

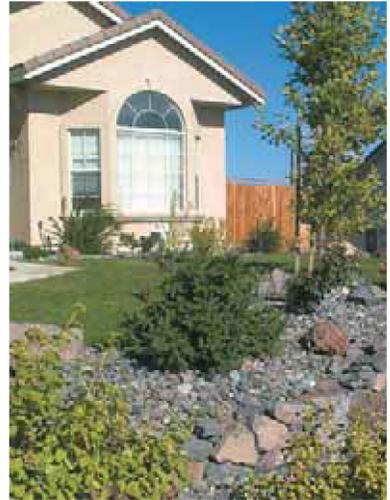
LANDSCAPING IN THE TRUCKEE MEADOWS



Landscape
Design



Plant
Selection



Planting &
Maintenance



tmwa.com/landscape



TRUCKEE MEADOWS WATER AUTHORITY (TMWA) started business in June 2001. The cities of Reno and Sparks and Washoe County came together to purchase the existing water company from Sierra Pacific Power Company. TMWA serves more than 400,000 residences in Reno, Sparks and Washoe County, making it the largest water purveyor in northern Nevada.

Our priorities include: promoting water conservation for the future of our communities, maintaining stable rates for our customers, and keeping our water supply pure and safe. We are fortunate to have the most advanced water purification plants which produce some of the highest quality water in the country — delivered to you every time you turn on your tap.

We understand that being a large user of the Truckee River comes with an enormous responsibility and we are committed to successful implementation of the best management practices and water conservation in our region.

It is a pleasure to provide you with this landscape guide, which is intended to stimulate your ideas and imagination on how to layout your landscape, provide a selection of plants that grow well in our climate while adding natural beauty to your landscape, and provide guidance on how to care for all your plants. Consideration is also given to sprinkler system layout and design.

There are seven horticultural principles that are proven to enhance the water efficiency of a landscape and provide preferred environmental conditions for the plants. These principles are:

- 1. Proper Planning (design)**
- 2. Efficient Irrigation**
- 3. Plant Selection**
- 4. Soil Improvement**
- 5. Mulching**
- 6. Grouping Plants with Similar Water Needs**
- 7. Maintenance**

The three sections contained in this guide take you through these principles to give you some tools to form the right plan for your yard.

Several references are included if additional, detailed information is desired. Worksheets in the back of the guide are there to get you started. Please call TMWA's Water Conservation Department at 834-8005 if you require additional information. A searchable version of this guide can also be found on our website, tmwa.com/landscape.

LANDSCAPING IN THE TRUCKEE MEADOWS

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This complete guide can be found at tmwa.com/landscape.

1

Landscape Design

Welcome to the Landscape Design section of *Landscaping in the Truckee Meadows*. Whether you are remodeling or retrofitting an existing yard, or starting from scratch, good planning and water-efficiency are vital to a healthy landscape in our desert climate. This section will give you ideas of how to layout landscaping to fit your lifestyle

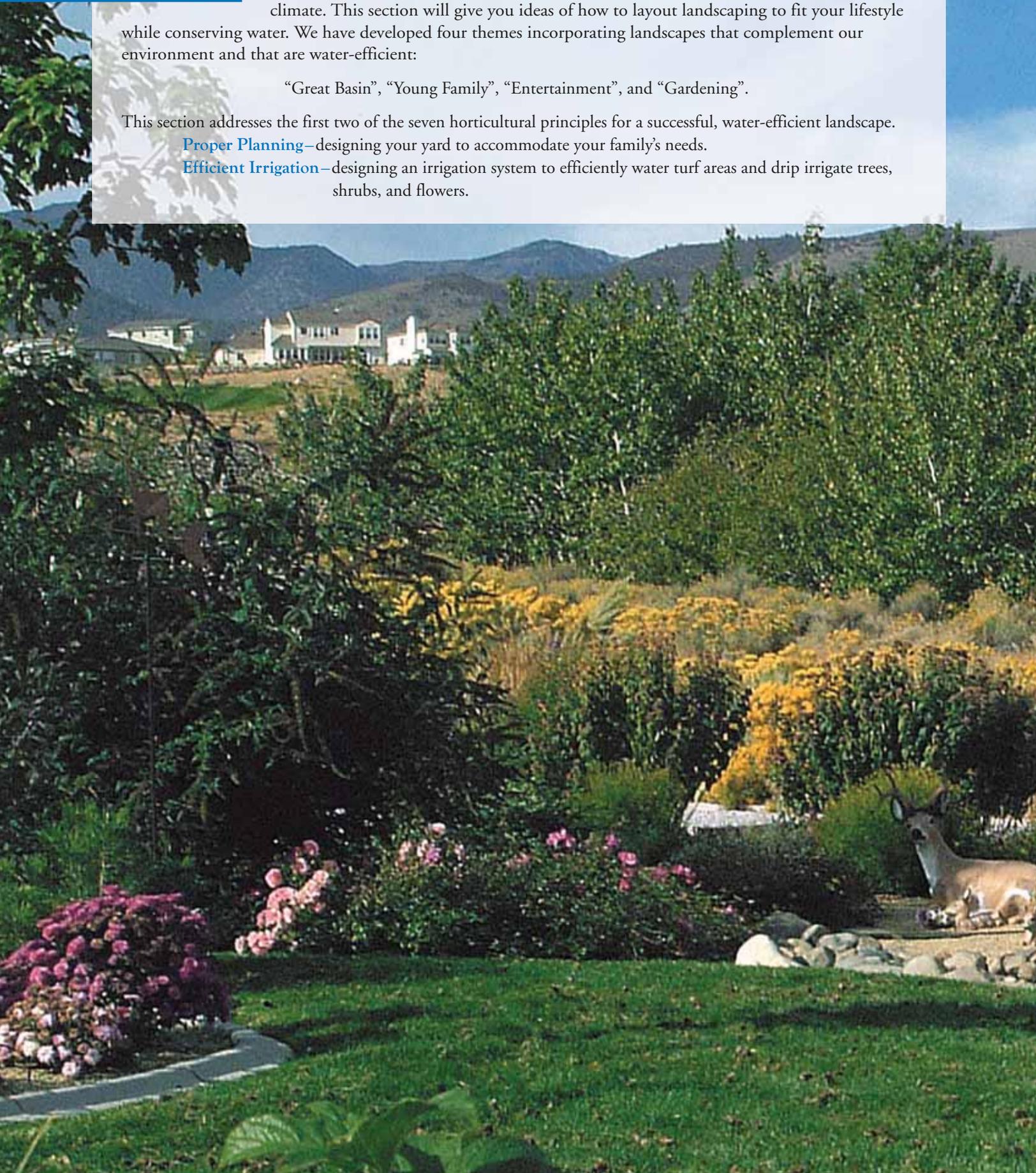
while conserving water. We have developed four themes incorporating landscapes that complement our environment and that are water-efficient:

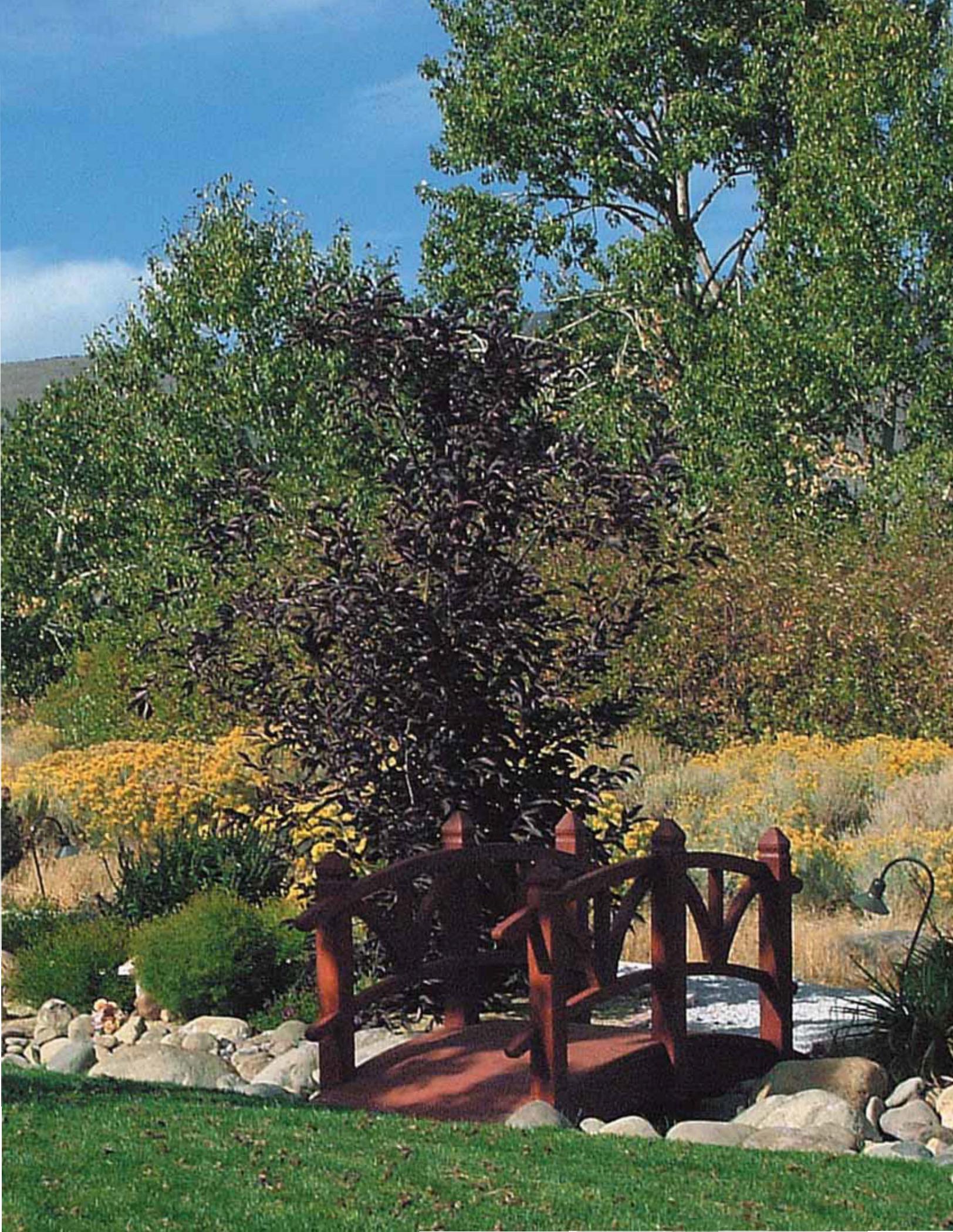
“Great Basin”, “Young Family”, “Entertainment”, and “Gardening”.

This section addresses the first two of the seven horticultural principles for a successful, water-efficient landscape.

Proper Planning—designing your yard to accommodate your family’s needs.

Efficient Irrigation—designing an irrigation system to efficiently water turf areas and drip irrigate trees, shrubs, and flowers.





I. VISUALIZE A GREAT LOOKING YARD

These suggestions will help you get started in planning your yard. They work whether you are retrofitting or starting from scratch.

- Evaluate your landscape and how it will be used. Take photos of yards that appeal to you. Creating an overall plan is easy once you have a concept in mind.
- Develop a plot plan map of your lot. Locate all the features that affect your landscaping.
- If you're renovating an established yard, evaluate plants, patios, decks, fences, walkways and irrigation systems which may need replacing.
- Draw or cut circles that represent the size of native plants when designing your new planting areas. Most large canopy-style trees average 40 feet wide; medium trees, 30 feet wide; and small trees, 20 feet wide. Use five- and 10-foot-wide circles to represent shrubs. Perennials are usually one to three feet wide. Place your templates on your plot plan. Choose trees that frame your home, rather than hide it. (See pages 78 and 79 for worksheets.)
- Plant deciduous (leaf dropping) trees on the south and/or the west side of your house to enhance summer cooling and to allow winter sun to warm your home.
- Although trees, shrubs and plants may look small when first planted, they will eventually grow to mature size, so allow proper space between them.
- Trees can be placed next to turf areas, but don't work as well within the turf itself. Nearly all trees have different watering requirements than turf, which may result in pests, disease and roots surfacing in the lawn.
- Place your shrubs and perennials, grouping zones by water use. A water-efficient landscape will have few "high water use" plants and practical turf area. In general, place the highest water-use zones close to the house, and low water-use zones furthest from the house.

The following chart lists examples of water use zones based on plant types. For more information on plants that are water-efficient, check the *Plant Selection* section.

PLANT TYPE	WATER ZONE USE
Native Plant	Low Water
Cactus Gardens	Low Water
Herb Gardens	Moderate to Low Water
Fruit Trees	Moderate Water
Flower Gardens	High Water
Vegetable Gardens	Generally Moderate to High (Depending on Crops)
Wildflower Meadow	High Water to Germinate/ Low Once Established
Lawn	Moderate to High Water

- Locate underground utilities. Call before you dig at 811.

EVALUATING GROUND COVERS, FLOWERS AND LAWN

Planting Ground Covers

If ground covers are considered, choose one best suited to your location:

1. Will there be foot traffic? Avoid succulent or fragile plants in these areas.
2. Are other plants growing within the area? Check how tall your ground cover will grow to avoid blocking other plants.
3. Are there roots, valves or meters you want the ground cover to hide?
4. Do seasonal conditions vary? Full sun in spring when trees are bare, shade when trees have leafed out.
5. How fast will the area need to be covered? For example, vines are fast growing but cannot handle foot traffic. Another example, thyme is durable, but is slow to fill in.
6. What are the water requirements of other plants in the area? Will all plants be on the same watering schedule? Will the ground cover need a separate station on the irrigation system due to different water needs?

Planting Flowers

Flowers can brighten, soften, highlight or disguise elements of your home's landscape, adding another dimension to the foundation you've created with trees and shrubs. After you've planted everything else, plant flowers to accent the theme or elements of your landscape.

Create Practical Lawn Areas

Because they use the most water, limit lawns to areas where they are truly needed. If you have plants that would benefit from overspray, place them next to the lawn. The easiest lawn to maintain has no trees in it or "islands" of plants, because they impede sprinkler patterns. Avoid areas that require a unique sprinkler pattern. Instead, try a flower bed, a shade tree, or enlarging an adjacent deck or patio. Planting turf on slopes is not recommended due to water runoff.

WATER ZONES

Very Low Water Zone

This drip-irrigated landscape uses little to no water once established. It is characterized by a variety of native desert plants and compatible exotics that are spaced to expose a rich "desert pavement" of scattered quarry rock.

Low Water Zone

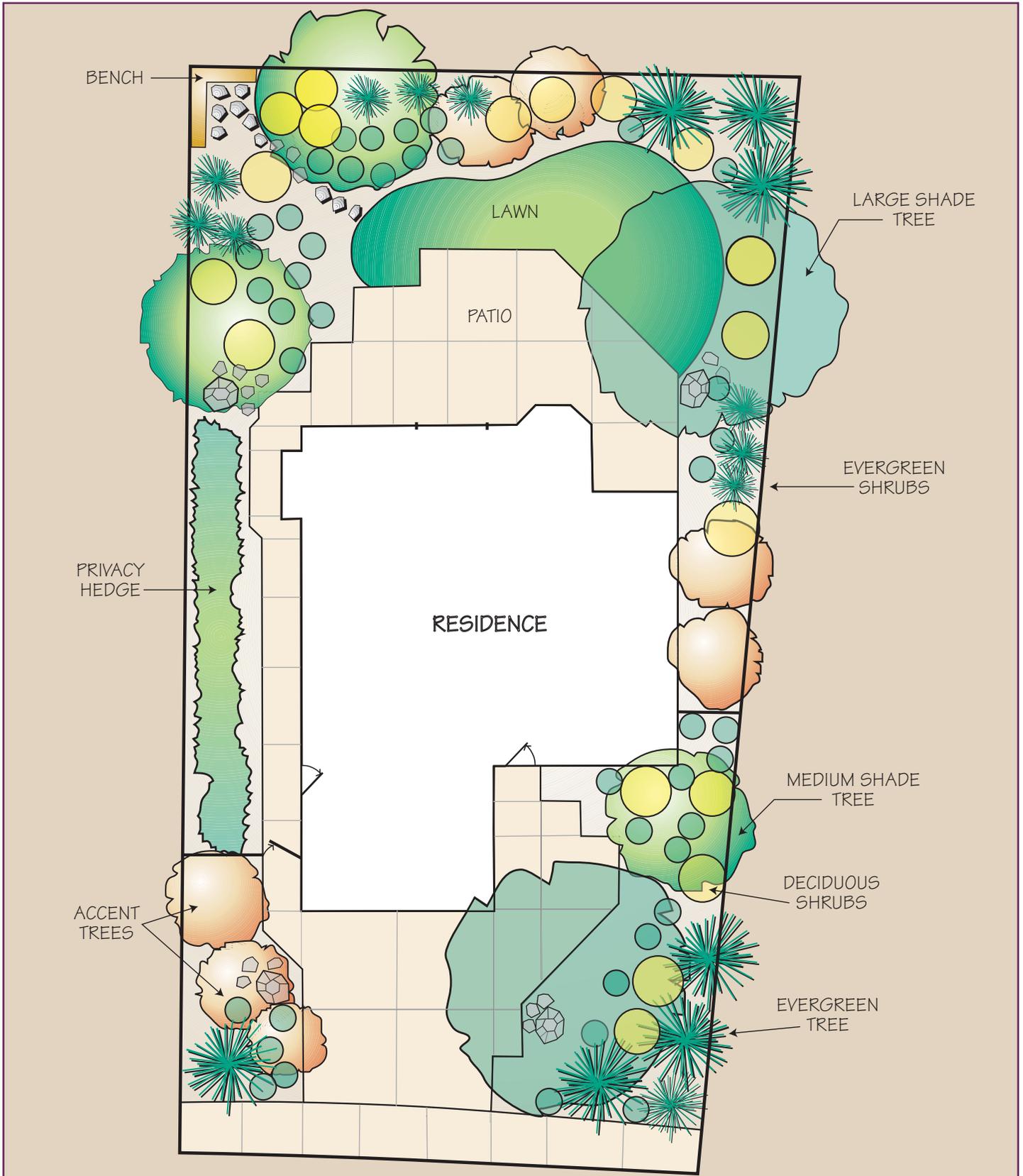
This lush-looking landscape includes evergreen trees and shrub masses and deciduous areas that are inspired by the mountains west of Reno. A deep wood chip mulch mimics natural forest duff and visually reinforces the concept. Mulches keep water evaporation to a minimum. This treatment can form visual screens and backgrounds for garden areas and they create favorable microclimates by providing wind breaks. Deciduous trees allow warm winter sun while providing summer shade. Plants used here flourish with low to moderate amounts of water supplied by drip irrigation.

Moderate and High Water Zones

Thirstier plants have a place in our landscapes, too. Dry streams constructed of rounded river cobbles and boulders can be used to visually enhance drainage ways, correct erosion problems and provide a garden focal point. Planted with moderate water-use plants such as those which grow along mountain and dry streams have a beautiful, natural look. These areas are the oasis of our Great Basin landscapes. Wildflowers and meadow grasses are included as well as the turf areas so important for recreational use.

Plant selections can coordinate with the mountain theme or can include drier, native wildflowers to work with low water use plantings. Rounded river cobbles and boulders are used to evoke the region's native stream sides. Boulders can also add accents and informal seating to lawn areas. Lawns and wildflower meadows are often planted from seed and can be very water-efficient depending on the kind of seed.

II. LANDSCAPE PLANS GREAT BASIN LANDSCAPE THEME



GREAT BASIN IRRIGATION PLAN



FIGURE 1

FIGURE 1 – Groups of native desert plants and areas of mountain region landscape create an attractive and easy-care setting.



FIGURE 2

FIGURE 2 – Lawn areas can be substituted with a wildflower meadow to reduce water usage and add color.



FIGURE 3

FIGURE 3 – Wild and errant vegetation is perfect along the fence line adding depth to the outskirts of the landscape.

FIGURE 4 – Shrubbery and evergreens with a rock retaining wall create an attractive, yet low-maintenance, entry to the Great Basin home.

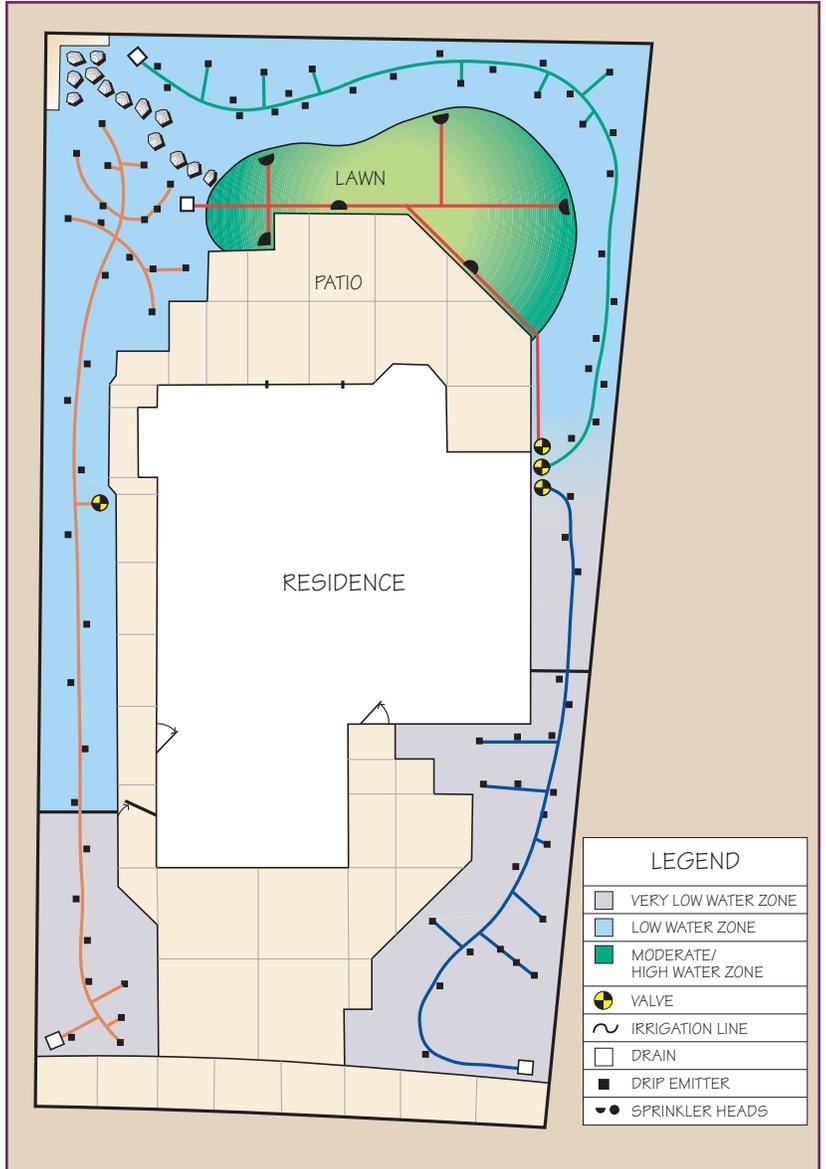
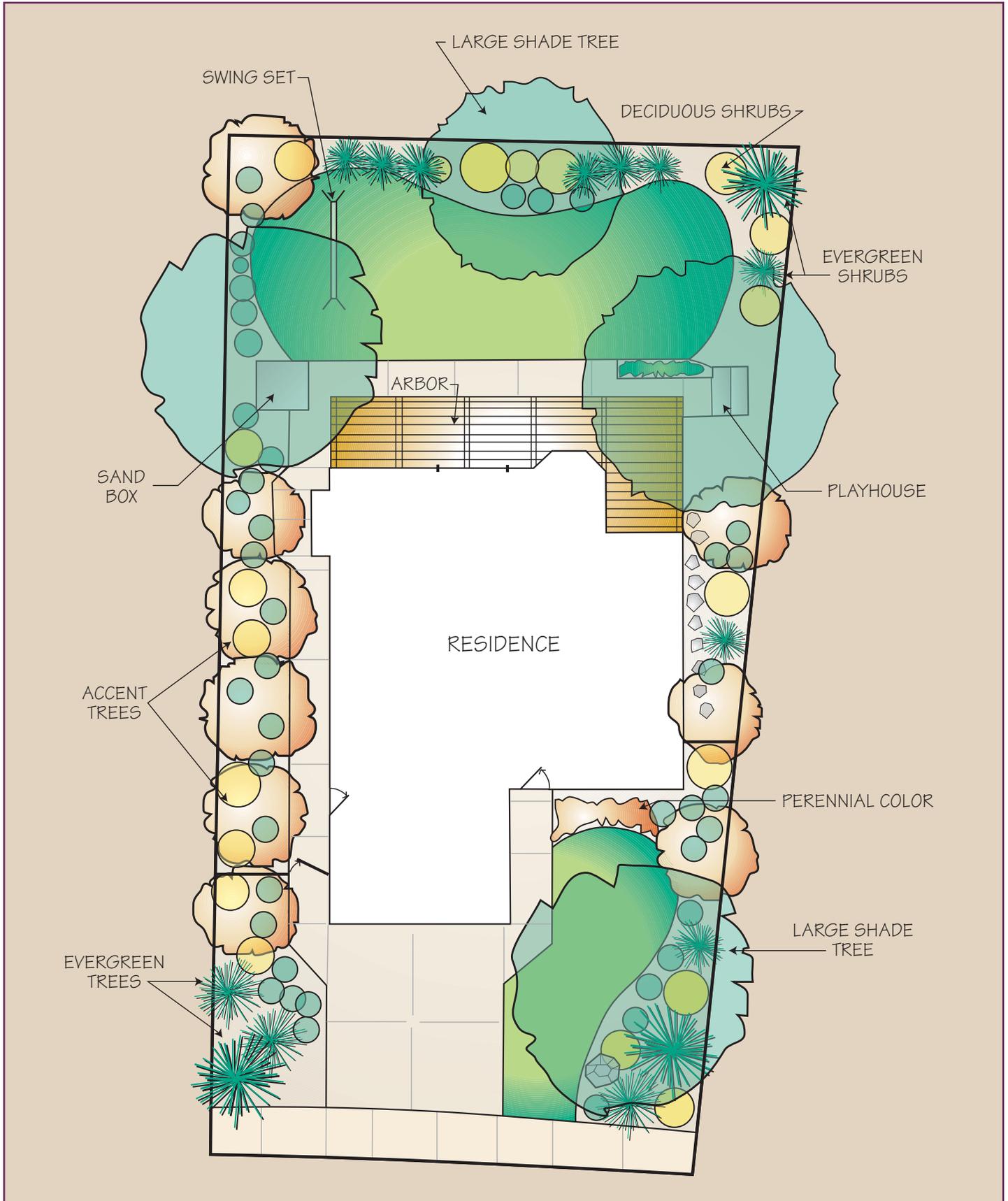


FIGURE 4

YOUNG FAMILY LANDSCAPE THEME



YOUNG FAMILY IRRIGATION PLAN



FIGURE 1

FIGURE 1 – Plan enough lawn area for an active family, yet still easy to maintain and water.



FIGURE 2

FIGURE 2 – Flowerbeds surrounded by creative hardscapes add vibrant color.



FIGURE 3

FIGURE 3 – Planters skirting the edges of a lawn and a wooden deck are a unique way to expand the living area.

FIGURE 4

FIGURE 4 – A swingset sits under ample shade ready for hours of family entertainment.

