



Plant This, Not That

Craig R. Miller, Parks & Open Space Manager

The best Aspen is the one that grows in the mountains. That is the opinion of most landscape professionals, as Aspen are prone to multiple insect and disease problems here on the Front Range. They



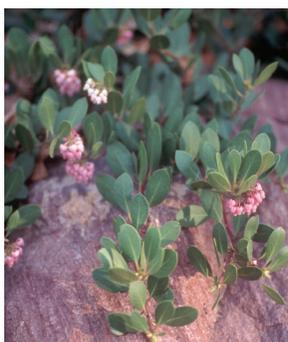
are a short lived tree (20 years plus or minus) and they do sucker profusely in our landscapes. A superior alternative is **Bigtooth Maple** (*Acer grandidentatum*). Growing to a mature height and spread of 30' by 20' (nearly identical to an Aspen), this under-used native maple tree rewards you with great form and texture, as well as brilliant fall colors of orange, red and yellow.



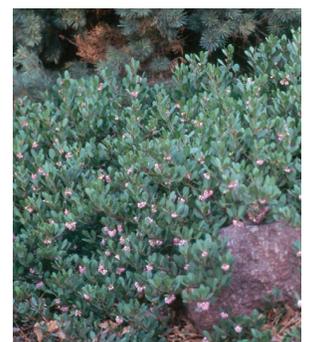
Many gardeners looking for a fast growing vine with lots of color often look to Trumpet Vine (*Campsis radicans*) as a solution. This easy to grow plant, while not without its charms, is very invasive, often sending extensive roots and suckers throughout the yard. If the seed pods are allowed to ripen, they will pour out large quantities of seed that will produce hundreds of plants the



following spring! A more refined choice is **Goldflame Honeysuckle** (*Lonicera x heckrottii*). The flowers and fragrance of this vining honeysuckle are outstanding. Rose-pink tubular buds open to very pale tangerine colored petals - the outside and edges of the petals are pale pink. Bloom time is June-September. Be sure to plant this vine where the Gardenia-like fragrance can permeate the air and drift your way, preferably in full sun.



Looking for some low growing evergreen shrubs, but you aren't that fond of Junipers? Try a **Panchito Manzanita** (*Arctostaphylos x coloradoensis*) instead! This outstanding native broadleaf evergreen can be planted as a specimen feature, or in groups as a groundcover. Small pink flowers appear February to early April on this shrub that has a height of 10 - 15 inches, and a spread of 24 - 36 inches. You will never again consider planting Carpet Junipers!





So you've been looking for the silvery leaves and texture that Russian Olive (*Elaeagnus angustifolia*) brings to a landscape, but can't find any at your local nursery? That's because it was placed on Colorado's Noxious Weed list not too long ago, and is no longer allowed to be sold here. Russian Olive quickly takes over upland, streambank and wetland areas, choking out native vegetation and riparian habitat.



A great replacement for this plant is **Silver Buffaloberry** (*Shepherdia argentea*). Though smaller in size than Russian Olive (8' to 15' tall, 6' to 12' wide at maturity), this plant has the same silvery leaves and appearance, but with the added bonus of tiny yellowish flowers in late spring, followed by bright red, pea-sized fruit on female plants in late summer. Tolerant of alkaline soils, cold, wind, drought and even standing water, this plant will add that flash of silver color to your yard!

This may be blasphemy, but here in Colorado, is there anything more inappropriate than a bluegrass lawn? Let's think about this for a minute - we get less than 16" of precipitation a year, which classifies us as "semi-arid", or not to put too fine a point on it, pretty much a desert. Unless you actively use your bluegrass lawn (you have kids or dogs that run around and play on it), why DO you have that water-hungry green pestilence in your yard?

The solution? **Buffalo Grass** (*Buchloe dactyloides*), a Colorado native that thrives in our climate. Buffalo grass produces a uniform and attractive turf that ranges in color from spring green to gray-green, and it reaches a mature height of 4 to 6 inches. The narrow leaves curl downward to produce a shorter-looking grass even without mowing. It can be left longer for a soft, prairie look, or cut to 3 inches for a neater looking lawn. Being a warm season grass, it does green up several weeks later than traditional bluegrass. Since buffalo grass is hardy and disease resistant, there is little need for supplemental fertilizer or pesticides. The lower, slower growth rate of buffalo grass also means less watering and mowing is necessary.

