Landscape Consultants & Contractors, Inc.



Shrub Care Services Edition

Inside this issue:

Current Events ANSI	1 2
Shearing Winter Watering	3-4 5-6
FAQ's	7
Health Care	8
Insects	9-10
Voles	11
Contact Info	12

Pruning Services

What's Included?

Our standard maintenance contract is very specific about what type of pruning is included in your annual fee.

However, some clients prefer to provide their own contracts and some sites have some very specific needs. We believe our pruning services are the best in the industry. Whether it's your contract or ours, we always make sure that you get the very best.



Hand pruners are the best for your shrubs

LOOK AHEAD For March

- Continue spring cleaning
- Police for trash as weather allows
- Finish dormant season pruning as needed
- Soil Testing

For April

- Finish spring clean up
- Soil testing
- · Test Irrigation systems

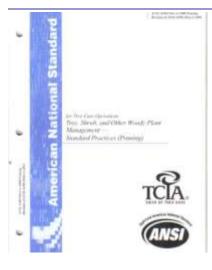
Current Events

Winter Watering?

During prolonged dry weather, we do recommend supplemental watering. We have water trucks, tanks, pumps and hoses to provide whatever services you may need. In addition, you may wish to con-

sider activating your irrigation system for a one-time watering, followed by winterization.

Keep in mind that we own private water rights so we can provide water in most any drought condition. See inside for more info.



ANSI A300

Did You Know?

ANSI A300 is the source for pruning standards.

American National Standards Institute

Standard Practices (Pruning)

It might surprise you to know that there is one recognized source for pruning standards in our industry: ANSI A300. This publication is available for purchase or download and is easily found with an internet search.

The pruning specifications you will find in our standard contract are based on ANSI A300.

Pruning and Landscape Maintenance

It has been long accepted that pruning trees is a specialized task that should only be done by well-trained, experienced personnel. There is an international organization of tree specialists that trains and certifies arborists. But no such organization exists for shrubs.

Looking around our industry, we do not see companies that take great care in how they prune shrubs. The industry standard is a gasoline powered hedge shear. Can you imagine using one of those on a tree?

It seems that shrubs just don't rate such attention. But we think they should. They are a large part of your land-scape and affect the appearance of your property and its value.

So a number of years ago we instituted an improvement plan. The concept was simple, the answers were right there in front of us. Step one, throw away the gasoline powered hedge trimmer. Step two, pick up a copy of ANSI A300 and use it.



While the information was easily obtained, implementing the program was not. We will go into the steps we took in greater detail later in this edition. But here's a quick look.

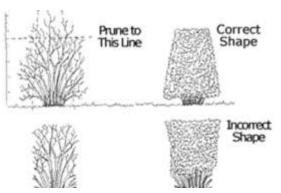
It's probably obvious that we needed to train our pruning crew. There are hundreds of shrubs they need to be able to identify. We then classify them by the time of year they need pruned.

Training to make the cuts themselves was the easy part. Surprisingly, the hardest part was undoing the damage that years of shearing had done. More on that later as well.

What's Wrong With Shearing?

I some cases, there is absolutely nothing wrong with shearing. Some plants like Boxwood and Privet are selected for their ability to withstand close pruning. There are also many cases where a hedge is desired.

But there is still a right way and a wrong way to shear.



The diagram to the left shows the right and wrong way to create a hedge.

There are a couple of very good reasons why the right shape is a tapered one. One, it provides strength and stability. Two, it keeps the shrub away from the upper body, arms, eyes, making it safer. But most importantly, it exposes the





entire plant to the sun.

Problems Associated with Improper Shearing

When we are talking about improper shearing, we should look at two different situations involving evergreen and deciduous shrubs.



We have all seen this problem. A juniper is planted in a space that is too small. For a number of years, shearing keeps it under control but eventually, this happens. There is only an inch or two of

live vegetation available to prune so cutting it back leaves dead wood. The solution is proper plant selection. Pruning cannot help areas like these. Removing the plants and replacing them with more appropriate choices is the only long-term option.

Deciduous shrubs are a different case. Continuous shearing affects them in a different way. The main problem is that the shrub gets old and less vital with every passing year. Most shrubs prefer to be selectively thinned. This technique calls for the service technician to select a number of the oldest stems each year and remove them. This allows the younger, more vital stems to grow and thrive. Younger stems generate more energy for the plant, and in blooming varieties, more flowers.

The solution is proper plant selection.

