winter.

TREES: Giants of the garden need fertilizer as well. Tree fertilization gets more complicated as trees mature. Feeding trees is only one tool to keep them healthy.

Older and stressed trees are best evaluated by a professional arborist to determine the best 'prescription' and delivery mode to feed trees. Since there are too many variables to cover here, this is a guide for young trees that homeowners can accomplish easily.

Use a balanced organic fertilizer with a 5-5-5 ratio. Fertilizer is best applied mid April to be sure fertilizer is available to plants when they wake up later in the month.

Equally distribute fertilizer from the trunk root flare out past the canopy edge.

Use no more than 4lbs per 1000sq ft. Water well.

Trees can also have a boost by July 4th if trees seem lackluster during the first few years after transplant.

Young trees can benefit from fall fertilization in mid-late October if the ground temperature is still a warm 40degrees. They will uptake and use nutrients to build roots and increase trunk girth over winter. Larger, older trees benefit most from trunk or soil injections. Please contact a professional arborist to assist.

Conventional fertilizers work well in the same ratios listed above, but need close attention paid to application rates as they can damage leaves and roots if over applied.

They can float and leach through soils more easily so it is also very important to control water runoff especially into bodies of water.

The use of granular slow release synthetics and organic fertilizers are the easiest and most forgiving for homeowners to use. They are safe, sustainable, non-leaching and effective when used according to label instructions.



INSECT CONTROL ADVICE

Living with pests inside our homes is generally not tolerated. Outdoor insects, however, are vital to the seasonal cycle of plant and animal life. We must learn to live with some insect damage.

Your garden is home to creatures that provide benefits. Most of the time, the beneficial ones, such as pollinators and predatory insects, keep the destruc-

tive pests in check. Sometimes the balance shifts and a plant can sustain enough damage that you'll want to take action. Fortunately, most garden pests can be dealt with using non-toxic methods such as handpicking larger insects or blasting them off with a strong spray of water. How you deal with the problem depends on what insect is causing damage.

HERE'S HOW YOU CAN IDENTIFY AND CONTROL SOME OF THE MOST COMMON GARDEN PESTS.

Tiny, pear-shaped, and soft-bodied, Aphids can be yellow, white, red, or black, and either be winged or wingless. Aphids are typically found clustering on the tender new growth of plants, where they suck sap, causing distorted leaves and flowers. A strong spray of water from a hose knocks them off plants or cut off the affected stem and crush it on the ground. Ladybug larvae and lacewings (both beneficial insects) can help bring aphids under control.

Caterpillars (also known as larvae) are the first life stage of moths and butterflies. This makes them trickier to control because many will turn into the pollinators that your garden and landscape needs. And who doesn't love butterflies? Caterpillars and larvae feed on plants, consuming leaves and stems. Handpick them off if necessary. Natural predators such as birds can help. Naturally occurring parasites such as some tiny wasps attack caterpillars; look for small white eggs on the backs of caterpillars as evidence they are present. Do not destroy these particular caterpillars as they are hosting new beneficial wasps. Discourage moths from laying eggs by using floating row covers over young plants, but make sure to remove row covers when vegetable plants begin to flower so they may be pollinated. As a last resort, spraying with a biological insecticide like Bt (*Bacillus thuringiensis*) is harmless to people, animals, and adult insects, but very successful for protect-

ing crops such as broccoli and cherry trees from caterpillars.

Asian and Japanese Beetles are metallic copper, blue or green, are 1/2-inch long and have coppery wings. They are voracious eaters: Adult beetles consume leaves and flowers, leaving behind only leaf veins. Common targets include roses and hibiscus, but hundreds of plants are favored by Japanese beetles. The larvae (grubs) of Japanese beetles can also be a problem in lawns; they overwinter in the soil for 3 years, then eat grass roots in spring before they emerge as adult beetles. Heavy infestations in turf grasses weaken them and allow weeds to take over. Handpick Japanese beetles daily as soon as they appear and dispose of them in a container of soapy water. Pesticide sprays can kill adult beetles but provide no ongoing protection from further infestations; the beetles can fly from considerable distances to find food. Botanical and chemical treatments for grubs in lawns must be timed carefully, and although they may be effective, controlling the grubs will not prevent adult beetles from feeding on your landscape plants. Beetle traps are ineffective because they tend to attract even more beetles to your yard. Neem based insecticides can help repel beetles from plants. Spinosad or pyrethrin based insecticide will kill them.

Mealybugs are small, sap-sucking, cottony insects. Mealybugs suck sap from plants causing distorted and limited growth and leaf loss. They secrete honeydew as they eat, which can attract ants and lead to the growth of sooty



mold. In the garden, grow small-flower nectar plants, such as sweet alyssum and yarrow; this will attract natural predators including ladybugs, mealybug destroyers, and green lacewing larvae. Remove mealybugs from plants with strong sprays of water or swabbing with alcohol-dipped cotton swabs. If the infestation is heavy, spraying with summer oil, neem, or an insecticide with pyrethrins can help control mealybugs. Follow label directions carefully to avoid damaging plants and beneficial insects.

Although there are several kinds of Scale insects, all begin as crawlers, which are mobile until they find a good plant feeding location. Once settled, the 1/16-inch-long scale insects become immobile and develop hard, oval shells that are difficult to distinguish from bark. Scale insects suck out vital plant fluids, which leads to stunted leaves and needles, yellowing, and twig and branch dieback. In late winter, spray woody plants with dormant oil to suffocate the pests. In spring and summer, spray lightweight horticultural oil or a pyrethrin based spray if the young are crawling.

Slimy and black or brown, Slugs look similar to short worms but have tiny antennae. Snails look like slugs but have hard circular shells on their backs. Both slugs and snails love moisture and rasp holes into leaves and flowers. They feed at night and cloudy days, leaving shiny slime trails. Slugs and snails prefer moist, cool areas. You can find slugs and snails hiding under mulch, garden debris, or near rocks; at dusk, handpick and dispose of them. Set several traps of glass jars filled with beer at ground level; discard drowned slugs and snails and refill the traps frequently. Baits with iron phosphate, such as Sluggo Plus, are considered safe for organic food crops.

Tent caterpillars are the larvae of several different species of moths. The adult moth lays eggs on tree branches and the colony of larvae shelter in large silken 'tents' or webs they create as they feed on leaves. Larvae of tent-making caterpillars and fall webworms eat leaves of trees. While often more an unattractive nuisance than a threat, multiple nests of tent-making caterpillars in a tree can defoliate it, and if repeated for several years can cause the tree to die. Tent-making caterpillars have many predators (birds, other insects) so they rarely cause enough damage to harm plants. Damage can be reduced by removing tents and caterpillars while they are still small. Cool mornings or late evenings when the caterpillars are in their tent is the best time to remove it with a pole or gloved hands (though the larvae are not harmful to humans.) Destroy the nest by burning or crushing after removal from the tree. Insecticidal chemical control may be warranted after sustained, high levels of damage over several seasons.

Garden pests are less of a problem for healthy plants planted in the right conditions, are well cared for and are not stressed. Before you use any insecticide, consult the label for a list of plants, conditions, and correct application methods. We always recommend starting with natural, organic methods before resorting to harsher synthetic chemicals.

Plants can lose 1/3 of its foliage without affecting health. If plants sustain more defoliation, the plant may need additional fertilizer to jump start regrowth midseason.