Buffalo grass is a beautiful and water thrifty alternative to traditional landscaping turfs. It can be established either from seed, sod or plugs. For those interested in creating a more native, water conserving landscape, buffalo grass is the natural choice.

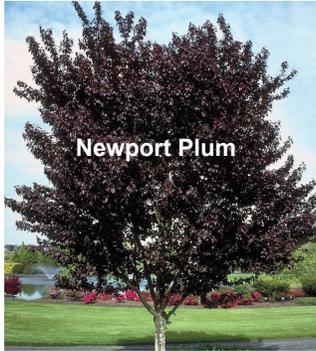


Buffalo grass unmowed

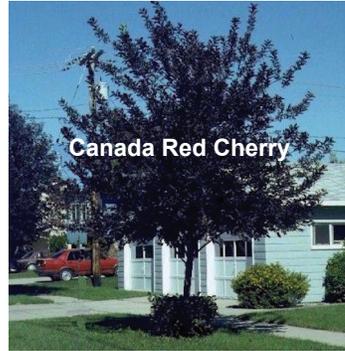


Mowed Buffalo grass

Newport Plum (*Prunus cerasifera* 'Newport') and Canada Red Cherry (*Prunus virginiana* 'Canada Red') are the two trees most people will select when they are looking to add a splash of red leaf color to their gardens. Aside from the fact that these trees are overused in our landscapes, they both have some issues that homeowners need to be aware of.



Newport Plum



Canada Red Cherry

Most gardeners grow Newport Plum trees for their beautiful reddish-purple foliage and spectacular white-pink blossoms. While the Newport Plum may be one of the hardiest purple-leaved plum trees available, it is susceptible to a variety of insect problems, including pear slugs, which can defoliate the tree, and peach tree borer, which can kill it. In addition, it typically does not do well in irrigated turf areas, where it is most commonly planted.

Canada Red Cherry is a variety of Chokecherry that has maroon-red leaves, clusters of white flowers in the spring and an edible fruit that is favored by birds. Unfortunately, this tree truly wants to be a bush, and it will sucker profusely. Constant removal of the suckers is required if you wish to maintain the tree form that you purchased. It is also susceptible to black knot disease, which can seriously disfigure the branches.

Why plant such troublesome trees, when there is a better choice? Intense color is the most outstanding feature of **Purple Smoke Tree** (*Cotinus coggygia*). The rich dark purple foliage is a dramatic backdrop for the bright pinkish-white flowers that appear in airy smoke-like clusters, giving this plant its common name.



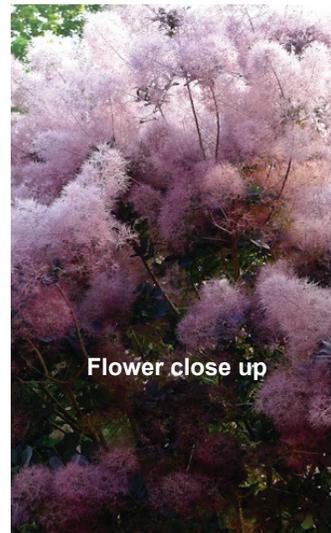
Purple Smoke Tree

As the flowers fade in the fall, the tree takes over and lights up the landscape with brilliant fall colors of gold, orange and red. It can be grown as a large

shrub or small tree, attaining a mature height and spread of 15' by 8'. Full sun brings out the best leaf color, but it will tolerate light shade. Tolerant of a wide



Tree form in flower



Flower close up

range of soils including sand and clay, this plant does best in a well-drained moist to dry soil with deep infrequent watering. This species was popular in Victorian gardens and is ideal for adding brilliant color to your garden restoration projects. Hardy to 8000 feet.



If you are considering planting an Autumn Blaze Maple (*Acer x freemanii* 'Jeffersred') - a weak-wooded, fast growing tree that is basically a Silver Maple with great fall color, plant a **Northern Red Oak** (*Quercus rubra*) instead. This durable tree is not as prone to breakage in our climate, and has a beautiful fall color that goes from dark wine red to ruddy brown and orange. Growing to a mature height of 50 feet with a spread of 30 feet, the well balanced branches sweep upward to form a symmetrical, oval to rounded crown. This tree has a moderate rate of growth (12-24" per year).