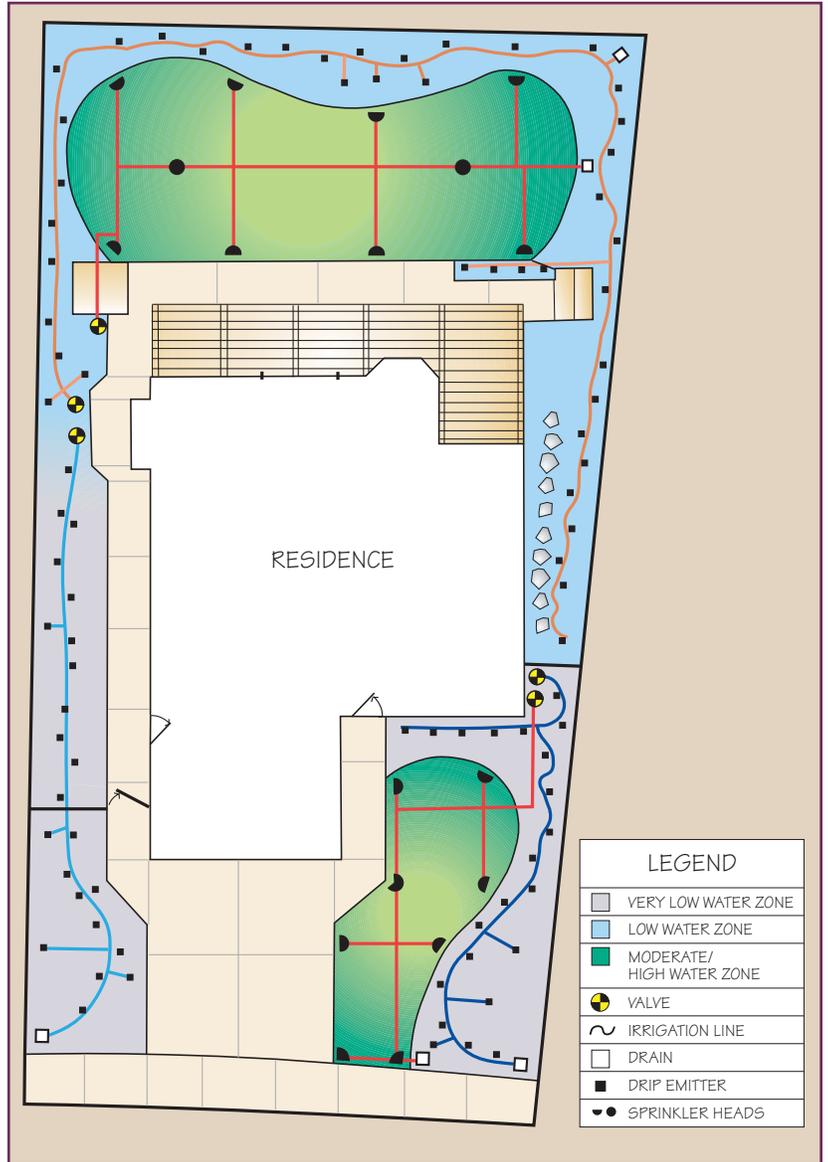
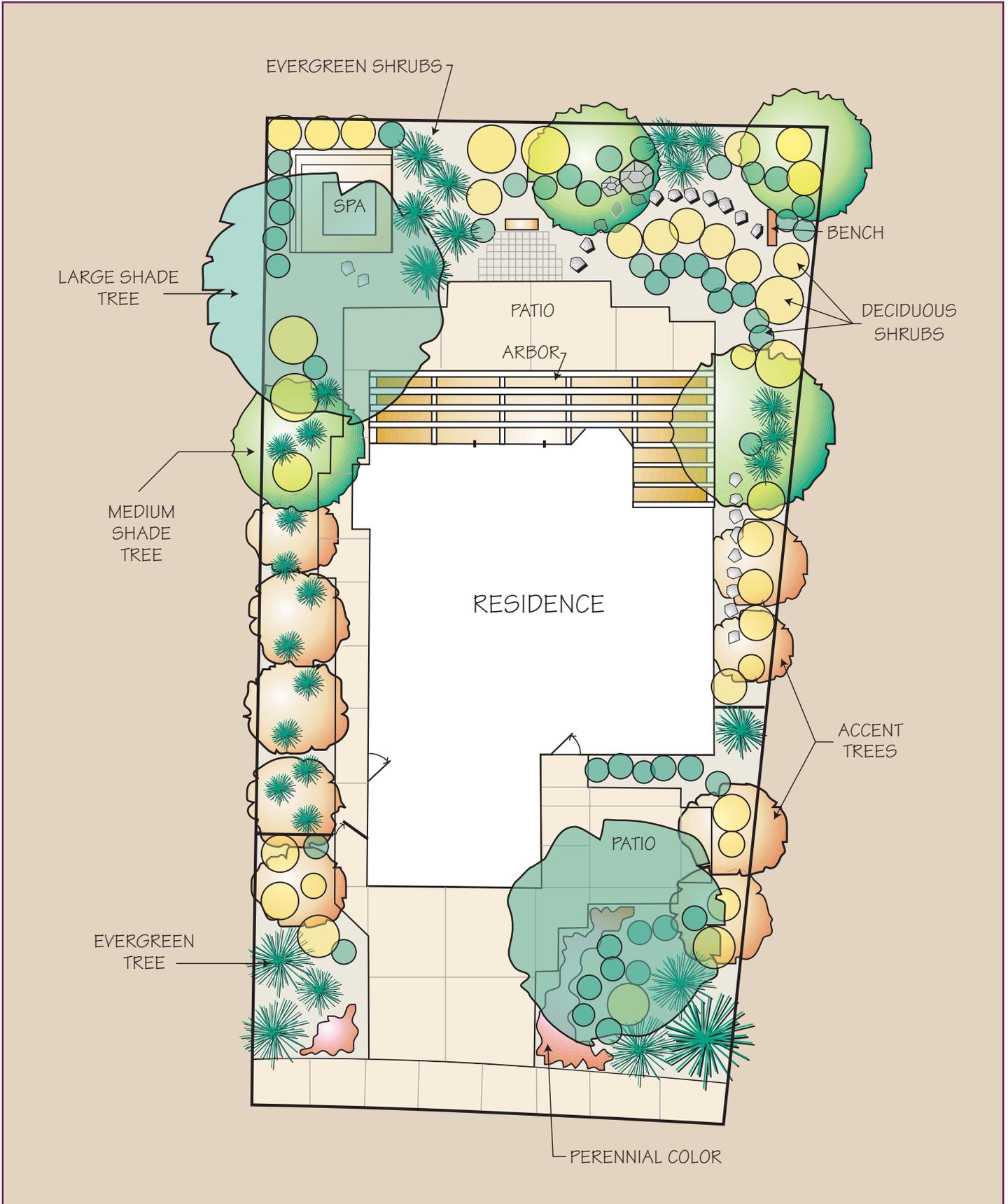


FIGURE 4

ENTERTAINMENT LANDSCAPE THEME



ENTERTAINMENT IRRIGATION PLAN



FIGURE 1

FIGURE 1 – Cement curbing is excellent for separating the grass from the shrubs and groundcovers in low water zones.



FIGURE 2

FIGURE 2 – A patio in the front yard adds additional living space balanced with shrubs, ground cover and evergreens.

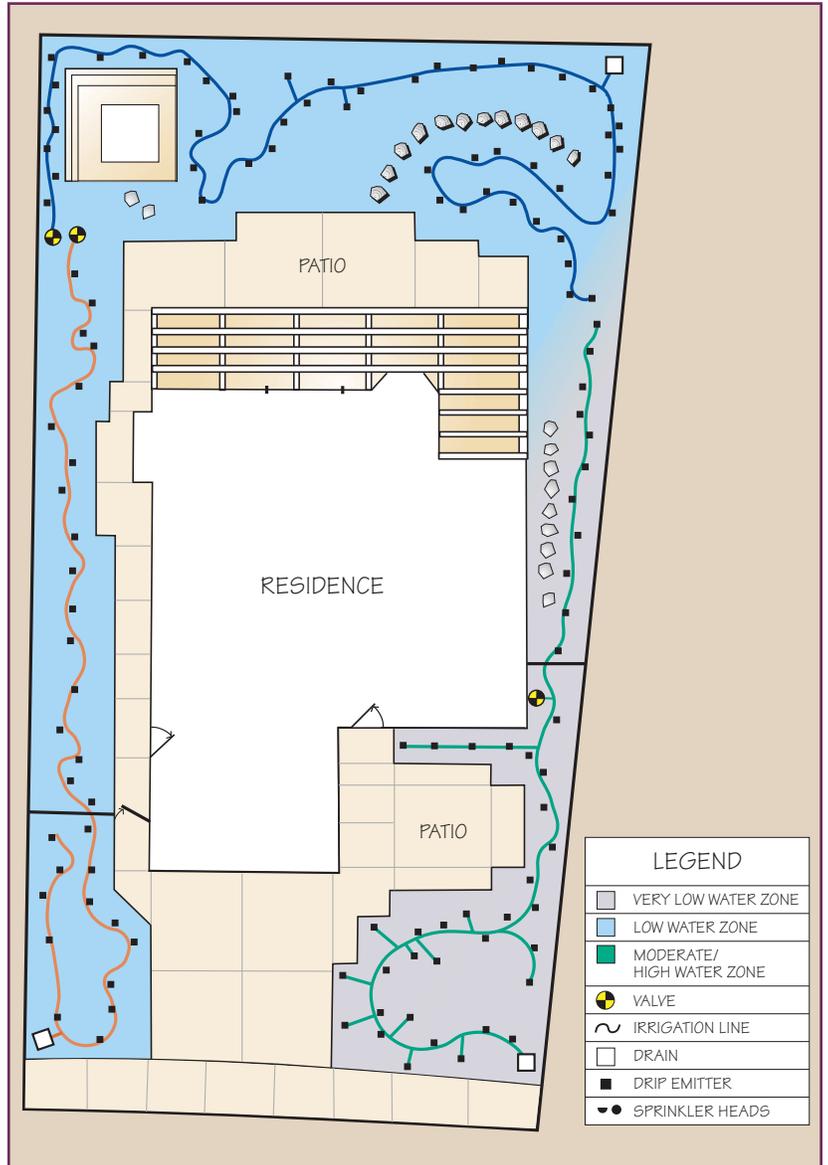


FIGURE 3

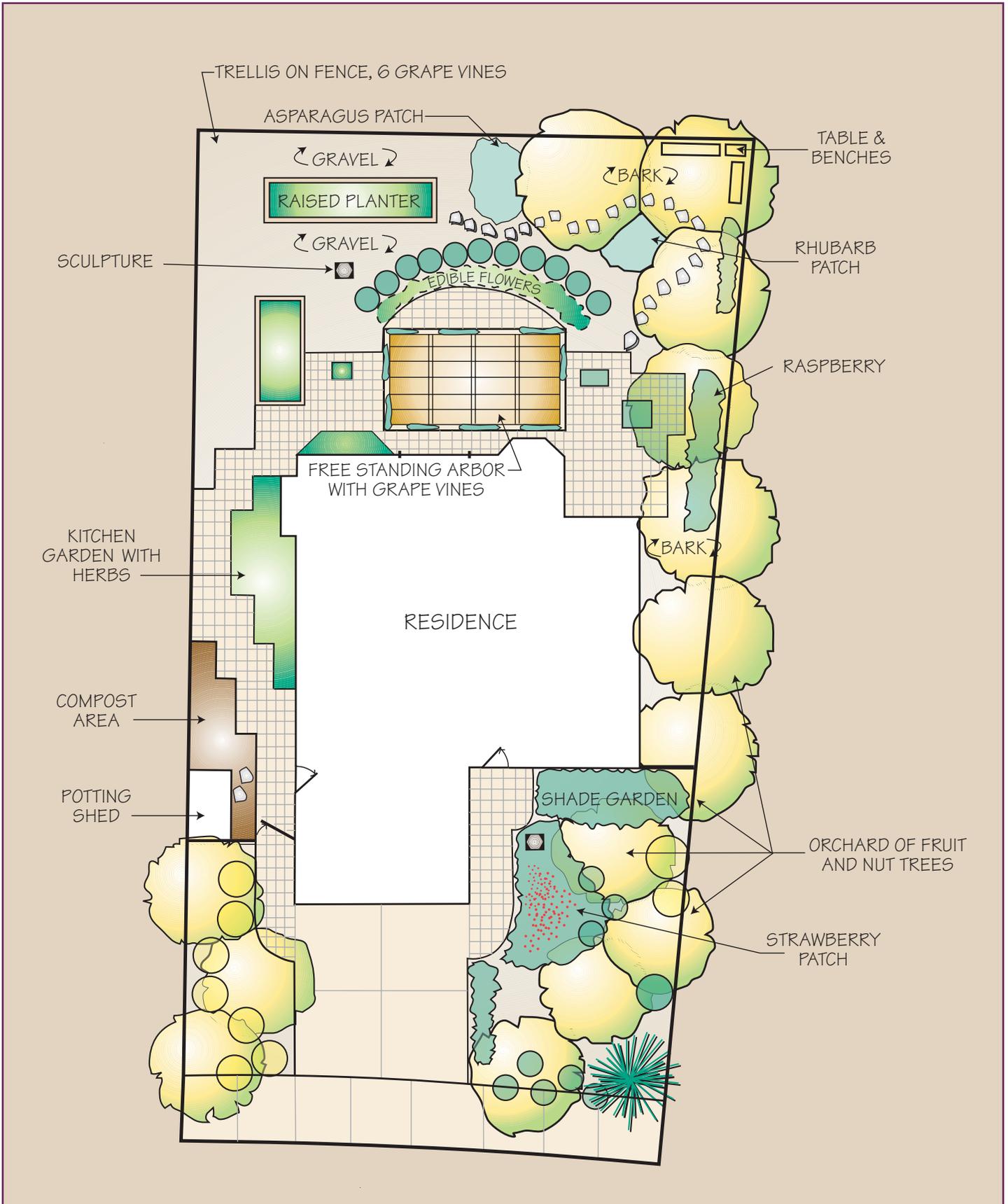
FIGURE 3 – A contemporary spa design gives variety and style to the landscape. Plenty of large shade trees keep the surrounding areas cool during the summer heat.

FIGURE 4

FIGURE 4 – A rear, wooden deck provides additional living space as well as entertaining options.



GARDENING LANDSCAPE THEME



GARDENING IRRIGATION PLAN



FIGURE 1

FIGURE 1 – A stone path set in bark runs along the side of the house for easy access to the backyard.



FIGURE 2

FIGURE 2 – A grapevine-covered entryway shades and accents the house.

FIGURE 3 – A vegetable patch is a useful and challenging necessity for the aspiring gardener.

FIGURE 4 – Raised planters for tomatoes and herbs contribute color and convenience.

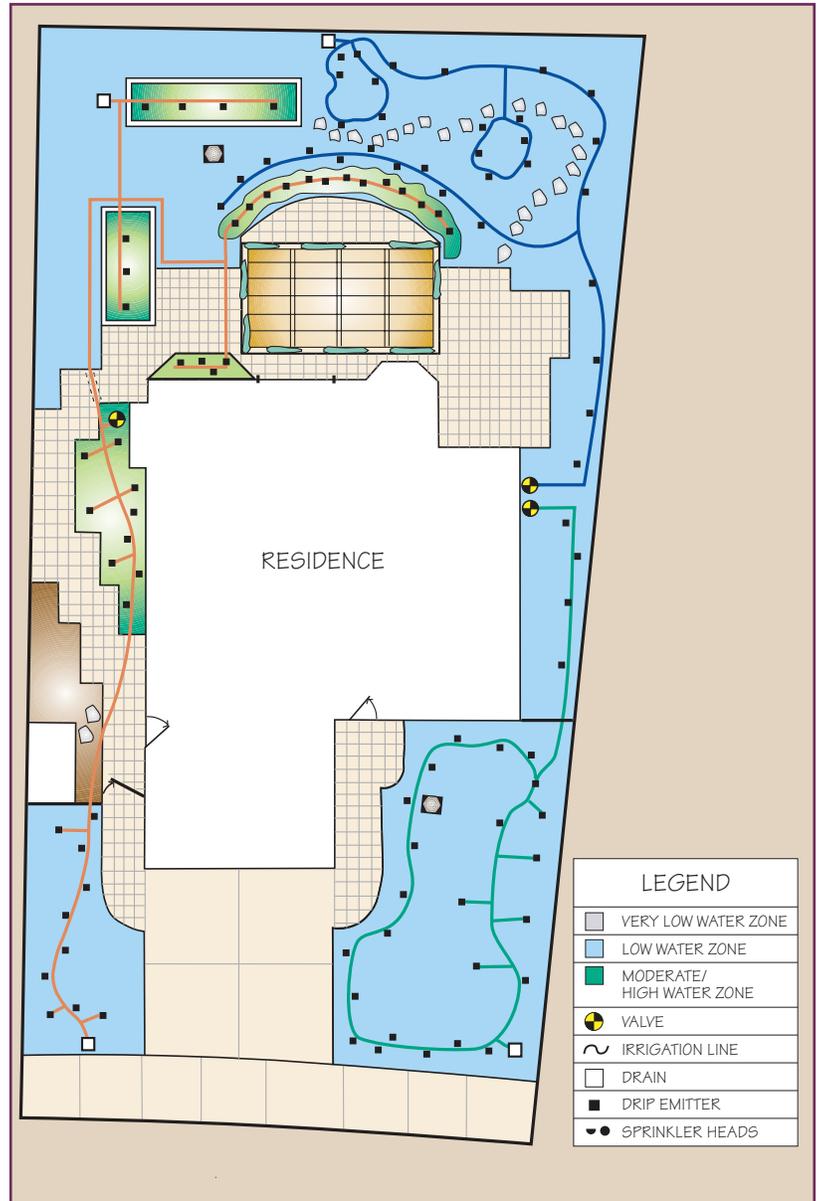


FIGURE 3

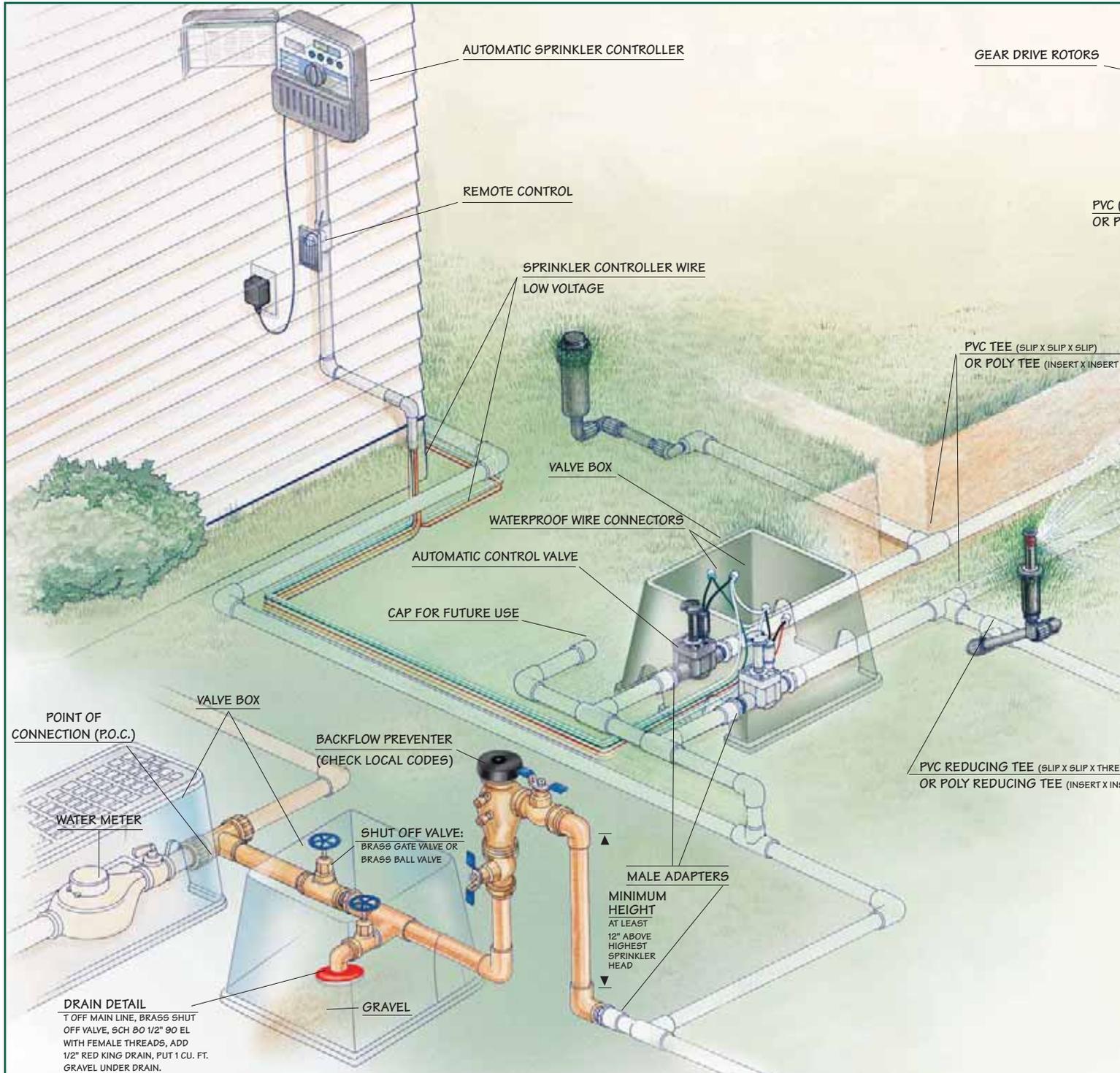


FIGURE 4

III. PLAN AN EFFICIENT IRRIGATION SYSTEM

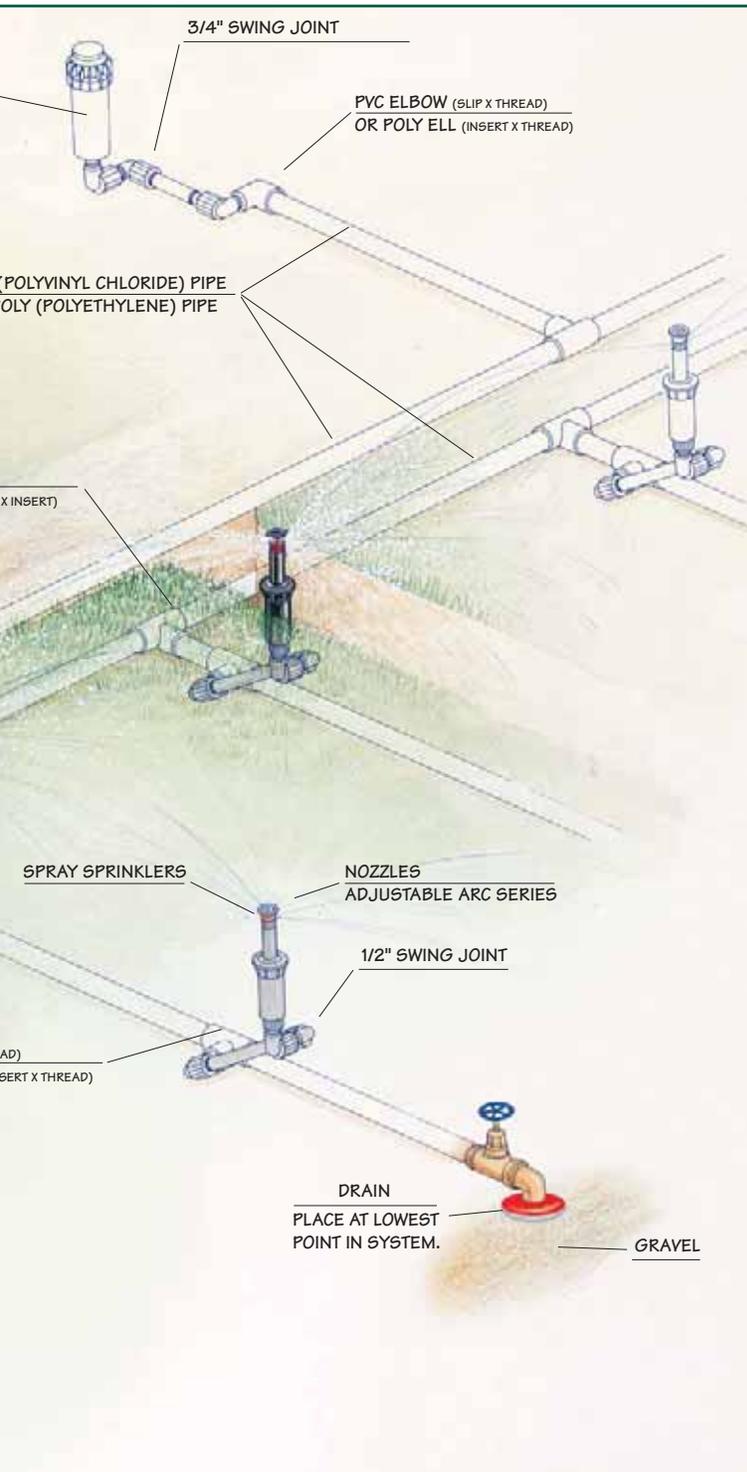
An irrigation system can be tricky to design and install, even with experience. Many building supply centers offer design services or classes to help you design your own. In a water-efficient yard, sprinklers are used to irrigate turf areas only while drip irrigation systems are recommended for trees, shrubs, and flowers.

You can purchase drip emitters with varying flow rates and specialized heads for flower beds, ground covers and gardens. Since drip systems give plants, shrubs and trees the water they need without waste, you'll save time, water and money when you design your system with a healthy amount of drip irrigation.



Many landscapes require a change in the grade or slope of the yard. Make sure level surfaces are graded with a slight slope so they will drain away from your home's foundation.

If you've added berms or terraces, consider installing your irrigation lines before bringing in additional materials.



(The irrigation trench depth will be more uniform when dug through a level surface). If you're planting the sloping sides of a berm or terrace, the grade of the slope must not exceed three feet of run for every one foot of rise (3:1).

If you have an old or galvanized pipe system, you may want to replace it with plastic PVC pipe. Galvanized pipe can slowly plug up, rust and corrode, leading to a leaky system.

Whether you're installing an irrigation system in a new yard or modifying one in an existing landscape, you can save money by doing most of the work yourself. However, consider your time schedule and mechanical abilities before you jump in—you may find that you'll get it done quicker and with fewer headaches by calling a landscape contractor to do it for you.

Whether you're using spray, rotor or impulse-type sprinklers for turf, make sure to provide sufficient overlap in your design. Check the manufacturer's instructions for suggested overlap distances. Also, be careful not to locate sprinkler heads behind trees or objects which might impede the spray and deprive your lawn of valuable water.

You'll need to perform some annual maintenance, because drip emitters and sprinkler heads get clogged and lawn mowers occasionally damage spray heads. Also, adjust your controller for changes in water amounts needed over the season. Drain your system at summer's end to prevent it from freezing and cracking when the weather turns cold.

WATER QUALITY PROTECTION

Precautions are necessary to prevent contaminated water from entering your irrigation system. Bacteria and other microbiological contaminants may enter your system through malfunctioning valves or broken sprinkler heads and subsurface pipes. Water may also become chemically contaminated if you are applying or injecting fertilizer into your drip irrigation system.

Potential contamination from your irrigation system becomes a serious issue should backflow occur. Backflow is a flow reversal which may occur from a broken water main or from a flowing fire hydrant. In order to protect your home from backflow, an appropriate "backflow prevention assembly" must be incorporated into your irrigation system.

Properly installed and maintained backflow prevention assemblies will prevent contamination and are required by state and local laws.

2

Plant Selection

Welcome to the Plant Selection section of *Landscaping in the Truckee Meadows*. This section addresses the third of the seven horticultural principles for a successful water-efficient landscape:

Plant Selection—choose plants that fit your landscape plan.

