

PARK CITY PLANT LIST

Approved Drought Tolerant Plants

The concept of xeriscaping (landscaping with plants that require little or no supplemental irrigation), is relatively new in our region. The Denver area has been promoting xeriscape for the past 8 - 10 years and Reno recently opened a xeriscape demonstration garden at the Hay Arboretum. This list is largely compiled from information from these two areas. Actual drought tolerance and, in some cases, hardiness is not known for the Park City area. It is expected that as we gain more experience this list will be updated periodically. Where possible, notes are added regarding hardiness, drought tolerance, and availability:

Our mountain climate not only has varied temperature zones (basis for the U.S.D.A. hardiness zone designations) but varying slope aspect (the direction a slope faces) slope angle, soil moisture and soil composition; all of which affect what grows naturally and what is likely to succeed. Sage/grass hillsides grow very different plants than evergreen forests. Consider the surrounding vegetation type when planning your landscape.

Hardiness of plants is a perennial problem in the Park City area. The following guidelines are suggested and were used in developing this plant list. In general U.S.D.A. Zone 3 or less plants are fully hardy in the lower elevations within the Park City limits. Several Zone 4 plants are successful here, but should be used with caution unless you have specific experience with the plant. Higher elevation areas around American Flag and Silver Lake in Deer Valley are reliably hardy to Zone 2 with many Zone 3 plants surviving and a few Zone 4 plants. Again, use Zone 3 or 4 plants here with caution. The Bald Eagle area may have some Zone 3 plants which will survive. It is likely that most Zone 2 plants will thrive in the Bald Eagle area and Zone 1 plants are the only ones which are completely reliable. Wherever you are planning to plant be aware of microclimates. For example, there are areas out in Snyderville Basin where only Zone 1 and 2 plants are reliable. Yet, in the Thaynes Canyon area, Zone 4 plants seem to do better than in other parts of the city. Also, the Park Meadows and Prospector areas are generally more severe than Old Town. Observe what is growing around you as you make plant selections for your own property.

The following list of plants is approved to qualify for the water development and connection fee rebate program. The plants listed are broken down into various categories such as deciduous trees, evergreens, shrubs, bulbs, etc. for your convenience. Wherever possible this plant list has the following rating designation system for each plant as to its relative water requirement.

D= Fully drought tolerant plant.

Requires no supplemental irrigation once established. Especially dry, exposed sites may require supplemental deep watering 1-2 times per year.

M-D=Tolerate dry, well-drained soils.

Depending upon where these plants are planted they may require little or no supplemental irrigation once established.

Example: An M-D plant installed in a Silver Lake area aspen grove may need no supplemental water once established and the same plant installed on a southwest facing slope in Park Meadows would require 2-4 deep waterings per year after establishment.

M= Tolerate moist well-drained soils.

Require fairly deep watering 4-6 times per year once established.

Tips for using the plant list;

All plants, especially large container grown nursery stock need to become established in their new environment before water is reduced. Never make quick changes in watering. Slowly withdraw water over a period of time so your plants have a chance to send out new roots to help sustain themselves with less water. When you do water, water deeply. Depending upon size, species and growing conditions, establishment can take 1-5 years.

Finally, when selecting plants from this list group plants with like water demands together. If you don't you'll find yourself watering for the most water demanding plant in the area. Also circuit your irrigation system so that all of the plants with like water demands are on the same circuit.

TREES

Trees, both evergreen and deciduous (those which lose their leaves in the winter), are generally the most difficult class of plants to grow in the Park City area. The combination of winter sun, exposure to winter winds, cold temperatures, extreme fluctuations in daytime high to nighttime low temperatures, and a short growing season all combine to create a challenging environment for trees. When selecting trees consider the types of trees which grow naturally on sites with similar slope aspect, soils and moisture conditions. After they are planted water them well in the fall for the first few years so they have some soil moisture throughout the winter, plant early enough in the fall so tree roots become established before the ground freezes, plant late enough in the spring so trees which are already in leaf are not frozen by late spring frosts, wrap deciduous tree trunks in winter with a tree wrap, apply a rooting hormone immediately after planting trees, during the first growing season mist foliage early or late in the day during hot weather, and mulch around the trunk with a 3" layer of mulch. Native trees may not require as much care after initial planting depending upon the species, the size and the site.

DECIDUOUS TREES

Genus	Common Name	Comments	Watering Req	Zone
<i>Acer campestre</i>	Hedge Maple	Hardiness in Park City unknown	M	4
<i>Acer ginnala</i>	Amur Maple		D-M	2
<i>Acer glabrum</i>	Rocky Mt. Maple	Hardy only at lower elevations	D	4
<i>Acer grandidentatum</i>	Bigtooth Maple		D-M	3
<i>Acer negundo</i>	Box Elder	Tough, hardy, prone to insects, may be difficult to find. Male trees recom.	D-M	All
<i>Aesculus glabra</i>	Ohio Buckeye	Availability & hardiness uncertain	M	3
<i>Aesculus octandra</i>	Yellow Buckeye	Availability & hardiness uncertain	M	NA
<i>Ailanthus altissima</i>	Tree of Heaven	Tough and easily grown, hardiness and availability unknown	D	4
<i>Alnus crispa</i>	Artic Alder	Naturally occur on moist sites, adaptable to drought, availability unknown	M	1
<i>Alnus glutinosa</i>	Black Alder	Naturally occur on moist sites, adaptable to drought, availability unknown	M	2
<i>Carpinus caroliniana</i>	American Hornbeam	Hardiness and availability unknown	M	2
<i>Catalpa speciosa</i>	Western Catalpa	May be marginally hardy	M	4
<i>Celtis occidentalis</i>	Common Hackberry		M	2
<i>Crataegus ambigua</i>	Russian Hawthorn	Availability and hardiness in Park City unknown	M	NA
<i>Crataegus crus-galli</i> "Inermis"	Thornless Cockspur Hawthorn	Hardiness unknown in Park City	M	4
<i>Crataegus mollis</i>	Downy Hawthorn	Hardiness unknown in Park City	M	4
<i>Crataegus viridis</i>	Winter King Hawthorn	Availability and hardiness in Park City unknown	M	4
<i>Elaeagnus angustifolia</i>	Russian Olive		D	2
<i>Fraxinus pennsylvanica</i> "Patmore"	Patmore Green Ash		M	2
<i>Fraxinus pennsylvanica</i> "Summit"	Summit Green Ash	Obtain one of these two varieties	M	3