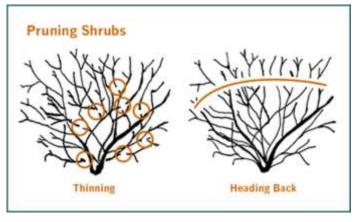


Rejuvenation

Rejuvenation

Earlier we mentioned that our biggest challenge was dealing with years of improper pruning. The solution is rejuvenation.

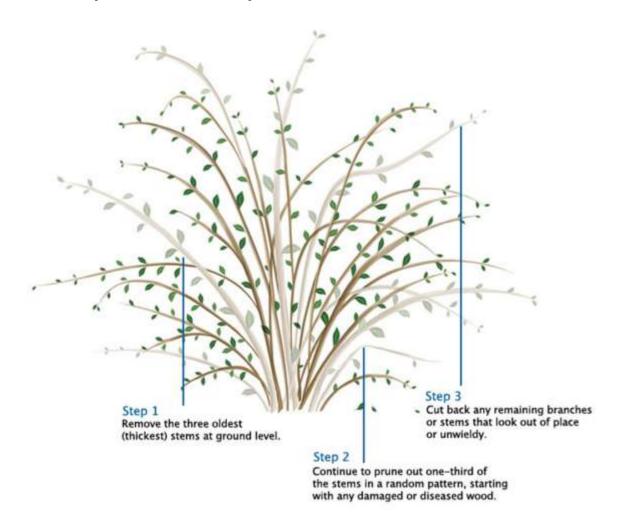
Start removing the oldest stems.



Shearing or heading back shrubs creates a dense shrub with old, thick stems.

When faced with a thick, compact, overgrown shrub, the best thing to do is start removing the oldest stems.

This can be done little by little over a number of years, or all at once.





CSU Extension Service

We are constantly referring to the CSU website for the newest research and information. It is also a great source to develop "best practices". Here is what they have to say about winter watering.

We own water rights and can provide water in most any conditions!

Fall and Winter Watering

by J.E. Klett and C. Wilson¹(7/08) Ouick Facts...

- Water trees, shrubs, lawns, and perennials during prolonged dry fall and winter periods to prevent root damage that affects the health of the entire plant.
- Water only when air and soil temperatures are above 40 degrees F with no snow cover.

Established large trees have a root spread equal to or greater than the height of the tree. Apply water to the most critical part of the root zone within the dripline.

Dry air, low precipitation, little soil moisture, and fluctuating temperatures are characteristics of fall and winter in many areas of Colorado. There often can be little or no snow cover to provide soil moisture, particularly from October through March. Trees, shrubs, perennials and lawns can be damaged if they do not receive supplemental water.

The result of long, dry periods during fall and winter is injury or death to parts of plant root systems. Affected plants may appear perfectly normal and resume growth in the spring using stored food energy. Plants may be weakened and all or parts may die in late spring or summer when temperatures rise. Weakened plants also may be subject to insect and disease problems.

Plants Sensitive to Drought Injury

Woody plants with shallow root systems require supplemental watering during extended dry fall and winter periods. These include European white and paper birches; Norway, silver, red, Rocky Mountain, and hybrid maples; lindens, alder, hornbeams, dogwood, willows, and mountain ash. Evergreen plants that benefit include spruce, fir, arborvitae, yew, Oregon grape-holly, boxwood, and Manhattan euonymus. Woody plants benefit from mulch to conserve soil moisture.

Herbaceous perennials and ground covers in exposed sites are more subject to winter freezing and thawing. This opens cracks in soil that expose roots to cold and drying. Winter watering combined with mulching can prevent damage

Lawns also are prone to winter damage. Newly established lawns, whether seed or sod, are especially susceptible to damage. Susceptibility increases for lawns with south or west exposures.

Watering Guidelines

Water only when air temperatures are above 40 degrees F. Apply water at mid-day so it will have time to soak in before possible freezing at night. A solid layer (persisting for more than a month) of ice on lawns can cause suffocation or result in matting of the grass.

Plants receiving reflected heat from buildings, walls and fences are more subject to damage. The low angle of winter sun makes this more likely in south or west exposures. Windy sites result in faster drying of sod and plants and require additional water. Lawns in warm exposures are prone to late winter mite damage. Water is the best treatment to prevent turf injury.

Winter Watering (continued)

Newly Planted vs. Established Plants

Newly planted trees are most susceptible to winter drought injury. Woody trees generally take one year to establish for each inch of trunk diameter. For example, a two inch diameter (caliper) tree takes a minimum of two years to establish under normal conditions.