Is there any shrub more overused than Dwarf Burning Bush (*Euonymus alatus* 'Compactus')? I call this plant a "one-trick pony" - all season long, its green, its green, its green and come fall...oh look, its RED! If you are fortunate, that brilliant fall color will last you about 2 weeks.

Many gardeners wouldn't think of a lilac as a good substitute for burning bush, because typically they don't have much of a fall foliage color (yellow). But **Miss Kim Lilac** (*Syringa patula* 'Miss Kim') has a beautiful rich maroon fall color, and the added bonus of a second trick - spectacular spring blooms!



Miss Kim is the perfect lilac for smaller spaces. The rich orchid-pink flowers, which bloom among the latest of all lilac species (mid-May to June), are borne in abundance and can literally smother the plant in flowers. There are many lilac connoisseurs that regard this variety as the most fragrant of all, it's sweet and spicy scent able to permeate an entire yard. Compact and upright-rounded in form, this xeric shrub slowly grows to five feet tall and wide (similar to the mature size of Burning Bush) and is an outstanding foundation plant.



Austrian Pine (*Pinus nigra*) is one of the best selling evergreen trees in Colorado, valued for its adaptability to our heavy soils and dry climate. Unfortunately, too much of a good thing can lead to problems with insects and disease. Biological diversity in the urban landscape can help protect the investment you have in your trees, and differentiate your property from your neighbors.

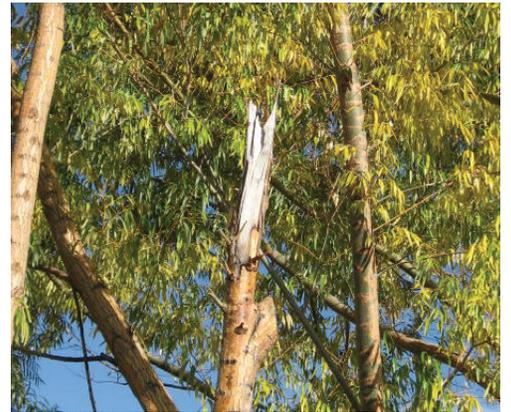
The next time you are looking to add a large evergreen tree to your yard, consider **Southwestern White Pine** (*Pinus strobiformis*). This attractive tree is native to the mountains of western Texas, New Mexico, Arizona, and southwestern Colorado and into the mountains of central Mexico. It does very well in urban landscapes and thrives in a variety of soils. It tolerates heat and wind very well. Southwestern White Pine has a moderate rate of growth. Young trees are dense, symmetrical and pyramidal in form. In most urban settings, it will reach 35 to 50 feet in height. Soft dark bluish-green needles and large ornamental cones set this tree apart from the rest of the pack.

Many homeowners are looking for a fast growing tree to provide them with shade as quickly as possible. Unfortunately, here in Colorado, with our dramatically changeable climate, this is not the best way to go. Fast growing trees, like Cottonwoods and Poplars (*Populus* spp.), Willows (*Salix* spp.) and Silver Maples (*Acer saccharinum*) tend to have very weak wood and are prone to severe breakage when those early fall or late spring snows come along (which seems to be every year!). On top of that, they have very aggressive root systems, and can cause a lot of damage to sprinkler systems, water lines, sidewalks and driveways. They are really inappropriate for the smaller lots found in our suburban and urban yards.

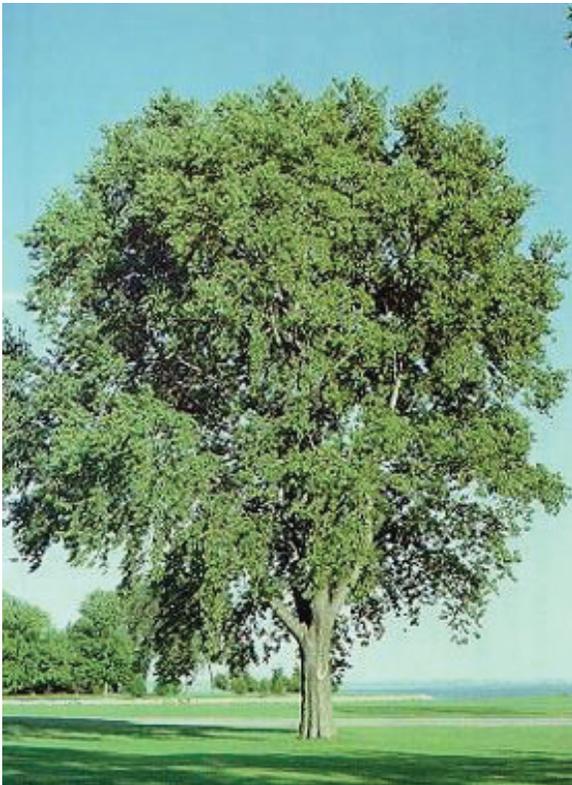


Plant a fast growing tree like Cottonwood (above) or Willow (below), and you will see this damage frequently here in Colorado