Deciduous Trees Cont.

Genus	Common Name	Comments	Watering Req	Zone
Ginkgo biloba	Maidenhair Tree	Water until 10-20' then wean off water until tree is self sufficient		
Gleditsia triacanthos	Honeylocust	Marginally hardy, check specific varieties	M	4
Gymnocladus dioicus	Kentucky Coffee Tree	Limited availability. Hardiness in Park City unknown	M	4
Juglans cinerea	Butternut	Availability and hardiness in Park City unknown	M	3
Juglans nigra	Black Walnut	Availability and hardiness in Park City unknown	M	4
Malus species	Crabapple	Drought tolerance of specific species and named varieties unknown.	M	Vary
Prunus americana	Wild Plum	Hardiness and availability in Park City unknown	D	3
Prunus maackii	Amur Chokecherry		D-M	2
Prunus padus	Mayday Tree		M	3
Prunus virginiana	Chokecherry		D	2
Prunus virginiana "Shubert"	Red Leaf Chokeberry		D-M	2
Quercus gambellii	Gamble Oak		D	3
Quercus macrocarpa	Bur Oak	May be difficult to find commercially	M-D	2
Robinia pseudoacacia	Black locust	Tough, hardy, drought tolerant, showy flowers in mid-late spring	D	3
Robinia pseudoacacia "Purple Robe"	Flowering locust	May be marginally hardy in Park City	D-M	4
Robinia x ambigua "Idahoensis"	Idaho Flowering Locust		D-M	3
Sophora japonica	Japanese Pagoda Tree	Marginally hardy here, named varieties not recommended	M	4
Sorbus aucuparia	European Mt. Ash		M	3
Tilia cordata	Little Leaf Linden	May be marginally hardy in Park City	M	3-4
Tilia tomentosa	Silver Linden	Hardiness & availability unknown		4
Tilia x euchlora	Crimean Linden	May be marginally hardy in Park City	M	3
Ulmus pumila	Siberian Elm	Tough, hardy & drought tolerant, considered a "trash" tree by some	D	4

EVERGREEN TREES

Name	Comment	Water Req.	Zone
Abies concolor - White Fir	Not Recommended for the Prospector Area	M-D	3
Abies lasiocarpa - Alpine Fir	Doesn't like to be too wet or too exposed	M-D	2
Calocedrus decurrens - Incense Cedar	Hardiness in Park City area unknown	M	4
Pinus aristata - Bristlecone Pine	Hardiness in Park City area unknown	D	4
Pinus banksiana - Jack Pine		D	2
Pinus contorta "Latifolia" Lodgepole Pine		D	3
Pinus flexilis - Limber Pine		D	2
Pinus heldrichi "Leucodermis" - Bosnian Redcone		M-D	2
Pinus nigra - Austrain Pine	Protect from harsh winter winds	M-D	3
Pinus ponderosa - Ponderosa Pine	May be difficult to obtain locally	D	4
Pinus strobiformis - Border Pine		M-D	3
Pinus strobus - White Pine	Hardiness in Park City area unknown	M	2
Pinus sylvestris - Scotch Pine	Protect from harsh winter winds	M-D	3
Pinus sylvestris "Fastigiata" - Columnar Scotch Pine	Hardiness in Park City area unknown	M-D	3
Pseudotsuga menzeisii - Douglas Fir	Difficult to transplant, specific clones and varieties are not hardy	D-M	Varies

EVERGREEN SHRUBS AND GROUND COVERS

Deciduous or evergreen shrub masses can be a good way to cover relatively large areas with vegetation which is inexpensive to maintain over a long period of time. A shrub mass is a grouping of several of the same species of shrub in an area. Maintenance of a shrub mass may be time consuming at first but once they fill in, requires very little maintenance. They shade out the weeds and don't require weekly mowing like your lawn. Even water demanding shrubs will survive on 50-70% of what your lawn takes. In addition many are evergreen, have showy flowers, or attract wildlife. On the down side, shrubs and ground covers generally are more expensive to install than lawn.

As with any plant, select the right location to plant your shrubs. In general it's a good rule to pick the plant for the place instead of vice versa. Also consider the mature size of the plant; locate and space it for that size. If long term maintenance is a consideration select, space and locate shrubs so they don't require continuous pruning or shearing in future years.