Trees obtain water best when it is allowed to soak into the soil slowly to a depth of 12 inches. Methods of watering trees include: sprinklers, deep-root fork or needle, soaker hose or soft spray wand. Apply water to many locations under the dripline and beyond if possible. If you use a deep-root fork or needle, insert no deeper than 8 inches into the soil. As a general survival rule, apply 10 gallons of water for each diameter inch of the tree. For example, a two-inch diameter tree needs 20 gallons per watering. Use a ruler to measure your tree's diameter. Newly planted shrubs require more water than established shrubs that have been planted for at least one year. The following recommendations assume shrubs are mulched to retain moisture. In dry winters, all shrubs benefit from winter watering from October through March. Apply 5 gallons two times per month for a newly planted shrub. Small established shrubs (less than 3 feet tall) should receive 5 gallons monthly. Large established shrubs (more than 6 feet) require 18 gallons on a monthly basis. Decrease amounts to account for precipitation. Water within the dripline of the shrub and around the base.

Herbaceous perennial establishment periods vary. Bare root plants require longer to establish than container plants. Perennials transplanted late in the fall will not establish as quickly as plants planted in spring. Winter watering is advisable with late planted perennials, bare root plants, and perennials located in windy or southwest exposures.

Fall and winter watering: during drought

Limited summer rainfall and water restrictions can deplete subsurface soil moisture. Upon digging, people may find little moisture at 8 to 12 inch depths where most tree roots are located. Paying special attention to fall watering is important for trees to mature buds and enter dormancy in a healthy condition. Consider tree watering in addition to whatever general landscape sprinkling local water restrictions allow in fall months. Colorado horticulture experts recommend watering underneath the branches within the circle bounded by the drip line. Water to a depth of 12 inches. Trees should receive ten gallons per inch of trunk diameter measured at knee height. This amount can be reduced by that supplied by general lawn watering or if rain or snow is received. Water trees three times per month in September. Cut back to one or two times per month from October through March, two times monthly for young trees and for evergreens. Mulch within a circle bounded by the drip line to a depth of 4 inches allowing 6 inches of space between the mulch and tree trunk. A mulch circle of any area will be beneficial whether it extends to the dripline or stops short of that. Many water application methods can be used. Consider soaker hoses, soil needles, or soft spray nozzles. On hard or compacted soils, soak, wait and soak again to avoid water runoff. Be especially careful with soil needles, also known as deep root feeders. Some people insert these well below a 12 inch depth, placing water out of reach of tree roots. Soil needles should be inserted at an angle to a depth of 6 to 8 inches. Leave the needle in place for 3 to 5 minutes with water turned on low to moderate pressure. Water the area under the branches in at least twelve sites for a medium sized or larger tree. Disperse water sites evenly within the circle bounded by the dripline. For new trees, water all four sites at least 3 feet from the trunk (stem). In dry years, established shrubs will need additional amounts of winter watering. Apply 5 gallons for a small shrub (less than 3 feet), and 18 gallons for a large shrub (more than 6 feet) on a monthly basis from October through March. Newly planted shrubs will require more winter water, twice monthly using these same amounts at each watering. Be sure to mulch shrubs to retain moisture.

FAQ's

Severe Pruning

Some varieties can benefit from periodically being pruned back to near ground level. This is a photo of a Yellow Twig Dogwood. All Dogwoods along with other varieties like Potentilla, Willow, Butterfly Bush can benefit by being cut back.

The 15' Limit

This is probably the most common question we get. What does the "under 15' limit mean. We had to put some kind of measurable number in our contract. But it is more important to understand the reason



why. Small trees do not need much pruning. A cut here and there over the first few years is enough. Cleaning up suckers is about the most technical thing we do. But once a tree starts to mature, it takes specialized personnel and equipment to handle. The bottom line is, if your tree needs structural pruning, it needs a certified arborist.

When to Prune

We prune broken, hazardous, or encroaching limbs anytime the need arises. Scheduling pruning for the season depends on growth periods, blooming times, and the health of the plant. We are glad to discuss specifics with you. But there really is too much to tell here.

Roses

In general, we do not prune roses. Shrub roses are widely used in commercial landscapes and usually do not need pruned. Perhaps from time to time they could be cut back to the ground as needed. In our experience all other varieties are planted by individuals in the community. We prefer to discuss the care of these plants with the individuals involved.

Grasses

One of the most attractive aspects of ornamental grasses is their winter appeal. The most common practice is to allow grasses to dry and stand throughout the winter.

However, sometimes snow loads and wind can damage the plants and make them unsightly.