The solution? The much more durable **Hackberry** (*Celtis occidentalis*). This tree is in the same family as and similar in habit to the American Elm. It is a medium to large sized deciduous tree that typically grows 40 to 60 feet tall with upright arching branches and a rounded spreading crown. Mature gray bark develops corky ridges and an interesting warty texture. Insignificant greenish flowers appear in spring and give way to an often abundant fruit crop of small edible purple berries, much favored by birds. The leaves are distinctly asymmetrical and coarsely textured and have a yellow fall color.



This xeric and deer-resistant tree is highly adaptable to many adverse conditions, including wet soils, dry soils, poor soils, compacted soils, rocky soils, soils of various pH, heat, drought, flooding, pollution, and windswept areas. The rate of growth is not comparable to the fast growing species mentioned earlier, but is more than adequate when you consider how well behaved this tree is.



One of the top selling trees in Colorado is the Eastern Redbud (*Cercis canadensis*). This tree is one of the first to flower in the spring, blooming with petite pink flowers in large clusters. These colorful blooms appear in late winter or early spring, followed by dark green leaves, making those rosy-pink blooms stand out even more. Here in Colorado however, the Redbud is not particularly reliable in the blooming department unless it is in a well-protected location (and I mean WELL protected!). Our springtime weather is just too unpredictable. There is a reason it is called "Eastern" Redbud...



Eastern Redbud

The most dependable and spectacular substitute for this tree is **Prairifire Crabapple** (*Malus* × 'Prairifire'). Unlike the Redbud, which looks great in early spring, Prairifire offers what all gardeners seek but seldom find - true 4 season interest! Growing to 20' x 20' with a rounded crown, this tree prefers full sun and does well in most soil types. In mid-late April, new foliage emerges a deep red color. Within a week or so after that, spectacular vibrant pink blooms emerge, lasting 2 to 3 weeks. Once the blooms fade and drop, the leaves begin to change to green with a reddish cast and the small crabapples (well favored by birds) begin to develop. These shiny red fruit last all summer long and provide vibrant color and interest well into late winter.



Prairifire Crabapple



Prairifire spring flowers



Fruit in winter

Looking for a perfect replacement for Eastern Redbud that is disease resistant, able to thrive in our poor soils and is low maintenance and well adapted to our rapidly changeable climate? Look no further than this beauty!

Before you decide to plant a peach or apricot tree next spring, you need to know that these trees may have fruit in perhaps 1 out of every 5 years. They are among the first to bloom in the spring and often get caught by Front Range freezes. More reliable fruit trees are sour cherries, pears, plums and apples.

Among these, one of the most prolific and dependable is **Montmorency Cherry** (*Prunus cerasus* 'Montmorency'). This old French variety, named for a valley in that country, is the most popular sour cherry in America and it is the classic pie cherry tree.



Montmorency cherries have proven over the years to be outstanding for cooking, canning and pie-making. The tree is extremely winter hardy and very heavy bearing. Blooming in early May, it ripens in late June/early July. This tree is self fertile and produces large sized dark red cherries with good flavor and quality. Flesh is clear and yellow in color. Trees can be kept to any height by summer pruning.

On page 2 of this guide, we examined the virtues of using Buffalo grass as a substitute for our water-hungry bluegrass lawns. I would like to bring to your attention another alternative. **Creeping Thyme** (*Thymus serpyllum*) comes in many different varieties and makes an amazing lawn replacement. This "steppable" groundcover not only gets by on minimal amounts of water, but is about as low maintenance as you can get!



The 1st year it sleeps...



...the 2nd year it creeps...



...the 3rd year it leaps!

Hardy and drought resistant, creeping thymes produce small but attractive and prolific flowers June, July and/or August (depending on cultivar). Though unsuited for heavy traffic areas, thyme lawns stand up very well to light to moderate traffic.