DECIDUOUS SHRUBS

Name	Comment	Water Req.	Zone
Amelanchier alnifolia - Saskatoon Serviceberry		D	4
Artemisia tridentata tridentata - Big Sage		D	3
Berberis thunbergii - Japanese Barberry	Hardiness in the Park City area unknown	M	4
Caragana arborescens - Siberian Pea Shrub		D	2
Caragana microphylla - Little Leaf Peashrub	Hardiness and availability unknown	M-D	2
Caragana pygmaea - Pygmy Pea Shrub		D	3
Cercocarpus montanus - Beechleaf Mt. Mahogany		D	4
Chrysothamnus nauseosus - Rubber Rabbitbrush		D	3
Cotoneaster acutifolius - Peking Cotoneaster		M	3
Cotoneaster apiculatus - Cranberry Cotoneaster	May be marginally hardy	M	5
Cotoneaster multiflorus - Many Flowered Cotoneaster	Hardy cotoneaster, may not be available, drought tolerance unknown	M	3
Cotoneaster racemiflora soongorica - Sungari Rockspray	Hardest cotoneaster, may not be available, drought tolerance unknown	M	3
Cotoneasters	Several sources list cotoneasters as a drought tolerant genus.		
Cowania mexicana - Cliffrose	May be difficult to obtain locally	D	3-4
Euonymus alata - Winged Euonymus		M	3
Euonymus alata compacta - Dwarf winged Euonymus		M	3
Ligustrum amurense - Amur Privet	Hardiness in this area unknown	M	3
Ligustrum vulgare - European Privet		M	3
Lonicera tatarica - Tatarian Honeysuckle		D-M	3

Deciduous Shrubs Cont.

Name	Comment	Water Req.	Zone
Lonicera xylostrum "Claveyi" - Clavey's Dwarf Honeysuckle	Drought tolerance unknown	M	4
Philadelphus lewisii - Lewis Mockorange	May be difficult to locate	D	2
Philadelphus microphyllus - Littleleaf Mockorange	May be difficult to locate	D	NA
Physocarpus monogynus - Mt. Ninbark	May be difficult to obtain	M-D	4
Physocarpus opulifolius lutea - Golden Ninebark	Yellow foliage	M	2
Potentilla fruticosa - Shrub Cinquefoil	Named varieties are not known for drought tolerance or hardiness	D-M	2-3
Prunus besseyi - Western Sandcherry		D	3
Prunus tomentosa - Nanking Cherry		D	1
Purshia tridentata - Antelope Bitterbrush	May be difficult to obtain	D	3
Rhamnus frangula columnaris - Tallhedge Buckthorn		M	4
Rhus glabra "Cismontana" - Dwarf Smooth Sumac		D	2
Rhus glabra - Smooth Sumac		M-D	2
Rhus triloba - Squawbush		D	2
Rhus typhina - Staghorn Sumac		M-D	3
Ribes alpinum - Alpine Current		D	2
Ribes aureum - Golden Current		D	2
Ribes inerme - Whitestem Gooseberry	Hardiness and availability unknown	M-D	4
Rosa foetida "Bicolor" - Austrian Copper Rose		D	4
Rosa foetida "Persiana" - Persian Yellow Rose		M-D	3
Rosa harisonnii - Harison's Yellow Rose	May be difficult to locate	M-D	3
Rosa multiflora - Multiflora Rose		M-D	3
Rosa rubrifolia - Red Leaf Rose		M-D	2
Rosa rugosa - Rugose Rose	Several named varieties available	D	2
Rosa woodsii - Wood's Rose		D	3
Roses	Many shrub roses are noted for drought tolerance. Several species listed above		
Sambucus caerulea - Blue Elderberry		D	3
Santolina chamaecyparissus - Lavender Cotton	Maybe difficult to obtain. Hardiness in Park City area unknown	M-D	4
Symphoricarpus albus - Snowberry		M-D	3
Symphoricarpus x chenaultii - Coralberry		M-D	4
Syringa chinensis - Chinese Lilac		M-D	3
Syringa villosa - Late Lilac	May be difficult to locate	M	1
Syringa vulgaris - Common Lilac		M-D	3
Viburnum lantana - Wayfaringtree Viburnum	Hardiness unknown in this area	M	3

EVERGREEN SHRUBS AND GROUND COVERS

NAME	COMMENT	WATER REQ.	ZONE
Arctostaphylos patula - Greenleaf Manzanita	Availability may be difficult	D	3
Arctostaphylos santii - Emerald Queen Manzanita	May be difficult to locate commercially	D	3
Arctostaphylos uva-ursi - Kinnickinick	Ground cover	D	2-3
Ceanothus velutinus - Mountain Lilac	Availability may be difficult	D-M	1
Cercocarpus ledifolius - Curleaf Mt. Mahogany		D	3
Cowania mexicana - Cliffrose	Yellow spring flower, availability may be difficult, semi-evergreen	D	4
Gaultheria procumbens - Wintergreen	May be difficult to obtain	M-D	2-3
Juniperus - Junipers	Listed species are drought tolerant. All should be checked for hardiness		
Juniperus chinensis - Chinese Juniper	Pfitzer & Armstrong listed as drought tolerant	M	4
Juniperus communis - Common or Native Juniper		D	2
Juniperus horizontalis - Creeping Juniper	Several varieties available check for drought tolerance	M	3-4
Juniperus sabina - Savin Juniper	Tam & Buffalo listed as drought tolerant	M	3-4
Juniperus scopulorum - Rocky Mt. Juniper	Several varieties available check for drought tolerance	D	4
Juniperus squamata - Single Seed Juniper		M	4
Juniperus utahensis - Utah Juniper	May be difficult to locate commercially	D	3
Juniperus virginiana - Eastern Red Cedar	Several varieties available check for drought tolerance	M-D	4
Mahonia repens - Creeping Oregon Grape		D	4-3
Microbiota decussata - Siberian Cypress		M	2
Pachistima canbyi - Dwarf Mountain Lover	May not be hardy to upper elevations around Park City	M-D	4
Pachistima myrsinites - Mountain Lover	Can to difficult to establish and to find	M-D	3
Pinus mugo "Pumilio" - Dwarf Mugo Pine		D-M	2
Pinus mugo - Swiss Mt. Pine		D-M	2
Shepherdia argentea - Buffaloberry	Hardiness may be questionable in this area	D	2
Shepherdia canadensis - Russet Buffaloberry	Availability may be difficult. Only species that is hardy in this area	D	1