Our area is classified as a desert due to the low average rainfall of 6–10 inches per year. Many plants we grow are native to other regions and have higher watering requirements. The plants illustrated here were chosen for hardiness, pest and disease tolerance, maintenance needs, longevity, and water use. These colorful plants are proven performers.

Pick plants that individualize your yard and reflect your personality and landscape desires. Carefully choosing your plants will prevent disappointment later and will result in a display that lives up to your efforts and expectations.



Perennial Flowers



BOTANICAL NAME	COMMON NAME	PAGE
<i>Achillea</i> species	Yarrow	20
<i>Agastache cana</i>	Bubblegum Mint	20
<i>Alcea rosea</i>	Hollyhock	20
<i>Antirrhinum majus</i>	Snapdragon	20
<i>Armeria maritima</i>	Sea Pinks	20
<i>Artemisia</i> species	Sage or Wormwood	21
<i>Aster</i> species	Aster	21
<i>Aurinia saxatilis</i>	Basket-of-Gold	21
<i>Coreopsis</i> species	Tickseed	21
<i>Crocus</i> species	Spring Crocus	22
<i>Dianthus</i> species	Pinks	22
<i>Echinacea purpurea</i>	Coneflower	22
<i>Eriogonum umbellatum</i>	Sulfur Flowered Buckwheat	22
<i>Eschscholzia californica</i>	California Poppy	23
<i>Gaillardia grandiflora</i>	Blanket Flower	23
<i>Gaura lindheimeri</i>	Gaura	23
<i>Geranium</i> species	Hardy Geranium	23
<i>Gypsophila</i> species	Baby's Breath	23
<i>Hemerocallis</i> hybrids	Daylily	23
<i>Heuchera sanguinea</i>	Coral Bells	24
<i>Iberis sempervirens</i>	Candytuft	24
<i>Iris germanica</i>	Bearded Iris	24
<i>Kniphofia uvaria</i>	Red Hot Poker	24
<i>Lavandula angustifolia</i>	Lavender	24
<i>Lilium</i> species	Lily	25
<i>Linum</i> species	Flax	25
<i>Narcissus</i> species	Daffodil or Narcissus	25
<i>Nepeta racemosa</i>	Catmint	25
<i>Oenothera</i> species	Evening Primrose	26
<i>Papaver</i> species	Poppy	26
<i>Penstemon</i> species	Beard Tongue	26
<i>Perovskia atriplicifolia</i>	Russian Sage	27
<i>Platycodon grandiflorus</i>	Balloon Flower	27
<i>Rudbeckia fulgida</i>	Black-Eyed Susan	27
<i>Salvia</i> species	Sage or Salvia	27
<i>Saponaria</i> species	Soapwort	27
<i>Sedum</i> species	Stoncrop	28
<i>Senecio cineraria</i>	Dusty Miller	28
<i>Stachys byzantina</i>	Lamb's Ears	28
<i>Tanacetum</i> species	Painted or Michaelmas Daisy	28
<i>Thermopsis montana</i>	False Lupine	29
<i>Tulbaghia violacea</i>	Society Garlic	29
<i>Tulipa</i> species	Tulip	29
<i>Veronica spicata</i>	Spike Speedwell	29
<i>Viola</i> species	Violet or Pansy	29

How to Use Your Water-Efficient Plant Selection Guide

The plants in this guide are alphabetized by their Latin or botanical name which is followed by the common name.

Below the plant name you'll find a series of icons that gives a quick indication of the special needs and some qualities of each plant.

The text with each plant gives additional information that should prove helpful in making the best selection for your landscape needs.

FLOWERS



Achillea species

Yarrow – Yarrow has many heights and flower colors depending on species. It is good used as a cut or dried flower, within a flower border, within meadow mixes or native areas. Best grown in full sun, well-drained soil, and a watering zone that is irrigated 1-2 times per week. This plant is not bothered by rabbits, squirrels nor deer.

A. filipendulina (Fernleaf Yarrow) – 4-5 ft. tall by 3 ft. wide; dark green ferny foliage; gold flowers in July

A. f. 'Coronation Gold' – 3 ft. tall by 3 ft. wide; gray-green foliage; 4 in. wide gold flowers in August

A. millefolium – 3 ft. tall by 3 ft. wide; white flowers from July-August



Agastache cana

Bubblegum Mint – As you might guess from its name, the flowers of this plant smell like bubblegum. They are pale pink to rose pink in color and bloom July through September. Grow in full sun, well-drained soil and water 1-2 times per week.



Antirrhinum majus

Snapdragon – These are a cut flower favorite because of their long vase life and many colors (pink, red, yellow, white). They range in height from 6 in. to 3 ft. tall by 1 ft. to 2 ft. wide, depending on variety. Plant in full sun, well-drained soil, in a twice-a-week watering zone and feed while blooming.



Alcea rosea

Hollyhock – An old fashioned garden favorite that can still be found blooming at many an abandoned home site. Because the flower spike is so tall you need to place it in the back of a border or in front of a wall or fence so it doesn't overwhelm smaller plants. Flowers may be white, pink, red, purple, orange or yellow and bloom in June. Plant in full sun, any garden soil, with once-a-week watering. This plant is not bothered by rabbits, squirrels nor deer.



Armeria maritima

Sea Pinks – This evergreen perennial has a clumping, grass-like appearance. The ball shaped flower heads may be pink, red or white and bloom June through August. Plant in full sun, well-drained soil, water twice-a-week and feed annually with slow release fertilizer. It grows from 6-12 in. tall and about 1 ft. wide, and is suitable as an edging, in the rock garden or massed in a planter. This plant is not bothered by rabbits, squirrels nor deer.

20 • PLANT SELECTION

 Full Sun
  Part Shade
  Shade
  Moderate (twice-a-week)
  Low (once-a-week)
  Very Low (7-14 days)
  Deep Water (7-10 days)
  Deep Water (10-14 days)
  Extra Maintenance
  Temperature Sensitive

Descriptive photo

Botanical name

Icons for quick reference of special needs and features

Common name

Vital plant information

Bottom of each page has complete list of reference icons

18 • PLANT SELECTION
Truckee Meadows Water Authority

Please keep in mind the following:

- Designing a landscape using predominantly water-efficient plants can save a great amount of water. A water-efficient plant is one that lives on a twice-a-week (or less) watering schedule and tolerates drought conditions.
- Group plants together in your landscape design that have similar soil, sunlight and water requirements. If you are developing a landscape design or adding to an existing landscape, determine each plant's sunlight and water requirements by referring to this guide. Choose plants whose needs equal those of existing plants in close proximity. For example, plants with higher water needs are best placed near lawn areas where they can take advantage of sprinkler overspray or runoff.

- Choose your plants carefully. Plants shown in this guide do well in our region. Not all plants available for purchase locally are necessarily suitable for growing in our climate, so plan wisely.
- Most plant publications will refer to a plant's viability based on climate zone. The US Department of Agriculture (USDA) has established climate zones based on the range of low temperatures that a plant can tolerate within a geographic region. The lower the zone number the colder the climate a plant can tolerate. The climate zone in the Truckee Meadows is USDA Zone 4, which has a low temperature range of -20° F to -25° F. Plants needing a warmer climate as indicated by a higher zone number are not recommended for the Truckee Meadows.

Good planning and appropriate plant selection will result in an attractive landscape, helping make your home a standout in your neighborhood.

ICON	NAME	DESCRIPTION	ICON	NAME	DESCRIPTION
	Full Sun	Greater than or equal to 8 hrs. of unobstructed sun daily		Temperature Sensitive	Zones 5 & 6 require warmer climate; not conducive to outlying valleys and foothills
	Part Shade	3-5 hrs. of sun daily		Bees	Indicates habitat or food source
	Shade	No direct sun		Birds	Indicates habitat or food source
	Moderate	Water twice-a-week		Butterflies	Indicates habitat or food source
	Low	Water once-a-week		Cut Flowers	Useful as a cut or dried flower or in flower arranging
	Very Low	Water every 7-14 days		Fall Color	Leaves turn color during fall months
	Deep Water	Water trees once every 7-10 days		Fire Hazard	Use at least 30 feet from structures
	Deep Water	Water trees once every 10-14 days		Utility Tree	Height of tree at maturity will not interfere with overhead utility lines
	Extra Maintenance	Requires more than annual pruning, winter protection, spraying for pests, etc.		Native	Plant is native to Nevada



Achillea millefolium

Achillea species



Yarrow – Yarrow has many heights and flower colors depending on species. It is good used as a cut or dried flower, within a flower border, within meadow mixes or native areas. Best grown in full sun, well-drained soil, and a watering zone that is irrigated 1-2 times per week. This plant is not bothered by rabbits, squirrels nor deer.
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Antirrhinum majus

Antirrhinum majus



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Armeria maritima



Sea Pinks – This evergreen perennial has a clumping, grass-like appearance. The ball shaped flower heads may be pink, red or white and bloom June through August. Plant in full sun, well-drained soil, water twice-a-week and feed annually with slow release fertilizer. It grows from 6-12 in. tall and about 1 ft. wide, and is suitable as an edging, in the rock garden or massed in a planter. This plant is not bothered by rabbits, squirrels nor deer.



Armeria maritima





Artemisia absinthium

Artemisia species



Sage or Wormwood – The members of this genus vary widely in size (1-4 ft. tall by 1-4 ft. wide), but all have gray foliage and insignificant flowers. Plant in full sun, any garden soil and prune after bloom. Water once every 7-10 days. Their color provides a nice contrast when planted next to red, blue or purple flowering plants.



Artemisia schmidtiana



Artemisia stellerana

A. absinthium (Wormwood) – grows 4 ft. tall by 4 ft. wide; pungent gray foliage; divide every 2-3 years
A. ludoviciana albula (Silver King) – 3 ft. tall by 3 ft. wide; silvery white leaves good in arrangements
A. schmidtiana (Silver Mound) – 1 ft. tall by 3 ft. wide; gray-green foliage; good as edging or cascading over wall
A. stellerana (Dusty Miller) – 2 ft. tall by 3 ft. wide; silvery gray foliage; yellow flowers



Aster novi-belgii

Aster species



Aster – Asters fall into two categories: spring blooming or fall blooming. They are prolific bloomers that are often used in flower arrangements. Plant in full sun, well-drained soil and water twice weekly. They are vigorous growers that need to be divided every 2-3 years. This plant is not bothered by rabbits, squirrels nor deer.



Aster 'Eventide'

A. frikartii – 2 ft. tall by 2 ft. wide; lavender flowers from May-July
A. novae-angliae – 4 ft. tall by 2 ft. wide; flowers red, pink, or white from August-October
A. novi-belgii – 3 ft. tall by 2 ft. wide; blue, violet flowers from August-September



Aurinia saxatilis

Aurinia saxatilis



Basket-of-Gold – Low growing perennial whose brightly colored flowers of yellow gold welcome spring, usually in April. Grows 8 in. tall by 12 in. wide when given full sun, well-drained soil, and watered once-a-week.

Coreopsis species



Tickseed – Consistent bloomer all summer long if old blossoms are removed as they fade. All varieties prefer full sun, well-drained soil and twice-a-week watering. Divide plants every 2-3 years to maintain vigorous plantings.

C. grandiflora – 1-2 ft. tall by 1 ft. wide; orange to yellow flowers from June-August
C. lanceolata – 1-2 ft. tall by 1 ft. wide; yellow flowers from June-September
C. verticillata (Threadleaf Coreopsis) – 1½-3 ft. tall by 3 ft. wide; yellow flowers from July-September
C. v. 'Golden Showers' – 2 ft. tall by 2 ft. wide; yellow flowers from July-August
C. v. 'Moonbeam' – 2 ft. tall by 2 ft. wide; pale yellow flowers from June-September



Coreopsis grandiflora



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Crocus species

Crocus species



Spring Crocus – These delightful little bulbs are one of the first flowers to burst out of the snow in spring. They have bowl shaped flowers that may be solid or striped, in shades of white, yellow, pink or purple. Plant 2 in. deep and about 3 in. apart in well-drained soil and full sun to light shade. Crocus are very well suited to planting within turf. They bloom in February or March when the turf is dormant, providing visual interest to an area usually devoid of life for another month. To plant, dig out a small circle of turf, plant bulb 2-3 in. deep and replace the turf over it. Mow high (3-4 in.) through April to allow crocus to manufacture food for next season.



Dianthus barbatus

Dianthus species



Pinks – Dianthus are part of a large family of 300+ species as a result of hybridization. All prefer full sun, excellent drainage and water 1-2 times per week.

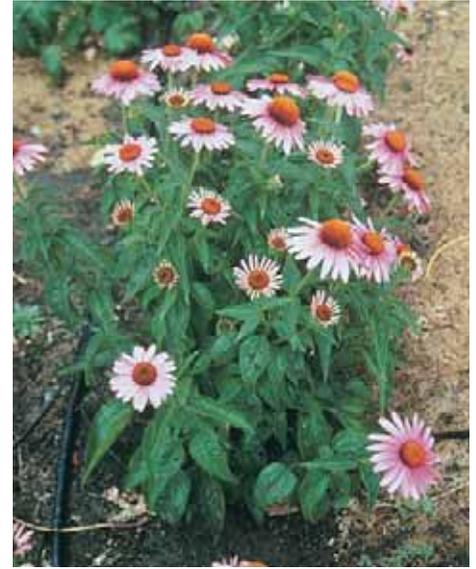
Divide clumps every 2-3 years. Not bothered by rabbits, squirrels nor deer.

D. x 'Alwoodii' – gray-green leaves; flowers white, pink, rose or red from June-July
D. barbatus (Sweet William) – 1 ft.



Dianthus plumarius

tall by 1 ft. wide; green leaves; fragrant maroon, red or pink flowers from May-June
D. deltoides (Maiden Pinks) – 6-12 in. tall by 24 in. wide; green leaves; red, pink, white or purple flowers; shear after bloom
D. gratianopolitanus (Cheddar Pinks) – 1 ft. tall by 1 ft. wide; gray-green leaves; fragrant pink, red or rose flowers from May-September if old flowers removed following bloom
D. plumarius (Cottage Pinks) – 2 ft. tall by 1 ft. wide; gray leaves; white, pink or red flowers in June



Echinacea purpurea

Echinacea purpurea



Coneflower – This striking member of the Daisy family grows 3 ft. tall and 2 ft. wide when given full sun, well-drained soil and twice-a-week watering. It has purplish red flowers that bloom in late June and make great cut flowers.

Eriogonum umbellatum



Sulfur Flowered Buckwheat – This native plant will form a 3 ft. wide mat when grown in full sun, gritty well-drained soil, and watered once every 7-10 days. It bears creamy to pale yellow clusters of flowers that will take on a red tinge with age. The bloom lasts over a period of 4-6 weeks beginning in July. This plant is not bothered by rabbits, squirrels nor deer.



Eriogonum umbellatum



Eschscholzia californica

Eschscholzia californica



California Poppy – A reliable performer in low water or wildflower area, blooming from April through August. It does require full sun, well-drained soil and water once every 7-10 days. Flowers most commonly are orange or yellow, although white or pink forms are also available. Seed at a rate of 3 pounds per acre for large scale applications. This plant is not bothered by rabbits, squirrels nor deer.

Gaillardia grandiflora



Blanket Flower – The bright orange and yellow flowers on this plant were named after the vivid colors seen on Indian blankets in the Southwest. It has gray-green foliage, grows 2 ft. tall and can grow equally as wide. It tolerates heat, poor soils and drought. Grow in full sun, well-drained soil and water once to twice-a-week. It blooms July through August and needs to be sheared at the end of each season. Use in native areas or wildflower plantings where it has room to seed itself freely about the garden. This plant is not bothered by rabbits, squirrels nor deer.



Gaillardia grandiflora



Gaura lindheimeri

Gaura lindheimeri



Gaura – This southwest native blooms happily from July through September if faded flowers are removed following each bloom. It sets pink buds that open white, but a new pink hybrid is also available. This plant prefers full sun, well-drained soil and twice-a-week watering.

Geranium species



Hardy Geranium – These garden variety geraniums should not be confused with their tropical cousins, the Pelargoniums.

Hardy geraniums grow 6 in. to 24 in. tall and equally as wide in full sun to partial shade. Plant in well-drained soil that is amended with organic matter and water twice-a-week.

Flowers may be white, pink, purple or blue and most varieties bloom July through September if fed both in spring and fall. Short varieties are suitable as groundcover or edging, while taller varieties are nice in flower borders.



Geranium species



Gypsophila paniculata

Gypsophila species



Baby's Breath – The perennial varieties of this popular cut flower grow easily in well-drained alkaline soils and full sun if they are watered twice-a-week. Flowers are in shades of pink or white, tiny and prolific.

G. paniculata – 1 ft. tall by 4 ft. wide; white flowers from July-August

G. repens – 8 in. tall by 12 in. wide; white or pink flowers ½ in. diameter from July-August

Hemerocallis hybrids



Daylily – Daylilies come in a variety of sizes and colors, due to the hybridization of over 30,000 cultivars worldwide. Dwarf daylilies are 1 ft. tall and twice as wide; larger types may be up to 3 ft. tall with even taller stems. Daylilies grow successfully in amended, well-drained soil, full sun to partial shade, with twice-a-week watering.

For longer flowering, feed every 2-3 weeks while blooming. Divide daylily clumps every 3-5 years, mulch in winter.



Hemerocallis hybrids



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Heuchera sanguinea

Heuchera sanguinea



Coral Bells – These dainty flowers are held high above the foliage from May through June. The parent species has red flowers, but hybrid varieties may be pink, white or a coral red color. Grow them in full sun or partial shade in well-drained soil amended with organic matter and water twice-a-week. This plant benefits from spring feeding with an acid plant food. This plant is not bothered by rabbits, squirrels nor deer.

Iberis sempervirens



Candytuft – This evergreen perennial is covered with white flowers April to May. It is used as an edging between turf and flower borders very effectively, as it is only 6-10 in. tall. Grow candytuft in well-drained soil, full sun and water twice-a-week. Shear off flowers after bloom to keep foliage dense and encourage another blossom set.



Iberis sempervirens



Iris germanica

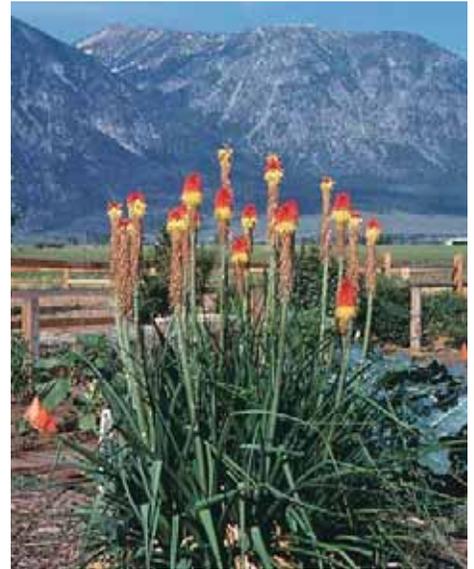
Iris germanica



Iris germanica – There are six categories of bearded iris based on the plants height which may range from 8-36 in. tall. Iris can be grown easily in soil with good drainage to which compost has been added. Do not use animal manure, high nitrogen fertilizers nor mulches in iris beds as they can encourage rhizome rot. Grow in full sun to light shade, water 1-2 times a week in summer, but keep rhizomes dry during dormancy from November through March. This plant is not bothered by rabbits, squirrels nor deer.



Iris germanica



Kniphofia uvaria

Kniphofia uvaria



Red Hot Poker – This perennial has evergreen leaves up to 4 ft. long. It has striking bicolored flowers in shades of yellow, orange and red. Bloom time varies by variety, usually from June through August. It tolerates heat, drought and wind when planted in full sun, light, well-drained soil and watered twice-a-week. This plant is not bothered by rabbits, squirrels nor deer.

Lavandula angustifolia



Lavender – This aromatic herb has flowers valued for their fragrance as well as their lovely purple color. Prefers full sun and well-drained, even rocky soil. Needs light pruning (1 in.) after bloom. It grows 1-3 ft. tall and as wide; needs protective mulch in winter when grown on exposed sites. This plant is not bothered by rabbits, squirrels nor deer.



Lavandula angustifolia



Lilium x aurelianense

Lilium species



Lily – Lilies can be the backbone of a flower border when provided the right location and proper soil. They grow from 3-6 ft. tall and about 2-3 ft. wide when planted in an area with some afternoon shade. All benefit from soils that have been amended to a depth of 8-12 in. with bark compost, oak leaf mold and peat moss. Best bloom results when they are fed liquid fertilizer twice a month and watered twice-a-week. The following varieties have the greatest tolerance for alkaline soils such as Nevada. Provide protection during growing season if rabbits are a problem in your area.
L. candidum (Madonna Lily) – 4 ft. tall by 1 ft. wide; white fragrant flowers in July
L. henryi (Orange Tiger) – 6 ft. tall by 2 ft. wide; orange flowers from July-August that curve backward
L. x aurelianense (Aurelian Hybrid Lily) – 6 ft. tall by 2 ft. wide; flowers in all shades except blue from July-August



Linum perenne

Linum species



Flax – These durable perennials are tolerant of drought, heat, wind and cold. They prefer dry, light, well-drained soil, full sun and once-a-week watering. Not bothered by rabbits, squirrels nor deer.
L. flavum (Golden Flax) – 1 ft. tall by 1 ft. wide; bright yellow flowers from June-August; mulch in winter.
L. perenne (Blue Flax) – 18 in. tall by 12 in. wide; almost leafless stems; blue flowers; seeds easily, good in meadow mixes



Narcissus species

Narcissus species



Daffodil or Narcissus – There are 50 species of narcissus with thousands of cultivars available worldwide. Flowers range in height from 4-12 in. tall with blooms that may be from 1-3 in. wide. They may be solid yellow or white, or combinations of the two colors; some new varieties have pink tones. By choosing different species it is possible to have daffodils blooming continuously from February through April. Plant in masses in full sun to light shade, any well-drained soil, and feed annually in fall with bonemeal fertilizer. This bulb is not used by small mammals as a food source.

Nepeta racemosa



Catmint – This member of the Mint family has lavender flowers borne at tips of the stems from June through August. It has gray-green foliage about 1 ft. tall by 2 ft. wide. Prefers full sun or partial shade, any well-drained soil, and water once-a-week. Good at front of the border or cascading off a wall. Tolerates browsing by small mammals.



Nepeta racemosa



Oenothera speciosa

Oenothera species



Evening Primrose – These flowers are known for heavy production of yellow, white or pink flowers that open in the morning or evening. Very tolerant of poor, even rocky soils as long as they are well-drained. Grows in full sun and blooms from June-August on once-a-week watering. This plant tends to sow itself about the yard when conditions are right. Not bothered by rabbits, squirrels nor deer.

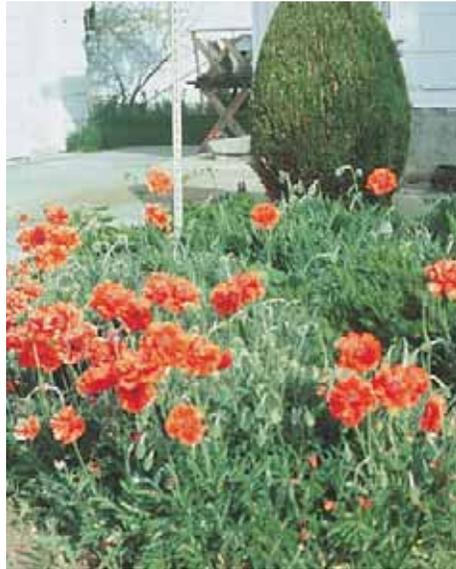
O. biennis – 3-5 ft. tall by 2 ft. wide; yellow flowers, fragrant in the evening from June-September

O. caespitosa – 8 in. tall by 8 in. wide; white flowers, fragrant in the evening in July

O. fruticosa (Sundrops) – 1-3 ft. tall by 1 ft. wide; yellow flowers, fragrant in the morning from May-July; many hybrids

O. pallida – 18 in. tall by 12 in. wide; white flowers, fragrant in the evening from June-September

O. speciosa (Showy Primrose) – 1 ft. tall by 1 ft. wide; white or pink flowers, fragrant in the morning from June-September



Papaver orientale

Papaver species



Poppy – Poppies are best when planted in masses in areas where they can seed themselves freely. They need full sun, well-drained soil, and water once- or twice-a-week. Not bothered by rabbits, squirrels nor deer.

P. croceum (Iceland Poppy) – 12 in. tall by 6 in. wide; fragrant orange, white, yellow or red flowers from May-June

P. orientale (Oriental Poppy) – 2 ft. tall by 3 ft. wide; red, orange, white, pink or apricot flowers from May-June



Papaver orientale



Penstemon strictus, purple

Penstemon species



Beard Tongue – Some penstemon varieties are native to Nevada; however most commercially available types are hybrids. All seem to benefit

from full sun, well-drained soil with gravel or sand added, and once to twice weekly watering.

P. ambiguus (Prairie Penstemon) – 2 ft. tall by 2 ft. wide; white or pink flowers from June-September

P. barbatus (Beardtongue) – 4 ft. tall by 2 ft. wide; red-lavender flowers from June-August

P. eatonii (Firecracker Penstemon) – 3 ft. tall by 18 in. wide; blue-green leaves; red flowers from June-August

P. eriantherus (Crested Tongue Penstemon) – 1 ft. tall by 1 ft. wide; gray-green leaves; lilac flowers

P. hirsutus – 3 ft. tall by 2 ft. wide; dark green leaves; lavender flowers from June-July

P. newberryi – 10 in. tall by 12 in. wide; dark green leaves; red or pink flowers in June

P. palmeri – 4 ft. tall by 1 ft. wide; gray-green leaves; pink blooms from June-July

P. strictus (Rocky Mountain Penstemon) – 2 ft. tall by 2 ft. wide; dark green leaves; purple flowers from June-July



Penstemon palmeri





Perovskia atriplicifolia

Perovskia atriplicifolia



Russian Sage – Bursts forth in late summer with almost luminous lilac flowers that last 6 weeks. The foliage is gray-green and the plant grows 4 ft. tall by 3 ft. wide. Grow in any well-drained soil, full sun, and water once-a-week. This plant is not bothered by rabbits, squirrels nor deer.

Platycodon grandiflorus



Balloon Flower – This blue flowering perennial delights children when the flowers open in July. It is easy to grow in sunny locations with well-drained soil. Balloon flower grows 3 ft. tall with equal spread when fed annually in spring and watered twice-a-week.



Platycodon grandiflorus



Rudbeckia fulgida

Rudbeckia fulgida



Black-Eyed Susan – This is one of the garden favorites seen in many perennial borders. This member of the daisy family has orange or yellow petals, a dark center and usually blooms August-September. Provide a location in full sun, with well-drained soil and twice-a-week watering.

Salvia species



Sage or Salvia – Salvias are a great source of blue or purple in the garden. They prefer full sun or light shade, well-drained soil and twice-a-week watering. Many interesting hybrid varieties are available. *S. dorrii* (Purple Sage) – 12 in. tall by 24 in. wide; purple flowers in July; native to Nevada. *S. x superba* *May Night* (May Night Salvia) – 3 ft. tall by 2 ft. wide; dark purple flowers from July-August



Salvia superba



Saponaria ocymoides

Saponaria species



Soapwort – This perennial is a delightful addition to the flower border. It thrives in areas of full sun, well-drained soil and once to twice-a-week watering. Best when cut back after flowering to maintain compact habit. Not bothered by rabbits, squirrels nor deer.