Many different varieties of thyme can be used to create a lawn - you can go with a monoculture, as is pictured here, or mix different cultivars to create more visual interest. "Reiter", "Pink Chintz", "Coccineus", "Albus", "Wooly" and "Elfin" are varieties that work very well in this application.

Before planting a thyme lawn, it is very important to kill the grass. A non-selective herbicide such as Roundup is well suited to this task. Once the ground is properly prepared, plants can be placed about 6-12" apart. Plants should be watered in thoroughly, then watered deeply about once a week (more in extremely hot or dry conditions) until they are well established (2 to 3 years).

Come on, you KNOW you always wanted a lawn that doesn't need mowing, right? Well here it is!



Established Thyme lawn - no mowing required!

Looking for a vine that is different from the ordinary Clematis, English Ivy and Honeysuckle you see out there? Give **Kintzley's Ghost® Honeysuckle** a try (*Lonicera reticulata* 'Kintzley's Ghost®'). This 2006 Plant Select® introduction was discovered on a side street in old town Ft. Collins in 2001. Turns out it is a family heirloom. In the 1880's, William "Ped" Kintzley had worked



Showy June flowers

in the greenhouses at Iowa State University (then college) and found this unusual form. He propagated it himself, and over the years, gave plants as gifts to members of the Kintzley clan throughout the country. The vine was discovered to be an improved selection of the species. Although the showy, tubular yellow flowers aren't fragrant, they cover the vine in June. Each flower is



White bracts cover the plant through fall

surrounded by a large perfectly circular pure white bract. Amazingly, this bract holds its color throughout the summer into the fall before eventually fading. Preferring a good garden loam but tolerant of average soils, this vine can grow to 8' to 12' in height, with a width of 3' to 6'. Hardy to USDA zone 4 (it has been grown up to 8,000' elevation), plant in full sun to part shade.

Bridal-wreath Spirea and Snowmound Spirea are two of the more popular flowering shrubs in our landscapes. They produce profuse masses of pure white flowers in early spring, but provide little visual interest after the display ends.

Looking for a similar sized plant that provides four-season interest? **Fernbush** (*Chamaebatiaria millefolium*) is an attractive aromatic shrub that is profusely covered by small showy white five-petaled flowers June through August, when most plants are done blooming for the season! The feathery fern-like leaves and fragrant flowers are clustered at the ends of the branches. Although it is considered a semi-evergreen, most of the older leaves typically drop during the winter, revealing a smooth to flaky russet red bark.



Bridal-wreath Spirea



Snowmound Spirea

This long lived shrub grows to 4 feet tall and wide, and is extremely drought tolerant once established. After flowering, large brown seed heads are formed. Seeds are colorful, and provide great winter interest. Fernbush makes an excellent specimen or accent plant, is cold hardy to minus 30° F and prefers a well drained soil and full sun exposure.



Fernbush form



Fernbush flowers and leaves



Dwarf Japanese Maple

Dwarf Japanese Maple (*Acer palmatum dissectum*) is a highly popular ornamental tree, but here in Colorado, it does need some protection from our winter winds and sun. Even with the best of sites, these trees can suffer weather related damage.



Black Lace Elder

A better and much hardier choice is not a maple at all, but a cultivar of the common Elder shrub. **Black Lace Elder** (*Sambucus nigra* 'Eva') in development in Europe for over 10 years, is a true Zone 4 plant that looks like the more tender cutleaf Japanese Maples varieties. Finely serrated leaves emerge charcoal-purple in the spring, turning to a dark purple-green throughout the summer. Large, flattened flower clusters produce pink blossoms that turn to white in late spring and early summer, with dark blackish-red berries ripening in late summer.

Hardy to 8,000', it grows to 6-10' in height and spread. It does best with medium moisture, but also tolerates wet and even boggy soils.



Shademaster Locust

Here in Colorado, many of us contend with hungry deer eating our landscape plants. Unfortunately, many of the trees and shrubs we love are very attractive to these animals as a food source. Apple, Linden, Green Ash, Cotoneaster, Strawberry, and Tulip are just some of the species they favor. One solution is to select deer resistant plant material.