FRUITS

Name	Comment	Zone	Water Requirement
Fragaria "Fort Laramie" - Strawberry		3	M
Malus - Apple	Check species for hardiness	3-4+	M-D
Prunus americana - Wild Plum		3	M-D
Rheum rhaponticum - Rhubarb		3	M
Ribes "Cherry" Red Current		3	M
Ribes "Pixwell" - Gooseberry		3	M
Ribes nigrum - Black current	May be difficult to obtain	NA	M
Rubus deliciosus - Boulder raspberry	May be difficult to obtain	NA	M-D
Vitis "Concord" - Concord Grape	Check other species for hardiness	3-4	M

VINES

Name	Comment	Zone	Water Requirement
Clematis ligusticifolia - Virgin's Bower	Availability unknown	NA	D-M
Clematis texensis - Scarlet Clematis	Availability unknown	3	D-M
Clematis viticella - Virgin's Bower	Availability unknown	2	M
Ipomoea tricolor - Morning Glory	Annual vine, seeds may self sow	3	D-M
Lonicera japonica "Halliana"-Halls Honeysuckle	May be marginally hardy in the Park City Area	4	M
Parthenocissus quinquefolia - Virginia Creeper		Varies	M
Polygonum aubertii - Silverlace Vine		4	D-M
Vitis - Common Grape	Check species for hardiness in this area	NA	M

GRASSES

There are several abbreviations which have been used in this section to give you as much information as possible about grasses as there isn't a lot of information readily available on growing grasses. Below is an explanation of the various abbreviations used and why they are significant.

CS= Cool Season. These are grasses which grow during the cooler times of the year. They green up very early and if watered, stay green until late in the fall.

WS= Warm Season. These grasses grow during the hotter summer season and generally require less water than cool season grasses to stay green. They tend to green up much later in the spring and go dormant earlier in the fall than cool season species.

Under the Water Required column there are two designations: the total amount of water required for initial establishment after seeding and the relative drought resistance after establishment. The relative drought resistance is different for grasses than other plant types if you expect to keep it green all summer.

D= Once established these grasses will survive here without supplemental irrigation. However, if you want them to stay green through much of the summer they need to be watered deeply every 10 days to two weeks.

M-D= These need to be watered deeply every 7-10 days to stay green throughout the summer.

M= Water deeply every 5-7 days to stay green throughout the summer months.

B= Bunch grass. Grows in bunch-like clumps.

S= Sod Forming Grass. Forms a mat-like sod.

Under the Use column there are several designations which will help you to select how each of these grasses can be most effectively used.

- S= Stabilization. These are tough, hardy grasses that can be used effectively to re-vegetate steep hillsides and areas with little or no topsoil. They were not selected for their aesthetic beauty.
- M= Meadow Grass. These grasses combine well with wildflowers and will tolerate periodic mowing or grazing. To look their best they need a layer of topsoil. These may not be appropriate for a small subdivision lot but work well on lots adjacent to wildland areas or ski runs.
- L= Lawn Grass. These grasses are suitable for frequent mowing and can be used as a substitute for Kentucky bluegrass. They generally use less water than Kentucky bluegrass. Unfortunately, the more drought tolerant they are, the more difficult they are to establish into a lawn.
- O= Ornamental grass. These grasses are attractive in an of themselves. They can be used as a specimen with shrubs, ground covers or perennials, or they can be used in mass. Generally the seed heads and/or foliage are decorative.