We can provide whatever option you prefer. Whether we cut them back in October before winter, cut them only if damaged, or cut them in early spring, it's up to you.



Health Care Act (for your trees)

Does Your Yard Have a Health Plan?

When is the last time your yard had a check-up? Just like people, plants need periodic examinations and treatments to help prolong their health. Plant health care (PHC) is a vital part of landscape management.

Preventative care, frequent check-ups, early detection, informed decision-making, and routine treatments that provide long term, stable solutions are regular duties of PHC programs. A PHC plan is multi-faceted and customer-driven, focusing on the health, growth, and beauty of a homeowner's yard.



"It's like an HMO plan for your yard," says Jim Skiera, Executive Director for the International Society of Arboriculture (ISA). "Adopting a plant healthcare program can prevent problems or keep them from getting serious. When homeowners and professionals work together, everyone benefits. Drastic, costly maintenance can be avoided while the value of the entire property increases."

The basic premise behind PHC is that if a plant is taken care of properly, natural defenses can be strengthened. Energy that would normally be used up fighting stressful factors can instead be utilized to build up defense systems. Regular check-ups and the removal of hazardous factors from the environment help to improve the health of a plant, the same as they would the health of a human.

Maintaining a Plant Health Care (PHC) Program:

First, choose the right professional support. You would select a doctor carefully, so be sure to select the best professional to assist you in your PHC plan. Experts should ask questions, determine priorities, and discover the homeowner's expectations. Look for ISA Certified Arborists (found at www.treesaregood.org) or certified land-scape professionals who are well-trained, educated, and experienced professionals familiar with landscape plants, their needs, and the pests and diseases most likely to attack.

Every yard is different, so individual care is important. Frequent monitoring aids in early detection and is key to the long-term health of plants. Professionals will alert you to any existing or anticipated problems then suggest all possible treatment options and alternatives-just like a doctor would a patient. The best choices usually involve natural processes that are least intrusive. Chemical treatments should be used as a last resort. Homeowners and professionals should work together to decide what is best for the yard.

Expensive remedies are often employed after a yard has already been badly damaged. These practices are often unsuccessful and cost homeowners significant amounts of money in planting and maintenance. Proactive PHC programs cost considerably less than reactive interventions because they help ensure the health and beauty of plants and landscapes, lowering maintenance costs and increasing property values.

"The long-term savings is virtually guaranteed," Skiera says. "Not only will a plant health care program enhance the well-being of plants, but it also will improve the mood and bank account of the homeowner."

Most (un) Wanted Pests

Aphids on Shade Trees and Ornamentals

by W.S. Cranshaw 1 (2/09)

Quick Facts...

- Aphids are found on almost all types of plants and a few species can cause plant injury.
- Some aphid species can curl the new leaves of some types of plant.
- Feeding aphids excrete honeydew, a sticky fluid that can cause nuisance problems.
- Natural enemies of aphids include lady beetles, flower fly larvae, lacewing larvae, and parasitic wasps.
- Exposed aphids can be controlled by insecticides, insecticidal soaps and sometimes with a strong jet of water.

Aphids are the most common insects found on trees, shrubs, and garden ornamental plants. Over 350 different aphid species occur in the state but most can feed on only a few species of plants. However, with so many

Aphids feed by sucking sap from plants. When the number of aphids on a plant are very high for an extended period, their feeding can cause wilting and sometimes even dieback of shoots and buds. Some aphids can cause leaf curling when the insect infests emerging leaves.

Sometimes problems with aphids do not primarily involve plant injury but instead their production of sticky honeydew. Honeydew is the waste material excreted by aphids and certain other phloem-sucking insects (e.g., soft scales, whiteflies, some leafhoppers). It may cover leaves, branches, sidewalks and anything that lies be-

Chemical Controls

Insecticides are a useful means for controlling aphids when natural enemies are not sufficient (Table 3). Some insecticides act by con-

tact action and these must contact the body of the aphid to work. This includes insecticidal soaps (Fact sheet 5.547, *Insect Control: Soaps and Detergents*), a popular option for aphid control but one that requires sprays to cover the aphid during application. Other insecticides have some persistence on the foliage and may be able to kill aphids for a day or two if they contact the aphid. Contact insecticides can be effective against exposed aphids but are ineffective against species that develop within the protection of leaf curls.

A few insecticides have the ability to move within a plant, spreading in the sap. These are known as systemic insecticides and they can control aphids that occur within leaf curls. Some formulations of systemic insecticides are designed to be ap-

plied as sprays and these are absorbed by leaves and then move in the plant. Others can be applied to the soil where they are taken up by the roots and translocate to leaves, particularly young leaves.