As these animals cannot read, and don't know any better, sometimes they just can't resist sampling a different "flavor" from your garden. There is no guarantee that one of these



Russian Sage

Deer Resistant Plants won't end up on the menu, but the following tend to be the ones that have successfully survived, while others have become dinner:

Trees

- Common Hackberry (*Celtis occidentalis*)
- Shademaster Locust (*Gleditsia triacanthos* var. *inermis* 'PNI2835' Shademaster®)
- Colorado Spruce (*Picea pungens*)

Shrubs

- Russian Sage (*Perovskia artiplicifolia*)
- Boulder Raspberry (*Rubus deliciosus*)
- Moonlight Broom (*Cytisus scoparius*) 'Moonlight'

Perennials

- Autumn Joy Sedum (*Sedum spectabile* 'Autumn Joy')
- Penstemons (*Penstemon* spp.)
- English Lavender (*Lavandula angustifolia* 'Munstead')



Autumn Joy Sedum



Potentilla

Potentilla (*Potentilla fruticosa*) is a popular and somewhat overused plant along the Front Range. It produces small yellow, white or pink flowers and blooms most of the summer. It has a small, rounded appearance and thrives in full sun and poor soil conditions. Diseases and pests are rare, but too much human attention damages the plant - it tends to thrive on neglect. As they age, they often become scraggly with many unproductive brown branches. The plant may cease blooming as well.

If you are looking for something different from what seems to be planted everywhere, a great choice is **Baby Blue Rabbitbrush** (*Chrysothamnus nauseosus* var. *nauseosus*). Similar in appearance to potentilla, this indestructible native shrub offers multiple season interest, growing 16-28 inches high and 20-30 inches wide. It grows best in full sun to part shade in sandy, clay or loam soils. It endures wind and cold and is very drought tolerant. It features needle-like, vivid blue leaves and is more compact and dense than the standard variety. Very attractive to butterflies, bright yellow flowers cover it in late summer and extend well into November. It is best to water as needed the first year to get your plant established. Past that point, it will need no additional moisture, but can tolerate moderate water conditions. If it receives too much water, it will likely need pruning to maintain a nice shape. It is hardy up to 8,000 feet elevation.



Baby Blue Rabbitbrush



Late Summer Flowers



Douglas Fir

Colorado Spruce (*Picea pungens*) is the State Tree of Colorado and is commonly planted along the Front Range. While it is a beautiful addition to most larger yards, there are some good alternatives available that have a similar shape, and may fit into your landscape better.

Douglas Fir (*Pseudotsuga menziesii*) is one such species. Neither a Fir nor a Spruce, Douglas Fir is more kin to Hemlock ("Pseudotsuga" means "false Hemlock" -- "Tsuga" is the Japanese name for Hemlock).

Douglas Fir is one of the primary forest trees

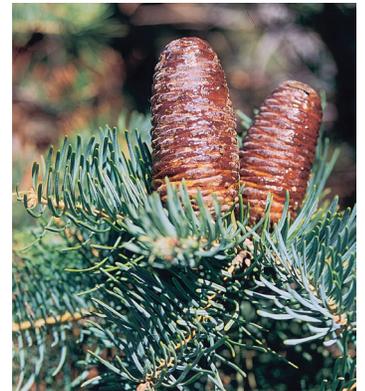
in Colorado. Its cones are distinctive (the "tails" give the appearance of a rat running under a shingle), and since it is common in forests at elevations widely used for camping, hiking, fishing and hunting, it is one tree you are sure to encounter and come to recognize. It's pyramidal shape is similar to Spruce but with a softer appearance. It prefers full sun and a slightly moist well

drained soil. Mature height is 60 feet, with a spread of 20-25 feet.



Douglas Fir cones/needles

With a similar height and spread is White Fir (*Abies concolor*), also known as **Concolor Fir**. This conical evergreen has 1.5" to 2.5" long soft bluish-green needles, brightened in the spring by very blue new growth. The softer texture and appearance is a welcome change from the much planted Colorado Spruce. This tree does best in full sun, with some protection from wind and with slightly moist soils. It will not do well in heavy soils.



White Fir cones/needles

White Fir



Globe Peashrub Form

Boxwood shrubs (*Buxus* spp.) tend to make some of the best small hedges, and look great as individual specimen plants. The downside to these broadleaf evergreens is that they do need protection from our winter winds and sun, otherwise they can desiccate and die back.