GRASSES

Name	Comment	Water Req.	Type	Zone	Height	Use
Agropyron cristatum - Crested or Slender Wheatgrass	CS, bl/green, prefers well drained loam soil	10" D	B	NA	18-24"	S
Agropyron inerme - Bluebunch Wheatgrass	CS, bl/green, symmetrical spikes, long lived, well drained loam	10" D	B	NA	18-24"	O,S
Agropyron riparium - Streambank Wheatgrass	CS, lt/blue, vigorous, tough, fine textured, not fussy about soil	10" D	S	NA	18-24"	S,M
Agropyron sibericum - Siberian Wheatgrass	CS, bl/ green drying to beige, well drained loam	8" D	B	NA	18-24"	S
Agropyron smithii - Western Wheatgrass	CS, coarse texture, bl/green, wide range of soils	10" D	S	NA	18-24"	S,M
Agropyron trichophorum - Pubescent Wheatgrass	CS, wide range of soils	16" D	S	2	30-48"	S
Agrostis alba - Redtop	CS, dark green, deep red seed heads, slightly acidic loam soil	18" M	S	NA	18-30"	M
Andropogon gerardii - Big Bluestem		D		NA		O
Avena scoparius - Little Blueslem		D		NA		O
Avena sempervirens - Blue Avena		M		NA		O
Bouteloua gracilis - Blue Grama or Side Oats Grama	WS, fine textured, sod forming with mowing, wide soil range	12-14" D	B/S	NA	6-20"	M,O,L
Bromus inermis - Smooth Brome	CS, coarse texture, fertile loam soil	12-18" D-M	S	NA	18-36"	S,M,L
Bromus marginatus - Mt. Brome Grass	CS, green, vigorous, wide range of well drained soil	14" D	B	2	30-40"	S
Buchloe dactyloides - Buffalo Grass	WS, gray/green, slow growing, indestructable, tolerates clay soil	12" D	S	NA	4-6"	L,O,M
Chasmantheum latifolia - Sea Oats or Bamboo Grass	Bamboo like leaves, silvery green flower spikes, full sun, average soil	M	B	NA	2-5'	M,O
Dactylis glomerata - Orchard Grass	CS, dk/green, long lived, mows well, well drained loam soil	16" M	S/B	2	2-4'	M
Descampia caespitosa - Tufted Hairgrass/Brangrass	CS, short lived, tolerates poorly drained soils	18" M	B	4	12-24"	M,S
Elymus cinereus - Great Basin Wildrye	CS, bright green, tall, wide range of soils	8" D	B	NA	3-5'	O
Elymus giganteus - Giant Wild Rye	CS, adapted to sand dunes	7" D	B	NA	25"+	M
Elymus glaucus - Blue Wild Rye		M		NA		M
Erianthus ravannae - Pampas Grass		M		5		O
Festuca arundinacea - Tall Fescue	CS, dark green, deep roots, tolerates wide range of soils	16-18" M	B	NA	30-48"	S,L
Festuca elatior - Tall Fescue		M-D	S	NA		L,M
Festuca idahoensis - Idaho Fescue	CS, fine texture , bl/green foliage, wide range of soils	10" D	B	1-2	12-36"	M,S
Festuca ovina "Glauc" - Blue Fescue	CS	10-12" M-D	B	4	10-12"	O

Grasses Cont.

<i>Festuca ovina</i> - Sheep Fescue	CS, fine text, bl/green foliage, wide range well drained soils	10" D	B	1	12-18"	M,S
<i>Festuca ovina duriuscula</i> - Hard Fescue	CS, fine textured, bl/green foliage, wide range, well drained soil	10" D	B	NA	12-18"	M,S
<i>Festuca rubra</i> - Creeping Red Fescue	CS, dk/green, fine text, soft, good unmowed in shade, tolerates poor soil	20" M	S	NA	12-24"	L
<i>Helictotrichon sempervirens</i> - Blue Oat Grass	Evergreen, bl/gray, full sun, graceful, good drainage, marginally hardy	M	B	4	2-3'	M,O
<i>Lolium perenne</i> - Perennial Ryegrass	CS, medium textured, rich green, medium to heavy soils	10" M-D	B	2	25"+	L,M,S
<i>Miscanthus sinensis</i> - Maidenhair or Eulalia	CS, graceful, sun or shade, all soils, marginally hardy in Park City area	M	B	4	5-6'	O
<i>Molena caerulea</i> - Varigated Moor Grass	Fine textured, lacy plumes, symmetrical, tolerates wet sites	M	B	3	18-24"	O
<i>Oryzopsis hymenoides</i> - Indian Rice Grass	CS, graceful, airy, turns straw blonde, attracts birds, sharp sandy soils	8" D	B	NA	18-24"	O
<i>Phalaris arundinacea variegata</i> - Variegated Ribbongrass	CS, tough, tenacious, spreading, sun or shade, wet or dry	16" M-D	S	4	2-3'	M,O
<i>Phleum pratense</i> - Timothy	CS, coarse textured, prefers moist or shaded sites	16" M	B	NA	24-42"	M
<i>Poa alpinum</i> - Alpine Bluegrass	CS, blue-green, densely tufted, prefers moist well drained loam	12" M	B	NA	3-9"	M,L
<i>Poa compressa</i> - Canadian Bluegrass	CS, pale gray-green, good w/wildflowers, wide range of soils	10" D	S	NA	12-18"	M,S
<i>Sitanion hystris</i> - Bottlebrush Squirrel Tail	CS, seeds early, good on dry hillsides, wide soil ranges	8" D	B	NA	6-12"	S
<i>Stipa comata</i> - Needle & Thread Grass	CS, green drying to blonde, prefers sandy or gravelly soil, distinctive	10" D	B	NA	1-3'	O,M
<i>Stipa species</i> - Needle grass	CS, wide range of well drained soils	16"	B	NA	varies	M,O

PERENNIALS/WILDFLOWERS

In general, perennials are one of the easiest classes of plants to grow in the Park City area. As long as they can tolerate being frozen in the winter, they are likely to succeed. Our cool summers are ideal for many varieties and the cool evenings often extend the blooming season significantly. Wildflowers planted by themselves or in combination with grasses as a meadow can also be successful but require a different level of expectation and maintenance. Most perennial wildflowers do not bloom until the second or third season of growth when seeded. You may want to mix in some annuals with the perennials for the first couple of years or on a yearly basis. Also, unless all of the weed seeds which are naturally found in the topsoil seedbed are germinated and eradicated over the first season or two prior to seeding with the grasses and/or wildflower mix, then undesirable weeds will germinate along with the desirable grasses and wildflowers. If wildflowers are in the mix then hand weeding or mowing are the only options for controlling the weeds. Some wildflowers will not tolerate mowing so they may be lost in this process.