S. ocymoides (Soapwort) – 6 in. tall by 18 in. wide; dark green leaves; bright pink flowers in June

S. officianalis – (Bouncing Bet) – 2 ft. tall by 2 ft. wide; light green leaves; fragrant pale pink flowers from June-September



Bees



Birds



Butterflies



Cut Flowers



Fall Color



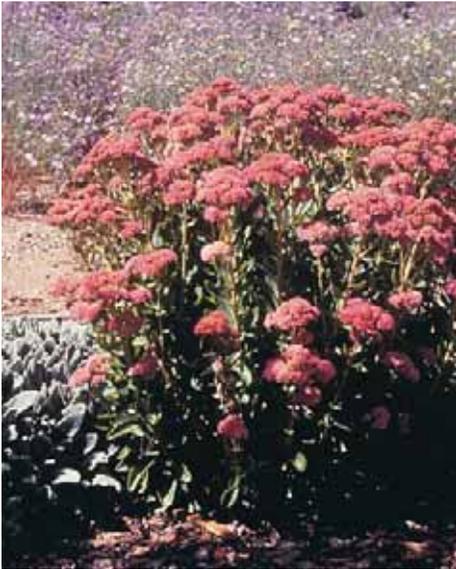
Fire Hazard



Utility Tree



Native



Sedum 'Autumn Joy'

Sedum species



Stoncrop – These succulents add interesting textural variety to the landscape as well as showy flowers. They prefer full sun, well-drained soil, and division in fall every 3 years. Not bothered by rabbits, squirrels nor deer.
S. 'Autumn Joy' – 2 ft. tall by 2 ft. wide; pink flowers from July-August
S. 'Rosy Glow' – 1 ft. tall by 1 ft. wide; pink flowers from August-September
S. 'spectabile' – 1½ ft. tall by 1½ ft. wide; bright pink flowers from August-September

Senecio cineraria



Dusty Miller – Grow Dusty Miller for its striking silvery white foliage, as its small yellow flowers are rather inconspicuous. It forms clumps 2 ft. tall by 3 ft. wide when grown in full sun, well-drained soil, and watered 1-2 times per week. This plant is not bothered by rabbits, squirrels nor deer.



Senecio cineraria



Stachys byzantina

Stachys byzantina



Lamb's Ears – Named for its soft, silvery gray leaves, this plant produces purplish flowers in July. Best when the old flower stalks are removed following bloom. It grows 1 ft. tall and spreads itself liberally about the garden. It prefers full sun, well-drained soil and once-a-week watering. 'Silver Carpet' is a non-flowering cultivar that is lower in maintenance and less invasive. This plant is not bothered by rabbits, squirrels nor deer.



Tanacetum coccineum

Tanacetum species



Painted or Michaelmas Daisy – These daisies are another old fashioned garden favorite. Though they bloom at different times of the year, both will bloom over a period of 3-4 weeks and may rebloom if cut back after first bloom. Finely divided aromatic leaves characterize these plants formerly classified as Chrysanthemums. Provide both with full sun to partial shade, sandy well-drained soil and twice-a-week watering. Not bothered by rabbits, squirrels nor deer.
T. coccineum (Painted Daisy) – 1-2 ft. tall by 2 ft. wide; white, pink, or red flowers from May-June
T. parthenium (Feverfew) – 2 ft. tall by 1 ft. wide; light green leaves; white flowers from July-August



Thermopsis montana

Thermopsis montana



False Lupine – Tall (3 ft.) spikes of yellow pea type flowers grace this plant in June-July. It tolerates poor soil, heat and drought and is a good candidate for wildflower areas. Plant in full sun to partial shade, well-drained soil and water once-a-week. This plant is not bothered by rabbits, squirrels nor deer.

Tulbaghia violacea



Society Garlic – The name of this plant is derived from the scent given off by the leaves which also helps protect it from rabbit damage. It has a fragrant purple flower that blooms in July through September. It grows 18 in. tall and equally as wide when mulched in winter to protect roots. Grow in full sun, well-drained soil and water once-a-week.



Tulbaghia violacea



Tulipa species

Tulipa species



Tulip – The number of tulip varieties available today is limitless. They range in size from 4-6 in. tall (Rock Garden Tulips) to 12 in. tall (Mayflowering, Triumph or Emperor Tulips). The flowers are available in every color imaginable, as well as solids, stripes and bicolors. Plant in full sun, well-drained soil and water twice-a-week while blooming. Feed these bulbs annually in fall with bone meal fertilizer. These bulbs are much sought after as a food source by small mammals; protect accordingly.

Veronica spicata



Spike Speedwell – A dependable source of mid-summer color when planted in full sun and well-drained soil. This plant has many hybrid varieties in various sizes and colors. Generally flowers are blue to white, occasionally pink, about 2 ft. tall overall. Benefits from twice weekly watering and protective winter mulch.



Veronica spicata



Viola cornuta

Viola species



Violet or Pansy – A large family (500 species) that is best known for the old-fashioned violets of the Victorian period. Low growing plants best suited to the front of a border or edging a walkway. Plant in full sun to partial shade, in well-drained soil and water twice-a-week.
V. cornuta (Tufted Violet) – 4-12 in. tall by 12 in. wide; various colors; shear after first bloom for fall rebloom
V. tricolor (Johnny-Jump-Up) – 6 in. tall by 6 in. wide; purple, white or yellow flowers from May-September; will seed itself about the garden readily



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



*Groundcovers,
Vines &
Ornamental
grasses*



BOTANICAL NAME	COMMON NAME	PAGE
<i>Calamagrostis x acutiflora</i>	Feather Reed Grass	32
<i>Campsis radicans</i>	Red Trumpet Creeper	32
<i>Cerastium tomentosum</i>	Snow in Summer	32
<i>Clematis</i> species	Clematis	32
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<i>Sedum</i> species	Stoncrop	36
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<i>Wisteria sinensis</i>	Chinese Wisteria	37
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Calmagrostis x acutiflora

Calmagrostis x acutiflora



Feather Reed Grass – This ornamental grass bears seed heads that persist on the plant long into winter. It can grow 2-6 ft. tall depending on variety, so make sure to check the label for mature height at the nursery. Usually the width of the clump is relative to the height; expect it to grow 2-4 ft. wide. Grow in full sun to partial shade, any soil except salty and water twice-a-week. Shear to the ground annually in fall or spring.

Campsis radicans



Red Trumpet Creeper – This vigorous vine climbs by means of aerial roots capable of adhering to wood, brick or stucco. It bears brilliant red-orange flowers from August through October. Best planted in full sun, well-drained soil and watered twice-a-week.



Campsis radicans



Cerastium tomentosum

Cerastium tomentosum



Snow in Summer – A good plant on dry, sunny slopes. Vigorous grower when provided with good drainage, full sun and watered twice-a-week. Profuse white flowers sit above light gray foliage from May to June. This plant is not bothered by rabbits nor squirrels. It is only 6-8 in. tall and grows to a width of 2-3 ft. in about 2 seasons if fertilized yearly. (*Plant 12 in. on center*)

Clematis species



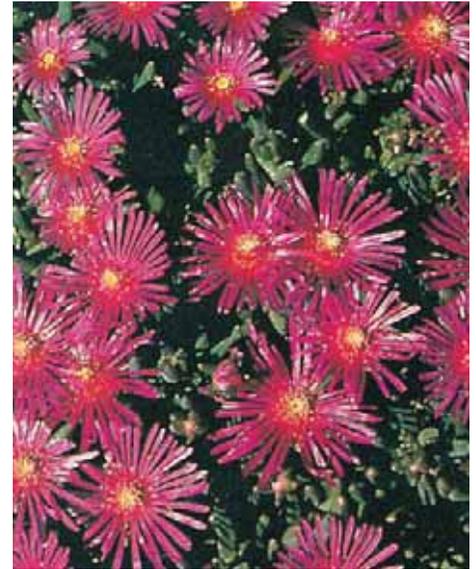
Clematis – These varieties don't have large showy flowers like their hybrid relatives, but make up for it with vigorous growth. They tolerate heat, wind, cold and drought with ease. Either is suitable on a slope, fence, trellis or as a groundcover.



Clematis tangutica

C. ligusticifolia (Western Clematis) – grows to 20 ft.; creamy-white flowers from July-August (*Plant 10 ft. on center*)

C. tangutica (Golden Clematis) – grows to 10 ft.; yellow lantern shaped flowers from July-September (*Plant 6 ft. on center*)



Delosperma cooperi

Delosperma cooperi



Hardy Purple Ice Plant – A useful groundcover in dry, well-drained soils. This ice plant only requires watering during its bloom period, June-August. Must be planted in full sun, in soils with excellent drainage. It is best in native or low water zones and requires winter mulching to protect succulent foliage from temperature extremes. Not bothered by rabbits nor squirrels. (*Plant 18 in. on center*)

Euphorbia species



Spurge – These succulents are related to the poinsettia plant of Christmas fame. The two varieties mentioned are low growers, best suited to a rock garden or native area. They perform best when planted in full sun, well-drained soil and once-a-week irrigation. Not bothered by rabbits nor squirrels.



Euphorbia myrsinites

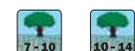
E. myrsinites – 4 in. tall by 12 in. wide; blue green leaves; lime green flowers in April (*Plant 12 in. on center*)
E. polychroma – 12 in. tall by 24 in. wide; dark green leaves; yellow flowers from June-July (*Plant 24 in. on center*)



Full Sun Part Shade Shade



Moderate (twice-a-week) Low (once-a-week) Very Low (7-14 days)



Deep Water (7-10 days) Deep Water (10-14 days)



Extra Maintenance



Temperature Sensitive



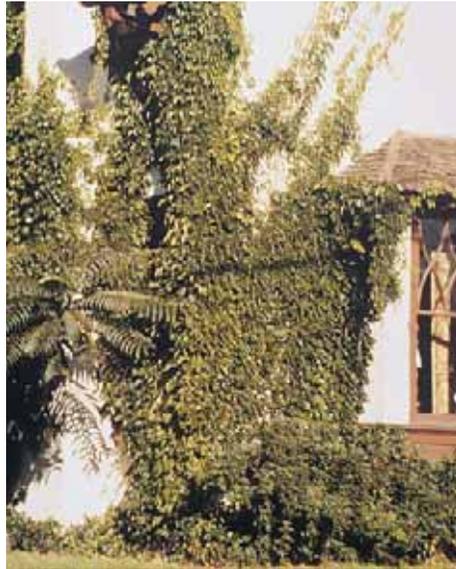
Festuca glauca 'Elijah Blue'

Festuca glauca



Blue Fescue – A blue-gray clump forming grass that grows up to 12 in. tall and 10 in. wide. Many times the leaves will lay down as it gets tall and form a lumpy, rolling kind of meadow grass look. It can be planted in groups or singly with no worry of it spreading anywhere. Grow in full sun (to maintain color), well-drained soil and water once-a-week. Requires division every 2-3 years to maintain vigor and color.

F. g. 'Blaufink' (Blue Finch Fescue) – 6-8 in. tall and wide; compact variety
F. g. 'Elijah Blue' (Elijah Blue Fescue) – 8-10 in. tall and wide; best blue color



Hedera helix as creeping vine

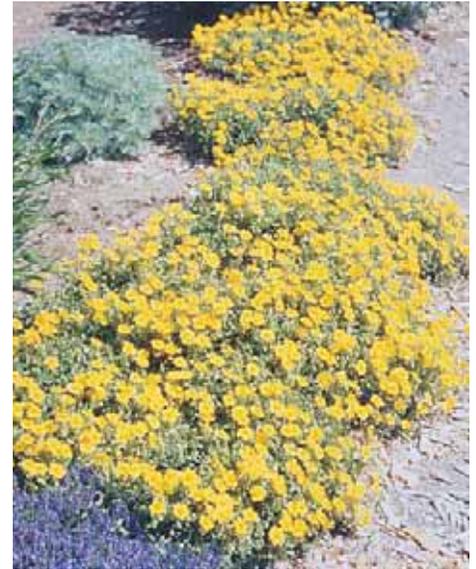
Hedera helix



Ivy – Ivy can be very durable when given the right growing conditions; partial shade to full shade, well-drained soil, twice-a-week water. It will fill in faster with less weed growth when mulched with bark when planted. It also grows faster when fed slow release fertilizer annually. This plant is not bothered by rabbits, squirrels nor deer. (Plant 4 ft. on center)



Hedera helix as groundcover



Helianthemum nummularium

Helianthemum nummularium



Sunrose – Excellent drainage is a must for this plant to grow successfully. Sunrose will grow 6-12 in. tall and 24 in. wide when provided full sun, winter mulch, twice-a-week water and an annual shearing. Flowers may be red, yellow, orange or pink, 1-2 in. in size from June through July. (Plant 24 in. on center)

Helictotrichon sempervirens



Blue Oat Grass – A mound forming grass that bears stiff, upright flower stems that stand 2 ft. above the leaves. It grows up to 2-3 ft. tall by 2 ft. wide when placed in full sun, well-drained soil, and watered 1-2 times per week. Old flower stems should be sheared off annually in spring. This plant is not bothered by rabbits, squirrels nor deer.



Helictotrichon sempervirens



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Hypericum calycinum

Hypericum calycinum



Jacob's Ladder or Aaron's Beard – Useful groundcover under trees and shrubs as it covers surface roots easily. Plant in full sun to full shade (reduces flowering), in well-drained soil with irrigation 1-2 times per week. The foliage is evergreen in mild winters, growing to 18 in. tall and spreading by underground roots. Flowers are bright yellow, 4 in. in size from June through August. *(Plant 24 in. on center)*



Hypericum calycinum

Juniperus horizontalis



Groundcover Junipers – Junipers are slow growing evergreens that range in height from 3 in. to 24 in. tall. They are tolerant of heat, drought, cold, poor soils and wind. They are subject to pest problems (spider mites, aphids, borers) during hot dry summers. Best planted in full sun to light shade, in well-drained soil that receives watering once-a-week. *(Plant 6 ft. on center)*



Juniperus horizontalis



Lathyrus latifolia

Lathyrus latifolius



Perennial Sweet Pea – The perennial sweet pea is useful as a bank cover, cascading over a wall or trained on wire fence. It has gray-green foliage that grows up to 6 ft. in length. Pink flowers are produced during July-August if it receives monthly feeding during blooming. Grow in full sun to light shade, well-drained soil and water 1-2 times per week. This plant is not bothered by rabbits, squirrels nor deer. *(Plant 4 ft. on center)*

Lonicera species

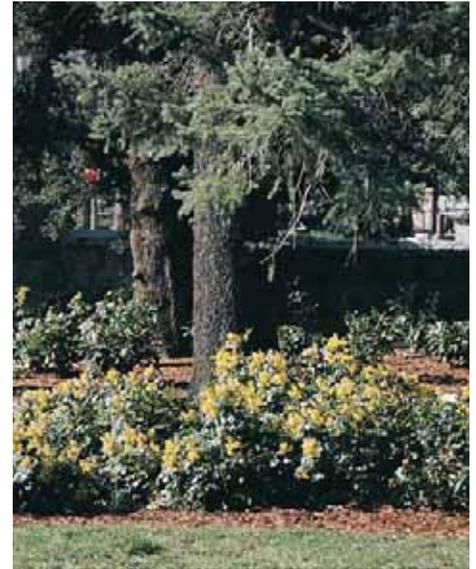


Honeysuckle – The honeysuckle is happy to scramble across ground or up a trellis or fence. It is evergreen in mild winters, and bears showy flowers June through frost. Best grown in full sun to partial shade (fewer flowers), well-drained soil and watered 1-2 times per week. *(Plant 6 ft. on center)*



Lonicera heckrottii
'Gold Flame'

L. x heckrottii 'Gold Flame' – 12-15 ft. wide; dark green leaves; pretty pink or yellow flowers from July-September
L. japonica 'Halliana' – 20 ft. wide; green or purple leaves; yellow and white fragrant flowers from June through frost



Mahonia repens

Mahonia repens



Creeping Mahonia – This evergreen sub-shrub creeps happily under trees and shrubs, thriving in a partly shaded environment. Its vigorous rooting habit makes it well suited for erosion control situations on banks or slopes. It bears bright yellow flowers in April that are followed by blue-black berries in July. Plant in part shade, well-drained soil and water twice-a-week. Not bothered by rabbits, squirrels nor deer. *(Plant 3 ft. on center)*



Mahonia repens



Opuntia polyacantha

Opuntia polyacantha



Prickly Pear Cactus – For some unknown reason, this cactus bears different colored flowers based on what region it is located in. For example, in California or southern Nevada, the flowers are most often yellow or peach colored. In northern Nevada and southern Idaho, usually the flowers are more often dark red to bright pink. Regardless of flower color, this plant must be handled with care when planting and placed away from high traffic areas. Grow in full sun, well-drained soil with sand or gravel added; place in an area that is watered once every 14 days during heat of summer only. Mature plant is 6-8 in. tall and about 12 in. wide, but roots readily where pieces happen to fall to the ground. This plant is not bothered by rabbits, squirrels nor deer. *(Plant 18 in. on center)*



Panicum virgatum

Panicum virgatum



Switch Grass – This tall, upright grass forms 3 ft. wide clumps that grow up to 3 ft. tall as well. It has flat green leaves tinged with purple, turning yellow in fall and tan in winter. The grass spikelets (produced in September) weep slightly and are a purple-green in color. Grow this grass in full sun, well-drained soil and water 1-2 times per week. Divide clumps every 3 years in May. This plant is not bothered by rabbits, squirrels nor deer. *(Plant 36 in. on center)*

Phlox subulata



Moss Pink – A low growing evergreen perennial that has needle like leaves that are slightly prickly to the touch. Flowers bloom early in spring, usually April, and may be white, pink, lavender or hot pink. It grows 2-6 in. tall and up to 24 in. wide when grown in full sun, well-drained soil and watered twice-a-week. *(Plant 24 in. on center)*



Phlox subulata



Polygonum aubertii

Polygonum species



Polygonum – Members of this genus are very tolerant of adverse conditions; a number of species are in fact weeds in most gardens. The ornamental members discussed here are very fast growing and tolerate heat, drought, cold, wind and poor soils. They perform best in full sun, well-drained soil and areas that are watered once-a-week. Not bothered by rabbits, squirrels nor deer.

P. aubertii (Silver Lace Vine) – 20 ft. spread on fence or wall; white flowers in September *(Plant 10 ft. on center)*

P. Reynoutria – 6 in. tall by 3 ft. wide; pink flowers in August *(Plant 3 ft. on center)*

Potentilla neumanniana



Cinquefoil – This low growing perennial forms a dense dark green mat, a mere 2-6 in. tall. It bears bright yellow flowers from May through August. It seems to prefer shade in the late afternoon, well-drained soil, and regular watering twice-a-week. *(Plant 12 in. on center)*



Potentilla neumanniana



Bees



Birds



Butterflies



Cut Flowers



Fall Color



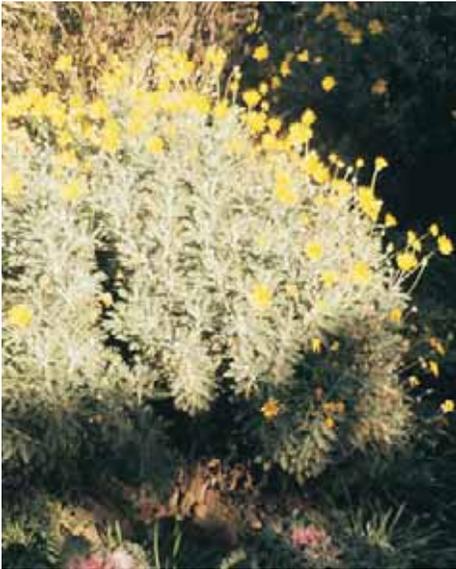
Fire Hazard



Utility Tree



Native



Santolina chamaecyparissus

Santolina species



Lavender Cotton – Santolina has aromatic foliage that may be used as an informal groundcover or as a sheared formal low hedge (as in knot gardens). Plant in full sun, well-drained soil and water once to twice weekly. Not bothered by rabbits, squirrels nor deer. (*Plant 24 in. on center*)
S. chamaecyparissus – 18 in. tall by 3 ft. wide; gray leaves
S. virens – 18 in. tall by 2 ft. wide; lime-green leaves; yellow flowers in June



Santolina chamaecyparissus



Sedum spurium

Sedum species



Stonecrop – The Sedums that are used as groundcovers can provide interesting textural variety in any garden. They need well-drained soil, full sun and water 1-2 times per week. Sedum is not bothered by rabbits, squirrels nor deer. (*Plant 12 in. on center*)
S. acre – 2 in. tall by 24 in. wide; yellow-green flowers in July
S. kamschaticum – 4 in. tall by 10 in. wide; pink buds become yellow flowers from July-August
S. spurium – 6 in. tall by 18 in. wide; red flowers from July-August

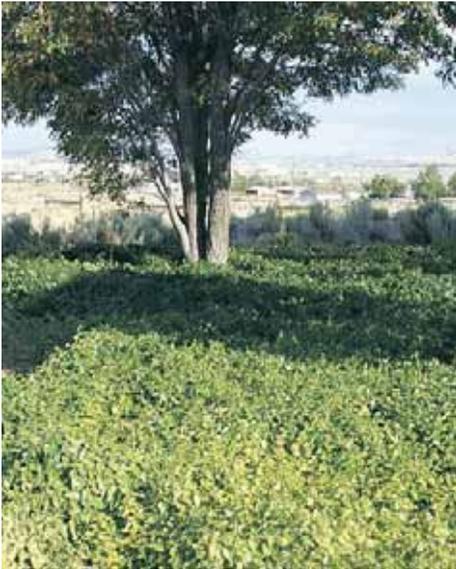


Thymus polytrichus

Thymus species



Thyme – Groundcover thyme forms a tight, dense mat suitable for areas with light traffic. They fill in quickly when given full sun, well-drained soil and water twice-a-week. Thyme is not bothered by rabbits, squirrels nor deer. (*Plant 12 in. on center*)
T. citriodorus (Lemon Scented Thyme) – 12 in. tall by 12 in. wide; lavender to pink flowers from July-August
T. polytrichus – 2 in. tall by 24 in. wide; purple flowers from June-July
T. serpyllum (Mother-of-Thyme) – 6 in. tall by 12 in. wide; purple flowers from June-July
T. vulgaris (Common Thyme) – 6 in. tall by 16 in. wide; aromatic leaves; lilac to white flowers from July-August



Vinca minor

Vinca minor



Dwarf Periwinkle – This evergreen sub-shrub is somewhat vine-like, but it will not climb. It grows 4-8 in. tall and creeps on indefinitely. Periwinkle has been hybridized and now may have white, blue, violet or purple flowers from June to September. It grows in full sun to full shade, any soil, and likes water 1-2 times per week. Useful under trees, on slopes, or as a groundcover in low traffic areas. This plant is not bothered by rabbits, squirrels nor deer. *(Plant 4 ft. on center)*



Wisteria sinensis

Wisteria sinensis



Chinese Wisteria – A deciduous vine that may be trained on a fence, arbor, trellis or wire form to become a patio tree. It grows to 20 ft. tall if un-pruned and initially needs some support to climb. Long pendulous clusters of fragrant, lavender flowers bloom in May. Plant in full sun, well-drained soil and water once-a-week. This plant is not bothered by rabbits, squirrels nor deer.



Zauschneria californica

Zauschneria californica



California Fuschia – A mat forming perennial that grows 1 ft. tall and up to 6 ft. wide. It has gray foliage that needs occasional shearing to encourage interior growth. Bright red tubular flowers bloom from June through August. Grow in full sun, well-drained soil and water 1-2 times per week. A vigorous root system makes this plant a good choice for sites on banks and hillsides. This plant is not bothered by rabbits, squirrels nor deer.



Zauschneria californica



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Shrubs



BOTANICAL NAME	COMMON NAME	PAGE
<i>Amelanchier</i> species	Serviceberry or Juneberry	40
<i>Aronia</i> species	Chokeberry	40
<i>Artemisia tridentata</i> var. <i>tridentata</i>	Big Sagebrush	40
<i>Atriplex canescens</i>	Four Wing Saltbush	40
<i>Berberis</i> species	Barberry	41
<i>Buddleia</i> species	Butterfly Bush	41
<i>Caragana</i> species	Peashrub	41
<i>Caryopteris x clandonensis</i>	Blue Mist Spiraea	41
<i>Chaenomeles speciosa</i>	Flowering Quince	42
<i>Chrysothamnus nauseosus</i>	Rubber Rabbitbrush	42
<i>Cotoneaster</i> species	Cotoneaster	42
<i>Cytisus</i> species	Broom	42
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<i>Euonymus</i> species	Euonymus	43
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<i>Rhus</i> species	Sumac	47
<i>Ribes aureum</i>	Golden Currant	48
<i>Rosa</i> species	Hardy Shrub Roses	48
<i>Shepherdia argentea</i>	Silver Buffaloberry	49
<i>Spiraea</i> species	Spiraea	49
<i>Symphoricarpos albus</i>	Snowberry	50
<i>Syringa vulgaris</i>	Common Lilac	50
<i>Thuja occidentalis</i>	American Arborvitae	50
<i>Viburnum</i> species	Viburnum	51
<i>Yucca</i> species	Yucca	51



Amelanchier x grandiflora

Amelanchier species



Serviceberry or Juneberry – This plant is loved by the birds for its blue-purple berry that tastes similar to blueberries. It has a small white to pinkish flower in spring and lovely fall color. Best grown in full sun to light shade (good under taller trees), well-drained soil and watered deeply once-a-week. This plant is not bothered by rabbits squirrels nor deer.

A. alnifolia 'Saskatoon' – grows 12 ft. tall by 12 ft. wide; white flowers; blue berries; tolerates deer

A. a. 'Regent' – 4 ft. tall by 6 ft. wide; sweet berries good for jam or jelly

A. x grandiflora – 25 ft. tall by 25 ft. wide; white flowers; blue-black berries; good fall color



Aronia arbutifolia

Aronia species



Chokeberry – Native to eastern United States and Canada, this shrub tolerates extreme cold, damp soils, heat, wind and drought. It has white flowers that have a pink tinge followed by bright red or black fruit, bitter to the taste (hence its name).

This plant is not bothered by rabbits, squirrels nor deer.



Aronia melanocarpa

A. arbutifolia (Red Chokeberry) – 10 ft. tall by 6 ft. wide; red berries; vivid red fall color

A. a. 'Brilliant' – grows 6 ft. tall by 6 ft. wide; has reddest fall color

A. melanocarpa (Black Chokeberry) – 6 ft. tall by 10 ft. wide; black berries; red to purple fall color



Artemisia tridentata

Artemisia tridentata var. tridentata



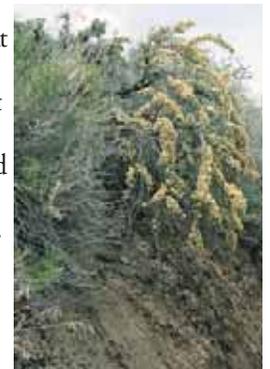
Big Sagebrush – The state flower of Nevada, this shrub grows to 15 ft. tall in the wild, but usually tops out at 4-5 ft. tall in cultivation. Sagebrush needs dry, well-drained soils and once-a-month watering in dry summers only. Gray, aromatic foliage with finely cut leaves, insignificant flowers.

Atriplex canescens



Four Wing Saltbush – This Great Basin native can be found growing in the worst soils our area can offer. It has gray foliage and an almost lime green

flower structure that is showy in late summer. This plant is good forage for small mammals and birds love the seeds. Saltbush grows 6 ft. tall by 4 ft. wide, prefers full sun, dry well-drained soil and water once every two weeks



Atriplex canescens

(best used in a native area with very little applied water).