As a hedge

If you have an unprotected area of your yard that could use a tough low growing hedge or interesting small accent plant, **Globe Peashrub** (*Caragana frutex* 'Globosa') is an excellent substitute. This deciduous shrub, hardy to zone 2, has a rounded form and grows slowly to 3 feet tall and wide. Bright yellow pea-like flowers bloom in late-spring. The bluish-green foliage turns bright yellow in the fall. Extremely cold hardy and drought tolerant, this plant is native to Siberia and Mongolia. Plant in full sun for best results.



Flowers and foliage



Leaves close up



Fall color



Winter

Rock Mulch or Wood Mulch?

Depending on the materials used, mulches provide many benefits, including weed suppression, soil moisture stabilization, erosion control and aesthetic appeal. Let's take a look at the two most popular mulches being used today.



*Use rock mulch in **non-plant** areas only*

Rock mulch has staying power - it will not degrade with exposure to the elements, it does not blow away like wood mulch and requires no topdressing to keep it looking good. It is the preferred material for non-plant areas of your yard, as it does poorly in the areas of weed suppression and water retention. Most rock products with a diameter of 1/2" or more allow a lot of light and air through, so they require the use of a weed prevention barrier (typically poly-spun fabric sheeting) between the rock and the soil. Without some kind of barrier, weeds can easily germinate in the rock, but these weed barriers can also inhibit the growth of plants and the free movement of air and water into the soil.

Rock mulch absorbs heat - outdoor people space adjacent to rock mulch will be warmer and less comfortable for summertime use. In planting beds, rock mulch gets much hotter than wood mulch and reflects sunlight, which can create an uncomfortable micro-climate for plant material. This "heat island effect" can also increase watering requirements, cause damage to tender leaves and stems and suppress healthy growth. Rock, while easy to maintain, can be very tough on plant material!

Wood mulch, such as shredded cedar fiber mulch, is extremely beneficial to the soil and plant material. Wood mulch retains water, provides organic matter to the soil, harbors beneficial microorganisms, provides a favorable environment for roots and earthworms and reduces reflective heat. It is great around trees, shrubs, perennials and small fruits. Wood mulch should have direct contact with the soil, because weed barriers will defeat most of the benefits. Even though a weed barrier is not used, with adequate coverage (2" in heavy clay soils, 4" in well drained sandy soils), wood mulch also suppresses weeds. In perennial and shrub beds, wood mulch can reduce the need for irrigation by as much as 50%.



Wood mulch reduces watering by up to 50%!



Rose bush damaged by reflected heat from rock mulch

The only real downside to it is it has to be top-dressed with a fresh layer every one to two years to maintain its look, feel, and integrity. Wood mulch, while being beneficial to the horticultural environment, can require more maintenance input, but it is a small price to pay for healthier plants and superior water retention!

Dog Tuff™ Grass

Dog Tuff Grass (*Cynodon* 'PWIN04S') is a homeowner's dream come true. This deep-rooted, dense, low-growing turf grass is very drought resistant and creates a tough, durable lawn. It is ideal for kids' play and stands up to dog traffic and dog urine with little or no damage. Dog Tuff Grass is established from plugs. Typically within one season, Dog Tuff fills into a thick, luxurious lawn, spreading by stolons that root deep into the ground. This grass is considered sterile, so it doesn't spread by seed. Because Dog Tuff Grass only grows to 2 ½-4 inches tall, you need not mow it. Without mowing, Dog Tuff grows in gentle mounds. If you prefer a manicured look, you can mow about once a week, but be careful to only mow ½ inch of growth at a time or you will scalp the lawn, causing it to go brown. Don't cut the grass short before winter; instead mow it low in early spring to reinvigorate it.



Dog Tuff™ Grass at 2 weeks



Dog Tuff™ Grass at 4 weeks



Dog Tuff™ Grass at 6 weeks



Dog Tuff™ Grass at 10 weeks



Dog Tuff™ is:

- VERY drought tolerant
- VERY resistant to dog urine
- LOVES full, hot sun
- GROWS happily on dry slopes
- DOESN'T wear thin in the winter like buffalo grass
- RECOVERS from excessive foot traffic quickly
- HONEYBEES love the pollen

Dog Tuff™ is **NOT**:

- Tolerant of shade
- Tolerant of weed killers like 2,4-D or glyphosate
- Green until early June (in Colorado's Front Range)
- Green after October 1 (in Colorado's Front Range)
- Useful in USDA zones colder than zone 5