Most (un) Wanted Pests, continued



Don't Spittle on Me



Spittlebugs, also called froghoppers, have been numerous the last several years. Probably everyone has seen one, but may not have known it. Spittlebugs form masses of sticky, frothy bubbles on leaf nodes (points where leaves join the stem). The blob of foam may have tricked you into thinking that someone spit onto the plant (maybe you blamed your kids for spitting into the flower beds or shrubbery?). The immature insect lives inside its spittle mass. Wipe away the foam to see the small (1/4 inch) frog-looking insect inside. The spittle provides protection from predators, desiccation, and temperature extremes. When they molt into an adult, they depart their protective spittle blob.

Juniper, arborvitae, pine, clover, strawberry, weeds, and many herbaceous plants are common hosts for spittle-bugs.

Economic harm to the plants is uncommon. The best treatment is to apply a stiff spray of water from your hose to wash away the spittle and leave the bug to dry out or become prey for a hungry predator. For additional information on spittlebugs and their control, read fact sheets by the <u>University of Wisconsin</u> and <u>North Carolina State University</u>.

-Diane Alston, Entomologist

Most (un) Wanted Pests, continued Managing Voles in Colorado

by W.F. Andelt, S. Ahmed and K. Jones¹ (6/09)

Quick Facts...

- Eight species of voles are found in Colorado. They often are called meadow, field or pine mice.
- Voles are small mammals that cause damage by girdling seedling and mature trees in orchards, shelterbelts and forests. They also damage field crops and frequently construct runways in lawns. Damage by voles can be reduced by habitat modification, exclusion, repellents, trapping, and poison grain baits.

Introduction

Voles are small rodents that measure 4 to 8.5 inches long and weigh 0.8 to 3 ounces and vary in color from brown to gray. They are pudgy, with blunt faces and small eyes, small and sometimes inconspicuous ears, short legs, and a short (the long-tailed vole is an exception) and scantily haired tail.

Eight species of voles are found widely throughout various ecosystems of Colorado, in heavy ground cover of grasses, grass-like plants, and litter.

Vole damage to trees and shrubs is characterized by girdling and patches of irregular patterns of gnaw marks about 1/16 to 1/8-inch wide. Gnawed stems may have a pointed tip. Do not confuse vole damage with damage by rabbits, which includes stems clipped at a smooth 45-degree angle and wider gnaw marks. Stems browsed by deer usually have a rough jagged edge. Voles also girdle the roots of trees and shrubs.

Other signs of damage by voles include: 1) 1- to 2-inch-wide runways through matted grass and burrows; 2) visual sightings; 3) hawks circling overhead and diving into fields; and 4) spongy soil from burrowing activity. Trees that appear to suffer from disease or insect infestation may be suffering from unseen vole damage.

Methods to prevent and control damage are: habitat management, exclusion, repellents, trapping, and poison grain baits. Voles are classified as non-game wildlife in Colorado and may be captured or killed when they create a nuisance or cause property damage.

Trapping. Use mouse snap traps to remove small populations of voles from backyard lawns. Place traps perpendicular to runways with the trigger end in the runway and bait with small amounts of rolled oats or peanut butter. Set traps in the fall before most damage occurs. Trapping is not practical for controlling voles on large areas.

Poison Grain Baits. Rodenticides usually are a short-term solution to damage by voles. Habitat management usually is more successful than rodenticides for eliminating damage in orchards.

Two percent zinc phosphide is the only legal grain bait for controlling voles in Colorado.

Fumigants usually do not work for control of voles because their burrows are too shallow and complex.



Landscape Consultants & Contractors, Inc.

12650 W 64th Ave. #E 430 Arvada, CO 80004

Phone: 303-980-0360 Fax 303-420-3073

E-mail: info@landscapeconsultantsandcontractors.com

Creating beautiful outdoor environments since 1984.

Founded in 1984, like many landscape companies, out of the back of a used pick up truck with an old wheelbarrow and a shovel. But with a different idea:

"We create beautiful outdoor environments by providing solutions to landscaping problems."

Our success comes from being proactive. Our best solutions are implemented before our clients know there was ever a problem. We do this by providing experienced personnel (over 150 years combined at the management level), serving in a professional manner, promptly attending to our clients needs.

We service the Metro Denver area offering a full range of landscape and irrigation design, installation, and maintenance services.



www.landscapeconsultantsandcontractors.com



Think of us first!