PERENNIALS/WILDFLOWERS

Name	Comment	Zone	Watering require
Achillea clavennae - Silvery Yarrow		3	M-D
Achillea filipendula - Fernleaf Yarrow		3	M-D
Achillea millefolium - Common Yarrow		3	D
Achillea ptarmica - Yarrow		3	M-D
Achillea tomentosa - Woolly Yarrow		3	D
Agastache urticifolia - Sawtooth Mt. Mint	Seed only	3	D
Ajuga reptans - Bugleweed		3	M
Anagallis arvensis - Poor Man's Weatherglass	Seed only	3	M-D
Anemone pulsatilla - Pasque Flower		4	M
Antennaria rosea - Pussy Toes	May be difficult to locate	3	D
Anthemis tinctoria - Golden Marquerite		3	M
Aquilegia caerulea - Blue Columbine	available in seed or pots	3	M-D
Aquilegia formosa - Western Columbine	available in seed or pots	3	M
Aquilegia vulgaris - Garden Columbine		3	M
Arabis caucasica - Rock Cress		3	M-D
Armeria maritima - Common Thrift		3	M-D
Asclepias tuberosa - Butterfly Flower		3	D
Aster sp. - Michaelmas Daisy or Aster	Several varieties available. Check varieties for drought tolerance	3	M-D
Aurinia saxatile - Basket of Gold	Also sold as Alyssum saxatile	3	M-D

Perennials/Wildflowers Cont.

Balsamorhiza sagittata - Arrowleaf Balsamroot	Available in seed only	1	D
Brunnera macrophylla - Alkanet		3	M
Calochortus sp. - Seego Lily	Seed only. Requires dry, sharp drainage	1	D
Camassia quamash - Camas	Soil needs to dry after blooming. Seed only	4	M-D
Campanula carpatica - Carpathian Harebell		3	M
Campanula poscharskyana - Serbian Bellflower		3	M
Campanula rotundifolia - Round leaved Harebell		3	M
Castilleja sp - Indian Paintbrush	Available in seed only	1-3	D
Centaurea cyans - Bachelor Buttons	Available in seed	3	D
Centaurea dealbata - Bachelor Button		3	M-D
Cerastium tomentosum - Snow in Summer		2	D
Chrysanthemum coccineum - Painted Daisy	Marginally hardy, requires winter mulching	2-3	M-D
Chrysanthemum leucanthemum - Oxeye Daisy		3	M-D
Coreopsis grandiflora - Coreopsis	Several varieties available	3	M
Coreopsis lanceolata - Coreopsis		3	M
Coreopsis tinctoria - Coreopsis		3	M
Coreopsis verticillata - Thread leaf Coreopsis		3	M
Delphinium bicolor - Larkspur	Seed only, hybrids not particularly drought tolerant	2-3	D
Dianthus deltoides - Maiden Pinks		3	M
Dianthus plumaris - Cottage Pinks		3	M
Digitalis ambigua	May be biennial or short lived	4	M
Digitalis mertonensis	May be biennial or short lived	4	M
Digitalis purpurea	May be biennial or short lived	4	M
Echinacea purpurea - Purple Coneflower		4	M-D
Epilobium angustifolium - Fireweed	Seed only	1-2	M-D
Erigeron sp. - Fleabane Daisy		3-4	D-M
Eriogonum umbellatum - Sulphur Buckwheat		2	D
Eschscholzia caespitosa - Dwarf California Poppy	May act as an annual or biennial	All	D
Eschscholzia californica - California Poppy	May act as an annual or biennial	All	D
Euphorbia polychroma - Spurge	Hardiness in this area unknown	4	D
Fragaria vesca - Wild Strawberry	Works well as a ground cover, edible fruits	3	M
Gaillardia aristata - Blanket Flower		2	D
Gaillardia grandiflora - Blanket Flower	Several named varieties available	2	M-D
Galium odoratum - Sweet Woodruff	Sweet Woodruff	3	M-D
Gaultheria procumbens - Teaberry	May be difficult to find locally	3	D
Geranium endressii "Wargrave Pink"-Pink Geranium		4	M
Geranium grandiflorum "Alpinum" - Geranium		3	M
Geranium ibericum "Platypetalum"-Blue Geranium		4	M
Geranium nepalense - Nepal Geranium	May be difficult to find	3	M-D
Geranium sanguineum - Scarlet Geranium		3	M
Geranium viscosissimum - Wild Geranium		2	D
Geum triflorum - Prairie Smoke	May be difficult to find commercially	3	D-M
Gilia aggregata - Scarlet Gilia	Biennial, seed only	3	D
Gypsophila paniculata - Baby's Breath	Hardiness in Park City area unknown	4	D-M
Hedysarum borealis - Northern Sweet Vetch	Available in seed form only	3	D
Hemerocallis - Daylilies	Many species available, pots or bare root	3-5	M
Iberis sempervirens - Candytuft		3	M-D

perennials/Wildflowers Cont.