Berberis thunbergii 'Crimson Pygmy'

Berberis species



Barberry – Many varieties of barberry are available locally, most of which have yellow flowers in spring and spines on their branches (unless otherwise noted). This shrub tolerates poor soils, heat, wind, drought and extreme cold. It looks best with occasional pruning of the interior branches to admit sunlight or it gets so thick it looks dead in the middle. Looks best when grown in well-drained soils, full sun and watered once-a-week.

B. gladwynensis 'William Penn' – 6 ft. tall by 6 ft. wide; black berries; evergreen to 0°F, then deciduous

B. mentorensis (Mentor Barberry) – 7 ft. tall and wide; dull red berries; red fall color; makes a good hedge or barrier; evergreen to -5°F

B. thunbergii (Japanese Barberry) – 4-6 ft. tall and wide; green leaves; red berries; barrier, hedge or specimen

B. t. 'Atropurpurea' (Red-Leaf Barberry) – 4 ft. tall and wide; needs sun to maintain color

B. t. 'Aurea' (Golden Barberry) – 3 ft. tall by 2 ft. wide; bright yellow foliage; needs full sun to maintain leaf color

B. t. 'Crimson Pygmy' – remains dwarf at 1 ft. tall by 2 ft. wide; bright red leaves; needs full sun

B. t. 'Kobold' – 1 ft. tall by 3 ft. wide; bright lime green leaves; needs full sun

B. t. 'Rose Glow' – 5 ft. tall by 4 ft. wide; red, pink, and white in each leaf; full sun



Buddleia davidii

Buddleia species



Butterfly Bush – The showy flowers on this shrub are much loved by its namesake, the butterfly. It prefers well-drained soil and a once to twice weekly watering regime. The felt leaves are green above, gray below. Flowers appear in June-July on last year's growth; prune out oldest wood to the ground. Flowers are 6-12 in. long in shades of blue, purple, lilac, pink and white.



Buddleia davidii

B. alternifolia (Fountain Buddleia) –

12 ft. tall by 8 ft. wide; fragrant lilac flowers (can train as tree)

B. davidii (Summer Lilac) – grows 10 ft. tall by 8 ft. wide; fragrant; various colors



Caragana arborescens

Caragana species



Peashrub – Native of Siberia, these shrubs tolerate extreme cold, wind, heat, drought and poor soils. Yellow sweet pea flowers in spring on last year's wood, followed by a pea pod from July through August. Use as windbreak, screen or hedge.

C. arborescens (Siberian Peashrub) – 15 ft. tall by 12 ft. wide; light green leaves

C. a. 'Nana' (Dwarf Peashrub) – 6 ft. tall by 3 ft. wide; light green leaves

C. frutex – 8 ft. tall by 8 ft. wide; dark green leaves

C. var. globosa – a dwarf version that only grows 2 ft. tall by 2 ft. wide; light green leaves

C. pygmaea (Pygmy Peashrub) – 3 ft. tall by 3 ft. wide; spines, dark green leaves

Caryopteris x clandonensis



Blue Mist Spiraea – This late-summer flowering shrub bears lovely blue flowers among its gray-green foliage. It grows 3 ft. tall by 3 ft. wide and flowers on this

year's wood, so it needs to be pruned to the ground every winter. It reblooms if pruned right after first bloom. Prefers well-drained soil with lots of humus or compost added, full sun, and once-a-week water.



Caryopteris x clando-



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Chaenomeles speciosa

Chaenomeles speciosa



Flowering Quince – A large spiny shrub that provides edible fruits for birds, large and small mammals. The parent species has brilliant scarlet red flowers, but there are hybrid varieties in white, apricot, pink and orange shades as well. The flowers usually bloom in May or June depending on variety. Grow in full sun, well-drained soil and water once-a-week. This plant is not bothered by rabbits, squirrels nor deer.

Chrysothamnus nauseosus



Rubber Rabbitbrush – This Nevada native plant establishes easily on poor, dry soils. Foliage varies from a yellow green color to a greenish gray. This plant may grow 3 ft. tall by 3 ft. wide if planted in native or low water areas (water once every 2 weeks), in full sun and any soil. It produces bright yellow flowers in late August to September that produce pollen that may irritate those with allergies.



Chrysothamnus nauseosus



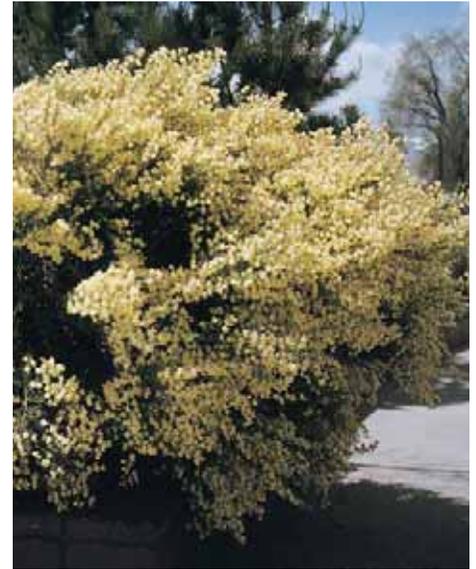
Cotoneaster microphyllus

Cotoneaster species



Cotoneaster – A very diverse group of plants ranging from low groundcovers to tall fountain-like shrubs, so make sure you get the proper variety to suit your needs. Best performance comes when planted in well-drained soils kept on the dry side, with once to twice-a-week watering. Tiny white flowers in spring are followed by red or black berries in fall. Not bothered by rabbits, squirrels nor deer.

- C. acutifolius* (Peking Cotoneaster) – 10 ft. tall by 10 ft. wide; black berries; orange-red fall color
- C. apiculatus* (Cranberry Cotoneaster) – 3 ft. tall by 6 ft. wide; red berries in August; red fall color; slopes, groundcover or hedge
- C. congestus* – 3 ft. tall by 3 ft. wide; red berries; evergreen
- C. divaricatus* (Spreading Cotoneaster) – 6 ft. tall by 6 ft. wide; red berries; red fall color; hedge, screen or slopes
- C. horizontalis* (Rockspray Cotoneaster) – 3 ft. tall by 15 ft. wide; red berries; orange-red fall color; slopes, groundcover
- C. Lowfast* – 1 ft. tall by 15 ft. wide; red berries; groundcover, bank, fast filler; evergreen
- C. microphyllus* – evergreen; 3 ft. tall by 6 ft. wide; red berries; dry slopes
- C. multiflorus* – 10 ft. tall by 8 ft. wide; has showy flower, red fruit
- C. salicifolius* (Willowleaf Cotoneaster) – 15 ft. tall by 15 ft. wide; red fruit; evergreen



Cytisus scoparius 'Moonlight'

Cytisus species



Broom – These evergreen shrubs are members of the pea family and have fragrant sweet pea shaped flowers of different colors (depending on species). They require full sun, well-drained soil and once-a-week water. Prune off flowering stems to new buds or side shoots immediately after flowering. This plant may be used for background plantings, low screen, foundation or informal hedge. Not bothered by rabbits, squirrels nor deer.

- C. praecox* 'Warmminster' – 5 ft. tall by 5 ft. wide; pale yellow flowers in May
- C. p. 'Allgold'* – 6 ft. tall by 6 ft. wide; deep yellow flowers in June
- C. p. 'Hollandia'* – 5 ft. tall by 5 ft. wide; pink flowers in June
- C. scoparius* 'Burkwoodii' – 6 ft. tall by 5 ft. wide; red and yellow flowers in June
- C.s. 'Carla'* – 6 ft. tall by 5 ft. wide; pink and white flowers in May
- C.s. 'Lena'* – 6 ft. tall by 5 ft. wide; red and yellow flowers in June
- C.s. 'Lord Lambourne'* – 5 ft. tall by 5 ft. wide; scarlet with cream flowers in May
- C.s. 'Moonlight'* – 4 ft. tall by 4 ft. wide; creamy pale yellow flowers in May
- C.s. 'Pomona'* – 5 ft. tall by 5 ft. wide; orange and apricot flowers in June
- C.s. 'Stanford'* – 5 ft. tall by 5 ft. wide; red flowers in June



Elaeagnus commutata

Elaeagnus commutata



Silverberry – Native to the Canadian plains and Rocky Mountains, this shrub thrives on neglect. It is tolerant of cold, wind, heat, poor soil and drought. This large shrub grows 6-12 ft. tall and wide, and is a useful screen, hedge or windbreak. It has tiny yellow fragrant flowers from May through June followed by dry silver berries loved by birds. Plant in full sun, any soil and water once-a-week. This plant is not bothered by rabbits, squirrels nor deer.



Elaeagnus commutata



Euonymus alatus

Euonymus species



Euonymus – This group of shrubs may be evergreen or deciduous (depending on variety) in our area. Valued most for their foliage, as they have inconspicuous flowers, they are best used as a background, foundation or hedge plant. Plant in part shade, well-drained soil and water once-a-week. Not bothered by rabbits, squirrels nor deer.

E. alatus (Burning Bush) – 10 ft. tall by 10 ft. wide; deciduous; foliage burns in hot, dry wind so plant in protected spot or part shade; red fall color; orange berries

E. a. 'Compacta' – 4-6 ft. tall by 6 ft. wide; fall color; part shade

E. fortunei – evergreen; 2 ft. tall by 6 ft. wide; shrub or groundcover

E. f. 'Emerald and Gold' – 6 ft. tall by 6 ft. wide; green leaves with white edges

E. japonicus – 12 ft. tall by 6 ft. wide; evergreen; green or variegated leaves; cut flower filler



Euonymus fortunei



Forestiera neomexicana

Forestiera neomexicana



New Mexico Privet – This native of the four corners region is tolerant of the worst conditions you may have: cold, heat, poor soils, wind and drought. Growing 8 ft. tall by 8 ft. wide, it has medium green leaves similar to that of a privet and makes a good informal hedge or screen. Provide it with once-a-week water, full sun and any garden soil.



Forestiera neomexicana

Fire retardant when watered regularly. This plant is not bothered by rabbits, squirrels nor deer when planted as a one gallon (or larger) size plant.



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Forsythia intermedia

Forsythia species



Forsythia – One of the first to bloom in the spring, its bright yellow flowers march up the entire stem, calling for an end to winter. Best used in the back of a planter bed as a backdrop for more colorful summer bloomers. Can also be used as a screen, bank cover or trained on espalier. Best performance with full sun, annual fertilization and twice-a-week watering.

F. intermedia – grows 7-10 ft. tall by 6-8 ft. wide; arching branches

F. i. 'Arnold Dwarf' – 3 ft. tall by 6 ft. wide; less flowers than other varieties

F. i. 'Beatrix Farrand' – 10 ft. tall by 7 ft. wide; yellow with orange flowers

F. i. 'Lynwood' – 6 ft. tall by 6 ft. wide; many light yellow flowers

F. i. 'Spring Glory' – 6 ft. tall by 6 ft. wide; light yellow flowers

F. suspensa (Weeping Forsythia) – 8 ft. tall by 8 ft. wide; roots where stems touch damp soil

F. viridissima (Greenstem Forsythia) – 10 ft. tall by 6 ft. wide; deep-green foliage

F. v. 'Bronxensis' (Dwarf Forsythia) – grows 18 in. tall by 2 ft. wide; groundcover or edge of border



Genista lydia

Genista species

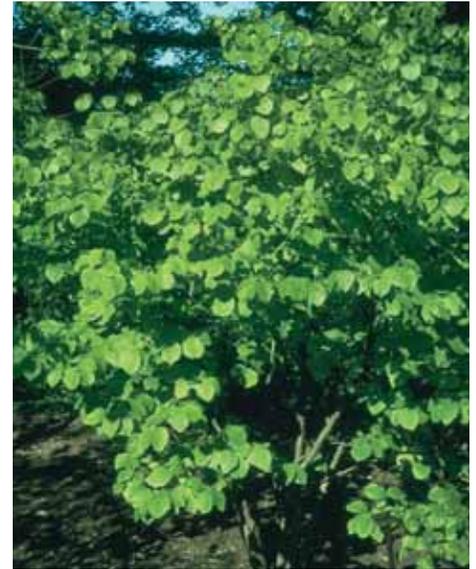


Dwarf Broom – This group of shrubs is also a member of the pea family, but less aggressive than their larger relatives (Cytisus). They perform best given full sun, gravelly dry soil and once-a-week watering. They do not transplant well so don't attempt to move it once you have planted it in the garden. Not bothered by rabbits, squirrels nor deer.

G. lydia – grows 2 ft. tall by 6 ft. wide; yellow flowers in June; groundcover

G. pilosa – grows 1 ft. tall by 7 ft. wide; yellow flowers from May-June; groundcover

G. tinctoria – grows 3 ft. tall by 3 ft. wide; golden yellow flowers in June (will re-bloom if sheared after first bloom)



Hamamelis x intermedia

Hamamelis x intermedia



Witch Hazel – This plant has three outstanding traits: it blooms in January when nothing else is usually blooming, it has very fragrant yellow flowers that can last 3-4 weeks, and it thrives in gravelly, poorly drained clay soil (present in much of our region). It is a large (8 x 8 ft.) somewhat coarse looking shrub that grows best in full sun or partial shade, with twice-a-week watering. The fall color is a coppery yellow. Use for foundation planting, background or screen plantings. Plant near a window or door to enjoy scent.

Hibiscus syriacus



Rose of Sharon – This plant can be grown as a large multi-stemmed shrub or trained into a single stem small tree, 10-12 ft. tall. It is very late to leaf out, sometimes as late as June.

It is useful as a hedge, screen or background plant. It tolerates full sun to partial shade, clay soils, heat, wind and cold. The flowers bloom August through September, and are rose, lilac, white or a bluish-purple. This plant is not bothered by rabbits, squirrels nor deer.



Hibiscus syriacus

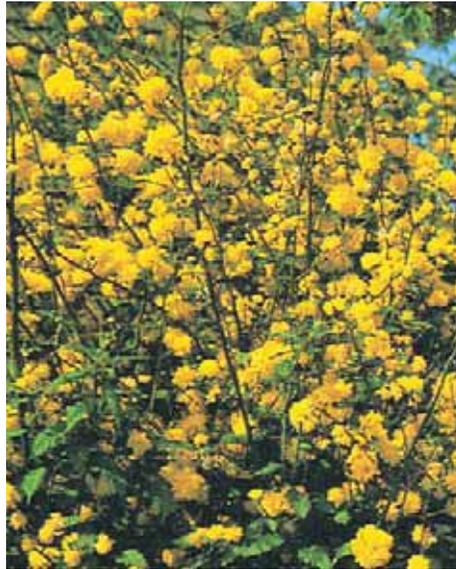


Juniperus chinensis

Juniperus chinensis



Sea Green Juniper – Junipers rank as one of the toughest landscape plants used around the world today. There are 13 species native to the United States alone. Generally the junipers that are categorized as shrubs range in size from 2-10 ft. tall with equal spread. Be careful to select the variety of juniper whose mature size fits your design criteria (pruning or removing a juniper is very unpleasant work). ‘Sea Green’ is a compact (5 x 5 ft.) dark green shrub with arching shape. There are 200 plus varieties of juniper available commercially; please refer to the *Sunset Garden Book* for a detailed discussion. Plant all in full sun to part shade, any soil and water 1-2 times per week. It is advisable to mulch around junipers when first planted to reduce weed growth while they are filling in. This plant is not bothered by rabbits, squirrels nor deer.



Kerria japonica

Kerria japonica



Kerria – This somewhat tropical looking shrub prefers an east or north exposure. It has yellow or pale orange flowers that look like tiny roses. Kerria grows 6 ft. tall and 8 ft. wide. It prefers well-drained soil with humus or compost added, partial shade and twice weekly watering.

Ligustrum species



Privet – These dense shrubs are best suited to use as a hedge or screen. They all produce white flowers that result in black berries.

Plant in full sun to light shade, any soil and water once-a-week. Not bothered by rabbits, squirrels nor deer.

L. amurense (Amur Privet) – 15 ft. tall by 15 ft. wide; green leaves

L. obtusifolium (Border Privet) – 10 ft. tall by 12 ft. wide; green leaves have purple tinge in fall

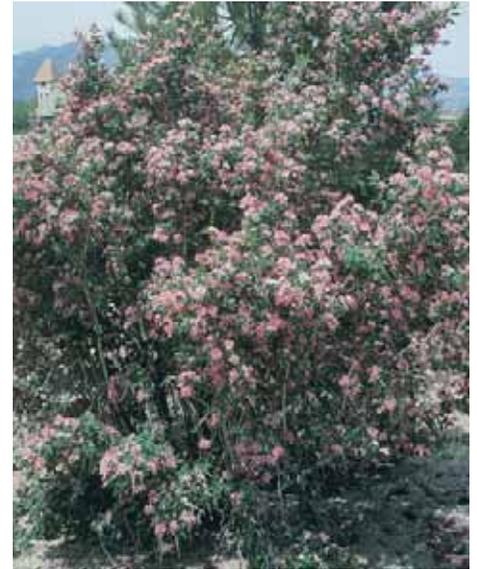
L. ‘Vicaryi’ (Vicary Privet) – 10 ft. tall by 10 ft. wide; golden yellow leaves

L. vulgare (Common Privet) – 10 ft. tall by 10 ft. wide; green leaves; clusters of black fruit

L. v. Aureum’ (Golden Privet) – 10 ft. tall by 10 ft. wide; golden yellow leaves



Ligustrum ‘Vicaryi’



Lonicera tatarica

Lonicera tatarica



Tatarian Honeysuckle – A large shrub that is best suited to the back of a border, as a hedge or screen. It grows up to 12 ft. tall and 8 ft. wide and produces red flowers in June. The variety ‘Arnold Pink’ has pink flowers, but is similar otherwise. The orange or red berries are relished by the birds in the fall. Place in full sun to light shade, well-drained soil and water once-a-week. This plant is not bothered by rabbits, squirrels nor deer.

Mahonia aquifolium



Oregon Grape – This evergreen shrub has glossy, dark green, spiny toothed leaves that become purplish in winter. It has bright yellow flowers in May, followed by blue black berries that attract birds in August-September. It matures to 4 ft. tall by 6 ft. wide. Grow in full sun to part shade, well-drained soil and water one to two times per week. This plant is not bothered by rabbits, squirrels nor deer.



Mahonia aquifolium



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Philadelphus virginalis

Philadelphus virginalis



Mock Orange – This shrub is named for the orange blossom scent of its flowers. Most varieties of this species have showy double white flowers that bloom from May through June. When in bloom, the display is noteworthy, but this shrub is somewhat open and unappealing out of bloom so use it as a background plant.



Philadelphus virginalis

This shrub tolerates many soils, full sun to light shade, heat, wind and cold. Prune every other year to keep center open and enhance bloom. It grows 6-8 ft. tall and 4 ft. wide. Not bothered by rabbits, squirrels nor deer.

P. v. 'Minnesota Snowflake' – 6 ft. tall by 6 ft. wide

P. v. 'Glacier' – 4 ft. tall by 4 ft. wide

P. v. 'Dwarf Minnesota Snowflake' – 3 ft. tall by 3 ft. wide



Picea glauca 'Conica'

Picea glauca var. albertiana 'Conica'



Dwarf Alberta Spruce – A relative of the Colorado Spruce trees, it remains dwarf, only growing 8 ft. tall in 30 years. It may only grow from 3-6 ft. wide at maturity making it very adaptable to container growing and useful in very confined spaces. It requires a site protected from cold, dry winter winds which can burn the foliage severely. Grow in sun to shade, well-drained soil and water twice-a-week. **MUST** be watered monthly in dry winters.

P. g. 'Montgomery' – 5 ft. tall by 8 ft. wide; dwarf and slow growing; silver blue needles

Pinus mugo



Mugo Pine – This pine always takes a multi-stemmed shrub form that has great variability in height and spread. It is a slow grower but eventually can reach 15 ft. tall, or you may get a dwarf strain that will stay a contained 4 ft. tall by 4 ft. wide (buyer beware). This pine prefers well-drained soil, full sun, once-a-week watering and monthly feeding during the growing season.



Pinus mugo



Potentilla fruticosa

Potentilla fruticosa



Shrubby Potentilla – This shrub is a reliable performer, flowering from July through the first frost. Tolerant of poor dry soils, cold, wind and heat and is a worthy addition to any landscape. Useful for edging, massing, flower border or as a foundation plant. Plant in full sun, well-drained soil, and a watering zone that gets irrigated 1-2 times per week. Not bothered by rabbits, squirrels nor deer.

P. 'Abbotswood' – 4 ft. tall by 3 ft. wide; white flowers

P. 'Daydawn' – 2 ft. tall by 2 ft. wide; peach and white flowers

P. 'Gold Drop' – 2 ft. tall by 3 ft. wide; yellow flowers

P. 'Goldfinger' – 2 ft. tall by 2 ft. wide; yellow flowers

P. 'Hollandia Gold' – 2 ft. tall by 2 ft. wide; gray-green leaves; golden yellow flowers

P. 'Jackmanii' – 4 ft. tall by 4 ft. wide; yellow flowers

P. 'Katherine Dykes' – 5 ft. tall by 5 ft. wide; pale yellow flowers

P. 'Klondike' – 2 ft. tall by 2 ft. wide; yellow flowers

P. 'Mt. Everest' – 4 ft. tall by 4 ft. wide; white flowers

P. 'Red Ace' – 2 ft. tall by 3 ft. wide; red flowers

P. 'Sutters Gold' – 1 ft. tall by 3 ft. wide; yellow flowers

P. 'Tangerine' – 2½ ft. tall by 3 ft. wide; yellow-orange flowers



Prunus besseyi

Prunus species



Bush Cherry – This group of plants is related to the fruit bearing plums and cherries. They all bloom in May to June, and produce edible fruit favored

by critters, both walking and winged. Grow in full sun, well-drained soil, water one to two times per week. Not bothered by rabbits, squirrels nor deer.



Prunus virginiana

P. besseyi (Sand Cherry) – 5 ft. tall by 5 ft. wide; green leaves; white flowers; sweet black cherries
P. cistena (Purple-leaf Sand Cherry) – 5 ft. tall by 5 ft. wide; purple leaves; pink flowers
P. tomentosa (Nanking Cherry) – 10 ft. tall by 10 ft. wide; green leaves; fragrant white flowers; red fruit
P. virginiana (Chokecherry) – 25 ft. tall by 15 ft. wide; green leaves; white flowers; black fruit



Pyracantha coccinea

Pyracantha coccinea



Firethorn or Pyracantha – This dense, thorny shrub is a great candidate for use as a hedge, screen or barrier planting. It has creamy, white flowers in May or June, and produces heavy crops of orange-red berries in September-October. It needs a site with full sun to part shade, well-drained soil, once-a-week watering and winter mulch to protect roots from extreme cold. Flowers and fruit on last year's wood. This variety grows 8-10 ft. tall by 8 ft. wide. Not bothered by rabbits, squirrels or deer.

P. c. 'Lalandei' – 8 ft. tall by 8 ft. wide; orange berries
P. c. 'Lowboy' – 4 ft. tall by 4 ft. wide; orange berries; low and spreading



Pyracantha coccinea flowers



Rhus typhina

Rhus species



Sumac – This group of plants are known for their drought tolerance and ability to thrive in poor soils (except soggy). The suckering tendency of their roots makes them very useful on slopes. All varieties have dark green foliage that turns bright red in fall. Plant in full sun to partial shade, well-drained soil and water once-a-week.

R. aromatica (Fragrant Sumac) – 5 ft. by 8 ft.; leaves fragrant when crushed; yellow flowers
R. a. 'Lowgrow' – 2 ft. tall by 5 ft. wide; yellow flowers; useful on slopes and for erosion control
R. glabra (Smooth Sumac) – 10 ft. tall by 8 ft. wide; red fruit in fall
R. g. 'Laciniata' – 4 ft. tall by 4 ft. wide; fernlike leaves
R. trilobata (Skunkbush) – 4 ft. tall by 6 ft. wide; leaves have skunk-like odor when bruised; yellow flowers
R. typhina (Staghorn Sumac) – 20 ft. tall by 20 ft. wide; branches have a felty feel; red fruit in fall



Rhus trilobata



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Ribes aureum

Ribes aureum



Golden Currant – Native to Nevada, this shrub grows 4-6 ft. tall and has small yellow flowers in spring. The golden berry is edible but you'll have to beat the birds to taste it. Good under planted with conifers and shade trees, it is very useful in low water zones of the yard. Plant in full to partial sun, well-drained soil and in a once-a-week watering zone. This plant is not bothered by rabbits, squirrels nor deer.



Ribes aureum



Rosa Harrisonii

Rosa species



Hardy Shrub Roses – The only group of roses discussed in this guide are those classified as hardy shrub roses. A hardy shrub rose is very cold tolerant, requires no annual pruning and only needs feeding in spring. These include some of the oldest roses known to the west as well as some of the newest varieties now sold commercially. Plant in well-drained soil with added compost, full sun, irrigate twice weekly.

- R. foetida 'Bicolor'* (Austrian Copper Rose) – 5 ft. tall by 5 ft. wide; orange-yellow flowers on same plant from May-June; loves heat; good in dry zones
- R. harisonii* (Harison's Yellow) – 6-8 ft. tall by 6-8 ft. wide; yellow flowers from May-June; blooms in fall if sheared after spring bloom; good against fence or wall; came west with pioneers
- R. rugosa* (Sea Tomato) – 3-8 ft. tall and wide; flowers single or double, white, dark red or yellow; good as hedge, vigorous
- R. spinosissima* (Scotch Rose) – 3-4 ft. tall, width varies; white or pink flowers from May-June; suckering roots spread vigorously; good as bank cover
- R. 'Meidiland'* – 12 in. to 10 ft. tall, width varies; white, pink, coral, red or ivory flowers; use as groundcover, hedge, background, bank cover
- R. woodsii* (Woods Rose) – 6 ft. tall by 6 ft. wide; pink flowers, red rosehips; low water zones; native to the west



Rosa rugosa hybrid



Rosa woodsii



Rosa Harrisonii



Rosa foetida 'Bicolor'



Full Sun Part Shade Shade



Moderate (twice-a-week) Low (once-a-week) Very Low (7-14 days)



Deep Water (7-10 days) Deep Water (10-14 days)



Extra Maintenance



Temperature Sensitive



Shepherdia argentea

Shepherdia argentea



Silver Buffaloberry – Native to the west, this shrub tolerates cold, heat, drought, poor soils and wind. It has insignificant flowers, that produce a red-orange berries in fall loved by birds, tart in flavor, but good in jam. Best suited to low water or native zones as its spiny branches are not friendly to garden around. Plant in full sun, well-drained soil and a watering zone that receives water once-a-week. This plant grows 6 ft. tall by 6 ft. wide. Not bothered by rabbits, squirrels nor deer.