<i>Liatris punctata</i> - Dotted Gayfeather	May be difficult to find commercially	3	D
<i>Liatris pycnostachya</i> - Kansas Gayfeather		3	M-D
<i>Liatris spicata</i> - Tall Gayfeather		3	M
<i>Limonium latifolia</i> - Statice or Sea lavender	May be marginally hardy in this area	4	M-D
<i>Linaria nevadensis</i> - Toadflax		4	M-D
<i>Linaria purpurea</i> - Toadflax	Hardiness not known in Park City	NA	D-M
<i>Linum flavum compacta</i> - Yellow Flax		2	D
<i>Linum lewisii</i> - Lewis Flax		2	D
<i>Linum perenne</i> - Blue Flax		4	D
<i>Liriope spicata</i> - Lily Turf	Can also be used as ground cover, hardiness unknown	4	M
<i>Lupinus sericeus</i> - Silky Lupine	Seed only	2-3	D
<i>Lychnis chalcedonica</i> - Maltese Cross		3	M
<i>Lychnis viscaria</i> "Splendens" - Maltese Cross		3	M
<i>Marrubium vulgare</i> - Horehound	May be hard to find commercially	3	D
<i>Mentzelia laevicaulis</i> - Blazing Star	Requires summer drought and good drainage. Seed only	3-4	D
<i>Mimulus lewisii</i> - Lewis Monkey Flower		3	M
<i>Monarda didyma</i> - Bergamot	Hardiness in this area unknown	4	M
<i>Oenothera berlandieri</i> - Mexican Evening Primrose	Hardiness not known in Park City	NA	M-D
<i>Oenothera missouriensis</i> - Evening Primrose	May be only marginally hardy in Park City	4	M
<i>Oenothera pallida</i> - White Evening Primrose		NA	D
<i>Papaver alpina</i> - Alpine Poppy	Also listed as <i>Papaver burseri</i>	4	M
<i>Papaver nudicaule</i> - Iceland Poppy		All	M-D
<i>Papaver orientale</i> - Oriental Poppy		2	M
<i>Pedicularis groenlandica</i> - Elephant Head	Seed only	1	D-M
<i>Penstemon</i>	Many native species to choose from	Vary	D-M
<i>Penstemon barbatus</i> "Elfin Pink" Scarlet Penstemon		2	D
<i>Penstemon barbatus</i> "Prairie Dusk"		2	M
<i>Penstemon barbatus</i> "Prairie Fire"		2	M
<i>Penstemon cyananthus</i> - Wasatch Penstemon		3	D
<i>Penstemon eatonii</i> - Firecracker Penstemon	Seed only	3	D
<i>Penstemon palmeri</i> - Palmer Penstemon		2	D
<i>Penstemon pinifolius</i> - Fernleaf Penstemon		3	D
<i>Penstemon strictus</i> "Bandara" Rocky Mt. Penstemon		3	D
<i>Perovskia atriplicifolia</i> - Russian Sage	Hardiness in this area unknown	5	M-D
<i>Phlomis fruticosa</i> - Jerusalem Sage	May be difficult to find commercially	NA	D
<i>Phlox paniculata</i> - Garden or Tall Phlox		3	M
<i>Phlox subulata</i> - Moss Pink		3	M-D
<i>Physostegia virginiana</i> - Obedient Plant		2-3	M
<i>Polygonum affine</i> - Border Jewel	May be difficult to find	3	D
<i>Polygonum renentria</i> - Pink Fleece Flower	Hardiness not known in this area	NA	D
<i>Potentilla nepalensis</i> - Cinquefoil		3	M
<i>Potentilla tridentata</i> - Cinquefoil		NA	M
<i>Potentilla verna</i> - Spring Cinquefoil		4	M
<i>Ranunculus repens</i> - Creeping Buttercup	Can be invasive. Hardiness in Park City area unknown	NA	M
<i>Ratibida columnaris</i> - Prairie Coneflower		NA	D
<i>Romneya coulteri</i> - Matilija Poppy	May be difficult to find commercially	NA	D
<i>Rudbeckia fulgida</i> "Goldstrum"		4	D

Perennials/Wildflowers Cont.

Rudbeckia hirta - Black-Eyed Susan		4	D-M
Rudbeckia subtomentosa "Dwarf Rustic Mix" -	Dwarf Rustic Coneflower	4	D-M
Salvia farinacea - Perennial Salvia	May be an annual in this area	4	M
Salvia superba - Meadow Sage	May be marginally hardy in this area	4	M
Santolina chamaecyparissus - Lavender Cotton		2	D
Santolina virens - Lavender Cotton		2	D
Saponaria ocymoides - Rock Soapwort		2	M-D
Saxifraga Sp. saxifrage	May be difficult to find commercially	Vary	M-D
Sedum sp. - Sedum	Numerous species available, hardy and drought tolerant	3	M-D
Sempervivum sp. - Hen and Chicks	Various named varieties available	4	M-D
Solidago decumbens - Dwarf Goldenrod	May be difficult to find	NA	D
Sphaeralcea munroana - Orange Globemallow	Seed only	3	D
Stachys lanata - Lamb's Ears	Hardiness in this area unknown	4	M
Thermopsis divaricarpa - Golden Banner		3	M
Thymus pseudolanuginosus - Woolly Thyme		3	M-D
Thymus serpyllum - Mother of Thyme		3	M-D
Trifolium hybridum - Alsike Clover	Available in seed only. Can use as ground cover	NA	M-D
Trifolium pratense - Red Clover	Use as ground cover. Seed only	NA	M
Viola odorata - Violet	Can also be used as ground cover	3	M
Wyethia amplexicaulis - Mule's Ear	Seed only	3	D

BULBS

Many spring blooming bulbs are excellent drought tolerant plants as they have their greatest demand for water when the naturally occurring soil moisture is highest in the spring. In fact, many bulbs prefer or require fairly dry conditions during our hotter and drier months. On the other hand, many bulbs disappear during the summer and fall months when you still want a colorful garden. One suggestion is to plant early, low growing bulbs in your warm season, drought tolerant lawn. This way you have early spring color when the lawn is still dormant and by the time the lawn has greened up and gotten long enough to cut, the bulb foliage can tolerate mowing.