Spiraea japonica 'Little Princess'

Spiraea species



Spiraea – Spiraea are deciduous shrubs that adapt well to many garden locations, from full sun to partial shade. All prefer well-drained soil, watering once to twice weekly and yearly pruning after flowering. Not bothered by rabbits, squirrels nor deer.
S. x bumalda – all varieties of bumalda are 2-4 ft. tall by 4-8 ft. wide; bronze young leaves; dark pink flowers
S. b. 'Anthony Waterer' – maroon tinged leaves; dark pink flowers
S. b. 'Crispa' – twisted, serrated leaves; pink flowers from June-July
S. b. 'Froebelii' – taller (3-4 ft.) with rose red flowers
S. b. 'Goldflame' – bronze-red young leaves, turning bright yellow then mid-green, then orange, red and yellow in fall; dark pink flowers



Spiraea bumalda 'Limemound'

S. b. 'Limemound' – very dwarf; lime green foliage; pink flowers; orange-red fall color
S. japonica – 4 ft. tall by 4 ft. wide; pinkish red flowers
S. j. 'Alpina' – 2 ft. tall by 3 ft. wide; pink flowers in summer
S. j. 'Little Princess' – 20 in. tall by 3 ft. wide; rose red flowers
S. j. 'Shirobana' – 3 ft. tall by 3 ft. wide; white, pink and red flowers on same plant
S. x vanhouttei – 8 ft. tall by 10 ft. wide; large fountain-like branches that curve to the ground; white flowers from April-May



Spiraea x vanhouttei



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Symphoricarpos albus

Symphoricarpos albus



Snowberry – Snowberry grows 3-6 ft. tall by 3-6 ft. wide. It has white flowers in June that become white berries in fall and last into winter. Tolerant of heat, cold, wind, drought and bad soil, it is great among evergreens. Plant in full sun to partial shade, well-drained soil, water once-a-week. This plant is not bothered by rabbits, squirrels nor deer.

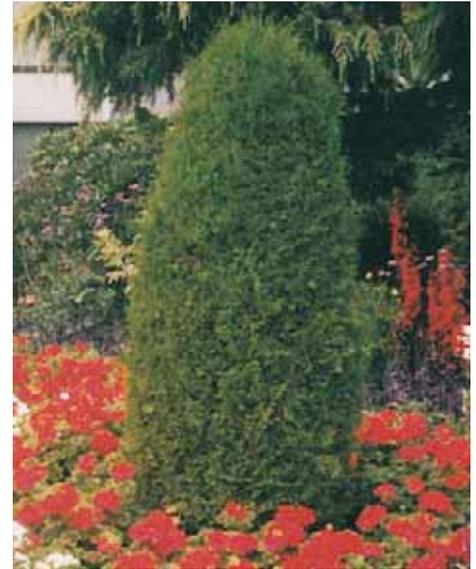


Syringa vulgaris

Syringa vulgaris



Common Lilac – This is an old garden favorite prized for its light purple flowers that appear in May. It is a large, coarse shrub when out of flower so consider using it in the back of a border, or as a hedge or screen. Grow in full sun, well-drained soil with compost added, and apply water once to twice-a-week. Prune after flowering in spring. Lilac grows 10 ft. tall by 10 ft. wide. This plant is not bothered by rabbits, squirrels nor deer.



Thuja occidentalis 'Emerald'

Thuja occidentalis



American Arborvitae – The only varieties listed here are those considered shrub-like due to their size (less than 10 ft.). This group of plants really require a more humid environment than our area can provide for best performance. The foliage burns when exposed to cold, dry winter winds and takes on a yellowish tone if not fertilized yearly. Plant in full sun, well-drained soil with added compost, water twice-a-week.
T. o. 'Emerald' – 8-10 ft. tall by 3 ft. wide; this columnar plant retains the darkest green color in winter of any plant of this species
T. o. 'Globosa' or 'Little Gem' – 4-6 ft. tall by wide; dwarf globe shaped plant useful in formal settings
T. o. 'Rheingold' – 6 ft. tall by 6 ft. wide; pine cone shaped; distinct yellow foliage
T. o. 'Woodwardii' – 6 ft. tall by 1½ ft. wide; slow-growing column; dark green foliage





Viburnum trilobum

Viburnum species



Viburnum – This group of shrubs have showy flowers, many of which are also fragrant. The flowers are followed by clusters of berries that may be yellow, orange, red, blue or black. Grow in full sun to partial shade, in well-drained soil that is amended with organic matter, apply water twice-a-week, fertilize in spring. Useful in a shrub border, along a foundation or as a screen. Not bothered by rabbits, squirrels nor deer.

V. burkwoodii – 8 ft. tall by 6 ft. wide; dark green leaves; pink flower buds opening white, fragrant from April-May, turning into red berries that change to black in July-August; some red fall color

V. carlesii (Korean Spice) – 4 ft. tall by 4 ft. wide; pink, white flowers from April-May; outstanding fragrance attracts bees; maroon fall color

V. dentatum (Arrowwood Viburnum) – 6 ft. tall by 6 ft. wide; multi-stemmed; white flowers; blue-black fruit; yellow-red fall color

V. lantana (Wayfaring Viburnum) – 10 ft. tall by 10 ft. wide; white flowers in May (no scent); yellow fruit changes to black in August

V. lentago (Nannyberry Viburnum) – 15 ft. tall by 12 ft. wide; white flowers in May (no scent); fruit many colors; red-purple fall colors

V. opulus (European Cranberry Bush) – 10 ft. tall by 10 ft. wide; white flowers in May; red berries in September; some reddish fall color



Viburnum burkwoodii

V. o. 'Roseum' (Snowball Bush) – 12 ft. tall by 12 ft. wide; white flowers 2-3 inches in size; sterile, with no berries

V. prunifolium (Blackhaw) – 12 ft. tall by 12 ft. wide; ivory flowers 4 inches in size in May; pink berries turning black in September

V. trilobum (American Cranberry Bush) – 12 ft. tall by 12 ft. wide; white flowers; edible red fruit; yellow-red fall color



Yucca glauca

Yucca species



Yucca – An evergreen stemless shrub with sharp, sword shaped leaves. Flower spikes white to ivory in color up to 6 ft. tall. Grows best in well-drained soil, full sun, once-a-week watering. Not bothered by rabbits, squirrels nor deer.

Y. filamentosa (Adams Needle) – 2 ft. tall by 4 ft. wide; yellowish flower grows to height of 2-6 ft. in July

Y. flaccida – 2 ft. tall by 4 ft. wide; loose strings hang off leaves; white flowers in July grow to height of 7 ft. or more with light fragrance at night; very hardy

Y. glauca (Small Soapweed) – 2 ft. tall by 4 ft. wide; greenish white flowers grow to height of 5 ft. tall in July

Y. whipplei (Our Lord's Candle) – 2 ft. tall by 4 ft. wide; gray-green leaves with sharp tips; creamy white flowers grow to height of 12 ft. in summer; may take many years to flower



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Trees

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Acer ginnala

Acer ginnala



Amur Maple – This drought tolerant member of the maple family may become a small tree or large shrub, topping out at 25 ft. tall. It has small, light green leaves that turn shades of red in fall. Grow in full sun to full shade, well-drained soil and water deeply once every 10-14 days to prevent surface rooting.

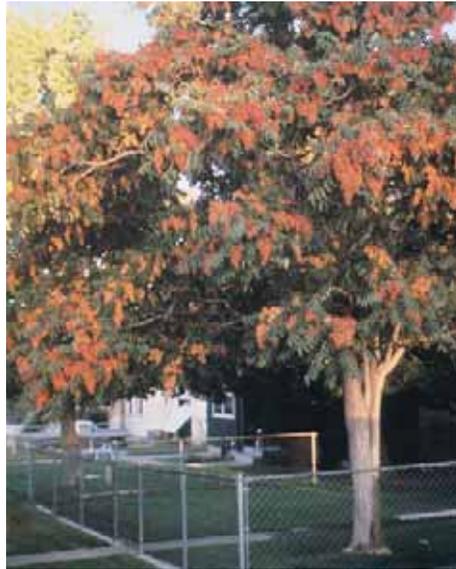
Aesculus hippocastanum



Common Horsechestnut – This dense shade tree produces a spring flower display of 12 in. clusters of ivory blooms (loved by hummingbirds) in April-May. It grows 50 ft. tall and 40 ft. wide at maturity. Provide deep watering (18-24 in.) every 7-10 days in summer. If planted in a lawn and watered on the same schedule, the roots will surface and can break concrete. Deep, infrequent watering is a must!



Aesculus hippocastanum



Ailanthus altissima

Ailanthus altissima



Tree of Heaven – This tree was brought from China in the 1800s by immigrants working on the railroads and mines of the Sierra Nevada foothills. It grows wild in that area because of its high tolerance for heat, poor soil, winds and drought. Its mature height is 40 ft., with width tapering from 40 ft. at the top to 20 ft. towards the bottom of the canopy. Prune heavily when young to promote strong branching habit. Water once every 10-14 days.

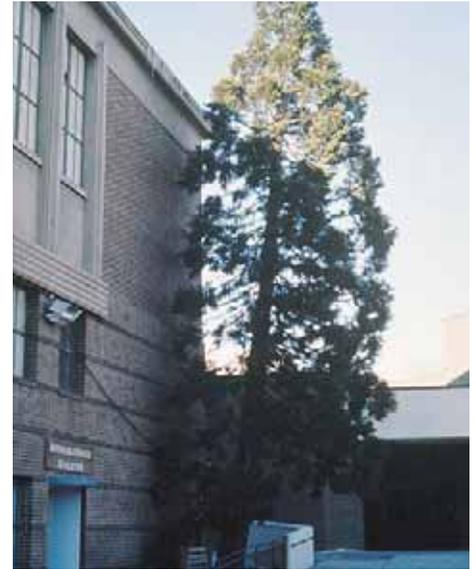
Albizia julibrissin



Mimosa or Silk Tree – A tropical looking tree that produces pink flowers that look like sea anemones sitting above the foliage in July or August. If you have a view out of a second story window, plant this tree underneath to take advantage of the flower position. This tree grows fairly fast to a height of 40 ft. and has equal spread. Tolerant of heat, wind, drought and poor soils. Grow in full sun, any soil except salty, and water deeply once every 10-14 days. The variety 'Rosea' is most cold tolerant of species.



Albizia julibrissin



Calocedrus decurrens

Calocedrus decurrens



Incense Cedar – This tall evergreen can dominate a skyline, maturing at 75-100 ft. tall. It is conical in form, has dark green foliage (useful in flower arrangements) and provides a great aroma on a warm summer afternoon. Provide deep, infrequent watering, well-drained soil, and 20 ft. of clearance from buildings. Water deeply once every 14 days in summer and once a month the rest of the year including winter or its foliage will burn.

Carpinus betulus



Hornbeam – A well-behaved shade tree that grows to 40 ft. at maturity. It has dark green leaves that turn yellow or red in the fall. The variety 'Fastigiata' is columnar and used to create large scale screens or hedges when pruned. Needs to be planted in full sun to partial shade, well-drained soil that has organic matter added and watered once every 7-10 days.



Carpinus betulus



Full Sun Part Shade Shade



Moderate (twice-a-week) Low (once-a-week) Very Low (7-14 days)



Deep Water (7-10 days) Deep Water (10-14 days)



Extra Maintenance



Temperature Sensitive



Catalpa bignonioides 'Nana'

Catalpa species



Catalpa – Huge tropical leaves (6-12 in.) provide good shade and a backdrop for white flower clusters in July. Tolerant of heat, cold, drought and poor soils.

Leaves may tatter if planted on exposed sites in high wind areas. Very drought tolerant when it receives deep, occasional watering approximately once every two weeks.

C. bignonioides 'Nana' (Umbrella Catalpa) – a dense globe that tops out at 20 ft. tall and does not flower;

good in small spaces, formal plantings, under power lines or in a street right of way
C. speciosa (Western Catalpa) – 60 ft. tall by 40 ft. wide; white flowers in July; seed pods create litter



Catalpa speciosa, fall color



Cedrus atlantica glauca

Cedrus atlantica glauca



Blue Atlas Cedar – An evergreen tree with an unusual open silhouette that reaches 50 ft. tall. Short needles are blue-gray in color. Branches need tip pruning when young to strengthen wood. Trees of any age experience branch breakage under heavy snow loads. Provide a 30 ft. wide area for mature width, full sun and deep watering once-a-week.

Celtis occidentalis



Hackberry – A relative of the elm, this tree grows 50 ft. tall by 50 ft. wide. It roots deep and can adapt well to confined planters when watered correctly. Tolerates heat, wind, drought, poor soil and air pollution. Best planted when young; seems to adapt more quickly. Plant in full sun, well-drained soil, and water

deeply once every 10-14 days.



Celtis occidentalis



Cotinus coggygia

Cotinus coggygia



Smoke Tree – A small tree or large shrub reaching about 25 ft. tall at maturity. The name is derived from the pink clusters of flowers that sit atop the leaves like puffs of smoke. This variety has medium green leaves that turn orange-red to yellow in the fall. The variety 'Royal Purple' has maroon leaves that change to dark purple in fall when planted in full sun. Grow in well-drained soil, full sun to partial shade and water deeply once every 7-10 days.



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Crataegus lavallei

Crataegus species



Hawthorn – Hawthorn trees are a maintenance nightmare for anyone trying to maintain a structured tree. They are dense, twiggy and usually very thorny as well. One of their best uses given these tendencies is as a hedge, screen or barrier planting. All bloom in April-May and produce clusters of fruit in the fall. All are prone to pests



Crataegus laevigata
'Paul's Scarlet'

(scale, borers and spider mites) and fire blight. Plant in full sun, well-drained soil and water deeply once every 10-14 days.
C. crus-galli (Cockspur Hawthorn) – 35 ft. tall by 25 ft. wide; white flowers in May; red fruit; orange-red fall color
C. laevigata 'Paul's Scarlet' – 20 ft. tall by 20 ft. wide; double red flowers in May; scarlet fruit.
C. lavallei (Lavalle Hawthorn) – 20 ft. tall by 20 ft. wide; white flowers in May; red fruit; bronze-red fall color
C. mollis (Downy Hawthorn) – 30 ft. tall by 30 ft. wide; white flowers in May; red fall color



Cupressus glabra

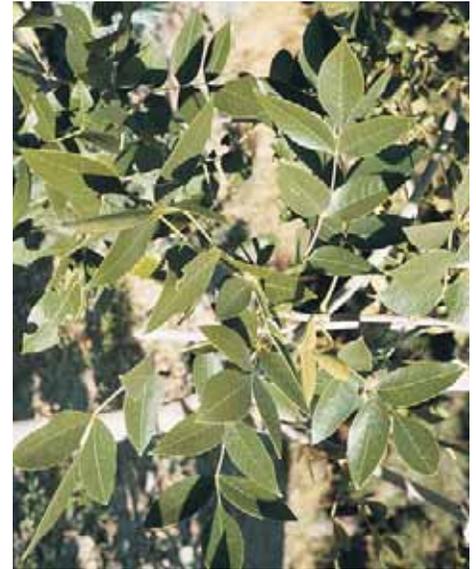
Cupressus glabra



Arizona Cypress – A tall (40 ft.) cylindrical evergreen that varies in color from a dull green to green-gray. This tree spreads about 20 ft. wide when planted in full sun and well-drained soil. Water deeply once every 7-10 days and monthly during winter.



Cupressus glabra



Fraxinus pennsylvanica lanceolata

Fraxinus species



Ash – A vigorous, rapid growing tree tolerant of heat, drought, poor soils, cold and wind. Prune annually for the first few years to create strong branching structure. Beneficial to spray with a dormant oil every winter to kill over-wintering insects if you had any problems during the year. Best when planted in full sun, well-drained soil and watered deeply once every 7-10 days.
F. americana 'Autumn Purple' (Autumn Purple Ash) – 80 ft. tall by 40 ft. wide; purplish-red fall color
F. pennsylvanica lanceolata (Green Ash) – 60 ft. tall by 40 ft. wide; yellow fall color

Ginkgo biloba



Maidenhair Tree – Geologic fossil records date ginkgo trees back to the Jurassic period. It is one of the ultimate no maintenance trees, requiring little if any pruning during its lifetime. The ginkgo grows to 100 ft. tall and about 25 ft. wide so it is well-suited to street tree planting and small yards. It has bright yellow fall color, grows in any well-drained soil and needs deep watering once every 7-10 days.



Ginkgo biloba leaves



Gleditsia triacanthos inermis

Gleditsia triacanthos inermis



Honeylocust – The thornless honeylocust and its varieties are tolerant of poor soils, heat, drought, wind and cold. They have small, fine textured leaves that provide light shade in summer and blow away easily in fall. Unfortunately, they suffer from attack by a number of insect pests, of which borers and pod gall midge have no chemical control. Grow in full sun to partial shade, any soil and water deep once every 10-14 days.

G. t.i. 'Imperial' (Imperial Honeylocust) – 30 ft. tall by 30 ft. wide; no fall color

G. t.i. 'Rubylace' (Rubylace Honeylocust) – 30 ft. tall by 30 ft. wide; new growth red; prone to wind damage

G. t.i. 'Shademaster' (Shademaster Honeylocust) – 50 ft. tall by 40 ft. wide; denser shade than most; NOT under utility lines

G. t.i. 'Sunburst' (Sunburst Honeylocust) – 30 ft. tall by 30 ft. wide; golden-yellow foliage; prone to wind damage



Juniperus 'Blue Haven'

Juniperus species



Tree Juniper – These evergreens are the backbone of many a windbreak, screen or barrier plantings. They are tolerant of cold, heat, drought, poor soils and wind. Plant in any well-drained soil, full sun to light shade, and water deeply once every 10-14 days in summer, once a month in winter. Best appearance when they are not pruned, so choose the variety that will fit your site.

J. chinensis 'Aurea' – 35 ft. tall by 15 ft. wide; yellow and green foliage

J. c. 'Spartan' (Spartan Juniper) – 20 ft. tall by 5 ft. wide; dull green foliage

J. occidentalis (Western Juniper) – 25 ft. tall by 20 ft. wide; green to gray-green foliage; dry sites; massive

J. scopulorum (Rocky Mountain Juniper) – 30 ft. tall by 20 ft. wide; green foliage that reddens with cold

J. s. 'Blue Haven' (Blue Haven or Heaven Juniper) – 12 ft. tall by 12 ft. wide; blue-gray foliage

J. s. 'Pathfinder' (Pathfinder Juniper) – 25 ft. tall by 10 ft. wide; blue-gray foliage

J. s. 'Skyrocket' (Skyrocket Juniper) – 20 ft. tall by 4 ft. wide; narrow pencil shape; gray-green foliage



Juniperus occidentalis, berries

J. s. 'Tolleson's Weeping' – 20 ft. tall by 10 ft. wide; weeping form; green or blue-gray varieties

J. s. 'Wichita Blue' (Wichita Blue Juniper) – 6 ft. tall by 3 ft. wide; conical form; blue-gray foliage

J. v. virginiana 'Burkii' (Burkes Juniper) – 20 ft. tall by 3 ft. wide; blue-gray tinted purple in winter

J. v. 'Hetzii' – 15 ft. tall by 15 ft. wide; blue-green foliage

J. v. 'Robusta Green' (Robusta Green Juniper) – 10 ft. tall by 2 ft. wide; narrow pencil shape; medium green foliage



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Koelreuteria paniculata

Koelreuteria paniculata



Golden Rain Tree – This tree has showy yellow flowers up to 12 in. long that sit above the leaves from June through July. It grows 30 ft. tall and equally as wide when located in full sun and any well-drained soil. Plan to irrigate this tree once every 7-10 days.

Laburnum watereri



Golden Chain Tree – Laburnum may grow to 25 ft. tall and about as wide, but usually in our area it is only about 20 ft. tall by 10 ft. wide. It is grown for its bright yellow flowers that bloom in May (if the frost doesn't get them). The flowers cascade down from the branches in 20 in. long clusters and are quite showy.



Laburnum watereri

It should be noted that the seed pods are poisonous and this tree should not be planted in a yard with young children or curious pets. Plant in full sun, well-drained soil, protect from the wind, and deep water once a week.



Liquidambar styraciflua

Liquidambar styraciflua



Sweetgum – This stately tree is planted for its brilliant fall color which ranges from red to orange to purple. It grows 80 ft. tall by 40 ft. wide when provided well-drained soil amended with bark humus. Although it has inconspicuous flowers, it has very conspicuous fruit. They are a hard spiny ball that ruins lawnmowers, but are very useful in dried flower arranging. Plant in full sun to partial shade, well-drained soil and water deeply every 7-10 days.

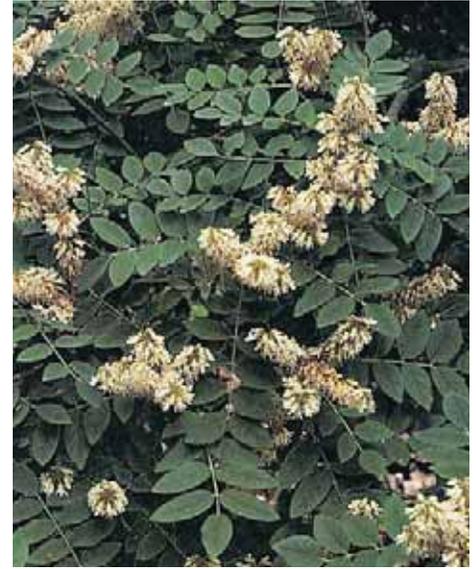
Liriodendron tulipifera



Tulip Tree – This is a long lived shade tree that grows 100 ft. tall by about 50 ft. wide. It has unusual shaped leaves and flowers that resemble yellow tulips in June. Best when provided plenty of room, full sun, well-drained soil and deep watering once-a-week during the hot months. If planted within a lawn, you must keep the turf away from its trunk and water deeply and independently of the turf to keep the large roots from surfacing.



Liriodendron tulipifera



Maackia amurensis

Maackia amurensis



Maackia – This tree is grown for its copper colored peeling bark and creamy clusters of flowers. The flowers bloom in July or August, which are followed by oblong brown seed pods in September or October. This hardy tree is 50 ft. tall and 30 ft. wide at maturity. Plant in full sun, well-drained soil amended with organic compost and water deeply once every two weeks.

Maclura pomifera



Osage Orange – This tree has stout thorns that make it a good candidate for windbreak, screen or barrier plantings. It is fast growing, tolerant of heat, drought, wind, cold and severe pruning. Although the flowers are inconspicuous, females produce 5 in. yellow green wrinkled “oranges.” Grow in full sun, well-drained soil and apply water deeply once every 10-14 days.



Maclura pomifera



Full Sun Part Shade Shade



Moderate (twice-a-week) Low (once-a-week) Very Low (7-14 days)



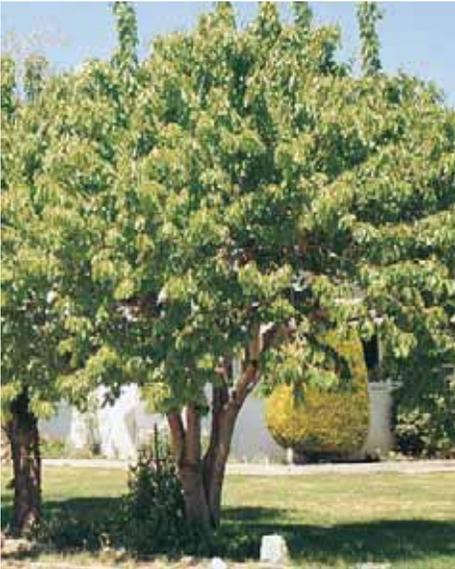
Deep Water (7-10 days) Deep Water (10-14 days)



Extra Maintenance



Temperature Sensitive

**Malus domestica**

Malus domestica



Fruiting Apple Tree – There are many abandoned homesteads in Nevada where apple trees planted years ago still survive. They receive no regular irrigation, no pruning, spraying or fertilizer, and yet they endure. That is a tree with an extreme tolerance for abuse. There are hundreds of varieties of apple available commercially and if you are interested, please contact the Cooperative Extension Service for a pamphlet. In general, apple trees range from 6-25 ft. tall with similar width. Grow in full sun, well-drained soil and water deeply once per week during fruit set. Some annual pruning is required to encourage strong branching and fruit set, and some annual spraying may also be necessary. This tree is a valuable food source for birds, squirrels, rabbits and deer.

**Malus 'Prof. Sprenger'**

Malus hybrids



Crabapple – There are 400-600 varieties of crabapples being grown across the country today. It provides a reliable display of flowers in the spring and the fruits can be quite showy well into winter. Flowers may be in shades of red, pink or white, usually in April or May. Foliage may be green or purple, and many varieties color nicely in fall. Fruits vary from 1/8 in. to 2 in., and may be yellow, red or orange in color. Choose a variety resistant to fireblight and scab to reduce your potential for annual maintenance. Light pruning for shape is recommended when young. Grow in full sun, well-drained soil and water deeply once every 10-14 days. This plant is a valuable food source for birds, squirrels, rabbits and deer.

M. 'Candied Apple' – 15 ft. tall by 15 ft. wide; green leaves; purple-pink flowers; 1/2 in. red fruit

M. 'Indian Summer' – 20 ft. tall by 20 ft. wide; bronze-green leaves; rose red flowers; red 5/8 in. fruit

M. 'Pink Princess' – 8 ft. tall by 12 ft. wide; leaves purple turning green; pink flowers; 1/4 in. red fruit

**Malus 'hopa'**

M. 'Prairifire' – 20 ft. tall by 20 ft. wide; red leaves; pink-red flowers; 1/2 in. red fruit

M. 'Prof. Sprenger' – 20 ft. tall by 20 ft. wide; green leaves; white flowers; 1/2 in. orange-red fruit

M. 'Robinson' – 25 ft. tall by 25 ft. wide; leaves red turning green; deep pink flowers; 3/8 in. dark red fruit; persistent

M. 'sargentii' – 10 ft. tall by 15 ft. wide; green leaves; white fragrant flowers; 1/4 in. red fruit; dark

M. 'White Cascade' – 15 ft. tall by 15 ft. wide; weeping; green leaves; white flowers; 3/8 in. yellow fruit

M. 'zumi calocarpa' – 20 ft. tall by 24 ft. wide; green leaves; pink fragrant flowers; 3/8 in. red fruit



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Metasequoia glyptostroboides, summer

Metasequoia glyptostroboides



Dawn Redwood – This pyramidal shaped tree has needles similar to evergreens, but is actually a deciduous tree. It turns red-brown to orange in color before dropping its needles in fall. Dawn Redwood grows 80 ft. tall and about 25 ft. wide and needs water once-a-week. It tends to branch very low and looks poor when the lower branches are removed. If planted in or near turf, remove all turf under the dripline to allow the natural branching pattern.



Metasequoia glyptostroboides, fall



Morus alba

Morus alba



Mulberry – This fruit tree produces loads of white, pink or purple berries that taste like blackberries in July. Don't plant near decks, concrete or parking areas due to the mess the birds and berries can cause. It tolerates heat, drought, wind, cold and air pollution. Best when planted in full sun, well-drained soil and watered deeply once every 7-10 days.

Phellodendron amurense



Amur Cork Tree – A wide spreading (50 ft.) tree with dark green aromatic foliage that turns yellow in fall. It has attractive gray, corky bark as it ages. The flowers are insignificant, but female trees bear 1/2 in. black fruits in October. Grow in full sun, well-drained soil and water deeply once every 7-10 days.



Phellodendron amurense



Picea pungens

Picea species

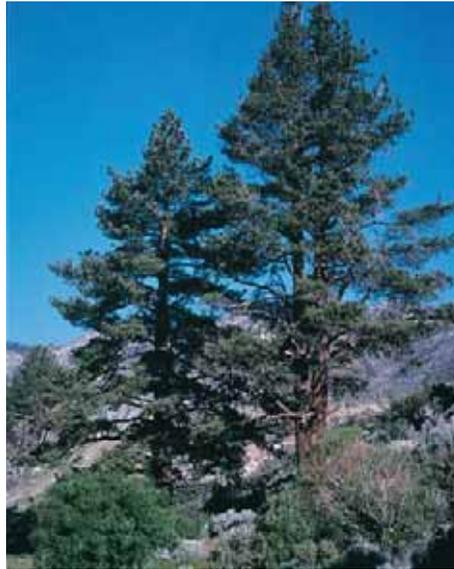


Spruce – A well known family of evergreens that has many members native to North America. Most of the trees are pyramidal in shape and grow from 50-100 ft. tall. The most common mistake in planting spruce is placing them too close to fences, walkways and buildings and not allowing for their mature width. There are horrible examples all over town of spruces that have outgrown their location and been pruned to “fit” it. Most mature spruce grow about 25 ft. wide at maturity with stiff branches all the way to the ground. Looks best when left unpruned, planted in full sun to partial shade, in well-drained soil and water deeply once-a-week. A good choice near turf areas as the overspray from sprinklers helps reduce pest problems. *P. pungens* (Green Spruce) – 75 ft. tall by 25 ft. wide; green needles; most drought tolerant of species. *P. p. 'Glauca'* (Blue Spruce) – 75 ft. tall by 25 ft. wide; silvery blue needles. *P. p. 'Fat Albert'* – 12 ft. tall by 10 wide; same shape as *P. p. 'Glauca'* but dwarf; blue gray needles.





Pinus monticola



Pinus ponderosa



Platanus acerifolia

Pinus species



Pine – A large group of evergreens that has many species native to Nevada. Pines are more tolerant of poor soil, drought, wind and heat than other evergreens.

However, they are prone to insect and disease problems when subjected to environmental stress. If planted in full sun, well-drained soil and watered deeply once every 10-14 days, they will thrive. Must be watered monthly in winter when snow is lacking.

P. aristata (Bristlecone Pine) – 20 ft. tall by 10 ft. wide; slow growing; needs rocky, well-drained soil

P. jeffreyi (Jeffrey Pine) – 100 ft. tall by 25 ft. wide; 5-8 in. long dark green needles; cones not prickly

P. monticola (Western White Pine) – 75 ft. tall by 25 ft. wide; soft green needles



Pinus jeffreyi



Pinus nigra

P. nigra (Austrian Pine) – 40 ft. tall by 30 ft. wide; fast to moderate growth; needs acid food in clay soils

P. ponderosa (Ponderosa Pine) – 100 ft. tall by 25 ft. wide; 5-11 in. needles; cones prickly; not in turf

P. strobus (Eastern White Pine) – 80 ft. tall by 40 ft. wide; soft green needles

P. sylvestris (Scotch Pine) – 75 ft. tall by 35 ft. wide; dark green needles; orange patches on bark

Pistacia chinensis



Chinese Pistache – Grow this tree for the outstanding display of fall color. The medium green leaves turn a combination of orange, red, yellow and pink over an extended period of time. Best grown in full sun, well-drained soil and water deeply once every 7-10 days.



Pistacia chinensis

Platanus acerifolia



Sycamore – This stately 100 ft. tall tree makes as striking a statement in winter with its white patchy bark, as it does in spring fully leafed out. It has dark green leaves that are somewhat felty to the touch, and do not color to speak of in fall. The fruits may be a problem when the tree is planted near turf or walkways. The 1 in. spiny, dry globes wreak havoc with a lawnmower or a pair of high heels. Best when planted 25-30 ft. from concrete so large anchor roots don't crack concrete or pipes. Needs full sun, well-drained soil and deep watering once every 10-14 days.



Bees



Birds



Butterflies



Cut Flowers



Fall Color



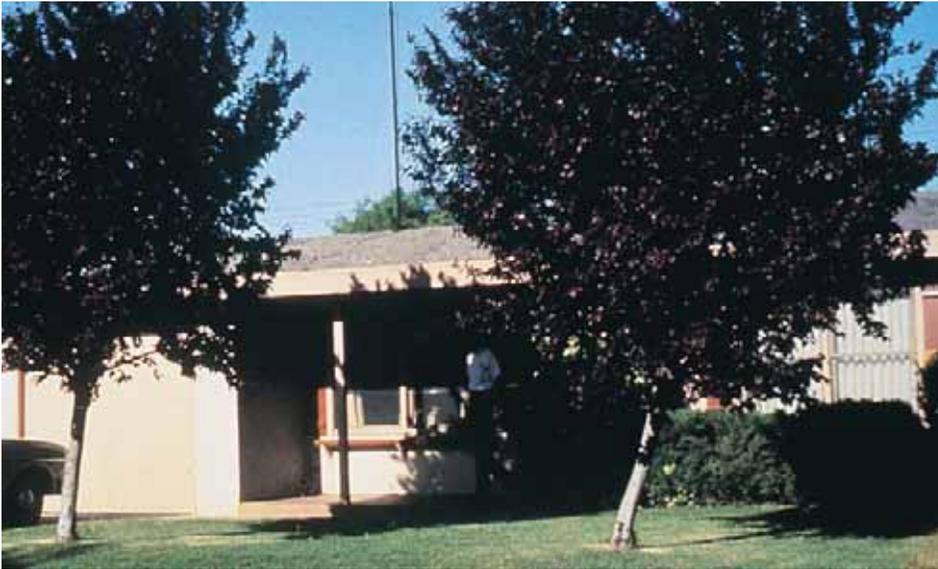
Fire Hazard



Utility Tree



Native



Prunus cerasifera 'Atropurpurea'



Pyrus calleryana

Prunus species



Plum or Cherry – This genus has over 400 species and countless more hybrids, but only the hardiest varieties will be discussed here. It should be noted that though these trees will tolerate heat, cold, drought and wind, they

are very susceptible to pests and disease. Most require annual spraying in winter and summer to reduce insect populations. Annual pruning for the first few years to remove sucker growth and to encourage strong branching is a must. (This may continue indefinitely depending on variety.) Grow in full sun, well-drained soil and water deeply once every 7-10 days. These trees are a valuable food source for birds, rabbits, squirrels and deer.

P. cerasifera 'Atropurpurea' (Purpleleaf Plum) – 20-30 ft. tall by 15-25 ft. wide; purple leaves; pink flowers; purple fruit

P. domestica (Fruiting Plum) – 20 ft. tall by 20 ft. wide; pink flowers; red, yellow or purple fruit

P. maackii (Amur Chokecherry) – 30 ft. tall by 20 ft. wide; fragrant white flowers; ¼ in. black fruit

P. padus (Bird Cherry) – 30 ft. tall by 30 ft. wide; fragrant white flowers; ⅜ in. black fruit; red fall color

P. sargentii (Sargent Cherry) – 40 ft. tall by 40 ft. wide; pink flowers; ¼ in. maroon fruit; red fall color



Above: *Prunus padus*; inset at right shows blossoms

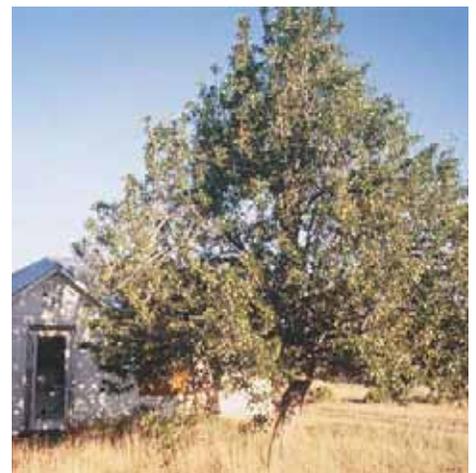
Pyrus species



Pear – Both fruiting and non-fruiting pears have proven themselves worthy of consideration for this area. They are tolerant of cold, wind, heat, drought and poor soils. Plant in full sun, well-drained soils and water once every 7-10 days.

P. calleryana (Flowering Pear) – 40 ft. tall by 30 ft. wide; white flowers in May; red, orange and yellow fall colors

P. communis (Fruiting Pear) – 15-30 ft. tall by 15-30 ft. wide; white flowers; edible fruits from August-October; fall color depends on variety



Pyrus communis





Quercus palustris

Quercus species



Oak – Oaks are generally very tall growing trees (50-75 ft.) of varying widths, so they require adequate room to develop and should not be considered for a small yard. They are tolerant of heat, wind, cold and drought. Plant in full sun, well-drained soil and water deeply once every 10-14 days. Do not overwater oaks as they are prone to root rot in wet soils. These trees are a valuable food source for rabbits and squirrels.



Quercus macrocarpa



Quercus robur 'Fastigiata'

- Q. acutissima* (Sawtooth Oak) – 40 ft. tall by 30 ft. wide; linear leaf with serrated edges; no fall color
- Q. alba* (White Oak) – 75 ft. tall by 75 ft. wide; dark green leaves turning red-purple in fall
- Q. bicolor* (Swamp White Oak) – 50 ft. tall by 50 ft. wide; tolerates wet soil; yellow, brown and red fall colors
- Q. douglasii* (Blue Oak) – 50 ft. tall by 50 ft. wide; blue-green leaves turn pink, orange, yellow in fall
- Q. lobata* (Valley Oak) – 75 ft. tall by 75 ft. wide; 4 in. green leaves; no fall color
- Q. macrocarpa* (Bur Oak) – 60 ft. tall by 30 ft. wide; 8 in. green leaves; no fall color
- Q. palustris* (Pin Oak) – 75 ft. tall by 40 ft. wide; pyramid shape; no fall color; needs acid fertilizer
- Q. robur* (English Oak) – 100 ft. tall by 75 ft. wide; dark green leaves; no fall color
- Q. robur 'Fastigiata'* (Columnar English Oak) – 75 ft. tall by 25 ft. wide; good substitute for Lombardy Poplar
- Q. rubra* (Red Oak) – 75 ft. tall by 50 ft. wide; shiny green leaves; red fall color



Robinia pseudoacacia

Robinia species



Locust – A tree best grown in dry or native zones, and watered deeply and infrequently. When watered regularly, it puts on large amounts of dense, weak, thorny branches which tend to break easily in high winds or heavy snow. Best when planted in full sun, dry, well-drained soil and watered deeply once every 14 days.



- R. ambigua 'Idahoensis'* (Idaho Locust) – 40 ft. tall by 30 ft. wide; pink flowers in June; litter
- R. pseudoacacia* (Black Locust) – 75 ft. tall by 40 ft. wide; fragrant white flowers in June; litter
- R. p. 'Purple Robe'* (Purple Robe Locust) – 40 ft. tall by 30 ft. wide; purple-pink flowers in July
- R. p. 'Frisia'* (Frisia Locust) – 40 ft. tall by 25 ft. wide; yellow foliage; new wood red, orange, yellow in fall; thorns
- R. p. 'Umbraculifera'* (Globe Locust) – 20 ft. tall by 20 ft. wide; no flowers; round formal shape; dense



Robinia ambigua 'Idahoensis'



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native



Sequoiadendron giganteum

Sequoiadendron giganteum



Giant Redwood – This is one of the tallest trees growing in Reno (Plumb Lane median), topping out at over 100 feet. It has a pyramidal silhouette growing 25 ft. wide at the base and narrowing to a point at the top. Best grown in dry, well-drained soil and watered deeply every two weeks. This tree must be watered once a month through the winter or the foliage burns on the side facing the prevailing wind. In the worst winters (below zero), lack of water may also contribute to its death.

Sophora japonica



Japanese Pagoda Tree – A fine textured tree that grows 50 ft. tall and equally as wide. Long drooping clusters of fragrant ivory flowers in August are followed by brown pods that hang on into winter. Glossy dark green leaves turn yellow in fall. Good choice for planting within a lawn. Best in full sun to part shade, well-drained soil and deep water once-a-week.



Sophora japonica



Sorbus aucuparia

Sorbus species



Mountain Ash – This is a good tree for smaller yards or street planting as it enjoys being planted in turf. It has handsome dark green leaves that turn yellow, red or orange in fall. Clusters of white flowers appear in April or May, followed by red or orange berries that birds adore.



Sorbus aucuparia, fruit

Best planted in full sun to partial shade, well-drained soil with humus added, and water deeply once every 7-10 days.
S. alnifolia (Korean Mountain Ash) – 40 ft. tall by 30 ft. wide; red or yellow berries
S. aucuparia (European Mountain Ash) – 30 ft. tall by 20 ft. wide; orange berries; orange fall color



Thuja occidentalis

Thuja occidentalis



Arborvitae – This slow growing evergreen forms a column varying in height by variety (up to 40 ft. tall). The foliage burns in dry winds (hot or cold) without protection and regular water. Best used as a columnar accent in the landscape or as bird habitat. Grow in full sun to full shade, well-drained soil that has compost added and water deeply once-a-week. This evergreen benefits from monthly watering in the winter and protective mulch.





Tilia americana

Tilia species



Linden – This tree has very appealing dark green heart shaped leaves; unfortunately they may turn yellow only briefly in fall (if at all). It has fragrant greenish, yellow flowers in July and inconspicuous fruit. It has a dense canopy that produces very deep shade so it is not a good candidate to plant within a lawn. If the leaves appear to be “dripping” it is infested with aphids and is receiving too much water. A dormant oil spray in winter kills over-wintering insect larvae. This tree becomes tattered in high wind areas; plant in a protected spot or make a different choice. Plant in full sun to light shade, well-drained soil with humus added, water deeply once every 7 days.

T. americana (American Linden) – 60 ft. tall by 50 ft. wide; large leaves; yellowish-white flowers in midsummer

T. cordata (Littleleaf Linden) – 80 ft. tall by 50 ft. wide; blue-green leaves



Ulmus parvifolia

Ulmus parvifolia



Chinese Elm – This variety of elm shows resistance to Dutch Elm disease and elm leaf beetle. This fast growing tree tops out at 50 ft. tall and spreads equally as wide. It is tolerant of poor soil, drought, heat, cold and wind. Plant in full sun, dry, well-drained soil and water once every 14 days. Overwatered elms produce lots of dense, brittle wood that breaks easily in high winds or heavy snow. Not a lawn tree or a tree to garden under, as it has many shallow surface roots.



Zelkova serrata

Zelkova serrata



Zelkova – This tree is related to and often confused with elms, and grows just as fast to about 50 ft. tall. It also shows resistance to Dutch Elm disease and insect problems. It is tolerant of heat, drought, wind, poor soil and air pollution. Requires regular pruning when young to form strong branching framework. Plant in full sun, well-drained soil and water deeply once every 14 days.



Bees



Birds



Butterflies



Cut Flowers



Fall Color



Fire Hazard



Utility Tree



Native

3

Planting & Maintenance

Welcome to the Planting and Maintenance section of *Landscaping in the Truckee Meadows*. By now you will have a vision of your new landscape, will have selected plants, and designed your irrigation system to water the turf and plant areas efficiently. This section will get your ideas growing by showing you how to plant and care for the selections you've made. For maximum performance, this section will guide you through the last four of the seven horticultural principles:

Soil Improvement—get the right organic content for your planting needs.

Mulching—protect your plant root zone from water loss and weeds with a variety of materials.

Grouping Plants with Similar Water Needs—achieve maximum water efficiency.

Maintenance—caring for your trees, shrubs, groundcovers, flowers, and lawn.

Proper maintenance will give you a pleasing result over time, providing a yard full of color, variety and texture that will enhance your home's appearance, as well as improve market value.





I. SOIL IMPROVEMENT AND APPLYING MULCHES

IMPROVING SOIL CONDITIONS

Soils in our unique desert climate tend to lack organic matter, nutrients, and either drain too quickly (soil with sandy, larger materials) or too slowly (soil with more clay material).

Because of this, it's a good idea to have your soil tested for its chemical composition and drainage ability prior to planting.

Select a soil testing lab that tests for pH (acidity or alkalinity), salinity, fertility (nitrogen, potassium and phosphorus) and organic content. Ask the lab to provide you with recommendations on what you need to do to amend your soil properly. Based on the recommendations from the testing laboratory, amend the soil to best fit your planting needs. Amending the soil generally means adding 3-6 inches of organic material over the planting area; then rototill this material into the soil to a depth of 12 inches. The following table lists some common soil amendments.

COMMON SOIL AMENDMENTS INCLUDE:

Compost — Organic refuse such as leaves, wood chips, manure that has decayed into humus material.

Humus — Decayed organic materials such as leaf mold, peat moss and compost that open clay soils or hold water in sandy soils.

Leaf mold — Fibrous, flaky, organic material composed of decayed leaves which is acidic.

Manure — Organic material excreted by animals. It should be aged prior to use, and applied in the fall. Chicken and rabbit manures have the highest nutrient content, followed by horse and then cow manures. Horse manure is available free at the Bureau of Land Management wild horse facility on the Pyramid Highway.

Peat moss — Decayed sphagnum moss and swamp plants. It is moisture-retentive, humus-rich and acidic.

Sewage sludge — The remains from treated sewer waste. It is high in nutrients, yet contains varying amounts of heavy metals. It is available at commercial garden stores or free at the local sewer treatment plants.

The best soil is a mixture of various sized particle material called loam. It is usually high in organic matter and drains well, yet is very moisture-retentive. Figure 1-1 shows equal parts of native soil and amendment material prior to mixing.



FIGURE 1-1

A simple way to test your soil drainage is to dig a 2-foot hole and fill it with water to see if the water drains in 24 hours. Fill it again with water on the next day. If the water has drained, then the soil has adequate drainage. If after 48 hours the water hasn't drained, then amendments need to be added to open the soil. If the water drains in less than 6 hours both days, then amendments are needed to help the soil retain moisture.

Taking the time to test and then amend your soil builds a better root zone for all your plants enabling them to develop deeper roots. Deeper roots build drought-tolerant plants and a more water efficient landscape.

MULCH, THE PROTECTIVE BLANKET FOR YOUR PLANTS

Mulch is any organic or inorganic covering that protects a plant's root zone from water loss and weeds, and helps maintain even soil temperatures. Mulches include: bark, hay or straw, leaves, pine needles or rocks and gravel. Mulch is generally applied about three inches deep after the drip system has been installed (Figures 1-2 and 1-3). One cubic yard of mulch three inches deep covers approximately 100 square feet.

Before the mulch is laid down, you may want to use landscape fabric for weed control. This porous, woven material inhibits seed germination and allows water and air to pass through. Plastic is not recommended because it prevents air and water movement and deteriorates rapidly in northern Nevada's arid climate.



FIGURE 1-2 ROCK OR GRAVEL



FIGURE 1-3 PINE NEEDLES

II. ZONED IRRIGATION

GROUP PLANTS IN WATER ZONES

Careful planning will result in an attractive landscape. Check the *Plant Selection* section for the watering needs of the plants you've selected. Also, you'll find a "Plant Grouping Worksheet" on page 77 to plan your watering zones based on the plants you select.



For a water-efficient landscape, it is crucial to group plants with similar watering needs into three basic zones:



Very Low

Water every 7 to 14 days.



Low

Water once a week.



Moderate

Water twice a week.



Plus special deep watering for trees:



Deep Water - less frequent

Water trees once every 10 to 14 days.



Deep Water - more frequent

Water trees once every 7 to 10 days.



When selecting plants, in addition to water usage, consider their light requirements. The *Plant Selection* section lists plant light recommendations based on how much sun is needed in one day. The *Plant Selection* section has broken the light requirements into three terms:



Full Sun

Greater than or equal to eight hours of unobstructed sun daily.



Part Shade

Three to five hours of sun daily.



Shade

No direct sun.

III. PLANTING

TEN STEPS FOR SUCCESSFUL TREE PLANTING

1. Begin with a healthy tree: no signs of insects or disease; a strong trunk; and roots that are not pot-bound. Choose a site large enough for the tree to mature.

2. Dig a hole no deeper than the root ball and at least three to five times as wide (Figure 3-1). Larger holes increase aeration and decrease the chance of “root suffocation” from over-watering.



FIGURE 3-1

3. Test the hole for drainage as described on page two.

4. Separate the roots out from the root ball surface and into the hole (Figure 3-2). Take care to keep the roots moist during planting. Prune any roots that are wrapped around the root ball, mushy, or dry and brittle. If most of the roots are rotten, dried-up or pot-bound, return the tree to the nursery for replacement.



FIGURE 3-2

5. The top of the root ball should be even with the surface of the soil (Figure 3-3).



FIGURE 3-3

6. Backfill the hole with 50 percent compost and plant soil mix and 50 percent native soil. Tamp the soil lightly to remove air pockets and water thoroughly (Figure 3-4).



FIGURE 3-4

9. Stake to immobilize the root ball (Figure 3-5). Secure the stakes to the trunk with soft, flexible ties that allow the tree to bend in the wind. Check ties often to prevent strangulation or bark damage. Loosen the ties gradually to allow the trunk to strengthen. Remove the stakes after the first year. If the tree is still wobbly, move the stakes farther out, loosen the ties, and “wean” the tree from staking by the end of the second season.

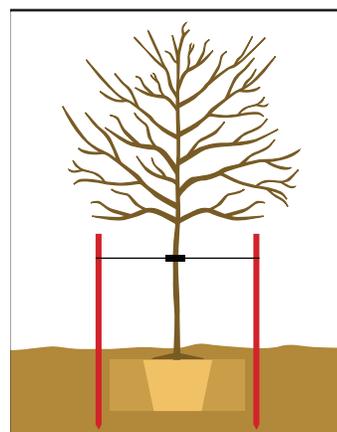


FIGURE 3-5

10. Protect the trunk from the sun by wrapping it in porous, pliable white wrapping available at nurseries, or you can use a manufactured tree shelter to shade the trunk and protect it from rodents. Place drip hose on the ground in a circle. It should be as wide as the circumference of the tree branches (Figure 3-6). Check up on the tree frequently the first year. Keep the root ball area free of weeds and grass for the first three years. Check the soil for moisture and watch for signs of stress.



FIGURE 3-6

PLANTING SHRUBS, GROUND COVERS AND FLOWERS

You can use ground covers in shady areas, low spots and slopes to provide color and texture, prevent erosion and conserve water.

1. A good time to plant seedling or bare root ground covers is in the early spring or early fall to allow plant roots to become established before the onset of summer heat or winter cold.

2. Rototill two to three inches of compost into the soil to a depth of eight to 10 inches. If the terrain is uneven or rocky, or if the plants are one gallon or larger, dig individual planting holes from four inches to two feet apart, depending on your budget and desired look (Figure 3-7).



FIGURE 3-7

3. Check the *Plant Selection* section to determine the recommended spacing between each plant and plan each plant's distance based on the chart. For example, one-foot plant spacing in a 20-square-foot area needs 20 plants. Stagger the plants in a checkerboard pattern as shown in Figure 3-8.

HOW MANY PLANTS WILL YOU NEED?	
Desired Spacing	Multiply Total Square Footage By:
6"	4.00
1'	1.00
2'	0.25
3'	0.11
4'	0.08
5'	0.04
6'	0.03

FIGURE 3-8



4. For all ground covers, dig a hole two to four inches wider and 1.5 times deeper than the plant root ball (Figures 3-9a, 3-9b and 3-9c). Backfill the hole with 50 percent organic matter and 50 percent natural soil, then pack the soil firmly around the roots. Leave a slight depression around each

plant to hold water, then water thoroughly. Apply a one- to two-inch layer of organic mulch around each plant, being careful not to cover the growing crowns.



FIGURE 3-9a



FIGURE 3-9b



FIGURE 3-9c

5. Lightly pruning plants when they're first planted reduces transplant shock and encourages growth. Once established, most ground covers will need little care or pruning, and they'll only need fertilization once each spring with an all-purpose fertilizer.

6. Since flowers are typically planted in groups or masses, prepare the flower bed all at one time instead of digging individual holes. Perennials require well-drained soil which you can foster by adding two to three inches of bark humus, bark compost, or aged animal manure (not steer manure) over the planting area. In heavy clay soils, add up to 50 percent organic matter to your flower bed.

A handful of bone meal or triple phosphate added to the soil encourages root growth and flower formation. Adding aged manure and bone meal in the fall of each year will provide the best floral display the following year. Other tips to remember include:

- Flowers should be pruned prior to planting to reduce effect of transplant shock.
- Dig a hole 1.5 to two times the depth of the root ball.
- Hole should be two to three times the width of the root ball.
- Gently loosen roots prior to planting (Figure 3-10). If roots are tightly compressed, make a few one-inch cuts with a knife down the length of the root ball. New roots will grow in the area of the cuts.
- Mix 50 percent organic matter with 50 percent native soil to backfill hole. Tamp soil lightly. Keep top of root ball even with existing grade.
- Soak plant thoroughly after planting. Add soil as needed to maintain a level grade, making sure not to bury plant crown. Mulch around plant to conserve water and reduce weed growth.



FIGURE 3-10 TEASE ROOTS FROM ROOT BALL.

PLANTING YOUR LAWN

When starting a new lawn from seed or sod, work your soil to a depth of six inches and add soil amendments like compost, nitrogen-rich fertilizer and other beneficial chemicals. Once tilled, level the area for a smooth seed bed. Make sure the water drains away from your house, but not into your neighbor's yard. After contouring, water thoroughly, then level out high and low spots. Whether you choose seed, sod or hydromulch, follow the recommendations from your landscape expert or lawn supplier for a healthy, well-established lawn.

IV. MAINTAINING YOUR LANDSCAPE

CARING FOR YOUR TREES, SHRUBS, GROUNDCOVERS AND FLOWERS

Pruning Trees

While ornamental trees are pruned for shape and density, fruit trees are pruned to maximize sunlight exposure. Structurally, the limbs must support heavy fruit with little breakage. Strong, properly spaced branches are the key to a good shape.

Keep fruit tree pruning to a minimum the first two or three years to allow a strong root system to develop.

Branches should be evenly spaced both vertically and around the trunk. The ideal arrangement is like a spiral staircase with no two branches coming out of the trunk at the same level or distance above the ground. Branches should be eight to 12 inches apart. Establish this arrangement early in the tree's life.

When the tree is mature, its height can be stopped by pruning any unwanted growth just above a side branch. This branch will take over as the upright growing leader, but it can be headed back similarly in future years to keep fruit trees' height as low as possible.

Limbs that jut out at a 65- to 90-degree angle are strongest. If the angle is 45 degrees or less, the crotch may break under heavy fruit. If three or more branches develop in a cluster, the fork will be very weak.

On older trees, cut out all dead, diseased or broken wood. Next, cut out weak crotches. If you have a choice, leave

limbs on the windward side. Next, remove limbs that cross over, rub, grow toward the center of the tree, and any strong, vertical shoots from the trunk.

For additional information on pruning, see references listed in the appendix.

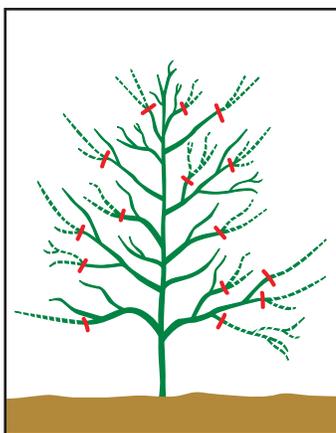
Pruning Shrubs, Ground Covers and Flowers

Shrubs are generally low maintenance. However, some pruning provides a vigorous appearance and allows light penetration. Prune to:

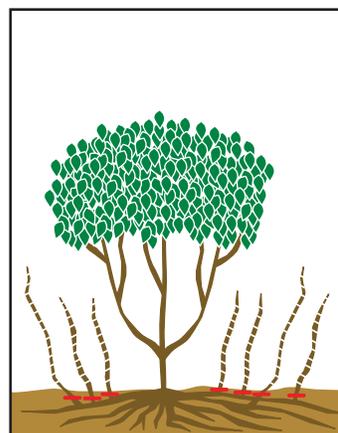
- Maximize available space.
- Maintain sight distance and sign visibility along roadways.
- Eliminate damaged branches.
- Maintain a neat-looking yard.