In general, most bulbs are planted in the fall so using them requires some planning ahead.

BULBS

Name	Comment	Water Req.	Zone
Iris siberica - Siberian Iris		M	3
Iris pumila - Dwarf Bearded Iris	Hardiness in Park City Area unknown	M	4
Allium - Onion	Check available species for hardiness	D-M	Varies
Narcissus - Daffodil or Narcissus	Various species, check for hardiness	D-M	Varies
Crocus - Crocus	Various species available	D-M	Varies
Fritillaria	Various species, check for hardiness	M-D	Varies
Galanthus - Snow Drop	Naturalize well	M	2
Iris reticulata-Violet Scented Iris or Netted Iris		M-D	3
Muscari - Dwarf Blue Hyacinth	Several varieties available	D	1-2
Tulipa - Tulip	Various species, check for hardiness	M-D	Varies
Brodiaea	May be difficult to find commercially, prefer no summer water	D	Varies
Iris germanica - Garden Iris		D	4
Iris missouriensis - Rock Mt. Iris	Allow to dry out after blooming is finished. Seed only	M-D	2
Chionodoxa luciliae - Glory of the Snow	Good for massing	M	3
Chionodoxa sardensis - Glory of the Snow		M	3
Colchicum autumnale - Autumn Crocus	Send up foliage in spring and flowers in early Sept. Short lived	M-D	3
Colchicum speciosum - Showy Autumn Crocus		M-D	3
Eremurus cristatus - Foxtail lily		D	3
Eremurus regelii		D	3
Erythronium - Trout lily or Dog-Tooth Violet	Several species available through mail-order. Check each for hardiness	M	Varies
Puschkinia scilloides libanotica - Puschkinia		M-D	3

ANNUALS

Many of the plants listed below are perennial in warmer climates and can be grown as annuals at our elevation. If planted in protected locations they may be perennial here. Also sources often do not list the hardiness zone for annuals as our growing season may be too short or cool for flower production.

In general annuals are most readily available in seed form only and many of the species listed may need to be mail ordered. Annuals which are commonly available at local nurseries are noted.

ANNUALS

Name	Comment	Water requirement	Zone
<i>Ammi majus</i> - Bishops Flower	May be difficult to find commercially, seed only	D	NA
<i>Cheiranthus allioni</i> - Serbian Wall Flower		D	ALL
<i>Chrysanthemum coronarium</i> - Garland Chrysanthemum	Seed only	D	NA
<i>Clarkia amoena</i> - Clarkia	Seed only	D	ALL
<i>Clarkia unguiculata</i> - Clarkia	Seed only	D-M	ALL
<i>Cleome spinosa</i> - Spider Flower		M	ALL
<i>Collinsia heterophylla</i> - Chinese Houses	Seed only, may be hard to find commercially	D-M	NA
<i>Coreopsis tinctoria</i> - Annual Coreopsis		D-M	ALL
<i>Cosmos bipinnatus</i> - Cosmos		M-D	ALL
<i>Dimorphotheca aurantica</i> - African Daisy		D	ALL
<i>Dimorphotheca pluvialis</i> - White African Daisy		D	ALL
<i>Dimorphotheca sinuata</i> - Mixed Color African Daisy		D	ALL
<i>Eschscholzia caespitosa</i> - Dwarf California Poppy	Perennial in zone 4	D	1-3
<i>Gaillardia pulchella</i> - Annual Blanket Flower		D	ALL
<i>Gilia capitata</i> - Blue Thimble Flower	Seed only	M	NA
<i>Gilia tricolor</i> - Bird's Eyes	Seed only	M	NA
<i>Gypsophila muralis</i> - Annual Baby's Breath		D	ALL
<i>Helianthella uniflora</i> - Little Sunflower	Seed only	D	NA
<i>Helianthus annuus</i> - Wild Sunflower	Seed only	D	ALL
<i>Lantana montevidensis</i> - Lantana	Many named varieties available	D-M	NA
<i>Lavatera trimestris</i> - Rose Mallow	Seed only	M-D	NA
<i>Layia platyglossa</i> - Tidy Tips	Seed only	D	ALL
<i>Linanthus grandiflorus</i> - Mt. Phlox	Seed only	D	NA
<i>Linum grandiflorum rubrum</i> - Scarlet Flax		D	ALL
<i>Lupinus desiflorus</i> - Golden Lupine		M-D	ALL
<i>Lupinus succulentus</i> - Arroyo Lupine	Seed only	M-D	ALL

Annuals Cont.

Mentzelia lindleyi - Blazing Star	Probably available in seed only	D	NA
Mirabilis jalapa - Four O'Clock	Roots can be stored over winter, available in seed only	D-M	1-3
Oenothera hookeri - Hooker Evening Primrose	May be biennial here	D	ALL
Papaver rhoeas - Flanders Poppy or Shirley Poppy	Seed only	D-M	ALL
Petunia hybrida - Common Garden Petunia	Many varieties and forms available	M	ALL
Phacelia campanularia - Desert Bluebells	May be available in seed only	D	NA
Phlox drummondii - Annual Phlox	Seed only	M	NA
Portulaca grandiflora - Rose Moss		D	NA
Senecio cineraria - Dusty Miller		M-D	ALL
Silene armeria - Catchfly	Seed only	D	NA
Tithonis rotundifolia - Mexican Sunflower	Commercial availability unknown	D	NA