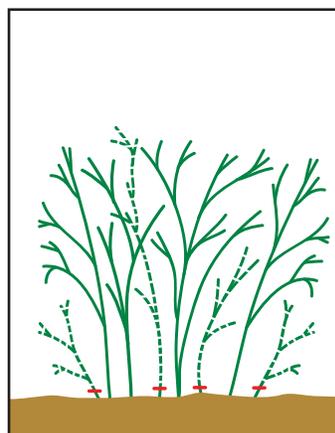
Prune once a year before bud break, except for flowering shrubs; these can be pruned after flowering each spring. You can do additional pruning any time during the season when temperatures are below 85 degrees. Do not prune more than one-third of the plant at any one time. When cutting stems, try to:



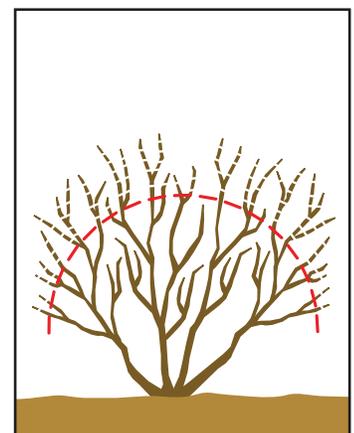
GROWTH CONTROL



ELIMINATE WATER SPROUTS

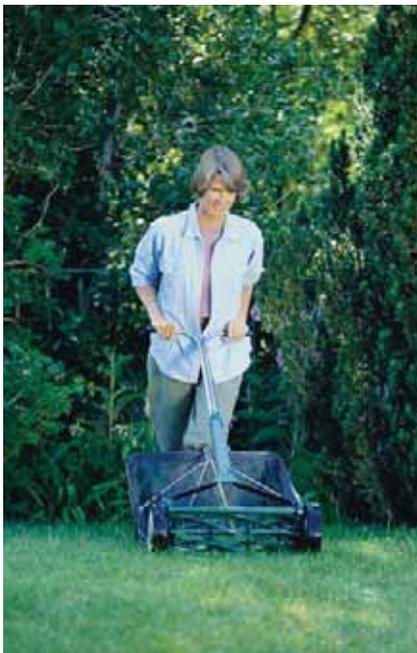


THINNING



HEADING

- Cut stems back to just above a bud that points in the direction you want the plant to grow.
- Cut stems back to an outward facing bud to “open up” a plant.
- Cut stems back to an inward facing bud to “tighten up” a plant.



“Thinning” is removing a branch down to its main stem or within a few inches of soil level. This results in a taller, open shrub and stimulates new shoots from the base. Thinning is used most often to rejuvenate old, woody, unproductive plants.

Fertilizing Trees, Shrubs, Ground Covers and Flowers

All plants need feeding at least annually with a three-month or longer slow-release fertilizer, which can be made from organic matter, coated urea or polymer-coated formulas. Check the manufacturer’s label for instructions.

CARING FOR YOUR LAWN

Mowing Lawn

Mow lawns two to three inches tall. When the grass grows one-third higher, mow again. Maintaining a tall height will shade and cool the soil, keeping the lawn from drying out. Also, leave clippings on the lawn. They will decompose, releasing nitrogen back into the soil. Clippings do not lead to thatch buildup as once thought.

Always keep mower blades sharp; a dull blade tears the grass, giving the tips a whitish appearance.

Thatching and Aerating

A thin layer of thatch (one-half inch or less) increases wear tolerance and retains moisture. However, excess thatch obstructs air, water and fertilizer from entering the soil and root zone, making the lawn susceptible to disease and weeds.

Aerating or coring your lawn each spring will lessen soil compaction. The plugs of turf and soil left from aerating should disappear after a week or two of watering and mowing, or they can be raked.

Fertilizing Lawn

The best times to fertilize lawns are from early spring to the middle of June; and from September to the time grass goes dormant in late fall.

Turf needs fertilizer that contains nitrogen. This fertilizer is available in fast- and slow-release forms. Apply fertilizer when your lawn is dry and water it into the soil. Use caution to avoid burning grass.

Never apply more than two pounds of nitrogen per 1,000 square feet to the lawn at one time. Before adding more, wait a month and then add fertilizer only when necessary. For a healthier lawn, use chelated iron and zinc in spring and fall. Whenever fertilizing, follow the manufacturer’s instructions.

Weed and Pest Control

Weeds out-compete desirable grasses when lawns stop growing due to improper watering or mowing, low fertility or compaction of soil. Once weeds become established, you have to restore favorable conditions for healthy turf. After diagnosing your yard, pull the weeds or use herbicides. Crabgrass, quackgrass and clover are nearly impossible to remove completely by pulling, so watch for vigorous regrowth.

Some fertilizers include herbicides and fertilizers in their formulas; however, use caution. These products work well on turf, but can cause problems near trees, roses, flowers and other broadleaf plants.

Also, diseases, insects and animals can harm turf. In Nevada, fungus diseases are the usual culprits and are usually the result of overwatering. To minimize turf diseases, keep grass growing evenly; mow when grass grows one-third higher than the proper height; and don’t fertilize during summer. Most importantly, water deeply and infrequently — twice a week on your assigned days.

The following pages contain information on the more common turf diseases or insects that occur in our region.

IRRIGATION

Deep, intermittent watering works best in our dry climate because it promotes deeper roots which survive hot weather better than shallow root systems. Light, frequent waterings are not recommended because they encourage shallow roots that dry out rapidly, especially on hot summer days. This stresses the plant, making it susceptible to disease. In spring and fall, water once a week. In the summer, water twice a week on your assigned days (Odd address: water Thursdays and Sundays; Even address: water Wednesdays and Saturdays).

Manufacturers' ideas for maintaining irrigation systems include:

1. Test coverage of sprinkler system.

Ideally, you should have water distributed equally over your landscape from each sprinkler head. To test the coverage of your sprinklers, randomly place six same-sized tin cans over one sprinkler zone. Turn on sprinklers. At the end of the cycle, the water collected in each can should have a similar depth — within one-fourth to one-half inch. If the depth varies significantly, then you may have too many sprinkler heads on the zone, or you may need to adjust sprinkler heads to obtain similar outputs of water at each one.

2. Find out how much water your sprinkler system applies in an hour.

Place tin cans at four-foot intervals from a sprinkler, turn the water on for 15 minutes and measure the water in each can. Add the amount of water from all cans, divide by the number of cans and multiply by four to determine the depth in inches per hour. Lawns need about one and one-half inch to two inches of water per week during the summer.

3. Check for:
 - Water pressure
 - Debris in nozzle opening
 - Debris in filter at base of sprinkler head
 - Leakage at pipe joints
 - Obstructions in coverage such as trees or shrubbery

4. Each fall, drain irrigation system. If it is well drained, exposed valves and pipes don't need insulation. For additional information on testing your irrigation system, consult your plumber or landscape contractor. Or, check the book references listed on page 80.

PLANT AND TURF MAINTENANCE TABLE

Use the following table to remind you of the best times to maintain your landscape.

PLANT & TURF MAINTENANCE	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
PLANT												
Bare Root Plants	■	■	■									
Roses, Annuals			■	■	■	■						
Perennials				■	■			■				
Turf					■				■			
Divide Iris								■				
Divide Day Lilies								■				
Pansies, Spring Bulbs									■	■		
Garden & Landscape Planning		■	■								■	■
Order Seeds												■
Ball & Burlap Evergreens								■	■			
PRUNE												
Trees, Deciduous	■	■										■
Roses			■				■	■				
Fruit Trees		■	■									■
Evergreens			■	■	■							
Spring Flowering						■						
Shrubs												
Elms & Poplars								■	■			■
Remove Water Sprouts From Tree Trunks						■	■	■	■	■		
Remove Spent Flower Blooms								■	■			
SPRAY												
Dormant Oil	■	■										
Pre-emergent Herbicide		■										
Aphids			■	■		■			■			
Mites, Thrips				■			■		■			
Leaf-Hopper												
Milder, Evergreens					■			■	■			
Cutworms												
Turf Disease								■	■			
FERTILIZER												
Turf			■	■		■				■		
Roses				■								
Trees, Shrubs				■	■							
WEED CONTROL												
Lawn					■					■		
Flowers						■						
Vegetable Garden						■						
IRRIGATION												
Test Backflow System			■									
Turn On Backflow System			■									
Reset Timers			■				■		■			
Turn Off & Drain										■		
OTHER												
Mulch				■	■	■						
Thatch Turf				■								
Aerate Turf									■			

Prune spring flowering shrubs immediately after blooming.
Prune summer flowering shrubs February, March or early April.

TROUBLESHOOTING PLANT PROBLEMS

PLANT PART	SYMPTOM	POSSIBLE CAUSES
Whole plant		
	Recently transplanted plant won't grow	Drought Excess water Insufficient root system Injured during or prior to planting
	Sudden death of whole plant or part of plant	Excess fertilizer Girdling Lightning strike Weed killers
	Gradual decline of formerly healthy plant; poor growth; yellowing and dropping of leaves. Death of individual shoots	Air pollution Construction injury Disease/pests Drought Excess water or fertilizer Soil pH (acidity or alkalinity) needs adjusting
Main stem or branches		
	Malformed new growth	Insect injury Weed killers
	Shoot dieback	Borers (insects) Lack of light Improper nutrition Winter injury Construction injury Too much water Insect or disease damage Hail damage
	Twigs with healthy leaves drop to ground	Squirrel damage Twig girdlers (insects)
	Bark splits on trunk	Winter injury Lightning
	Pitch on trunk or main branches	Borers (insects)
Foliage		
	Leaves look scorched or dry	Frost injury Drought Fertilizer burn Salt damage Spray injury Fire damage Mites (insects)
	Leaves yellow or mottled in color; smaller than normal size, malformed or drop early	Improper nutrition Too much water Insect or disease injury Improper pH (acidity or alkalinity) of soil
	Wilted foliage	Drought Excess fertilizer Excess water Disease (anthracnose)
	Skeletonized leaves	Insects

PLANT PART	SYMPTOM	POSSIBLE CAUSES
Foliage (cont)		
	Curled or distorted leaves	Aphids (insects) Weed killer
	Tunnels between leaf surfaces	Leaf miners (insects)
	Chewed leaf margins	Leaf-chewing insects
	Gray color to foliage; webs may be present	Mites (insects)
	Black or brown spots on leaves	Spray injury Disease
	White powdery look to top of leaves	Spray injury Mildew
	Rolled leaves	Cold temperatures Leaf roller (insects) Drought
	Needle drop	Lack of potassium Natural needle shed (every 3 years)
	Black sooty look to leaves and stems	Aphids Fire blight
Flowers		
	Plant fails to flower	Improper pruning (wrong time of year) Improper day length Nutrient imbalance Too shady Frost damage
	Flowers fail to open properly	Drought Bacterial blight Spray injury Frost injury Insects
	Petals chewed	Grasshoppers (insects)
	Shortened flowering period	Drought High temperature Low humidity
	Flower buds split	Herbicide injury Improper moisture levels Extreme temperature
Fruit		
	Plant fails to produce fruit	Drought Improper pruning Flowers not pollinated Plant too immature
	Fruit drops at early stage of development	Insects Low fertility Drought

TURF DISEASES AND CONTROLS

Disease is usually caused by overuse of fertilizers, fungicides and herbicides that disturb the balance of the soil system, and reduce activity and populations of beneficial organisms. The following chart may help you identify common turf diseases.

SYMPTOMS	DISEASE	CONTROLS	CONDITIONS FAVORING DISEASE DEVELOPMENT
Under snow 2" - 24" spots or circles. Grayish or reddish brown in color. As snow melts, pink around edges.	Pink Snow Mold (Fusarium Patch)	Fungus spreads in cool weather (32-61 degrees). Remove snow. Aerate and allow turf to dry out.	Cold, humid weather, especially under snow cover.
Patches 6" - 3' in diameter. Matted leaves grayish in color. As snow melts, gray around edges.	Gray Snow Mold (Typhula blight)	Fungus overwinters as dark-colored sclerotia on infected leaves. Sclerotia need temps of 50-64 degrees to germinate.	Cold, humid weather, especially under snow cover.
Small, dark purple or black leaf spots occur during cool weather in spring or fall. Center of spots may turn light tan. As spots enlarge to point, entire leaf looks tan.	Melting Out	Clear all turf debris. Thatch. Spot treat with Captan or Fore.	High nitrogen levels. Too much water. Mowing too low.
Round straw-colored spots the size of quarter to silver dollar.	Dollar Spot	Water only in daylight hours. Use commercial organic fertilizers containing actinomycetes.	Low nitrogen levels. Dry soil. High humidity. Moderate temperatures.
Rough circular brown patches from a few inches to several feet in size. Leaves turn purplish green, then brown and die.	Brown Patch (Rhizoctonia)	Highly resistant to fungicides. Remove turf debris. Thatch. Aerate.	High nitrogen levels. Too much water. Warm wet weather.
Circles or arcs of dark green grass. May contain mushrooms. Dead area to inside or outside of ring.	Fairy Rings	Remove affected soil to 2' deep. Aerate soil in ring area to 12". Thatch turf area yearly.	Decomposing lawn clippings.

TURF PESTS AND CONTROLS

PEST	DAMAGE	LARVAE	ADULT	WINTERTIME	CONTROLS
BILLBUGS	Emerging larvae eat the stems near the crown. Stems turn brown and die. As the weather warms, the larvae go below ground and eat roots.	White, humpbacked, look like puffed rice, 1/2" - 3/4" long.	Brown or gray, 1/4" - 1/2" long.	As an adult, emerge April or May. Lay eggs in May-June.	<ol style="list-style-type: none"> 1. Aerate turf areas in April-May (thatch as well if debris is deeper than 1/2"). 2. Water deeply in spring to encourage deeper roots. 3. Apply rotenone (insecticide).
WHITE GRUBS	Turf areas feel spongy and pull up easily. Brown patches develop.	White with brown head, six prominent legs, 1" - 1 1/2" long.	Many varieties of beetle.	In grub stage. Damage occurs April-May and Sept-Oct.	<ol style="list-style-type: none"> 1. Apply diatomaceous earth over soil surface to control surface-feeding grubs. 2. Spray Margosan-O (a neem extract) over entire lawn during surface stage. 3. Apply Scanmask (insecticide) as spot treatment for small infestations (predatory nematodes). 4. Water grass lightly and frequently to offset the loss of roots and stems to grubs.
LEAFHOPPERS	Turf takes on a silver cast. Insects suck juices out of phloem tissue.	Nymphs that produce large amounts of honeydew.	Pale green wedge-shaped insect, 1/8" long.		<ol style="list-style-type: none"> 1. Light dusting of pyrethrum (insecticide) on new lawns, no control on established lawns.
SOD WEBWORMS	Grass blades chewed. Results are yellowish-brown resembling drought damage.	Prominent hooks on its prolegs, 1/2" - 3/4" long.	Buff-colored lawn moth.	Silk-lined burrows in thatch layer.	<ol style="list-style-type: none"> 1. Thatch lawn in March-April. 2. Aerate lawn in April. 3. Water deeply in spring to encourage strong roots. 4. Apply Bacillus thuringiensis (insecticide) during larval stage.
APHIDS	Leaves are stunted and curled. Honeydew attracts ants.	Live young	Gray, greenish yellow or black, 1/8" - 1/4" long, soft bodied.	Egg stage	<ol style="list-style-type: none"> 1. Spray horticultural oil January-February to kill eggs. 2. Spot treat small outbreaks with Safer Insecticidal Soap. 3. Note locations of all host plants for use in winter spray program. 4. Apply Sunspray (summer oil) to host plants any day temperatures are under 95 degrees.
SPIDER MITES	Leaves have many small needle-like holes. Webs appear in leaf axils or branch crotches.	Eggs	Yellow, greenish, brown or red. Eight-legged. No bigger than head of a pin.	Eggs	<ol style="list-style-type: none"> 1. Hose down affected plants or add a mister nozzle to the drip line in the vicinity of the plant to increase humidity in the area. 2. Use a hose-end sprayer to apply soap solution or insecticidal soap. 3. Note locations of host plants for use in winter spray program. 4. Spray dormant oils on affected plants in January-March.

PLANT GROUPING WORKSHEET

ZONE 1 - VERY LOW WATER

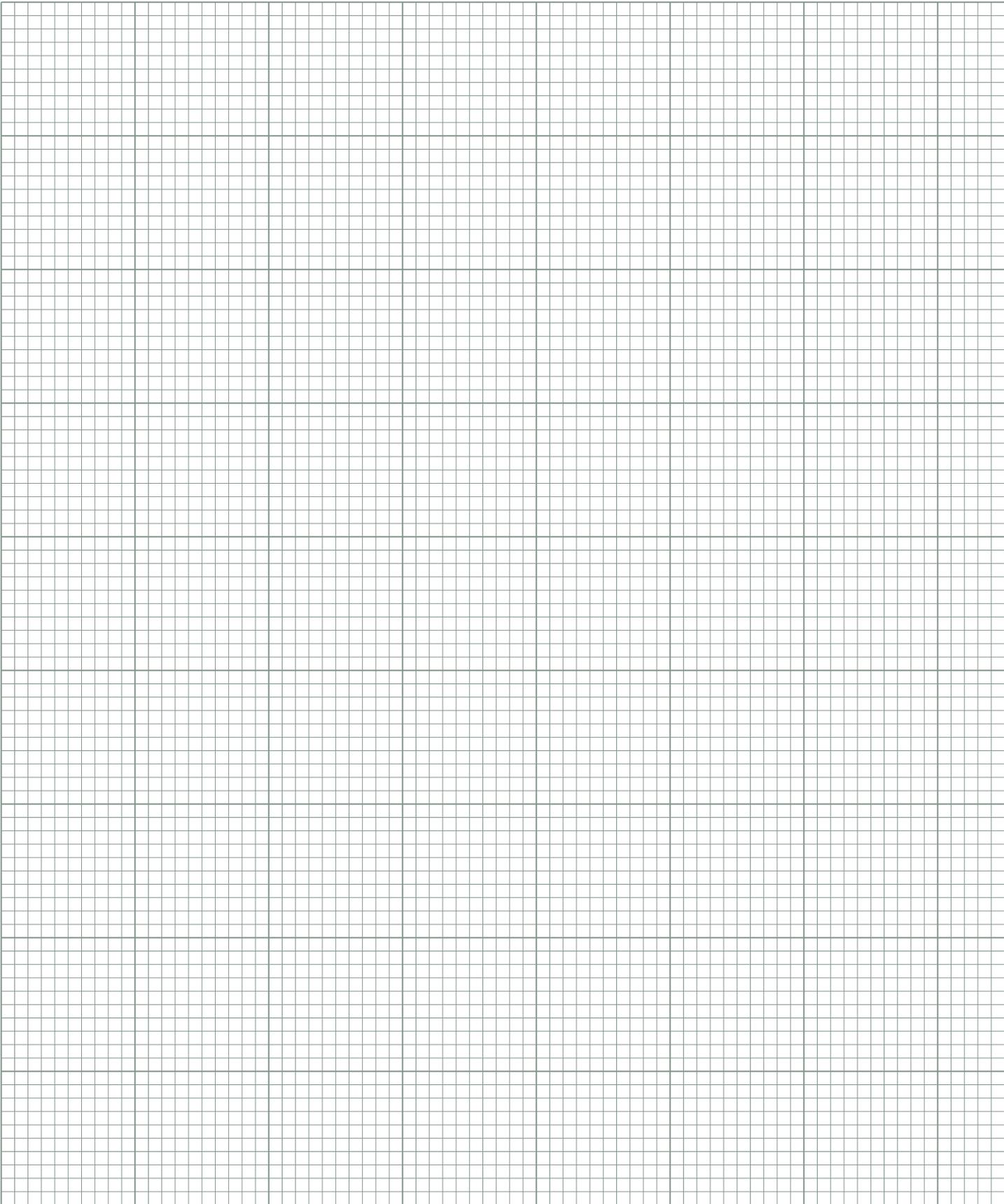
PLANT/TREE NAME	MATURE HEIGHT	SPREAD	SOIL TYPE	LIGHT			TREE WATERING		EXTRA MAINTENANCE	TEMPERATURE SENSITIVE	FLOWER COLOR	FRUIT MONTH
							 <small>10-15</small>	 <small>7-10</small>				

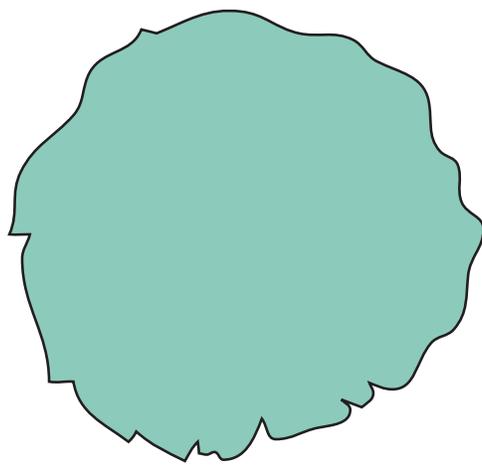
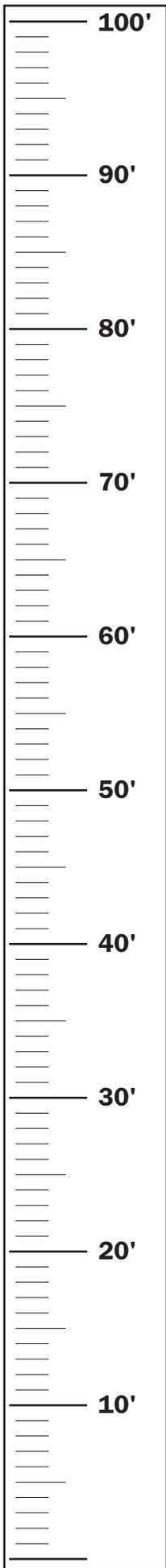
ZONE 2 - LOW WATER

PLANT/TREE NAME	MATURE HEIGHT	SPREAD	SOIL TYPE	LIGHT			TREE WATERING		EXTRA MAINTENANCE	TEMPERATURE SENSITIVE	FLOWER COLOR	FRUIT MONTH
							 <small>10-15</small>	 <small>7-10</small>				

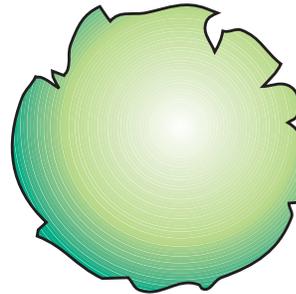
ZONE 3 - MODERATE WATER

PLANT/TREE NAME	MATURE HEIGHT	SPREAD	SOIL TYPE	LIGHT			TREE WATERING		EXTRA MAINTENANCE	TEMPERATURE SENSITIVE	FLOWER COLOR	FRUIT MONTH
							 <small>10-15</small>	 <small>7-10</small>				

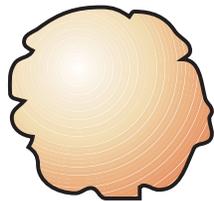




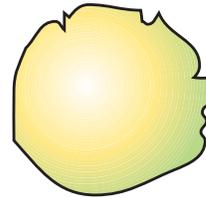
– LARGE SHADE TREE



– MEDIUM SHADE TREE



– ACCENT TREE



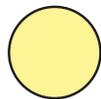
– FRUIT TREE



– CONIFER TREE



– EVERGREEN SHRUB



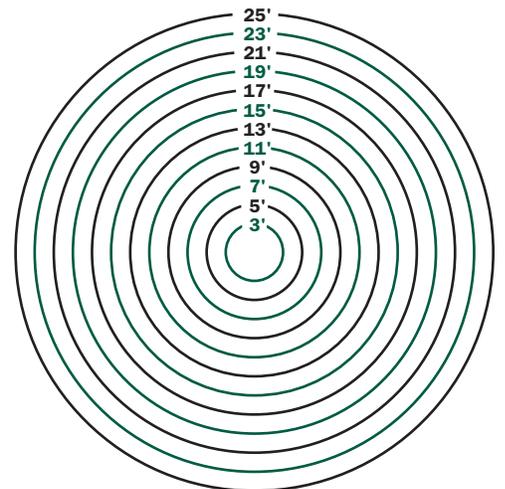
– DECIDUOUS SHRUB



– GROUNDCOVER



– BOULDER



Use these illustrations as a template or copy, cut out and paste on your landscape plan.

See page 4 for planting instructions.

References

This guide is not meant to endorse any product, service, company or author. It is only meant as a place to start to get additional help on plants and design. Listings of local service personnel can be found in both the Yellow Pages of the phone book and with the Contractors Board.

For any additional questions you may have on maintaining your newly retrofitted landscape, please check the following references, or consult your local professional landscape services. For a list of certified Qualified Water Efficient Landscaper professionals, visit qwel.net.

Books

All About Pruning

Ortho Books
San Francisco, CA
ISBN: 0-917102-73-8

A to Z Encyclopedia of Garden Plants

American Horticultural Society
DK Publishing, Inc.
New York, NY

Children's Play Yards

Sunset Books
Lane Publishing Co.
Menlo Park, CA
ISBN: 0-376-01790-2

Decks Design and Build

Creative Homeowners Press
Upper Saddle Press, NJ
ISBN: 0-932944-89-2

*Drip Irrigation for Every Landscape
and All Climates*

Robert Kourik
Metamorphic Press
Santa Rosa, CA
ISBN: 0-9615848-2-3

How to Build Fences and Gates

Sunset Books
Lane Publishing Co.
Menlo Park, CA
ISBN: 0-376-01104-1

*How to Build Walks, Walls
and Patio Floors*

Sunset Books
Lane Publishing Co.
Menlo Park, CA
ISBN: 0-376-01705-8

How to Design and Build Fences & Gates

Ortho Books
San Francisco, CA
ISBN: 0-89721-044-1

*Homeowner's Guide to Landscaping that
Saves Energy Dollars*

Ruth Foster
The Globe Pequot Press
Old Saybrook, CT

Lawns and Ground Covers

HP Books
Published by HP Books,
a division of Price Stern Sloan, Inc. Los
Angeles, CA
ISBN: 0-89586-099-6

Lawns

Sunset Publishing Corporation
Menlo Park, CA
ISBN: 0-376-03499-8

Sunset Western Garden Book

Lane Publishing Company
Menlo Park, CA

Taylor Guides:

Garden Design

ISBN: 0-395-46784-5

Groundcovers, Vines & Grasses

ISBN: 0-395-43094-1

Perennials ISBN: 0-395-40448-7

Shrubs ISBN: 0-395-430933

Trees ISBN: 0-395-467837

Houghton Mifflin Co.
Chanticleer Press Inc.

The Xeriscape Flower Gardener

Jim Knopf
Johnson Publishing Co.
Boulder, CO

Resources

Botanical and Demonstration Gardens

C-scape Arboretum
Mills Park
851 E. William
Carson City, NV

Heritage Park Gardens
1461 Ezell Street
Gardnerville, NV 89410

Renown Healing Gardens
1155 Mill Street
Reno, NV 89502

Rose Garden & Sensory
Garden at Idlewild Park
2055 Idlewild Drive
Reno, NV 89509

Wilbur D. May Arboretum
Rancho San Rafael Park
1595 N. Sierra Street
Reno, NV

University Arboretum
University of Nevada, Reno
Reno, NV

General Information

University Arboretum
University of Nevada, Reno
(775) 784-1110

Truckee Meadows Community College
(775) 673-7111

Truckee Meadows Water Authority
(775) 834-8080

University of Nevada Cooperative
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Acknowledgments

Hunter Irrigation
Interpretive Gardens
Wayne Johnson, Ph.D.
Davene Kaplan
Christy Malone

Lynda Nelson
Jim Ross
Sandra Wendel
James Young, Ph.D.
The May Arboretum

Many thanks to our residents and customers whose yards have been photographed over the last several years depicting good examples of water-efficient landscaping.

TRUCKEE MEADOWS WATER AUTHORITY

tmwa.com/landscape

Truckee Meadows Water Authority is a not-for-profit, community-owned water utility, overseen by elected officials and citizen appointees from Reno, Sparks and Washoe County.